SAN FRANCISCO
PLANNING DEPARTMENT

Memo to the Planning Commission

HEARING DATE: APRIL 26, 2018

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San Francisco,
CA 94103-2479

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Date:	April 19, 2018
Case Nos.:	2007.0946GPA-02 MAP-02 CWP-02 GPR
Project:	Candlestick Point and Hunters Point Shipyard Phase 2
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Project Sponsor:	Office of Community Infrastructure and Development One South Van Ness Avenue, 5th Floor San Francisco, CA 94103
Staff Contact:	Mat Snyder – (415) 575-6891 mathew.snyder@sfgov.org

BACKGROUND

The Planning Commission is scheduled to take several actions regarding amendments to the Candlestick Point – Hunters Point Shipyard Phase 2 ("CP HPS2") Development Project on April 26, 2018 Hearing.

A full description of the Original Project and proposed Project Refinements are in the Commission's April 12, 2018 packet.

On March 22, 2018, the Planning Commission initiated General Plan and Planning Code amendments that would further the proposed Project Refinements.

On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII") took several actions, including making additional CEQA Findings regarding Addendum 5 to the Project's FEIR that analyzed the Project Refinements. The CCII Commission also approved the HPS2 D4D; their approval included a provision enabling OCII staff to make conforming changes to the document as described therein.

Actions scheduled for the April 26 Planning Commission hearing are as follows: (1) approval of General Plan Amendments that amend the Candlestick Point Sub-Area Plan and the Hunters Point Area Plan; (2)

approval of Planning Code Map Amendments removing Assessor's Block and Lot: 4991/ 276 ("Jamestown Parcel") from the Candlestick Point Activity Node Special Use District ("SUD") and CP Height and Bulk Districts; (3) making findings of Consistency that Amendments to the Bayview Hunters Point ("BVHP") Redevelopment Plan and the Hunters Point Shipyard Redevelopment are consistent with the General Plan; and (4) approval of a revised Design for Development ("D4D") document for Hunters Point Shipyard Phase 2.

This packet provides revisions to the packet provided on April 12, 2018. These revisions are as follows:

1. Revisions to all draft Resolutions / Motions, providing CCII's resolution regarding CEQA findings as Resolution No. "11-2018" (revised version not provided).
2. Revision to the draft Motion for the D4D that includes additional authorization from the Planning Commission to Planning staff to make conforming changes to the D4D document if the revised changes result in stricter requirements. This additional authorization is being sought in case OCII seeks to lower the maximum heights in certain locations. OCII has informed Planning that the State Lands Commission, which has overlay jurisdiction on several portions of the site, is seeking additional information and analysis on some of the Project's view sheds and may request heights be lowered in some locations.
3. Revised Draft HPS2 D4D document. The enclosed revised D4D (dated April 19, 2018) include changes to several photographs throughout; they do not include any substantive changes to the text or formatting. The pagination also remains the same.

RECOMMENDATION:	**Approval**

Attachments:
Revised Draft Motion for the D4D Approval
Revised D4D

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Date:	April ~~12~~19, 2018
Case Nos.:	2007.0946GPA-02 PCM-02 GPR CWP-02
Project:	Candlestick Point and Hunters Point Shipyard Phase II (see attached Map)
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Recommendation:	**Approval**

ADOPTING A MOTION TO APPROVE AMENDMENTS TO THE CANDLESTICK POINT DESIGN FOR DEVELOPMENT DOCUMENT AND APPROVE A REVISED HUNTERS POINT SHIPYARD DESIGN FOR DEVELOPMENT DOCUMENT.

WHEREAS, In accordance with California Redevelopment Law, the Successor Agency to the San Francisco Redevelopment Agency (or the Office of Community Investment and Infrastructure or "OCII") is proposing to amend both the Bayview Hunters Point ("BVHP") Redevelopment Plan and the Hunters Point Shipyard ("HPS") Redevelopment Plan; and

In association with these Redevelopment Plan amendments, OCII is also proposing to amend the Design for Development Documents for Candlestick Point ("CP") and Hunters Point Shipyard ("HPS") as further described below.

The proposed amendments will facilitate the development of the Hunters Point Shipyard and Candlestick Point, as envisioned in the two respective Redevelopment Plans.

A primary objective of both the HPS Redevelopment Plan and the BVHP Redevelopment Plan is to create economic development, affordable housing, public parks and open space and other community benefits by development of the under-used lands within the two Redevelopment Plan project areas. In 2010, the City approved combining the planning and redevelopment of these two areas provides a more cohesive overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and improves opportunities to finance the development of affordable housing and

the public infrastructure necessary to expedite the revitalization of both areas. This project is referred to as Candlestick Point – Hunters Point Shipyard Phase 2 Project ("CP HPS2 Project" or "Project").

Approval actions in 2010 ("Original Approvals") included, but were not limited to, General Plan amendments including the creation of the Candlestick Point Sub-Area Plan and the Hunters Point Shipyard Area Plan, Planning Code amendments creating the Candlestick Point Activity Node Special Use District ("SUD") and the Hunters Point Shipyard Phase 2 SUD, amendments to the Bayview Hunters Point Redevelopment Plan and the Hunters Point Shipyard Redevelopment Plan and the adoption of Design for Development documents for both Candlestick and Hunters Point Shipyard.

More specifically, the Original Approvals included amendments to the BVHP Redevelopment Plan that divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that the Office of Community Investment and Infrastructure ("OCII") (previously the San Francisco Redevelopment Agency) would retain jurisdiction over land use and would be the approval body for development approvals pursuant to California Redevelopment Law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a Delegation Agreement between the Planning Department and OCII. The Original Approvals also contemplated the construction of a football stadium at HPS.

Subsequent to the Original Approvals, a new stadium for the 49ers was constructed in Santa Clara, removing the need to accommodate a stadium as a part of the Project.

Subsequent to the Original Approvals, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office development under the Project would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325.

As a result of these circumstantial changes, the Developer and OCII are pursuing refinements to the Project ("Project Refinements"). As a part of the Project Refinements, the BVHP Redevelopment Plan is proposed to be amended to remove the Jamestown Parcel from Zone 1 to clarify that it is not a part of the Project being implemented by the Developer under the DDA.

Similarly, as a part of the Project Refinements, the amendments to the HPS Redevelopment Plan are proposed to be revise the street grid and block pattern and land use designations and development caps, including in the area previously proposed for a new stadium (now referred to as the "Warehouse District").

The Design for Development ("D4D") documents for CP and HPS2 set forth specific standards and guidelines for the same breath of controls usually addressed in the Planning Code including but not limited to site coverage, building height and bulk, setbacks, building modulation and frontage, and open space. These D4D documents supersede the Planning Code for new development at CP and HPS. Both the respective Redevelopment Plans and the original Commission motion approving the D4Ds require Planning Commission approval for any D4D amendments.

OCII and the Developer are proposing conforming CP D4D amendments that would remove Chapter 7 regarding development of the Jamestown Parcel, and references to the Jamestown Parcel throughout, consistent with proposals to amend the BVHP Redevelopment Plan, the CP Activity Node SUD, and the CP Height and Bulk District.

OCII and the Developer are proposing a completely revised HPS2 D4D. The revisions include, but are not limited to: (1) removal the stadium; (2) reorganization of the open space with the introduction of a large central park ("The Green Room") and strengthening of Dry Dock 4 as major open space ("The Water Room"); (3) revision to the street grid and block pattern that more closely follow the existing block pattern, (4) revision to the height limits throughout with height reduced in some locations and increased in others, (5) clarification and strengthening of controls related to active uses, building modulation and articulation.

The San Francisco Redevelopment Agency ("Redevelopment Agency"), together with the San Francisco Planning Commission of the City and County of San Francisco ("Planning Commission") acting as lead agencies under the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.), certified a Final Environmental Impact Report (hereinafter "FEIR") for the Candlestick Park-Hunters Point Shipyard Phase II Project ("Project") on June 3, 2010 by Motion No. 18096 and Resolution No. 58-2010, respectively. On July 14, 2010, the San Francisco Board of Supervisors affirmed the Planning Commission's certification of the FEIR (Motion No. M10-110). The FEIR analyzed a mixed used development, including a stadium use at the Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

On June 3, 2010, the Redevelopment Agency, by Resolution No. 59-2010 adopted findings pursuant to the California Environmental Quality Act, including a Mitigation Monitoring and Reporting Program ("MMRP") and a Statement of Overriding Considerations for the Project, and took various actions to approve the Project. On the same day, by Motion No. 18097 the Planning Commission also adopted findings pursuant to CEQA ("CEQA Findings") and took various approval actions related to the Project.

Since the certification of the FEIR the Planning Department, working with the Office of Community Investment and Infrastructure ("OCII", the successor agency to the San Francisco Redevelopment Agency), has issued several addenda to the FEIR to address project changes. The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to modifications to the Project (the "Modified Project") will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effect that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1, Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of

these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are available under Case No. 2007.0946E, and are incorporated herein by reference as though fully set forth.

The Planning Commission has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Motion No. 18097, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures.

On April 26, 2018, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on the proposed Design for Development Documents Amendments and has considered the information included in the File for these Amendments, the staff reports and presentations, public testimony and written comments, as well as the information provided about the Project from other City departments.

NOW THEREFORE BE IT RESOLVED, That the Planning Commission finds that the actions contemplated by this Resolution are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Planning Commission hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. Additionally, the Planning Commission approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

AND BE IT FURTHER RESOLVED, That Planning Commission does hereby approve the amending of the Candlestick Point Design for Development document, by removing Chapter 7, "Jamestown", and amending of text and graphics throughout by removing mention of the Jamestown Parcel.

AND BE IT FURTHER RESOLVED, That the Planning Commission does hereby approve the revised Hunters Point Design for Development document, attached to this Motion as Exhibit A and incorporated herein by reference.

AND BE IT FURTHER RESOLVED, That the Planning Commission does hereby authorize the Planning Director to make conforming changes to the Design for Development document, without further action by the Commission, if the changes address consistency across other governing documents, and such changes are more restrictive in nature than provided in Exhibit A.

I hereby certify that the foregoing Motion was ADOPTED by the San Francisco Planning Commission on April 26, 2018.

Jonas P. Ionin

Commission Secretary

AYES:

NOES:

ABSENT:

San Francisco | *California*

HUNTERS POINT SHIPYARD PHASE 2

DESIGN FOR DEVELOPMENT

APRIL 18, 2018

SAN FRANCISCO SHIPYARD · EST · 1870

ADOPTED _____ BY:

SAN FRANCISCO PLANNING COMMISSION
MOTION NO. _____

COMMISSION ON COMMUNITY INVESTMENT & INFRASTRUCTURE
RESOLUTION NO. _____

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1 INTRODUCTION

1 Introduction

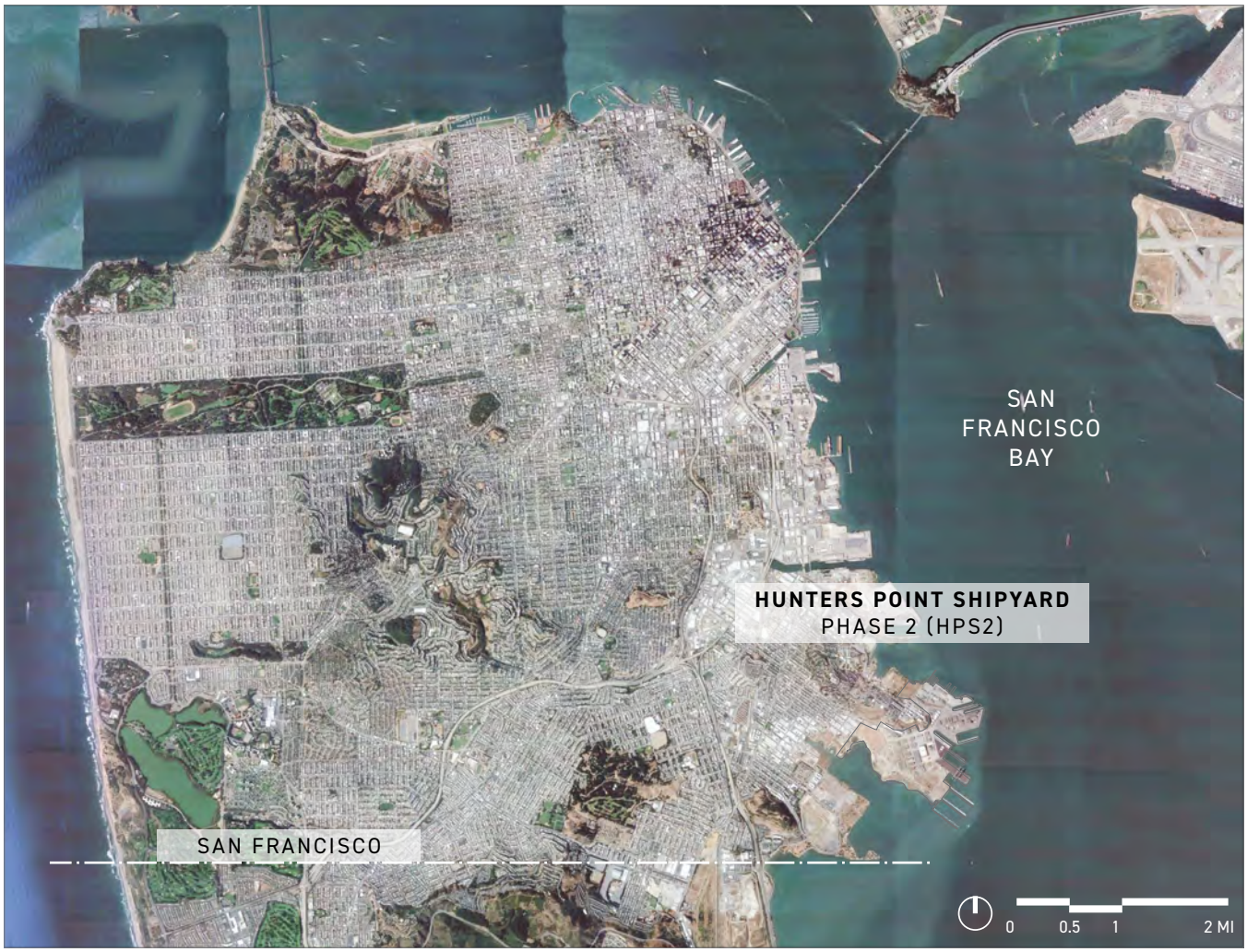

Figure 1.0a: HUNTERS POINT SHIPYARD PHASE 2 SITE LOCATION IN SAN FRANCISCO

1.1 Summary of Document

The 2018 Hunters Point Shipyard Phase 2 Design for Development document (D4D) establishes the design intent, standards, and guidelines that will govern Phase 2 of the Hunters Point Shipyard Redevelopment Project Area (HPS2). The amendment to the HPS2 Redevelopment Plan (Plan) establishes goals to: transform this approximately 421-acre site from a post-military site into thriving neighborhoods; support the construction of market-rate and affordable housing; expand public transit service; and create connections to parks, open spaces, and the waterfront. The Plan governs the land uses in HPS2 and allocates the maximum development square footage for each land use category permitted.

The D4D establishes standards and guidelines for development controls that implement the vision for HPS2 and provide an environment with opportunities for creative and innovative architectural expression. There are additional companion documents which govern different components of the HPS2 development. This D4D includes summaries from these companion documents for reference only—the summaries are not intended to be an exhaustive list of all the relevant content from these documents. This D4D supersedes the HPS2 D4D document approved in 2010.

Throughout this document, Hunters Point Shipyard Phase 1 will be referred to as HPS1 and Hunters Point Shipyard Phase 2 will be referred to as HPS2. While regulated independently, HPS2 is adjacent to HPS1. Hunters Point Shipyard, which includes HPS1 and HPS2, will be referred to as the "Shipyard." The master developer is responsible for the implementation of the Shipyard and Candlestick Point (CP). HPS1 and CP each have a separate D4D. *Figure 1.1a* highlights all three areas where the Office of Community Investment and Infrastructure (OCII) is the primary governing agency.

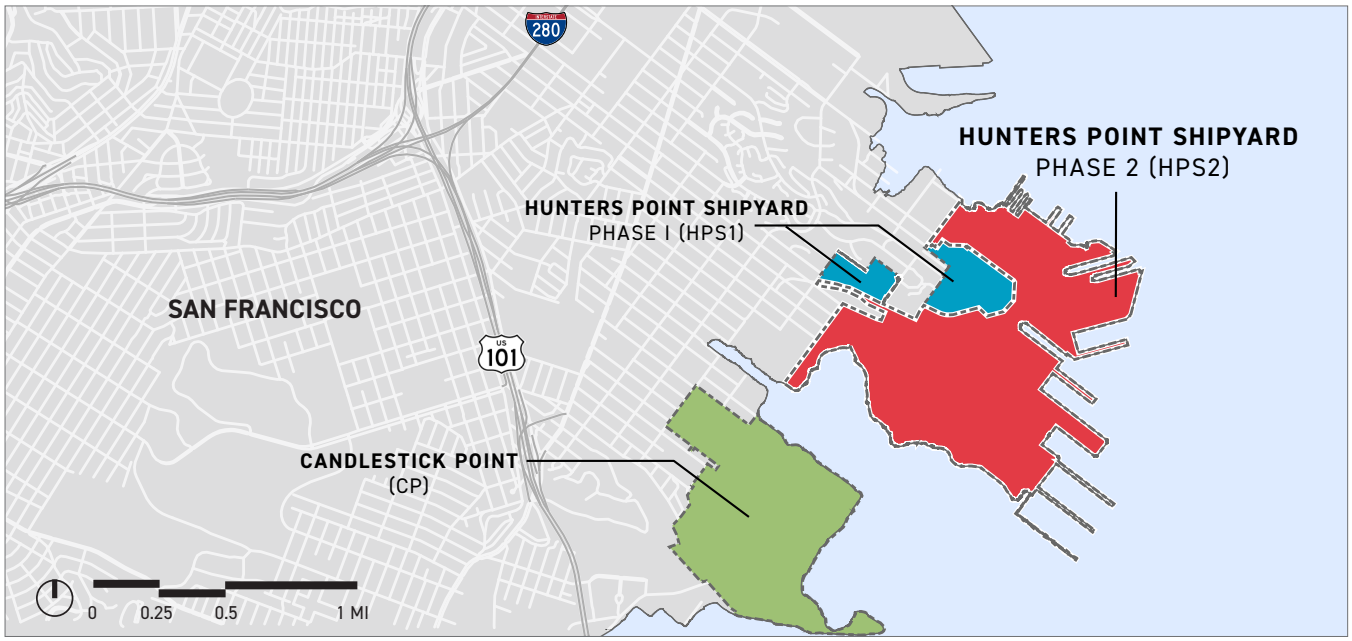

Figure 1.1a: HUNTERS POINT SHIPYARD AND CANDLESTICK POINT BOUNDARY

1.2 Companion Documents

Hunters Point Shipyard Redevelopment Plan: governs permitted land uses and maximum floor areas for each land use in HPS1 and HPS2.

Candlestick Point / Hunters Point Shipyard Phase 2 (CPHPS2) Disposition and Development Agreement (DDA): defines developer obligations to deliver certain infrastructure improvements and community benefits as part of the redevelopment of CP and HPS2.

CPHPS2 Final Environmental Impact Report (and Addenda): describes environmental impacts associated with the construction and operation of development at CP and HPS2, and outlines mitigation measures required of the developer to reduce those environmental impacts.

CPHPS2 Design Review and Document Approval Procedure (DRDAP): defines submittal requirements and the process for approving major and sub-phase applications, as well as Schematic and Design Development documents within CP and HPS2.

CPHPS2 Infrastructure Plan: describes all on-site and off-site infrastructure improvements including utilities and roadways to be constructed in CP and HPS2.

CPHPS2 Parks, Open Space, and Habitat Concept Plan: describes the concept plans for each of the parks and open space areas within CP and HPS2. These areas include the waterfront promenade, neighborhood parks, sports fields, recreational trails linking to the Bay Trail and Blue Greenway, and open spaces dedicated to the restoration of native habitats.

CPHPS2 Sustainability Plan: identifies sustainable design strategies to reduce energy and water demand, improve air quality, and reduce greenhouse gas emissions; defines transportation demand management to minimize auto dependence; and provides plans to enhance the natural environment.

CPHPS2 Transportation Plan: defines the Transit Operating Plan, Transportation Demand Management Program, designated bike routes, and street cross-sections along with parking and loading standards, bicycle facilities, and car-share requirements.

HPS2 Streetscape Master Plan: identifies landscaping, street furnishings, lighting, and paving standards for each neighborhood in HPS2.

HPS2 Signage Plan: defines design standards including color palette, fonts, and sign dimensions for wayfinding and directional signage within the public right-of-way within HPS2.

1.3 Document and Chapter Organization

This D4D opens with an overall vision for HPS2 and its unique districts.

The Design Intent, Standards and Guidelines regulate how this vision will be implemented.

The D4D document has six [6] chapters as follows:

1. **Introduction:** provides the purpose and overview of the D4D, identifies the D4D's relationship to companion documents, and describes the historical context of the Shipyard redevelopment.
2. **Vision:** illustrates the overall concept for HPS2 as well as the relationship between the Shipyard and adjoining communities, specifically in regard to design, character, and connections.
3. **Districts & Key Destinations:** defines the design vision and intent for each of the HPS2 neighborhoods, including urban form, interface and interaction with the public realm, and transportation.
4. **Building Design Standards & Guidelines:** defines the design principles and standards regulating the form and character of buildings, including height, massing, design, signage, and lighting.
5. **Implementation:** offers an overview of the procedures for permitting individual parcels, granting variances, and amending the D4D.
6. **Appendix:** provides definitions and the following site maps for reference to support this D4D: Topography, District and Development Blocks, Land Use, and Phasing.

1.3 Document and Chapter Organization

USER GUIDE

Section Number **Section Name** **Figures**

HUNTERS POINT SHIPYARD PHASE 2 DESIGN FOR DEVELOPMENT | 04.18.2018 DRAFT

3.3 Wharf District

Urban Form

Echoing the Shipyard's Naval period, the Wharf District will become a center for employment, innovation and entrepreneurship. Primarily focused on research and development, the neighborhood may also include light industrial and manufacturing operations as well as residential and ground level commercial uses.

Commercial space will be located within new and restored character-enhancing structures that reflect the needs of the modern workplace. Adhering to the historic street pattern, buildings echo the scale and massing of those that preceded them, with commanding views north, east, and south across the Bay. The generous height and footprint sizes of existing and future buildings relate to the grand scale of the Shipyard.

Public Realm

The Shipyard's primary transit center is located along Spear Avenue, the central axis of the neighborhood. Connecting to the Caltrain Station and Candlestick Point, the transit center also accommodates buses, shuttles, and a future water taxi/ferry service arriving at Dry Dock 4.

The Wharf District offers a unique, accessible, and highly-prized waterfront. The Cultural Heritage Park along Dry Docks 2 and 3 houses a variety of historic buildings and structures dating from the early 1900's, while the Water Room, Dry Dock 4, and the grand stairway provide extraordinary bay views.

1. Building 231
2. Building 253

1

2

HUNTERS POINT SHIPYARD PHASE 2 DESIGN FOR DEVELOPMENT | 04.18.2018 DRAFT

Figure 3.3a: WHARF DISTRICT

Shared Parking Structures / Utility
Existing Buildings
Priority Ground Floor Activation

1. Waterfront Office Example
2. Adaptive Reuse Example

1

2

Content **Image**

Standard Number and Title

Figures

4.1 Block Sizes and Mid-Block Breaks

4.1.1 Mid-Block Break Lot Divisions and Locations

INTENT

Mid-Block Breaks (MBBs) are intended to allow public access through private development blocks to promote connectivity and walkability and create a finer grain circulation system.

MBBs are regulated by the CPHPS2 Infrastructure Plan, Transportation Plan, and Streetscape Master Plan.

Mid-Block Break Specification Book will be provided per the DRDAP.

DEFINITIONS

"Mid-Block Breaks or MBBs"
A publicly accessible pedestrian, bicycle and/or vehicle lane way on private property as identified in *Figure 4.1.b*.

"Mid Block Break Width"
The mandatory Street Wall to Street Wall width for a MBB and associated Setback zones.

"EVA"
Emergency Vehicular Access.

"Street Wall"
The aggregate effects of the façades of buildings along a property line adjacent to a street or open space. The typical context for this term is in defining the public realm and framing or engaging the street.

"Block Sizes"
Block Sizes and legal parcels are defined in the Final Map. Approximate parcel dimensions are provided in *Figure 4.1b* and are subject to change. Block sizes may be legal parcels or may be part of a legal parcel.

STANDARDS

4.1.1 Mid-Block Break Lot Divisions and Locations

Mid-Block Break locations and widths shall be built as defined in *Figure 4.1a*. MBB Widths shall be used to define the location of the Street Wall. Street Wall to Street Wall dimensions shall not be greater or less than required MBB Width. Refer to *Figure 4.1a*.

MBB locations across blocks shall be aligned. The first developed MBB establishes the required centerline for subsequent MBB alignment. All required amenities including street trees, lighting, and seating shall occur within the MBB Parcel or the adjacent Setback Zones. Refer to *Figure 4.1b* and Section 4.27 Private Open Space - Mid-Block Breaks.

Figure 4.1a: MID-BLOCK BREAK LOT DIVISIONS

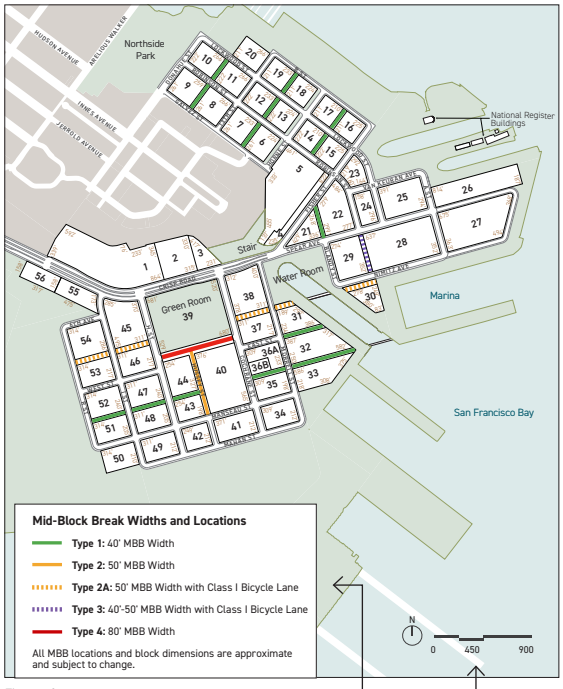

Figure 4.1b: MID-BLOCK BREAK WIDTHS AND LOCATIONS

Intent and Definitions | **Standards and Guidelines** | **Illustrative Graphics** | **Figure Number and Name** | **Figure Legend** | **Scale**

1.4 History

HPS2 occupies approximately 421 acres along the southeastern shoreline of San Francisco. The site has extensive waterfront land along the San Francisco Bay to the east and south, South Basin and Yosemite Slough to the west, and India Basin to the north. Hunters Point is relatively protected from the fog and harsh ocean winds that San Francisco is commonly known for. Nomadic Ohlone tribes and immigrant fishing communities have historically called this area home. The site later became a peripheral location within San Francisco, used as a commercial shipyard prior to being purchased and expanded by the US Navy coincident to WWII in the 1940's.

The original topography of the area has changed dramatically over time. Hunters Point Hill originally stretched a half mile into the bay, meeting the water's edge with steep banks. Large portions of the hill were later removed to fill in the end of the peninsula during the making of the Shipyard. Today, HPS2 is mainly characterized by flat topography as it meets the shoreline with constructed wharves, piers, dry docks, and low sea walls.

HPS2 will embrace a new future for the Shipyard by referencing the site's rich history through the design of the landscape and urban form.

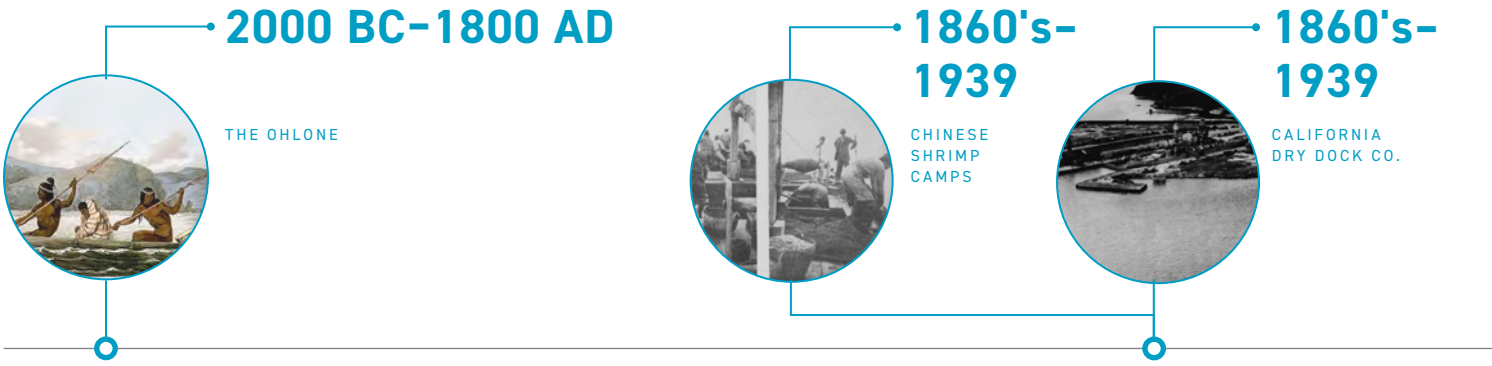

Figure 1.4a: PROJECT HISTORY AND TIMELINE

2000 BC–
1800 AD

The Ohlone

The Shipyard lies within the traditional territory of the indigenous Ohlone (Costanoan) people. Their habitation in close proximity to the San Francisco Bay provided access to clams, ocean and bay mussels, and oysters, which were important components of their diet. The Ohlone carved canoes out of balsa wood and used them to fish and hunt waterfowl and sea mammals. These canoes were also used for travel and trade across the bay waters and salt marshes.

For centuries, the waterfront has played an integral role in the lives of those who have inhabited this area. This powerful interaction between the sea and land will live on through the HPS2 development through waterfront open space promenades, activity areas, and view corridors.

1941–1974

NAVY EXPANSION

2010

HUNTERS POINT
PHASE 1
REDEVELOPMENT PLAN

2018

HUNTERS POINT
PHASE 2 D4D

1860's–1939

Chinese Shrimp Camps

Following the completion of the Transcontinental Railroad, Chinese immigrants who had previously made a living working on the railroad moved west and established shrimp camps. By the late 1860's they had fully developed the shrimping industry at Hunters Point using bag nets. As a result, a substantial amount of dried fish, abalone, abalone shells, and shrimp were exported to China.

Camps included a range of domestic and work-related structures associated with the shrimp industry. Most followed a similar layout, although this changed over time as population, technology, and social conditions altered. Typically, a camp consisted of several small shacks at the water's edge, a wharf, a processing area with boilers, drying grounds, storehouses, and living quarters. The amount of San Francisco fish and shrimp exported overseas led anglers of other ethnicities to petition the State to levy taxes on Chinese commercial fishing. In 1885 and 1886, six hundred Chinese were arrested for tax reasons. The Federal Government revived old trade laws and applied them to the dried fish and shrimp trade; Chinese vessels were seized and their captains fined.

The number of Chinese camps around the San Francisco Bay decreased from 50 in the 1880's to 26 in 1896. The 1900 US Census lists one Chinese fisherman at Hunters Point, but no evidence of large-scale fishing camps in the area. The State Legislature outlawed the bag net in 1910, and most of the shrimp fishermen abandoned the industry. A redesign of the bag net, which facilitated trolling for shrimp, was introduced in the 1920's. By the 1930's, the fishing villages were active once again. No fewer than twelve fishing camps were observed along Hunters Point shoreline.

In 1939, the San Francisco Health Department received a number of complaints surrounding the strong smell emitted by the fishing camps and responded by declaring them unsanitary and ordering several of the camps burned. Fishing activity also declined due to bay fill and pollution, as well as the Navy's move to Hunters Point in the 1940's.

1860's–1939

California Dry Dock Co.

Access to deep water at the Shipyard drove the nature of its early maritime activities. Small shipyards that had been crowded out of the waterfront closer to the City's center began operating in and adjacent to the Shipyard as early as the 1860's.

Dry Dock 1, completed in 1868, was well situated with deep water and close proximity to the thriving scow schooner boat yards at India Basin just north of the Shipyard. Most of the boats built and repaired during this time at Hunters Point were scow schooners (boats with a broad, shallow hull instead of a deep keel); two boat yards adjacent to the Shipyard in India Basin are known to have built junks (a boat with a flat bottom, no keel, and a very large rudder) for Chinese fishermen.

The dry dock facilities expanded in 1901-1903 with the completion of Dry Dock 2, Buildings 204 (Gate and Pump House) and 205 (Dry Dock No. 2 Pump House). At the time, it was the most modern dry dock on the San Francisco Bay. After the second dock was constructed, Navy ships came to the area for dry dock service. Dry Dock 3 replaced Dry Dock 1 in 1918 in response to the increase in Naval contracts, and Building 140 (Pump House) was constructed in conjunction with this phase of development. In 1939, the Navy purchased the dry docks and adjacent support buildings 207 (Latrine building) and 208 (Shop Service, Tool Room and Canteen Building).

The Hunters Point Commercial Dry Dock Historic District is listed on the National Register of Historic Places (see *Figure 4.24a.*). This Historic District comprises Dry Docks 2, 3, and 4, and Buildings 140, 204, 205, 207 & 208.

1941–
1974

Navy Expansion

The Navy took possession of the Shipyard on December 18, 1941, less than two weeks after the attack on Pearl Harbor. From this point forward, mobilization for WWII occurred rapidly at Hunters Point. As part of the expansion of the Shipyard, a major reclamation project was undertaken to construct Dry Dock Numbers 4, 5, 6, and 7 for docking submarines, destroyers and aircraft carriers. Between December 18, 1941 and September 2, 1945, 661 ships docked at Hunters Point.

Immediately following WWII, Operation Magic Carpet used the Shipyard for the return of US service personnel from overseas. The facility continued to serve as a docking area for Navy ships for repair, overhaul, maintenance, and conversion. Other functions were transferred to the facility, including Ship Salvage Base, 12th Naval District, and the Radiological Defense Laboratory set up along the southern waterfront. Beginning in the early 1950s, the Shipyard began to focus on submarine repair. It was in this capacity that the Shipyard provided support to the US Naval fleet during the Korean and Vietnam conflicts.

Among remnants of the maritime history at the Shipyard are some exceptional character-enhancing buildings and structures that may serve not only to recall the past, but to inform future uses and activities. Retaining and restoring these buildings and maintaining the Navy's historical street network are integral parts of the new development. Existing buildings serve as a relic of the scale and industrial function of the Shipyard. The historic street grid relates to these buildings. WWII Buildings 211, 224, 231, 253, 281, 411, 351, and 813 are being studied for possible retention and adaptive reuse and the iconic Regunning Crane will be retained. In addition, Buildings 101, 140, 204, 205, 207, and 208 will be retained.

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1&2. ARCHIVAL IMAGES OF THE WORKING SHIPYARD

1974–
PRESENT

Post Military

In 1974, the Navy deactivated the Shipyard and leased the facility to private industry. In 1991, the Base Realignment and Closure Commission identified the Shipyard for closure. Over the next decade, the Navy and the City and County of San Francisco negotiated terms for the lease and subsequent transfer of the facility.

After decommissioning in 1974, the Shipyard was leased in 1976 to a private ship-repair company which sublet buildings to civilians including sculptor Jacques Terzian, a fabricator of found-object furniture and wall installations. Jacques' vision of transforming neglected buildings into affordable workspaces became reality in 1983 when a handful of artists began renting and renovating Shipyard studios. With co-developers Paula Terzian and David Terzian (Jacques' daughter and son), the Shipyard was soon home to 300 visual artists, musicians, and writers. Groups such as the Hunters Point Citizens Advisory Committee, the Shipyard Trust for the Arts and the Shipyard Artist Alliance have worked hard to maintain the vibrancy of this community of arts professionals.

The Bayview Hunters Point neighborhoods adjacent to the Shipyard are predominately home to communities of color that historically included many Shipyard workers and their families. These neighborhoods have had a higher rate of home ownership compared to other neighborhoods within San Francisco, but face a multitude of physical, economic, and social challenges. The US I-280 and CA 101 freeways physically isolate the Bayview neighborhood from the rest of the City. Closure of the Shipyard and de-industrialization of the district in the 1970s and 1980s increased unemployment and local poverty within the Bayview. Racial discrimination, pollution, substandard housing, and lack of investment in infrastructure have been notable and enduring challenges.

Revitalization of the historic Shipyard will create opportunities for housing, employment, open space, transit, and sustainable infrastructure that will complement the growth and resilience of Bayview Hunters Point.

3

3. ARCHIVAL IMAGES OF THE WORKING SHIPYARD

2 VISION

2 Vision

*"I have great respect for the past.
If you don't know where you've come from,
you don't know where you're going. I have
respect for the past, but I'm a person of
the moment. I'm here, and I do my best
to be completely centered at the place I'm at,
then I go forward to the next place."*

Maya Angelou

Sir David Adjaye selected these words to reflect the vision for Hunters Point Shipyard, which recognizes and respects the history of the place and its connection to the water, sensitively responds to present-day needs, and demonstrates optimism for the future by creating space for the as yet unimagined.

2.1 Project Vision

The San Francisco Shipyard offers a once-in-a-lifetime opportunity to reimagine part of the city at a scale and context rarely encountered. The thinking that informed this Design For Development document is animated by a sense of stewardship, borne out of a recognition of the fact that the built environment created here will endure for generations to come. The aim of this work is to inspire designers to transcend typical notions of standards and compliance so that they may interpret and implement the principles of good city-making and work in keeping with the vision of this document.

Buildings will come and go and be renovated and altered. Permanence lies in the way people experience the spaces between buildings—the human-scaled urban fabric. The vision for the project draws upon the unadulterated authenticity of the Shipyard, continues the legacy of human ingenuity at the site, and creates a model of city-making for San Francisco and the world. The site presents the potential to respond at an impactful scale to some of the Bay Area's most pressing issues, including access to housing, employment, and economic equality through a series of integrated-use districts that connect with the adjacent Bayview Hunters Point neighborhood. The master plan connects these integrated-use districts with abundant public open spaces, providing a diversity of housing types, and aspires to create sustainable infrastructure that will make the new buildings remarkably efficient.

The site encompasses histories beyond the legacy of the Shipyard. A large open space identified as the Green Room pays homage to Ohlone shell mounds, and interpretive signage will tell the story of the Chinese shrimp camps along the shoreline. The history of the site is connected to the ideals of the future by embracing the monumental scale of potential adaptive reuse buildings, reconciling them with what makes a San Francisco neighborhood distinct, and carrying those qualities through to the design standards for all buildings. Keeping the street grid intact allows for the potential adaptive reuse of a number of existing structures. These "seed buildings" continue an authentic connection with the past.

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1. Shipyard Existing Photo
2. Shipyard Historic Photo
3. Shipyard Existing Photo
4. Shipyard Future Development Example

Figure 2.1a: HPS2 ILLUSTRATIVE PLAN

2.1 Project Vision Cont'd

The master plan incorporates certain commonalities found in San Francisco neighborhoods and adapts them to the unique site of the Shipyard. A prominent Pedestrian Allée, open space connections, and view corridors to the water enhance the public realm, stitch the districts of the site together and create a variation in experience. Features such as the dry dock are revitalized to serve as public gathering spaces framed by structures that have potential for adaptive reuse, taller buildings with a strong street wall, limited setbacks, and vibrant ground floor programming. Active and transparent ground floor storefronts focus the energy of the pedestrian realm along identified streets. A material palette to enhance the experiential texture and patina that is specific to the history of craft at the site is identified along specific streets, view corridors, and within public open spaces, lending a subtle distinctiveness to each district.

The project endeavors to couple the Shipyard's heritage of big ambitions with the small scale granularity of day-to-day human experience of people who will live, work, play, and walk through the site. The Shipyard is envisioned as a place that celebrates the monumentality of its past achievements, including exultant expressions of human ingenuity, and it will continue to be recognizable as a destination for big ideas and bold ambitions, replete with the quality and character of other great San Francisco neighborhoods.

1. Waterfront Open Space Example
2. Ground Floor Dining Example

1

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2.1 Project Vision Cont'd

2.1.1 Embrace the Legacy, Authenticity, and Unique Character of the Shipyard

Situated on the southeastern edge of a city known for its topography, the Shipyard is a uniquely flat maritime landscape with a pronounced connection to the water and the horizon.

Draw Cues from the Scale and Craft of the Shipyard's Heritage Uses to Preserve the Unique Identity of the Site

- Retain the historic buildings and encourage the adaptive reuse of existing character-enhancing structures
- Construct new buildings that respond to the monumental scale of character-enhancing structures
- Incentivize architecture that evokes the legacy of craft and ingenuity at the Shipyard through Adaptive Reuse and Building Materials
- Incentivize adaptive reuse of the unique character-enhancing buildings at Block 28 and Block 40; these structures are of a monumental scale that express the history of the Shipyard. If these blocks are built anew, special requirements to achieve architectural excellence apply

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1. Adaptive Reuse Example
2. New Building Example
3. Shipyard Existing Photo
4. Waterfront Open Space Example

Embrace the Maritime Character and Flat Topography of the Shipyard

- Preserve and reinforce views to the water through Building Heights and Setbacks
- Step down the height of buildings at the north and south perimeters of the site to emphasize the natural relationship with and proximity to the waterfront
- Reinforce the height and size of the buildings around the Water Room, Green Room, and Wharf District to meet and address the scale of the adjacent open spaces and water features
- Activate streets with ground floor uses along key corridors
- Activate the ground floor and provide variation in architectural expression along the Pedestrian Allée, which connects a variety of open spaces, residential, retail, and office uses

4

Build on the History of Human Ingenuity at the Site with Exemplary Measures of Large Scale Sustainability

- Aspire to provide state-of-the-art sustainability measures commensurate with the scale of the site which affords the opportunity to reduce its carbon footprint, lessen dependence on non-renewable energy, and significantly reduce water demand
- Create an "Eco-Grid" (subject to financial and regulatory feasibility and the Developer's discretion), which will provide opportunities to:
  - Pursue the implementation of sustainable, district-scale infrastructure
  - Develop a network of sustainable utility and data systems that will reduce impact of the Shipyard on the climate by leveraging the large scale of the site
  - Implement district solar energy generation, recyclable water facilities, and district-wide heating and cooling
  - Establish exemplary best practices for large scale sustainability and resiliency measures
- Leverage the roofs of buildings to accommodate renewable power
- Consider screening parking structure roofs with renewable power
- Allow district energy components within buildings

2.1 Project Vision Cont'd

2.1.2 Create a Model for City-Making That Continues San Francisco's Legacy of Distinct Neighborhoods

San Francisco's distinctive neighborhoods are destinations for residents and global visitors alike. The integrated use districts of this site restore the Shipyard as an engine of economic activity, create space for artists and makers, and benefit the Bayview Hunters Point community. The Shipyard will be reinstated as an economic driver for San Francisco by attracting world-class anchor tenants and research and education institutions. Through its large scale, the project establishes a new, refined approach to workforce urban development.

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Rebuild the Shipyard as a Cultural and Economic Engine for Bayview Hunters Point

- Generate new employment at the Shipyard
- Build community, civic, and institutional resources
- Provide program uses and services that benefit existing neighbors and new residents

Establish Residential Neighborhoods with a Variety of Housing Typologies to Create Diverse Urban Life and Active Streetscapes

- Establish a network of streets and mid-block breaks with active building frontages and proximity to a variety of public open spaces and retail
- Provide residential buildings at various scales and typologies, from multifamily to townhomes
- Design buildings to create an appropriate residential pedestrian street experience

Provide Retail Uses that Activate the Streetscape and Amenities that Build Community

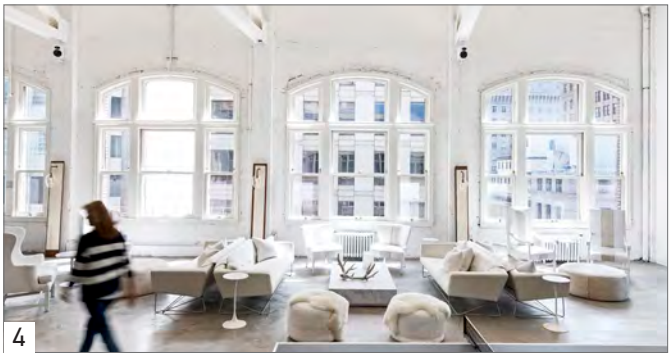
- Design buildings with ground floor activation and transparency to create vibrant, walkable streets
- Prioritize location of retail to focus activity along key streets and walkways
- Use retail and amenities to connect the districts, stimulate mobility, and create places for community gathering

Create Office and R&D Workplaces that Perpetuate San Francisco's Preeminence in the Global Innovation Economy

- Pursue adaptive reuse of select existing character-enhancing structures to create iconic architecture
- Construct new buildings that respond to the scale of existing structures and adjacent open spaces, particularly in the Warehouse and Wharf Districts
- Design large floor plate buildings that preserve flexibility, encourage innovation in workplace design, and attract world-class companies
- Design buildings with attention to architectural detail, quality of materials, and craftsmanship that honor the legacy of ingenuity at the Shipyard

Invigorate the Artistic Cultural District

- Retain Heritage Building 101 and complement it with a new artist studio building and plaza
- Locate active frontages for Artists and Makers along Fisher and Robinson Streets to encourage a vibrant cultural streetscape and destination



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1. Residential Neighborhood Example
2. Residential Street Example
3. New Office Building Example
4. Office through Adaptive Reuse Example
5. Ground Floor Retail Example

3

5

3 DISTRICTS & FEATURES

3 Districts & Features

Figure 3.0a: DISTRICTS & FEATURES

Districts

The site will comprise four distinct districts. Each district shares the same guiding principles and development goals, but may differ in the character of the public realm, street typologies, building design, and predominant uses.

3.1 Warehouse District: Architectural diversity in scale and massing reflects the demands of the different uses that make up this District. Building designs celebrate monumentality by responding to the large scale of existing structures, as well as to large public open spaces found in the Green Room and Water Room. Buildings may become smaller in scale along the south waterfront, however, providing a more porous layout and allowing more visual connection from interior blocks to the water.

3.2 Village Center: The Village Center accommodates the resident artist community with new studios and gallery space, supplemented by retail, maker space, and other related uses. The new building complements the distinctive scale and rhythm of Building 101. The architecture is appropriately scaled for a traditional artist community, overlooking a plaza with outdoor workspaces and a display area.

3.3 Wharf District: Primarily focused on research and development, this neighborhood may also include makerspaces as well as ground-level commercial or residential uses. Adhering to the historic street pattern, dry docks, and piers, buildings echo the scale and massing of those that preceded them.

3.4 North Shoreline: Predominately residential, buildings range from low- to mid-rise and are domestic in style and scale. The network of streets make for a walkable neighborhood.

Key Destinations and Features

The following key features bring the districts together:

3.5 Green Room: An eight[8] acre urban park sits at the center of the Warehouse District. The park is a well-designed and highly-maintained urban landscape to engage individuals living and working at the Shipyard.

3.6 Water Room: The Water Room opens up to Dry Dock 4. It provides unobstructed views of the Bay and acts as a powerful urban node, linking the Hilltop and waterfront.

3.7 Pedestrian Allée: A generous 50-foot-wide Pedestrian Allée and East-West bike pathway through the Shipyard connects major public spaces such as the Water Room, Green Room, and the Waterfront. This avenue offers ever-changing experiences across open spaces and the built environment. This procession of environments is complemented with low-rise residential, mid-rise residential, ground floor retail, and offices.

3.8 Waterfront Open Spaces: The waterfront open spaces provide a number of different experiences, such as promenades for walking and bicycling, a marina, sports fields, and an ecological landscape for native habitats. A diversity of waterfront edge conditions provide a variety of experiences as well as access to the water. Some are hard edge conditions (sea walls, rip-rap, ecologically enhanced bulkheads) and others are soft edge conditions (marsh lands, vegetated slopes.)

3.1 Warehouse District

Urban Form

The Warehouse District is a vibrant mixed-use neighborhood centered around the Green Room. The Green Room may be complemented by two existing Navy buildings from the World War II era that frame its northern and southern edges and provide a sense of scale and character. New buildings fronting the Water Room and Green Room respond appropriately to the open spaces.

A thoughtful use of building materials, scale, and massing, provide architectural character, and visual interest, and shape the pedestrian realm. Priorities include creating strong street walls at Crisp Road, the Pedestrian Allée, and around the Green Room; activating the ground floor; and framing key view corridors.

Public Realm

The Pedestrian Allée and bike pathway connects large, naturally landscaped open spaces on the southwestern quadrant of the neighborhood with the Green Room, and continue to bridge Dry Dock 4 and the Wharf District.

The Warehouse District is bordered by the Water Room and grand waterfront open spaces that include acres of baseball and soccer fields, a marina, and large natural landscapes. The Bay Trail extends along the shoreline to provide visual and physical connections to the North Shoreline, the Yosemite Slough Bridge, and Candlestick Point.

Ground floor activation is prioritized in the buildings around the Green Room, the Water Room, and the Pedestrian Allée.

A wastewater treatment facility and a police and fire station are located in this district. The character-enhancing elements of these buildings have been considered in the writing of the D4D.

1. Building 813
2. Building 351
3. Building 411

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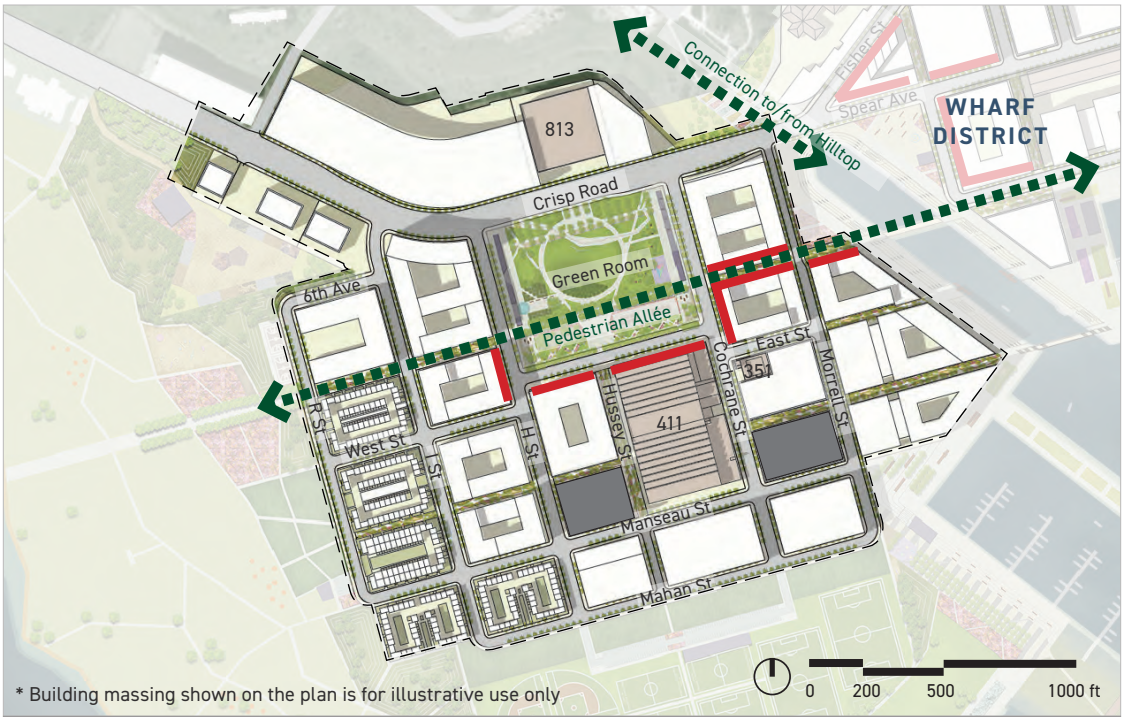
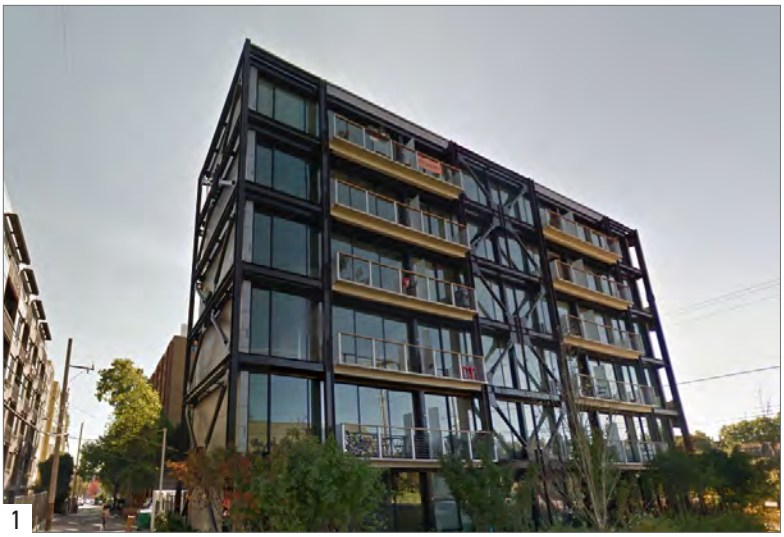


Figure 3.1a: WAREHOUSE DISTRICT



1

Shared Parking Structures/Utility
Existing Buildings
Priority Ground Floor Activation

1. Mid-Rise Residential Example
2. Open Space Example
3. Ground Floor Activation Example

2

3

3.2 Village Center

Urban Form

The Village Center is the creative and cultural hub of the Shipyard and the point of convergence for the other three Shipyard Districts. The Village Center builds on the history of a strong arts and maker community with new artist studios and gallery space supplemented by retail, storefront maker spaces, galleries, and other arts-related uses.

A new Shipyard Artist Studios building frames a plaza for outdoor work spaces and display of artwork. This new building complements the distinctive scale and rhythm of Heritage Building 101, which has been the home for a community of artists since the 1980's.

Public Realm

The nexus of Fischer and Robinson Streets is lined with artists' studios, galleries, and neighborhood retail. The plazas to the north and south of Building 101 provide the primary open space within the Village Center. The low horizontal lines of the Village Center are sharply distinguished from the hillside open space, which rises 85 feet from Fisher to Hilltop Park.

1. Building 101

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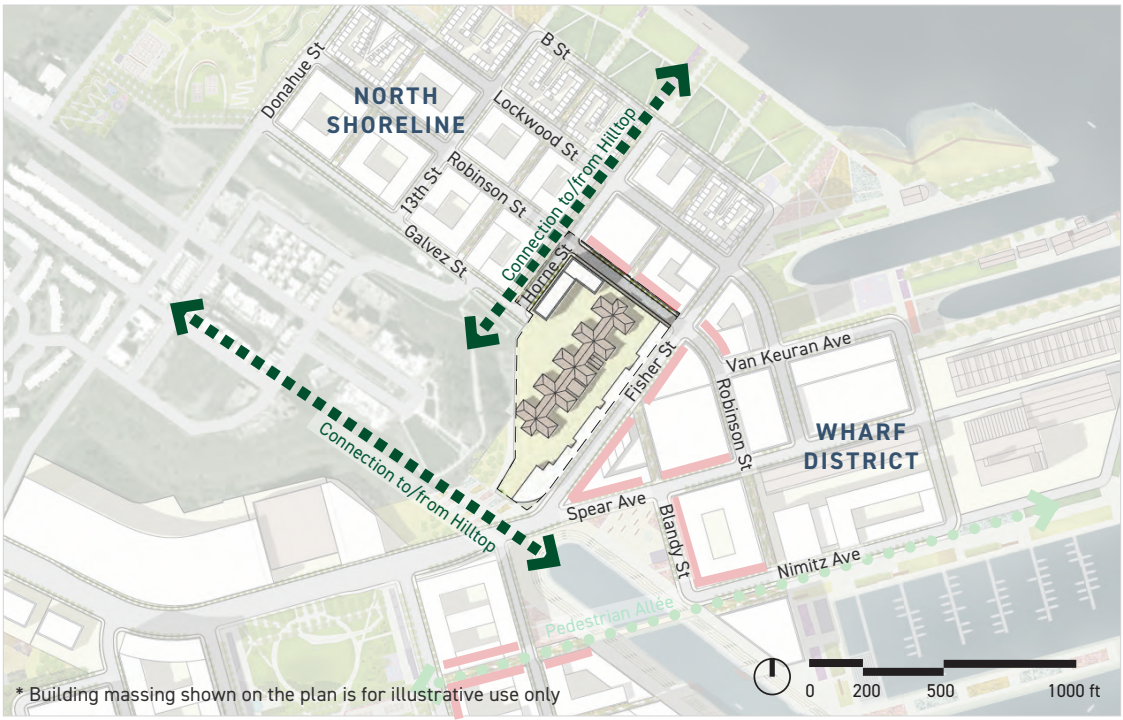

Figure 3.2a: VILLAGE CENTER

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Building 101 (Artists' Studios)

1 & 2. Artists' Studios Examples
3. Maker Space Example

3

3.3 Wharf District

Urban Form

Echoing the Shipyard's Naval period, the Wharf District will become a center for employment, innovation and entrepreneurship. Primarily focused on research and development, the neighborhood may also include light industrial and manufacturing operations as well as residential and ground level commercial uses.

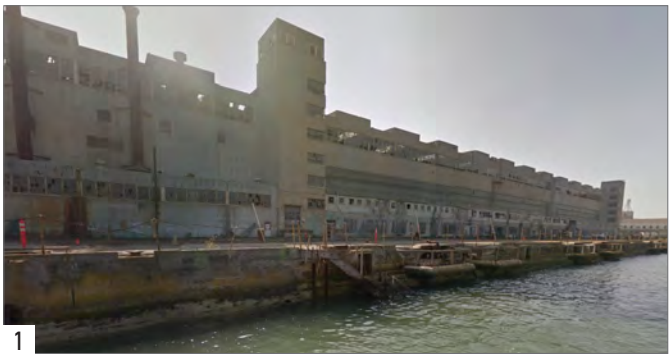
Commercial space will be located within new and restored character-enhancing structures that reflect the needs of the modern workplace. Adhering to the historic street pattern, buildings echo the scale and massing of those that preceded them, with commanding views north, east, and south across the Bay. The generous height and footprint sizes of existing and future buildings relate to the grand scale of the Shipyard.

Public Realm

The Shipyard's primary transit center is located along Spear Avenue, the central axis of the neighborhood. Connecting to the Caltrain Station and Candlestick Point, the transit center also accommodates buses, shuttles, and a future water taxi/ferry service arriving at Dry Dock 4.

The Wharf District offers a unique, accessible, and highly-prized waterfront. The Cultural Heritage Park along Dry Docks 2 and 3 houses a variety of historic buildings and structures dating from the early 1900's, while the Water Room, Dry Dock 4, and the grand stairway provide extraordinary bay views.

1. Building 231
2. Building 253



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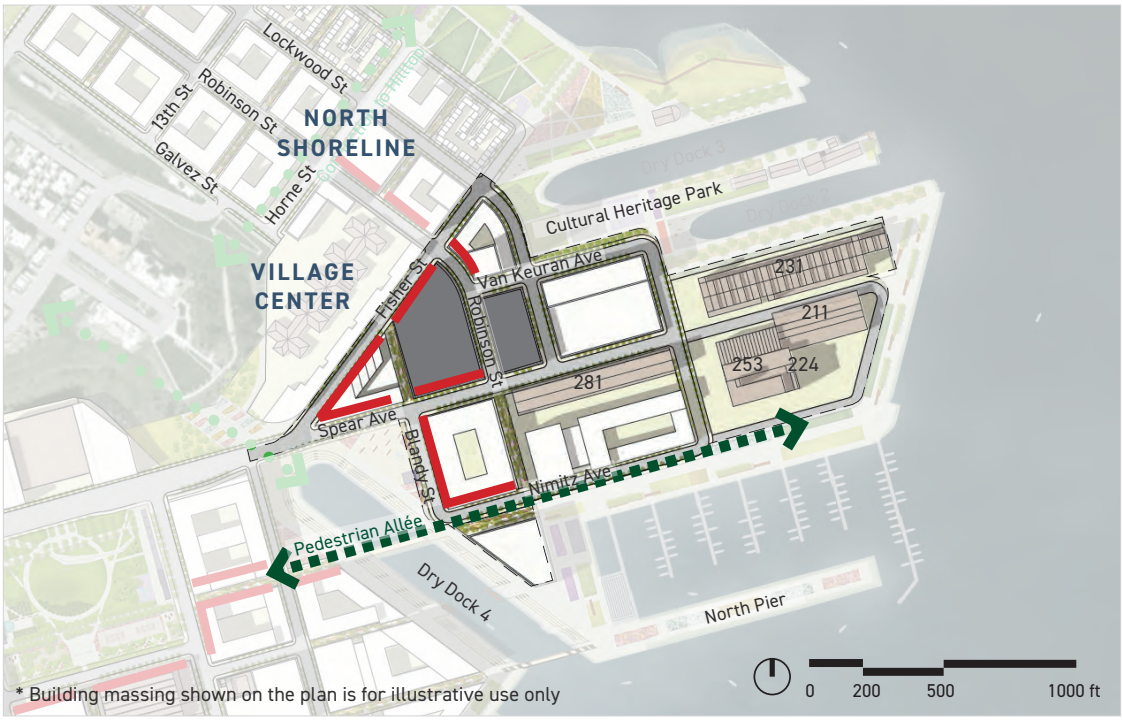
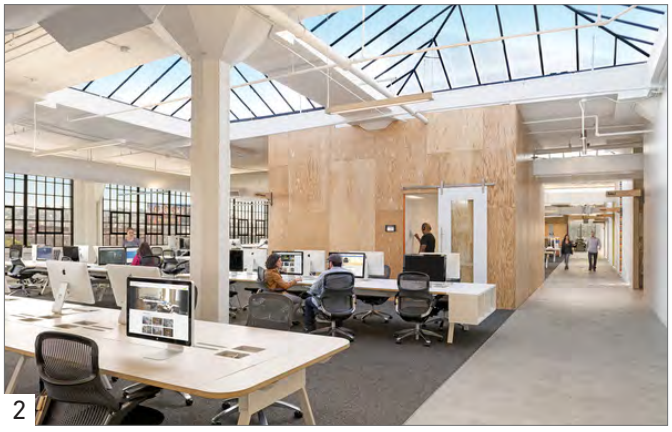


Figure 3.3a: WHARF DISTRICT

1. Waterfront Office Example
2. Adaptive Reuse Example

1



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3.4 North Shoreline

Urban Form

Embracing its historic residential legacy, the North Shoreline is the residential heart of HPS2, providing a range of housing types in proximity to the waterfront. Primarily low-to mid-rise, buildings relate directly to adjacent public spaces and rights-of-way, stepping down in height towards the shoreline. Toward the waterfront, buildings may become smaller in scale and less dense in layout, which allows more visual connection from interior blocks to the water. The North Shoreline also includes neighborhood-serving retail and business services, childcare, and small professional offices near Fisher Street and Robinson Street. The iconic high-rise towers located on either side of Fisher Street define the skyline of the Shipyard.

Public Realm

Bicycle-oriented Robinson Street and transit-rich Lockwood Street draw residents from the site's northern gateway at Innes Avenue and Donahue Street into the Shipyard's neighborhood center. A generous setback is designed on Robinson Street and Lockwood Street to enhance the sense of a neighborhood gateway and to allow for private open spaces, stoops and transitions from the private to public realm.

The Waterfront Promenade along the northeastern edge of the neighborhood provides views across the water to downtown San Francisco. Northside Park, at the northern edge of the Shipyard, is a 13-acre area with passive and active open spaces serving both the residents of Shipyard North Shoreline District and the adjoining Hunters Hill and Indian Basin neighborhoods. Both building and park design provide connectivity while also respecting the privacy of residential dwellings adjoining the promenade.

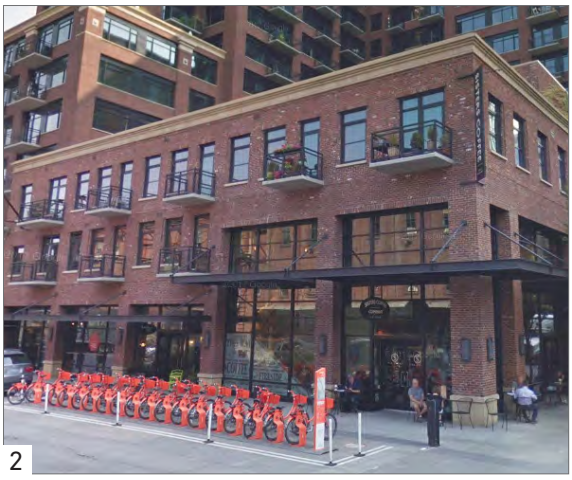
East-west streets, mid-block breaks, and private open spaces extend views to the parks and Waterfront Promenade. This promenade extends the Bay Trail's walking and bike routes into the neighborhood, via a series of paths connecting to neighborhood streets and allées. The broad, landscaped space along Horne Street connects the park into the neighborhood with manicured trees that preserve glimpses of the Bay.

Figure 3.4a: NORTH SHORELINE

Shared Parking Structures / Utility

Priority Ground Floor Activation

1. Residential Tower Example
2. Residential Mid-Rise Example



3.5 Green Room

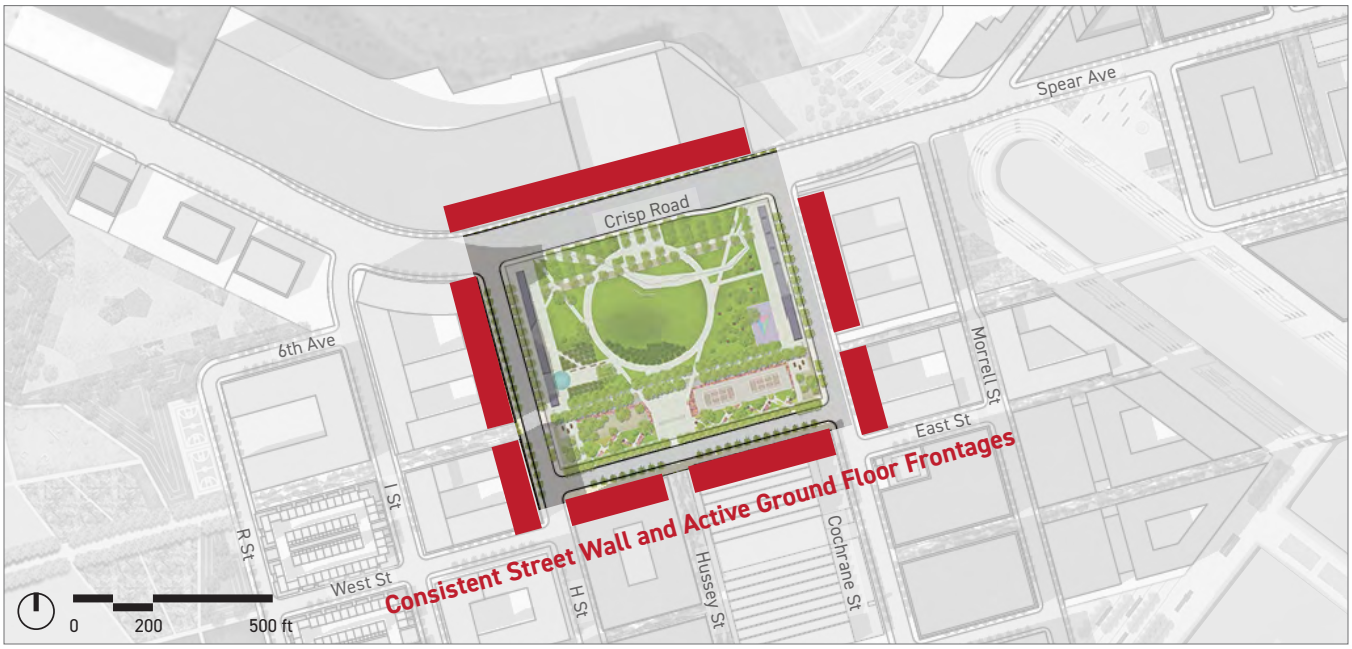


Figure 3.5a: KEY DESTINATIONS AND FEATURES - GREEN ROOM

- New buildings frame the Green Room to reinforce the historic legacy of large buildings through scale, massing, and consistent street walls.
- The district design represents and brings together multiple histories of the Shipyard with iconic adaptive reuse structures.
- One of two outdoor civic "rooms," the Green Room is situated at the heart of the Warehouse District. It is designed as a park with community programs, gatherings, and festivals.
- A pavilion dedicated to Maya Angelou offers a moment of quiet reflection.

1 & 2. Green Room Examples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3.6 Water Room

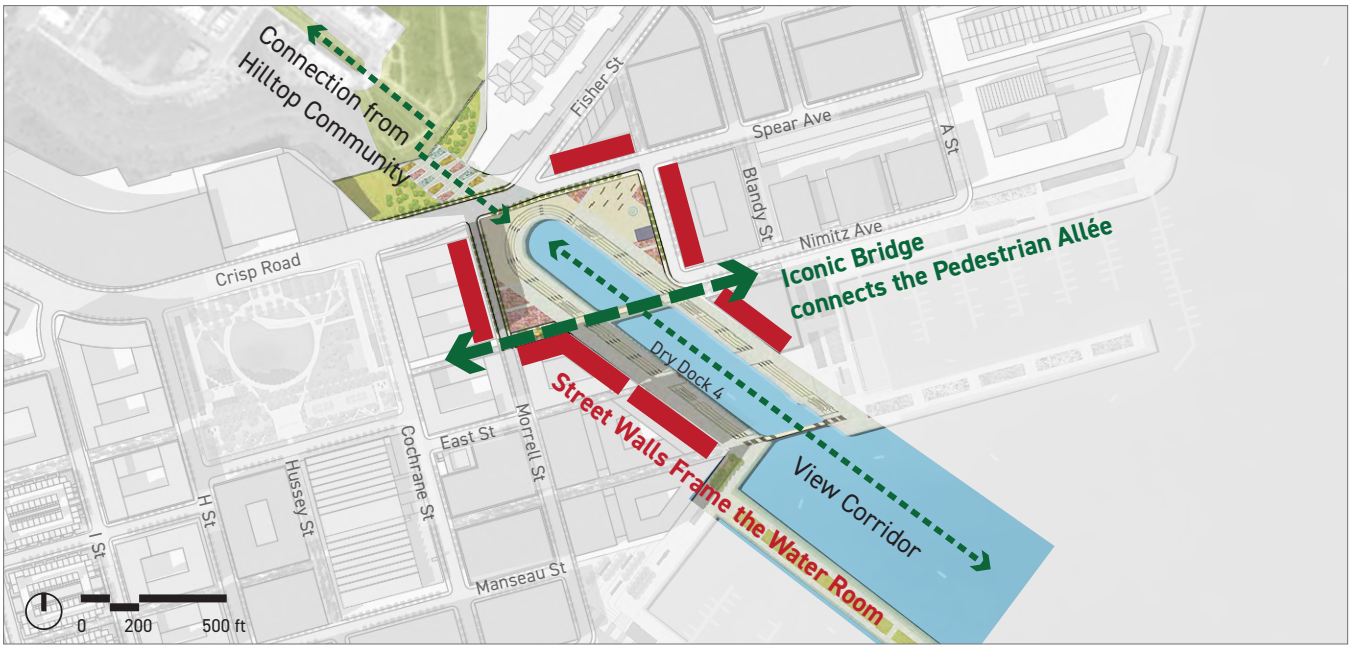

Figure 3.6a: KEY DESTINATIONS AND FEATURES - WATER ROOM

- Buildings around the Water Room are scaled and designed to create consistent street walls that frame this contemporary public space.
- The buildings create an unobstructed view corridor and frame a grand stair with generous access from the top of Hilltop Park down to the Waterfront.
- One of two outdoor civic "rooms," the Water Room is a four-acre civic square that weaves the most striking shoreline feature—Dry Dock 4—into the heart of the shipyard development.
- An iconic bridge connects the Pedestrian Allée.

1 & 2. Water Room Examples


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3.7 Pedestrian Allée

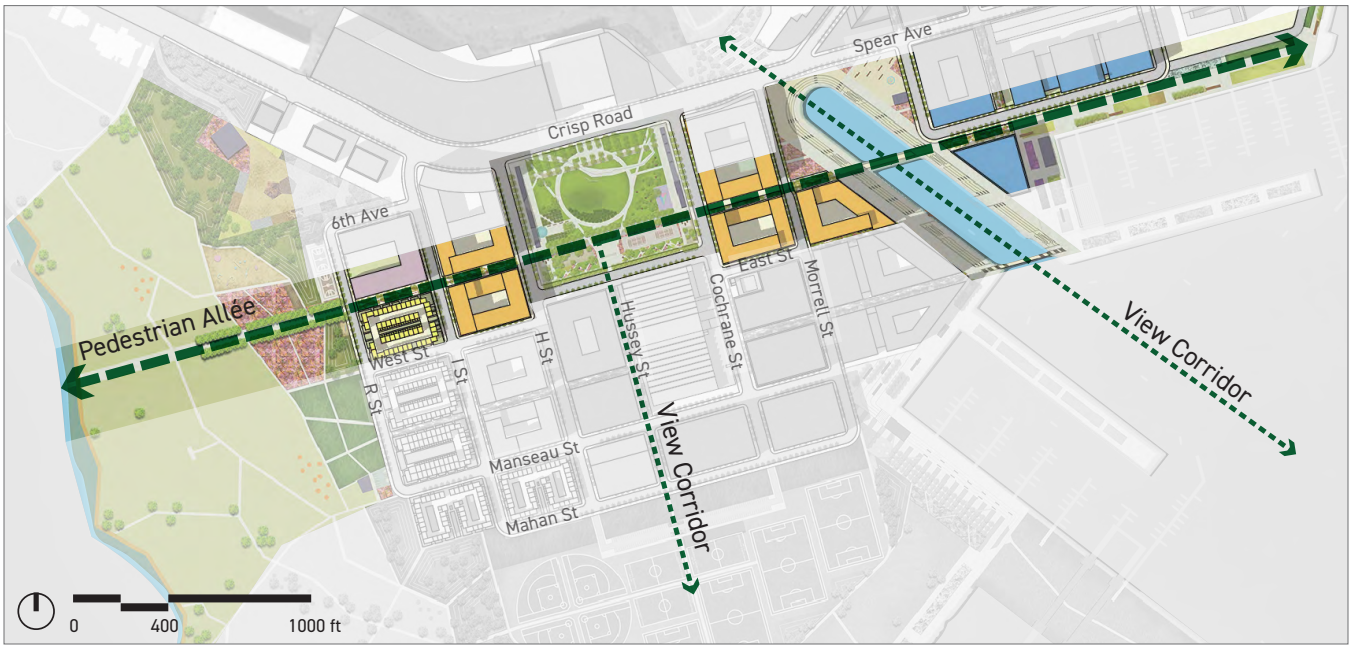

Figure 3.7a: KEY DESTINATIONS AND FEATURES - PEDESTRIAN ALLÉE

- Building Step Backs along the Mid-Block Breaks bring light to the corridor, while the consistent street walls define and frame view corridors.
- Ground Floor Activation at the base of the buildings and concentrated retail zones create a safe and exciting walking experience.
- The sequence of appropriately scaled open spaces—with a mix of low-rise residential, mid-rise residential, office and research buildings, and ground-floor activation—creates multiple experiences.
- A generous east-west pedestrian and bicycle path connects major public spaces such as the Water Room, the Green Room, Waterfront Open Spaces, and the Bay Trail.

1 & 2. Pedestrian Allée Examples


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3.8 Waterfront Open Spaces

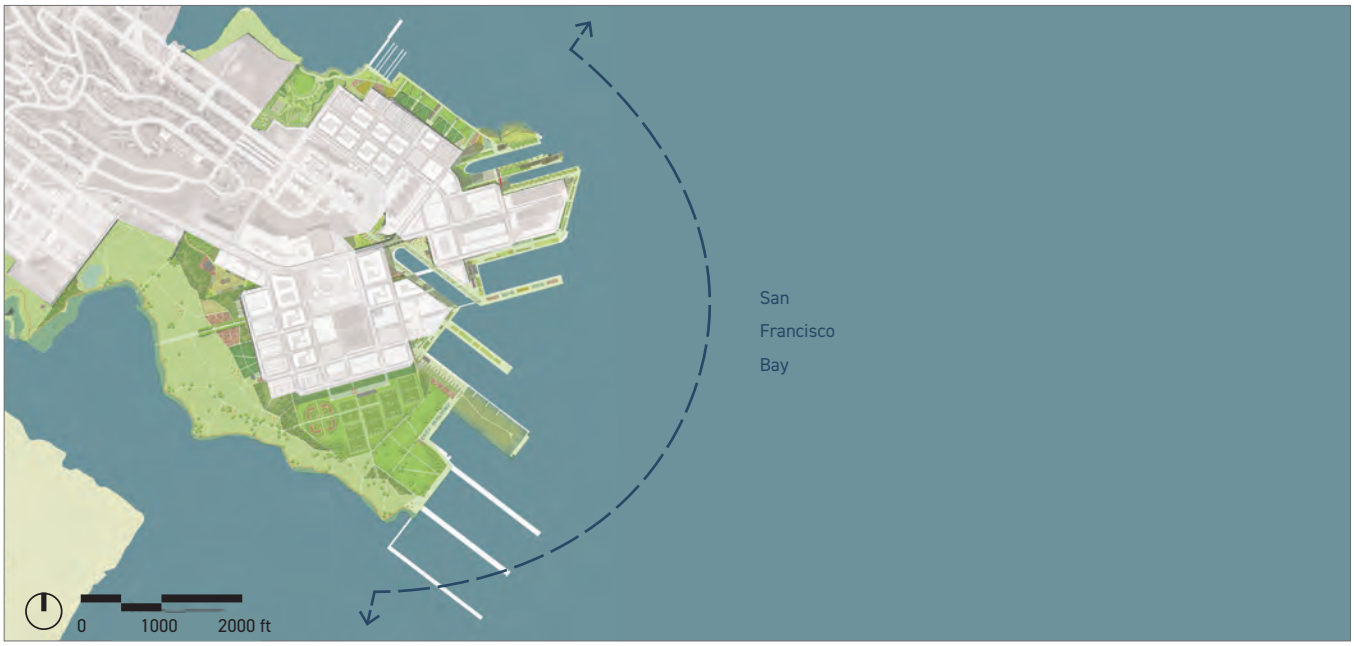

Figure 3.8a: KEY DESTINATIONS AND FEATURES - WATERFRONT OPEN SPACES

- Through bulk and massing, buildings in districts are scaled appropriately. Compared with the adjacent residential buildings to the north, buildings in the Wharf District increase in scale to emphasize the Dry Docks and Naval piers. Buildings may step down in height towards the northern and southern waterfront open spaces.
- Building parcels along the development perimeter provide access to the waterfront open spaces that host a number of diverse experiences such as promenades for walking, a marina where sailing can dispatch, thriving natural habitats, and a regional sports facility to draw people from across the region.

1 & 2. Waterfront Open Space Examples


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4 DESIGN STANDARDS & GUIDELINES

4 Design Standards & Guidelines

The Design Standards and Guidelines provide regulatory controls that guide development to align with the HPS2 Vision. Controls consist of Intent, Definitions, Standards, and Guidelines. Certain controls include an Application section that outlines additional information including intent, definitions, and guidance on application of Standards.

Intent: Describes the principal goals, objectives and rationale of each Standard and/or Guideline; as well as alignment of specific features or provisions to the project vision, principles, design drivers and physical framework.

Standard: Mandatory, objective and quantifiable specifications or other requirements applicable to the Project.

Guideline: Mandatory specifications or requirements that are inherently qualitative and therefore require interpretation.

Application: Provides direction on implementation of Standards and Guidelines.

Standards and Guidelines function as a system of controls to shape development consistent with the City and community aspirations for an active, vibrant, livable and distinctive waterfront district. The Intent, Standards, and Guidelines are used to describe and delineate each of the four key development categories: Building Design, Private Open Space, Building Signage, and Building Lighting.

Refer to Chapter 6 for all Term Definitions.

Anticipated Development Map

- R1 Residential Density I (15-75 Units Per Acre)
- R2 Residential Density II (50-125 Units Per Acre)
- R4 Residential Density IV (175-285) Units Per Acre)
- ART Artist or Maker
- CM Commercial (Includes Office, R&D, Retail & Hotel Uses)
- CU Community Use
- OS Parks & Open Space
- U Infrastructure / Utility
- Shared Parking Structures*
- Priority Ground Floor Activation

*Shared Parking Structures are permitted on Blocks 1 and 32 (locations to be determined upon Schematic Design approval)

Land uses are governed by the Redevelopment Plan. This figure is an illustrative example that is subject to change.

Block 36B is the currently identified location for the Fire Station lot, subject to change pursuant to the Disposition and Development Agreement (DDA). The Fire Station is exempt from the following:
-Building Setbacks
-Building Height
-Street Wall
-Ground Floor Activation
-Blank Wall

Figure 4.0a: ANTICIPATED DEVELOPMENT MAP *Illustrative use only*

CHAPTER 4 TABLE OF CONTENTS

Building Design

Private Open Space

Signage

Lighting

Private Infrastructure

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4.1 Block Sizes and Mid-Block Breaks

4.1.1 Mid-Block Break Lot Divisions and Locations

INTENT

Mid-Block Breaks (MBBs) are intended to allow public access through private development blocks to promote connectivity and walkability and create a finer grain circulation system.

MBBs are regulated by the CPHPS2 Infrastructure Plan, Transportation Plan, and Streetscape Master Plan.

Mid-Block Break Specification Book will be provided per the DRDAP.

DEFINITIONS

"Mid-Block Breaks or MBBs"
A publicly accessible pedestrian, bicycle and/or vehicle lane way on private property as identified in *Figure 4.1.b*.

"Mid Block Break Width"
The mandatory Street Wall to Street Wall width for a MBB and associated Setback zones.

"EVA"
Emergency Vehicular Access.

"Street Wall"
The aggregate effects of the façades of buildings along a property line adjacent to a street or open space. The typical context for this term is in defining the public realm and framing or engaging the street.

"Block Sizes"
Block Sizes and legal parcels are defined in the Final Map. Approximate parcel dimensions are provided in *Figure 4.1b* and are subject to change. Block sizes may be legal parcels or may be part of a legal parcel.

STANDARDS

4.1.1 Mid-Block Break Lot Divisions and Locations

Mid-Block Break locations and widths shall be built as defined in *Figure 4.1a*. MBB Widths shall be used to define the location of the Street Wall. Street Wall to Street Wall dimensions shall not be greater or less than required MBB Width. Refer to *Figure 4.1a*.

MBB locations across blocks shall be aligned. The first developed MBB establishes the required centerline for subsequent MBB alignment. All required amenities including street trees, lighting, and seating shall occur within the MBB Parcel or the adjacent Setback Zones. Refer to *Figure 4.1b* and Section 4.27 Private Open Space - Mid-Block Breaks.

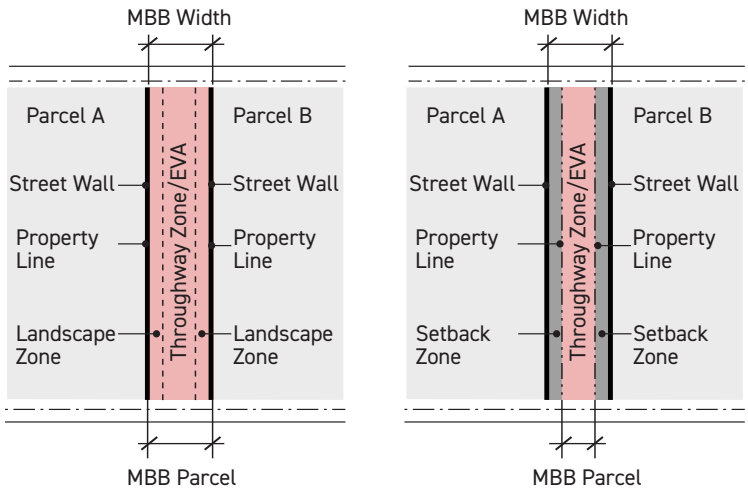

Figure 4.1a: MID-BLOCK BREAK LOT DIVISIONS

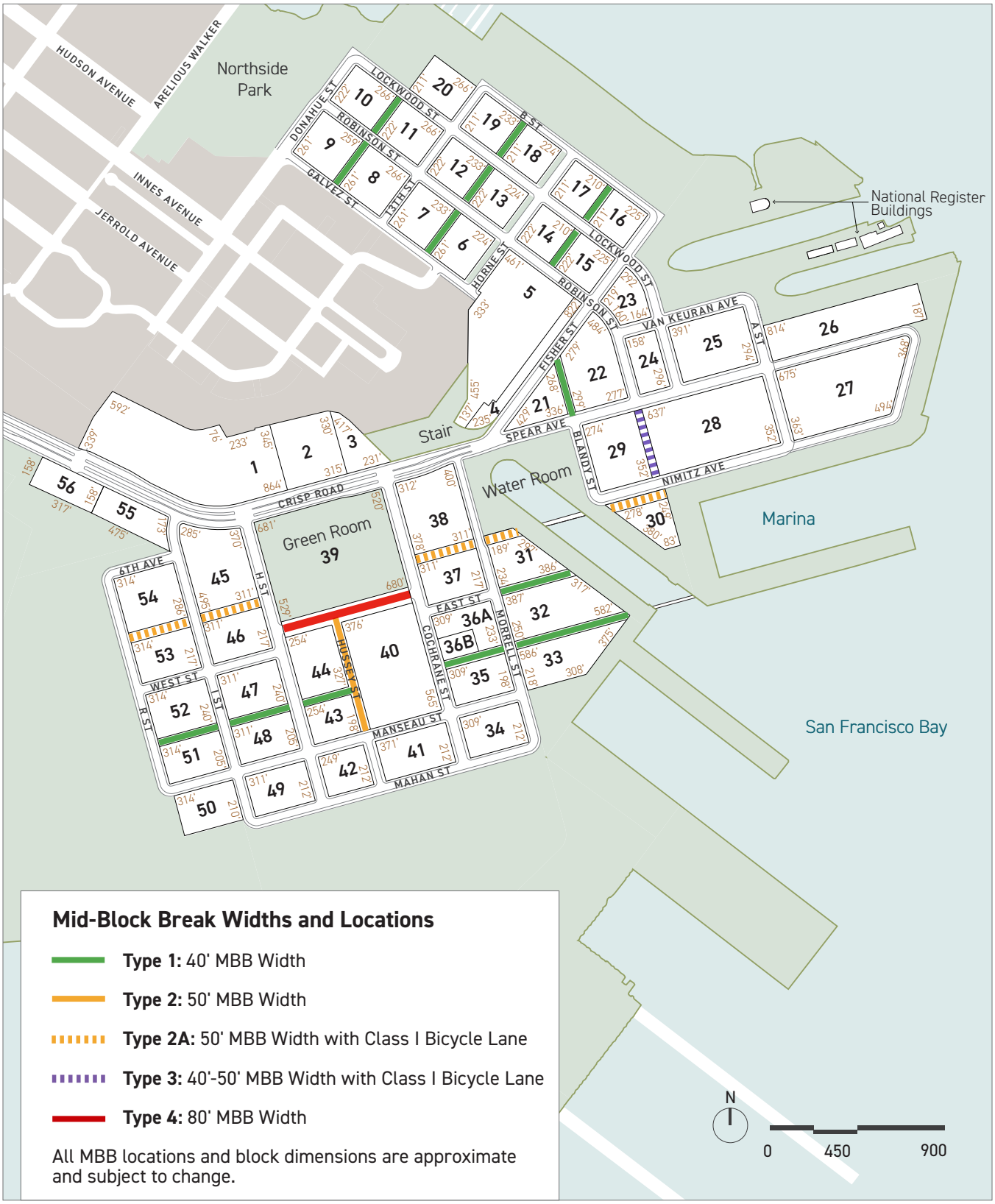

Figure 4.1b: MID-BLOCK BREAK WIDTHS AND LOCATIONS

4.1 Block Sizes and Mid-Block Breaks Cont'd

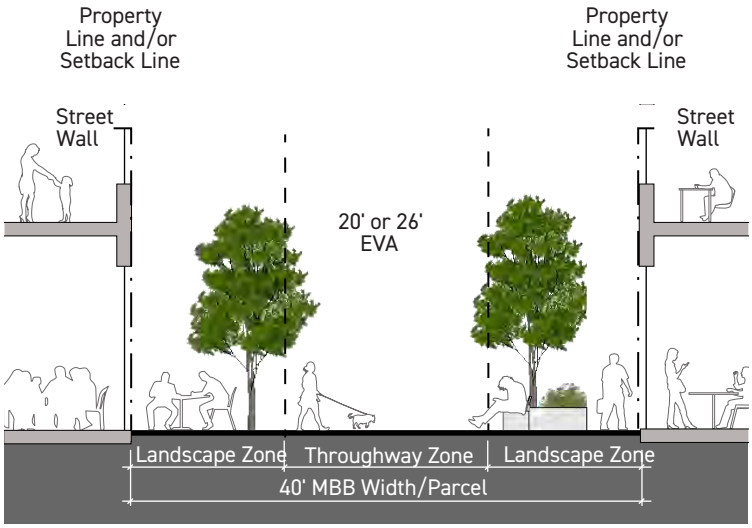

Figure 4.1c: TYPE 1 MID-BLOCK BREAK WIDTH (40') COMMERCIAL

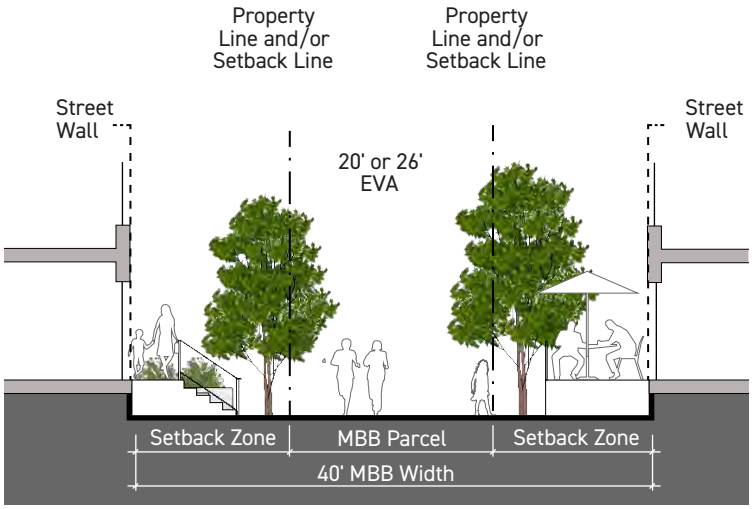

Figure 4.1d: TYPE 1 MID-BLOCK BREAK WIDTH (40') RESIDENTIAL

4.1 Block Sizes and Mid-Block Breaks Cont'd

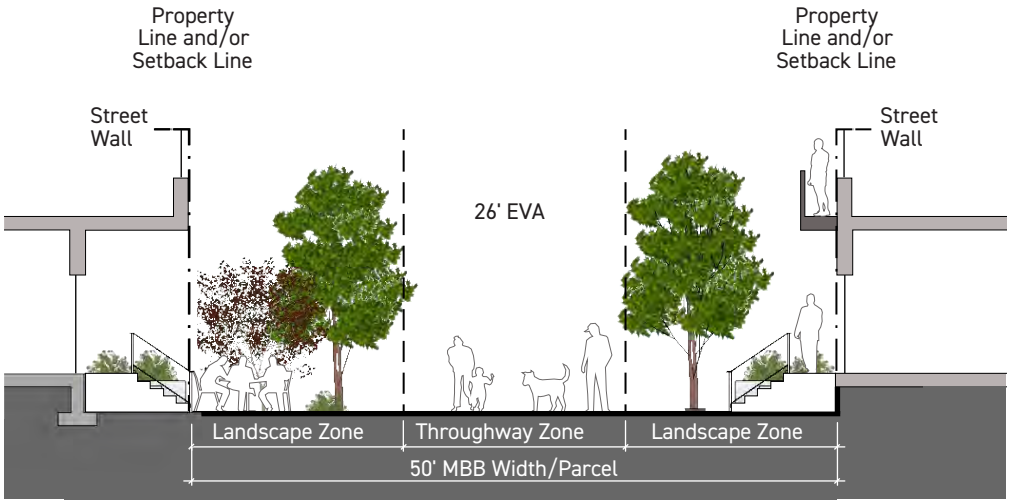

Figure 4.1e: TYPE 2 MID-BLOCK BREAK WIDTH (50')

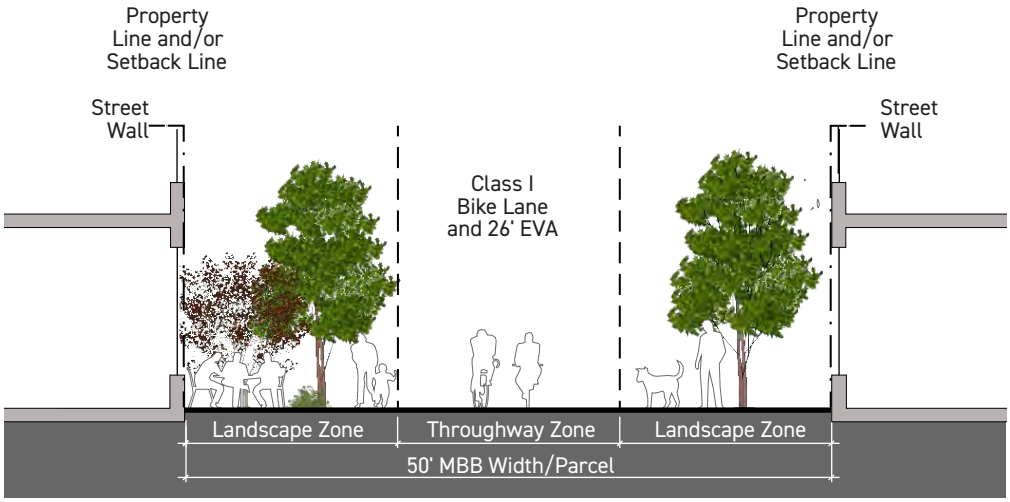

Figure 4.1f: TYPE 2A MID-BLOCK BREAK WIDTH (50') WITH CLASS I BICYCLE LANE

4.1 Block Sizes and Mid-Block Breaks Cont'd

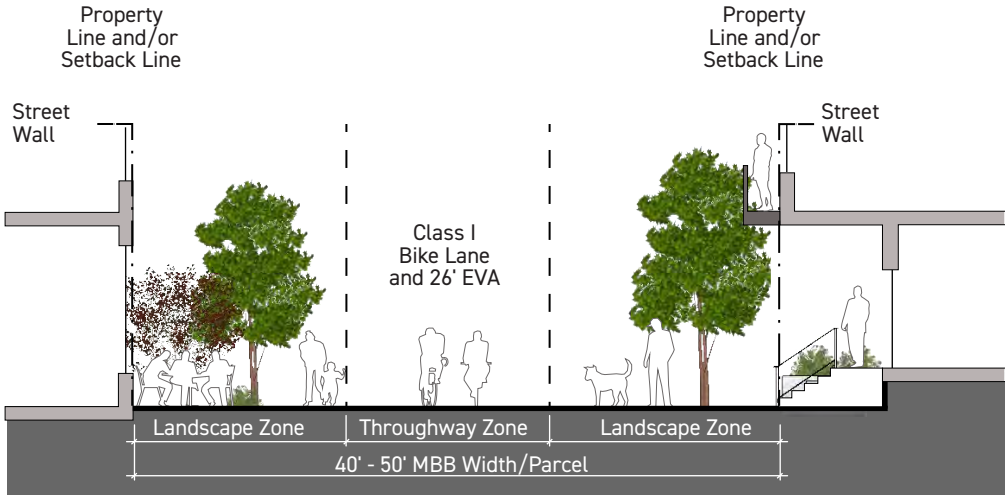

Figure 4.1g: TYPE 3 MID-BLOCK BREAK WIDTH (40' - 50') WITH CLASS I BICYCLE LANE

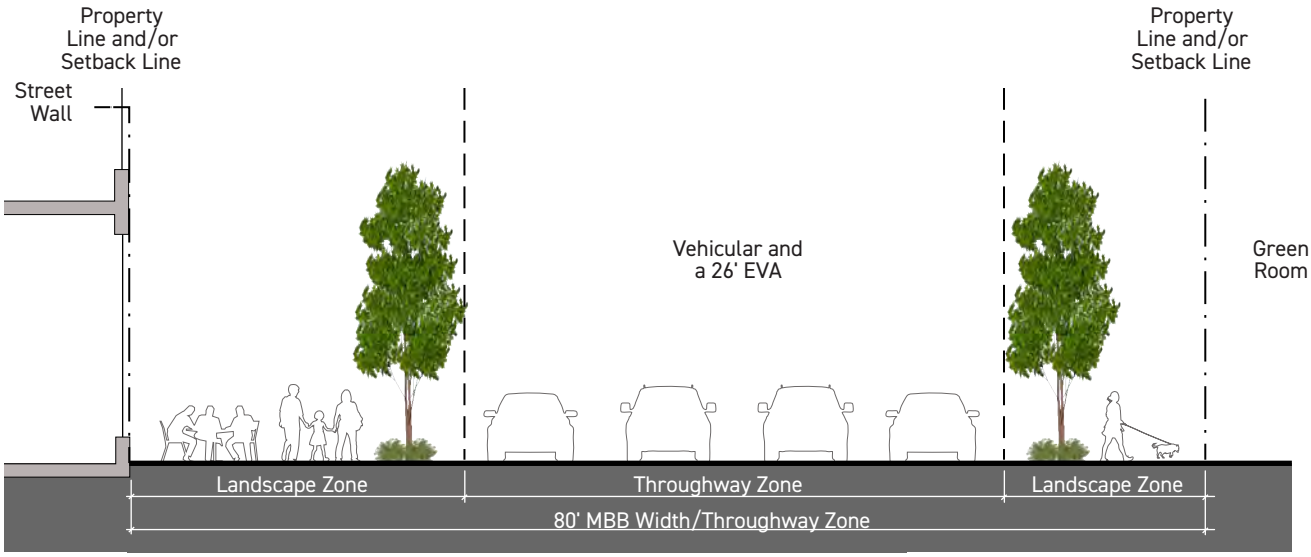

Figure 4.1h: TYPE 4 MID-BLOCK BREAK WIDTH (80')

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4.2 Building Setback

INTENT

Setback requirements provide a minimum and maximum range for Building Face locations and describe a relationship between the building and the public right-of-way for each building location.

Setback Zones 1 and 2 provide an urban Street Wall that frames the public realm and establishes a relationship for buildings fronting streets and public gathering spaces.

Setback Zones 3 through 6 provide spaces for transitions between the public and private realm, including but not limited to landscaping, stoops, and porches. These spaces increase the amount of privacy for ground floor residential units. Larger Setbacks on Robinson and Lockwood Streets, Zones 5 and 6, provide additional area for wider sidewalks, sidewalk seating, landscaping and stoops that will create a sense of arrival into the Shipyard from the neighborhoods to the north on these transportation corridors and bicycle routes.

DEFINITIONS

"Building Face"
A plane of the exterior wall of the building along a public right-of-way, open space, or other publicly accessible space. The term is typically used in the context of its relationship to an adjacent street or public area. Where a minimum Street Wall is required, the Building Face aligns with the maximum Setback.

DEFINITIONS

"Setback"
The required horizontal distance between the Building Face and a property line. See *Figure 4.2a*.

STANDARDS

4.2.1 Building Setback

The Building Face is required to be set back from a property line by a horizontal distance of no less than the minimum Setback and no greater than the maximum Setback as established by *Figure 4.2b*.

Setback requirements do not apply to existing buildings if retained or adaptively reused.

The Setback zone shall be used to create one or more of the following:

- Residential private open spaces (4.26)
- Building entries (4.12)
- Commercial open spaces
- Publicly accessible plazas
- Outdoor seating zones
- Walk-up windows for vending
- Stoops and unit entries (4.12 & 4.26)
- Fences (4.26)
- Stormwater treatment
- Below-grade parking structures (with adequate depth to meet landscape standards for setback area above)
- Screened utility areas (4.14)
- Landscape areas (4.27)
- Or similar
- Refer to Section 4.26 Private Open Space.

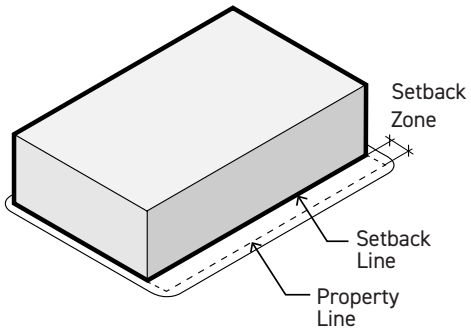


Figure 4.2a: BUILDING SETBACK

Allowable projections into the setback zone are controlled in Standard 4.10.1 Projections.

4.2.2 Mid-Block Break Setback

Setbacks along MBBs are subject to change depending on the final MBB property line location. Setback lines shall be set so that the Street Wall location is located at the MBB Width dimension required in Section 4.1 and *Figure 4.2b*.

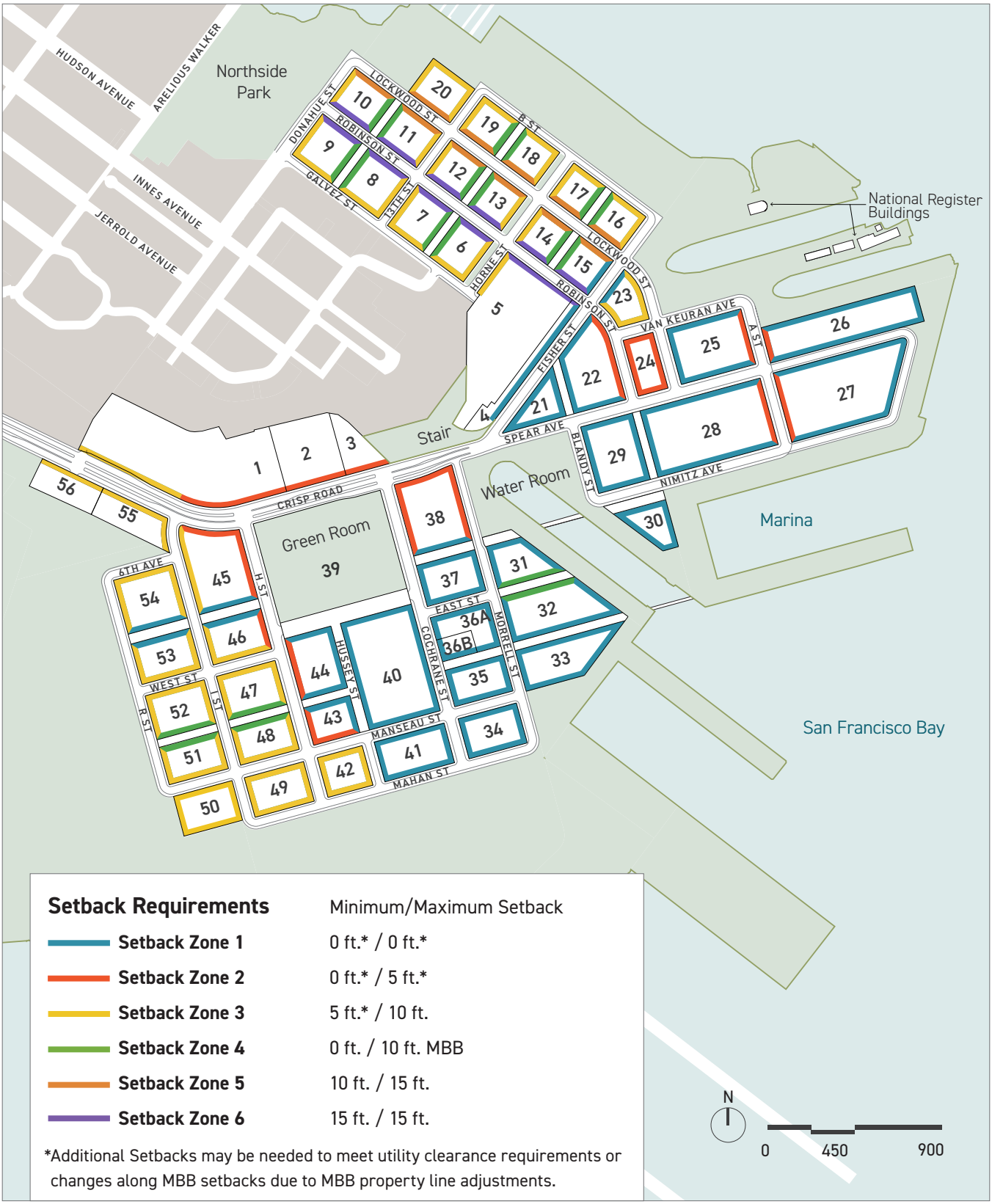


Figure 4.2b: SETBACK REQUIREMENTS

Figure 4.2c: VIEW LOOKING SOUTH *Massing study for illustrative purposes only.*

Figure 4.2d: VIEW LOOKING NORTH *Massing study for illustrative purposes only.*

4.3 Developable Area Coverage

4.3.1 Developable Area Coverage

INTENT

To regulate the Building Envelope by building lot coverage at various height thresholds in order to ensure that the overall bulk of buildings is at an appropriate scale.

DEFINITIONS

"Developable Area"
All land inside the legal property line, excluding Setbacks.

"Coverage"
The percentage of Floor Plate in relation to the Developable Area that is regulated at various height thresholds, as indicated in *Figure 4.3a and Figure 4.3b.*

"Floor Plate"
The Gross Floor Area for an individual floor level of a building.

"Gross Floor Area"
Definition provided in Chapter 6.

STANDARDS

4.3.1 Developable Area Coverage

Developable Area coverage by all habitable and non-habitable building area, including structured parking, is limited as indicated below:

Residential and Residential Mixed-Use Buildings:

Building Height (ft.)	Maximum Allowable Area (Gross sq. ft.)
0-40	100% of Developable Area
41-85	75% of Developable Area
86-120	30,000 sq. ft. maximum (block 45)
121+	12,500 sq. ft. maximum (blocks 15 and 23)

Non-Residential Buildings:

Building Height (ft.)	Maximum Allowable Area (Gross sq. ft.)
0-40	100% of Developable Area
41-95	90% of Developable Area
96-120	80% of Developable Area

For buildings over [120] ft. in height, additional tower design standards apply. Refer to 4.9 Tower Controls.

Shared Parking Structures are not subject to 4.3.1 Developable Area Coverage standard.

Buildings may span multiple parcels between Blocks 1, 2, and 3, Blocks 36A and 36B, and Blocks 55 and 56, respectively.

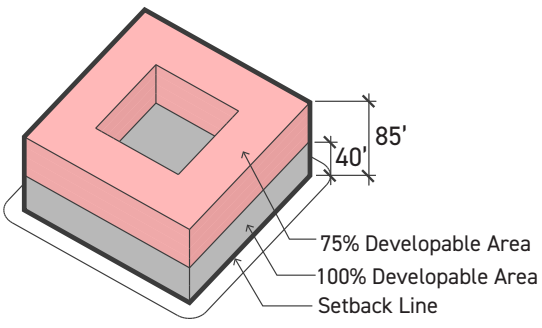


Figure 4.3a: DEVELOPABLE AREA COVERAGE RESIDENTIAL & RESIDENTIAL MIXED-USE BUILDINGS

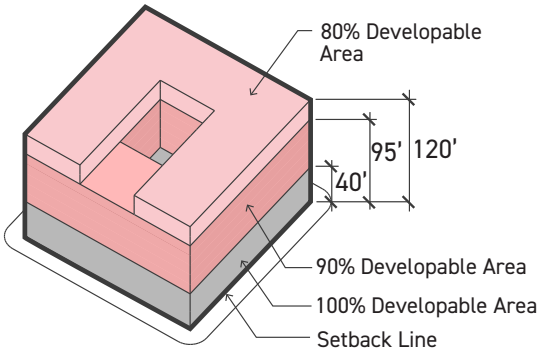


Figure 4.3b: DEVELOPABLE AREA COVERAGE NON-RESIDENTIAL BUILDINGS

4.4 Building Height

INTENT

Maximum Building Height, Street Wall, and Stepback requirements establish the building scale in each district. Taller buildings frame urban open spaces and define a skyline that steps down from the hillside towards the waterfront, optimizing views and facilitating the transition to the natural landscape. Stepbacks on the south side of residential and retail focused Mid-Block Breaks allow additional daylight to open space.

DEFINITIONS

"Stepback"
The distance that upper levels of a building may be inset from the primary Building Face.

"Implied Façade"
An Implied Façade is a Building Face that completes the apparent massing through vertical and horizontal architectural elements, such as the roof line, columns, angular shifts, or other elements, that maintain the visual continuity of the Street Wall.

STANDARDS

4.4.1 Building Height

Maximum height requirements are established for all development blocks, as illustrated in *Figure 4.4c*.

Building Height is measured from the highest corner at finished sidewalk grade to the average point on the finished roof in the case of a flat roof, and from the average height of the rise in the case of a pitched or stepped roof, or similarly sculpted roof form. See *Figure 4.4a*.

For parcels adjacent to streets with a slope greater than 5%, Building Height is determined by measuring at the mid-point of the building at the sidewalk grade adjacent to each street-fronting Building Face. The maximum height envelope may extend from one frontage up to a depth of half the distance to the opposite side of the block. Multiple frontages may be used to determine maximum Building Height envelope. See *Figure 4.4b*.

Towers shall be located within the Flexible Tower Zone, as shown in *Figure 4.4c*.

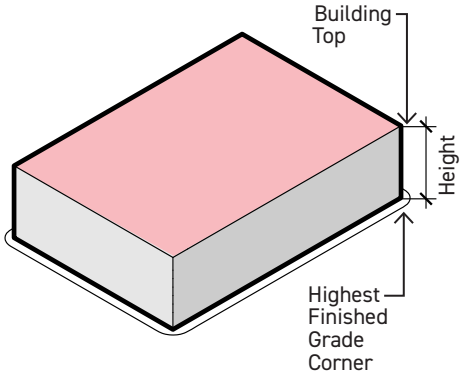


Figure 4.4a: BUILDING HEIGHT

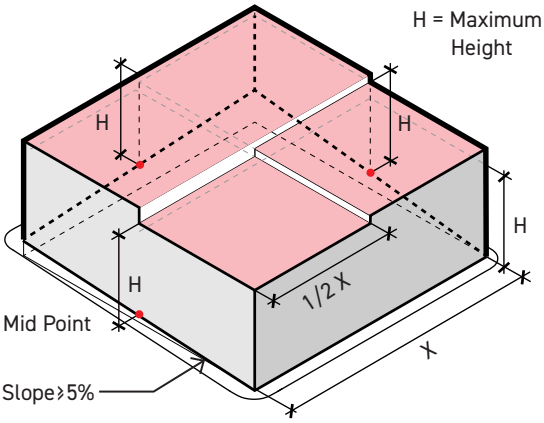


Figure 4.4b: BUILDING HEIGHT ON SLOPE

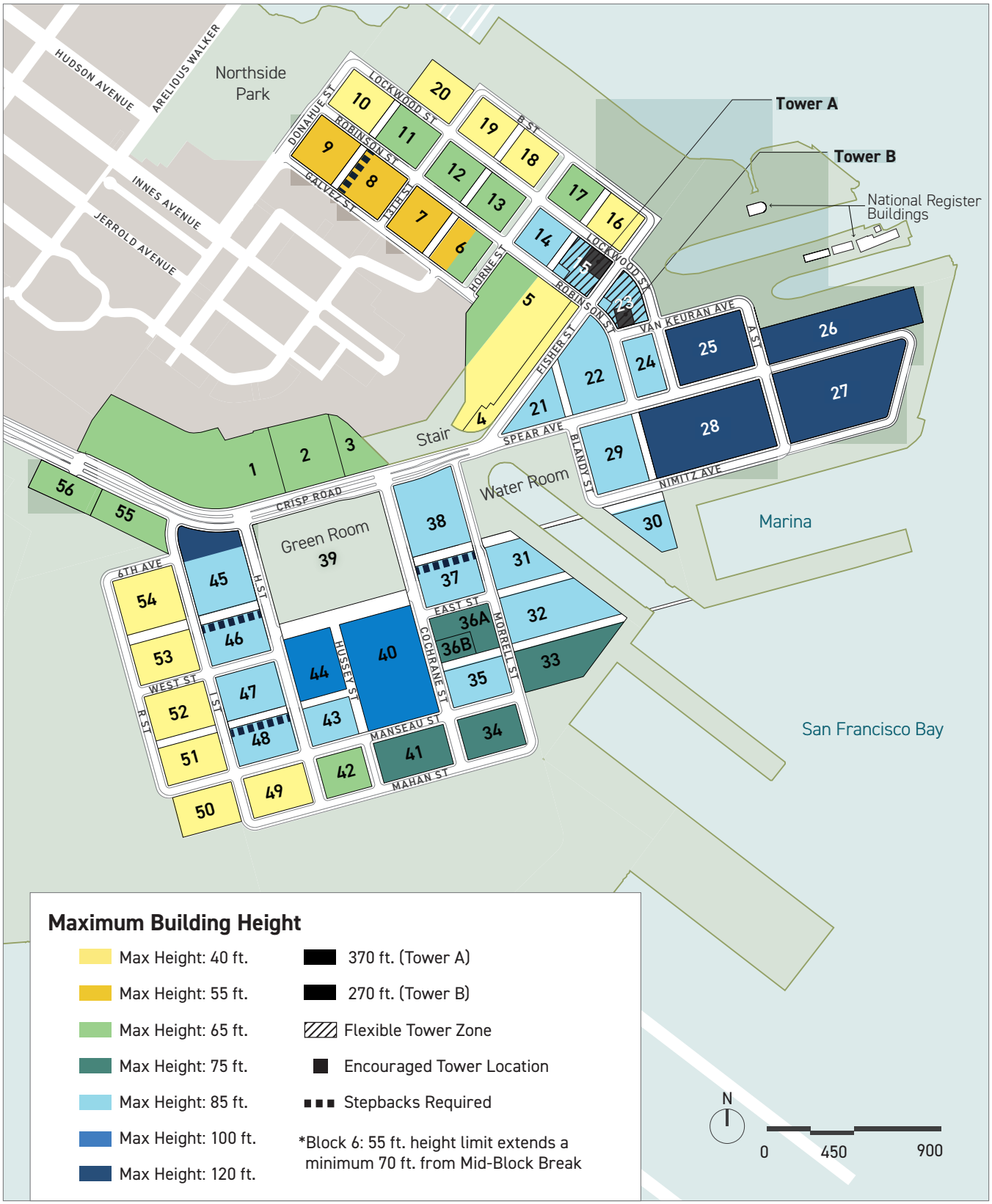


Figure 4.4c: MAXIMUM BUILDING HEIGHT

4.4 Building Height Cont'd

INTENT

To increase the amount of sunlight that reaches the ground plane of Mid-Block Breaks.

STANDARDS

4.4.2 Mid-Block Break Building Stepbacks

Stepbacks are required at designated locations as indicated in *Figure 4.4c*.

Stepbacks shall occur at a minimum of a 1:1.2 ratio above [45] ft. in building height. The first [70] ft. of building frontage perpendicular to H and Cochrane Streets are exempt. See *Figure 4.4d* and *Figure 4.4e*.

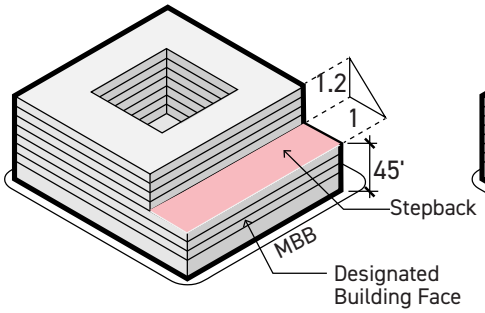


Figure 4.4d: BUILDING STEPBACK

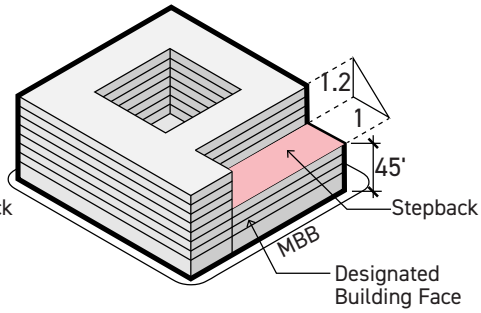


Figure 4.4e: BUILDING STEPBACK

INTENT

To define the type, number, height, and area of elements allowed to exceed the maximum Building Height.

STANDARDS

4.4.3 Building Height Exceptions

The following may extend up to [16] ft. above the maximum Building Height:

- Spires, towers, and other non-habitable architectural features
- Mechanical equipment and appurtenances necessary to the operation or maintenance of the building or structure itself, including chimneys, ventilators, plumbing vent stacks, cooling towers, water tanks, elevator, stair and mechanical penthouses, skylights, window-washing equipment and associated screens
- Sustainable building systems and roof-mounted equipment, such as solar collectors and wind turbines
- Habitable amenity spaces

4.4 Building Height Cont'd

4.4.4 Roof Area Building Height Exception

STANDARDS

Ventilators, vent stacks and mechanical exhaust systems for laboratory uses may extend above the maximum Building Height as necessary to the operation of the building only to the extent required by the corresponding codes. (i.e. building code, health code, etc.).

The screening of Roof-Mounted Equipment shall be stepped back from top of parapet at a ratio of 1:1.2 and no less than ten[10] ft. from the parapet or roof edge. See *Figure 4.4f.*

Parapets may extend up to four[4] ft. above the maximum Building Height.

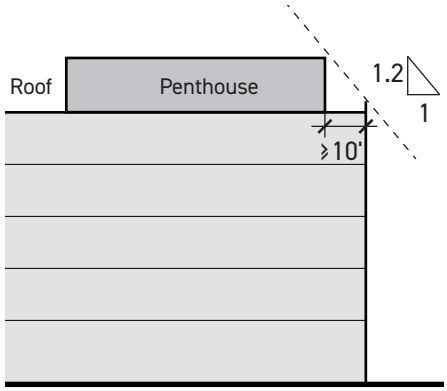


Figure 4.4f: PENTHOUSE STRUCTURE REQUIREMENTS

4.4.4 Roof Area Building Height Exception

The total square footage of enclosed area(s) within rooftop Screening and penthouses shall be no greater than 30% of the total roof area. See *Figure 4.4g.*

Enclosed habitable amenity spaces covering not more than [2,500] sq. ft. of the overall roof area and appurtenant to outdoor amenity spaces may extend up to [16] ft. above the maximum Building Height. See *Figure 4.4h.*

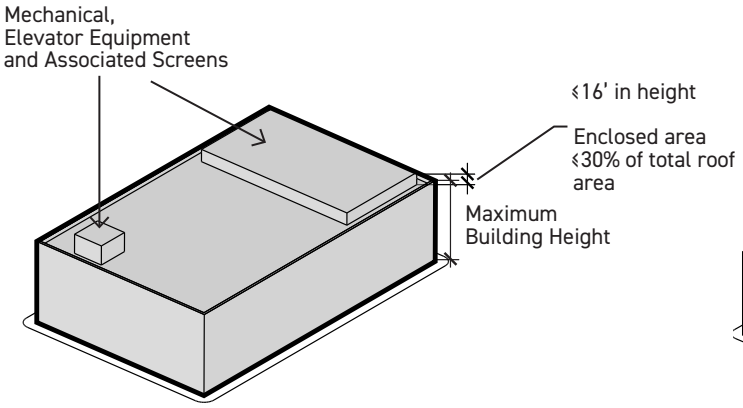


Figure 4.4g: BUILDING HEIGHT EXCEPTION

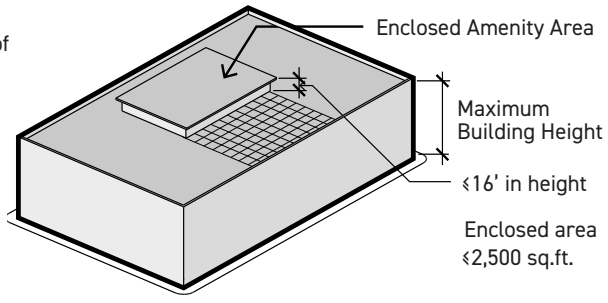


Figure 4.4h: BUILDING HEIGHT EXCEPTIONS ENCLOSED AMENITY AREA

4.4 Building Height Cont'd

INTENT

To create a strong Building Face that defines the public realm by ensuring a minimum amount of the Building Face is located at the setback line.

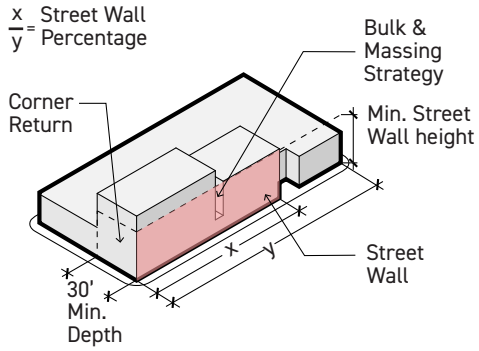


Figure 4.4i: STREET WALL

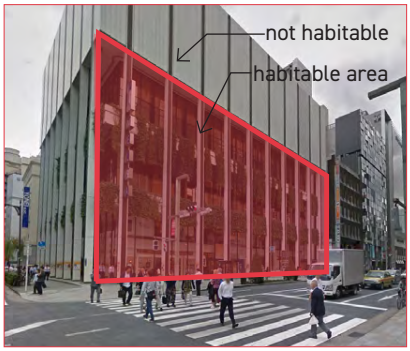


Figure 4.4j: IMPLIED FAÇADE

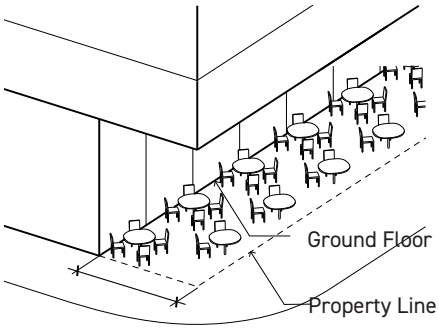


Figure 4.4k: COVERED OUTDOOR SEATING

STANDARDS

4.4.5 Street Wall

Minimum Street Wall heights and Street Wall percentage requirements are established by *Figure 4.4l.*

The Street Wall shall occur within an area bounded by the minimum and maximum Setbacks. The minimum height shall be maintained for a minimum depth of [30] ft. from the Street Wall. In the case of a corner where two different Street Wall heights adjoin, the higher of the two shall prevail for the required depth of [30] ft. Street Wall requirements are calculated independently for each Street Fronting Elevation. Refer to *Figure 4.4i.*

Bulk and Massing and Façade Composition strategies as defined in Section 4.6 and Section 4.7 that are used to meet the Standard requirement shall be counted toward the required Street Wall percentage.

4.4.6 Implied Façade

A required Street Wall may be achieved by an Implied Façade that complies with the height and percentage requirements of the Street Wall Standard. Height of the Street Wall shall be met by habitable building area. Refer to *Figure 4.4j.*

4.4.7 Street Wall Exceptions for Adaptive Reuse

Street Wall requirements do not apply to Adaptive Reuse buildings if retained.

4.4.8 Street Wall Exceptions for Recessed Areas

Street Wall Zones 1-A, 1-B and 2 permit covered outdoor areas at the ground floor, recessed from the Street Wall up to [15] ft. in depth, to allow for patio spaces, entrances, publicly accessible plazas, outdoor seating zones, and/or walk-up windows. The outdoor area shall be no greater than two Stories in height and the Street Wall shall be maintained for the Building above the recessed area. Such an outdoor area shall be immediately accessible by an entrance to the building. Refer to *Figure 4.4k.*

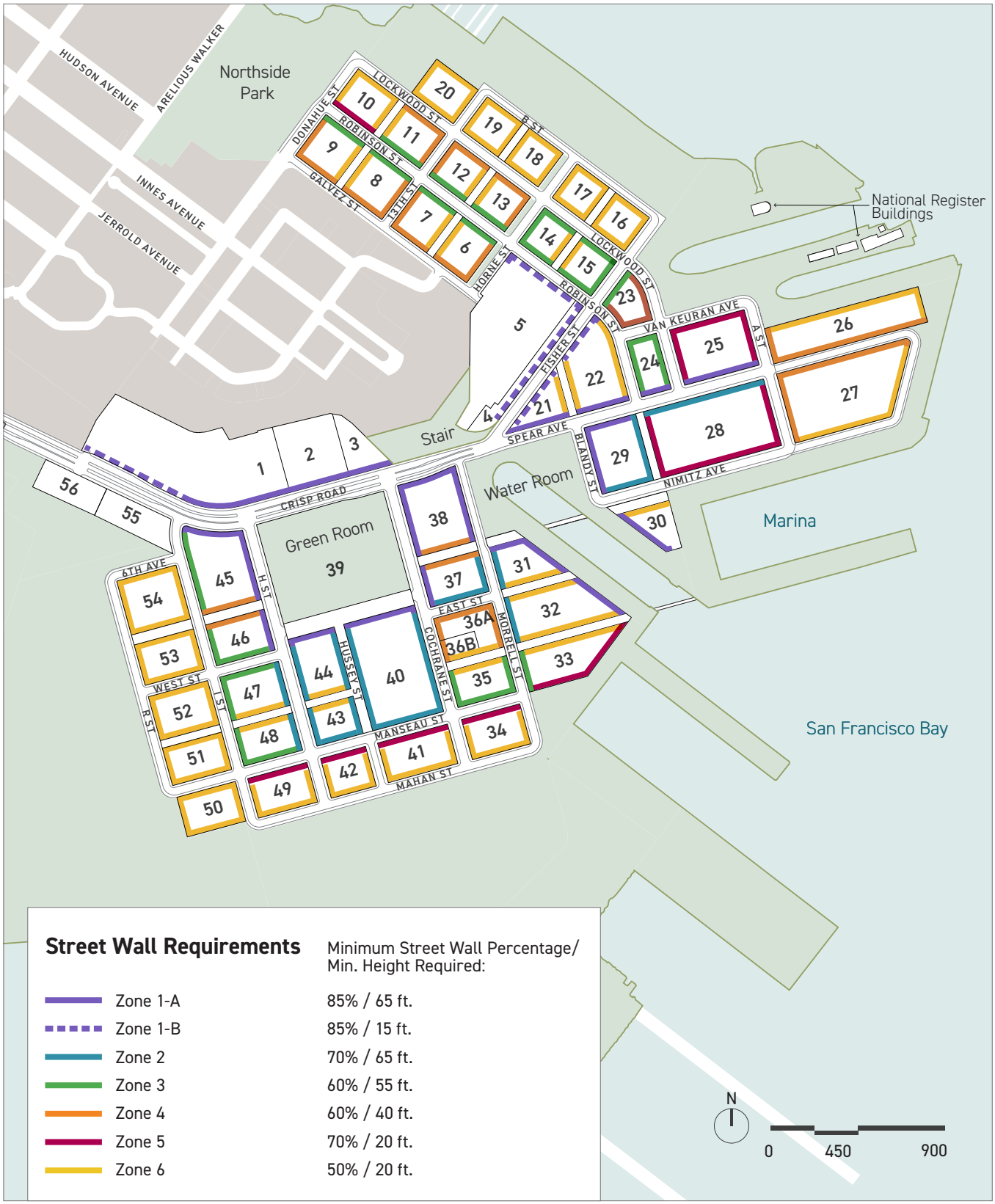


Figure 4.4l: STREET WALL REQUIREMENTS

Figure 4.4m: BUILDING SIZES: S, M, L, XL

4.5 Architectural Controls by Building Scale

INTENT

To determine which controls apply, refer to Flow Chart for "4.5A Architectural Controls by Building Scale Cont'd" (Page 68) which outlines a path to compliance for each building size category. The sections following the Flow Chart describe how Façade Composition, Bulk and Massing, Building and Public Realm Enhancements are regulated and applied.

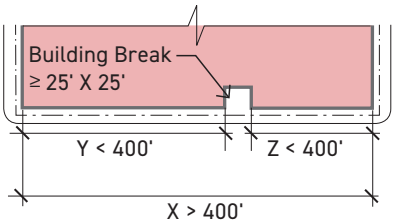


Figure 4.5a: FLOOR PLATE AREA AND MAXIMUM PLAN LENGTH

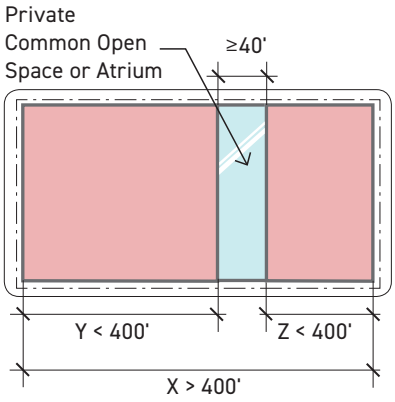


Figure 4.5b: MAXIMUM PLAN LENGTH

DEFINITIONS

"Maximum Plan Length"
The maximum linear dimension of a building measured in plan along a building elevation parallel to the immediately adjacent public right-of-way, MBB, or public open space.

"Street Fronting Elevation"
Building façades facing onto a public right-of-way, MBB, or public open space.

"Small Buildings" (S): Small Buildings include all buildings that have a Maximum Plan Length that is less than [150] ft. in length.

"Medium Buildings" (M): Medium Buildings include all buildings that have a Maximum Plan Length greater than [150] ft. in length along any facade and have a maximum Floor Plate less than [70,000] sq. ft.

"Large Buildings" (L): Large Buildings include all buildings with a maximum Floor Plate between [70,000] and [100,000] sq. ft.

"Extra Large Buildings" (XL): Extra Large Buildings include all buildings with a maximum Floor Plate greater than [100,000] sq. ft.

STANDARDS

4.5.1 Architectural Controls by Building Scale

Buildings have been grouped in four[4] categories: Small (S), Medium (M), Large (L) and Extra Large (XL). All buildings shall meet the Façade Composition Standards. In addition to Façade Composition Standards, Medium, Large and Extra Large buildings shall follow Bulk and Massing Standards and Building and Public Realm Enhancement Standards (see Flow Chart on page 68).

4.5.2 Maximum Plan Length

No Street Fronting Elevation shall have a Maximum Plan Length greater than [400] ft. without one[1] of the following: See *Figure 4.5a*.

- A building break that is at minimum [25] ft. by [25] ft. in dimension and extends from roof plane to sidewalk grade.
- A private common open space or Atrium that connects through to the opposite side of the block. Open space may include Skyways. Open space shall be at minimum [40] ft. wide in each dimension with a view to the sky. See *Figure 4.5b*.

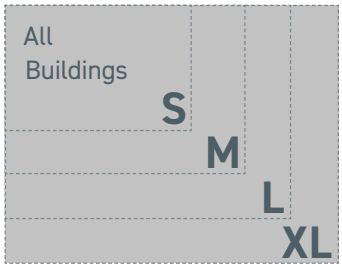
4.5A Architectural Controls by Building Scale Cont'd

FLOW CHART FOR ARCHITECTURAL CONTROLS

All Buildings shall meet the Façade Composition Standards. In addition to Façade Composition Standards, Medium, Large and Extra Large Buildings shall follow Bulk and Massing Standards and Building and Public Realm Enhancement Standards.

FC

4.6.1 Façade Composition

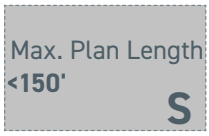


Apply two[2] Façade Compositions:
See Page 70

- **FC1** Façade Modulation
- **FC2** Façade Articulation
- **FC3** Fenestration
- **FC4** Material/Color

BM

4.7.1 Bulk and Massing



No Bulk and Massing Approaches or Building and Public Realm Enhancement Measures Required

Apply one[1] Bulk and Massing Approach:
See Page 81

- **BM1** Significant Breaks
- **BM2** Upper Floor Stepbacks
- **BM3** Façade Variation

BE/PE

4.8.1 Building and Public Realm Enhancements

Floor Plate:
<70,000 SF

M

Apply at least one[1] Building or Public Realm Enhancement Measure (BE/PE)

Floor Plate:
70,000-100,000 SF

L

Apply Option L1
Apply at least three[3] Building Enhancement Measures (BE)

or Option L2
Apply at least one[1] Building Enhancement Measure (BE)
Apply at least one[1] Public Realm Enhancement Measure (PE)

Floor Plate:
>100,000 SF

XL

Apply Option XL1
Apply at least four[4] Building Enhancement Measures (BE)

or Option XL2
Apply at least two[2] Building Enhancement Measures (BE)
Apply at least one[1] Public Realm Enhancement Measure (PE)

Building Enhancement Measures (BE):

See Page 88

- **BE1** Apply one[1] Additional Bulk and Massing Approach
- **BE2** Orient Private Courtyards and/or Atria onto a Public Right-of-Way or MBB
- **BE3** Visual and Physical Access to Interior Courtyard/Atrium
- **BE4** 24/7 Access to Open Space
- **BE5** Reduction in Floor Plate Area of Upper Floors
- **BE6** Expressive Entrance
- **BE7** Increased Transparency
- **BE8** Distinct Corner Architecture Feature
- **BE9** Roof Expression
- **BE10** Additional Active Entries
- **BE11** Additional Ground Floor Activation

Public Realm Enhancement Measures (PE):

- **PE1** Public Access through the Building
- **PE2** Public Access through Open Space Connections

4.6 FC Façade Composition

INTENT

To create character, distinction, and visual interest on the facades of all buildings.

DEFINITIONS

"Façade Composition"
Large scale facade geometry and smaller scale facade tectonics, including material selection and detailing.

"Street Fronting Elevation"
Building façades facing onto a public right-of-way, MBB, or public open space.

"Variations in Façade Composition"
Variations in Façade Composition create visual interest and avoid monotony. This can be achieved by using either two[2] different Facade Compositions or by using two [2] distinctly different designs of the same Facade Composition. In case of the latter, the two [2] designs must be recognizably different in expression.

STANDARDS

4.6.1 Façade Composition

Street Fronting Elevations of all buildings shall have a minimum of two [2] Façade Compositions. The same application shall not fulfill the requirement for more than one Façade Composition.

Choose two[2] Facade Compositions:

- FC1 Façade Modulation
- FC2 Façade Articulation
- FC3 Fenestration
- FC4 Material/Color

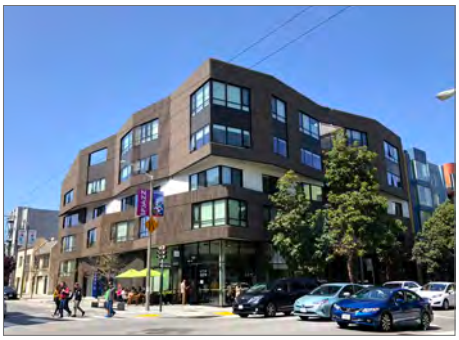


Figure 4.6a: BUILDING A

Example: Building A uses the following two[2] Facade Compositions:
See *Figure 4.6a*.

FC1 Façade Modulation:
Angular Shift and Horizontal Shift

FC3 Fenestration:
Punched Windows

Figure 4.6b: BUILDING B

Example: Building B uses the following two[2] Facade Compositions.
See *Figure 4.6b*.

FC2 Façade Articulation:
Sun Shading Devices

FC3 Fenestration:
Boxed Windows and Curtain Wall

4.6 FC Façade Composition Cont'd

4.6.2 Block to Block Variation

INTENT

To provide architectural variety and visual interest from Block to Block by demonstrating distinction between opposing Block faces and between Block faces adjacent to each other along a street, MBB, or other open space.

STANDARDS

4.6.2 Block to Block Variation

Buildings shall be distinct from one[1] Block Façade to adjacent Block Façade by incorporating variations in at least two[2] Façade Compositions. See *Figure 4.6c.*

Vary façade with two[2] Compositions:

- **FC1** Façade Modulation
- **FC2** Façade Articulation
- **FC3** Fenestration
- **FC4** Material/Color

Example: If Block A and Block B both use the same Façade Modulation (FC1) and Fenestration (FC3), then Block A and B shall be a distinct variation from one another in their Material/Color (FC4) and Façade Articulation (FC2). See *Figure 4.6c* and *Figure 4.6d.*

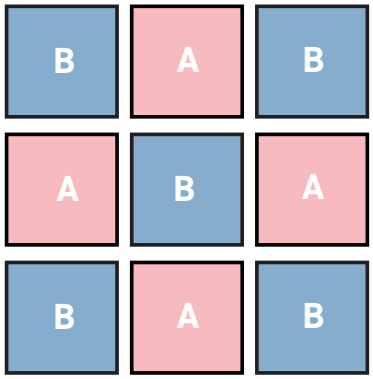


Figure 4.6c: BLOCK TO BLOCK VARIATION (ADJACENT BLOCK FAÇADES SHALL BE DISTINCT FROM BLOCK A)

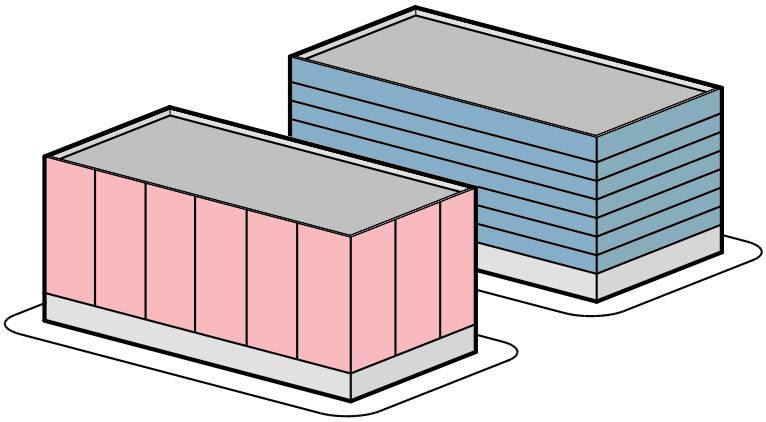


Figure 4.6d: BLOCK A (VERTICAL ARTICULATION AND MATERIAL COLOR) BLOCK B (HORIZONTAL ARTICULATION AND MATERIAL COLOR)

4.6 FC Façade Composition Cont'd

FC1 Façade Modulation Strategies

INTENT

To shape building massing and provide visual interest, scale, and rhythm to a building and/or building Façade.

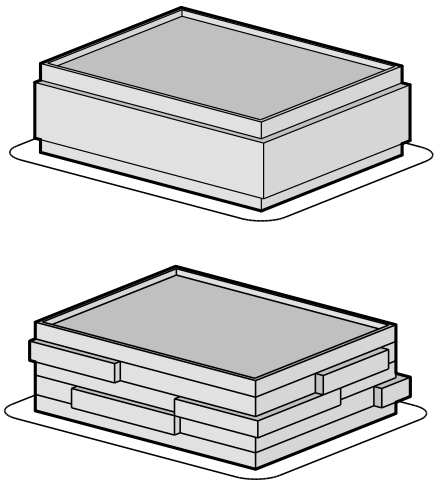


Figure 4.6e: HORIZONTAL SHIFT

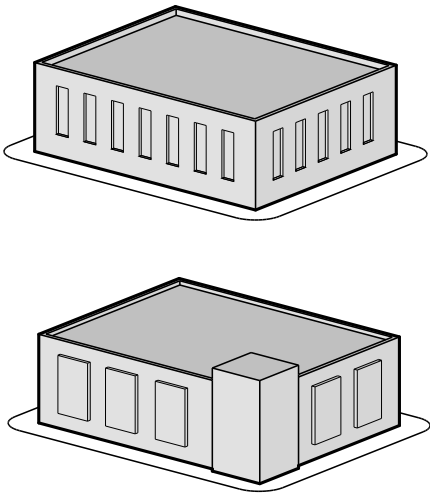


Figure 4.6f: VERTICAL SHIFT

APPLICATION

FC1 Façade Modulation

Façade Modulations shall include plan shifts in the Façades, expressions of building structure, Building Projections, and other strategies that provide visual interest and depth that is recognizable from a distance. Plan shifts and framing shall be a minimum of two [2] ft. in depth. The extent and scale of Facade Modulations shall be proportional to and in keeping with the scale of the entire building. Double skins and structural expressions that are character-defining features of the façade have no minimum depth requirements.

Changes in the Façade plane made for the application of the Façade Modulation may be used to create an Implied Façade.

MODULATION STRATEGIES

The following are a non-exhaustive list of Façade Modulation strategies:

"Horizontal Shift"
The Façade is defined by horizontal subdivisions which project forward or push back from each other. The horizontal subdivisions may, but need not be, determined by the location of the building floor slabs.
See *Figure 4.6e*.

"Vertical Shift"
The Façade is subdivided into "bays" that protrude or recess from a predetermined datum. These bays may be expressive of a programmatic or structural characteristic of the building. See *Figure 4.6f*.

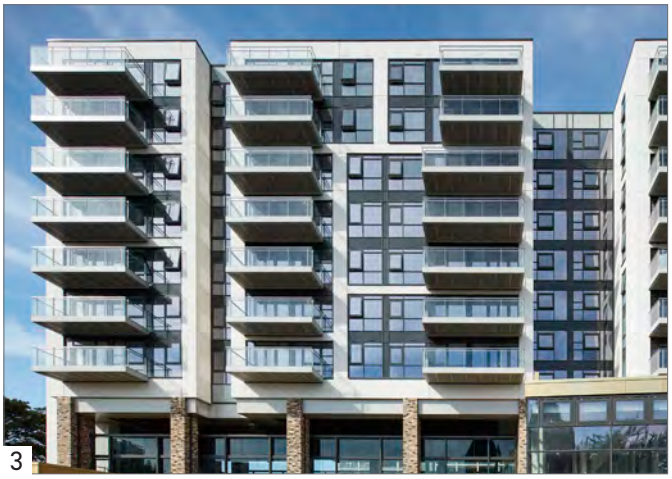
4.6 FC Façade Composition Cont'd

FC1 Façade Modulation Strategies

1

1. & 2. Horizontal Shift Example
3. 4. & 5. Vertical Shift Example

2



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4.6 FC Façade Composition Cont'd

FC1 Façade Modulation

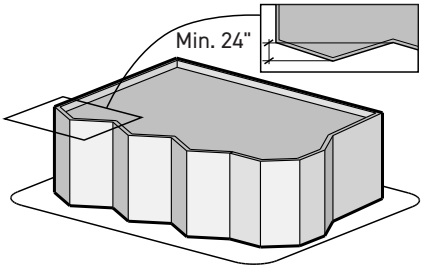


Figure 4.6g: ANGULAR SHIFT

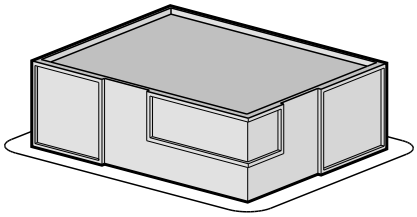


Figure 4.6h: FRAMING

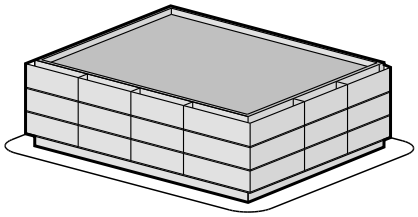


Figure 4.6i: DOUBLE SKIN

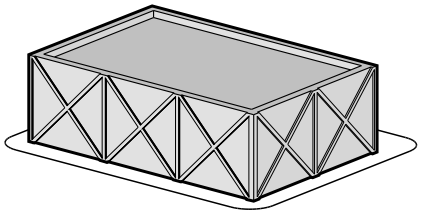


Figure 4.6j: STRUCTURAL EXPRESSION

MODULATION STRATEGIES

"Angular Shift"
A series of sloped or faceted surfaces along the façade. Angular shifts shall be minimum [24] in. in depth. See *Figure 4.6g*.

"Framing"
Elements of a Façade can be identified as modules through the use of a frame or framing element. A frame can be a continuous protrusion which follows some perimeter at the façade scale. See *Figure 4.6h*.

"Double Skin"
A Façade system created by a second enclosure, typically lighter and slightly translucent or perforated, outboard of the main exterior Building Envelope. A double skin may have operable components and is meant to add depth and intricacy by way of light and shadows along the Façade. See *Figure 4.6i*.

"Structural Expression"
Actual structural elements such as beams, columns, cross-bracing, or fastenings can naturally break up a building's Façade if made visible along a building's exterior. See *Figure 4.6j*.

4.6 FC Façade Composition Cont'd

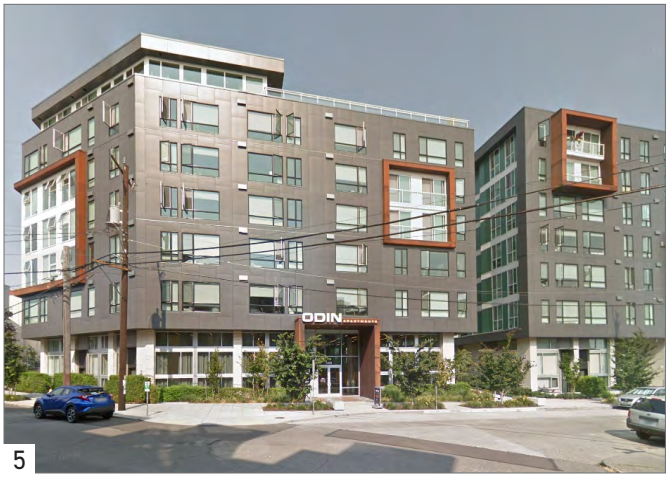
FC1 Façade Modulation

1

2

3

4



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1. Double Skin Example
2. Angular Shift Example
3. Structural Expression Example
4. Angular Shift Example
5. Framing Example

4.6 FC Façade Composition Cont'd

FC2 Façade Articulation

INTENT

To create a cohesive Façade system. Facade Articulation strategies are intended to create visual interest, texture, and shadows, through the tectonics, materiality, and craft of the facade.

DEFINITION

"Façade Articulation"
Expressions of material properties, craft, treatment, pattern and/ or assembly that create visible shadows and/or texture across the Building Façade.

APPLICATION

FC2 Façade Articulation

Articulation can either emphasize distinct components of a Façade or create smooth, continuous transitions between elements to emphasize the "whole." A non-exhaustive list of strategies are listed below:

Articulation Strategies:

- Vertical Recesses
- Horizontal Extensions
- Architectural Fins
- Louvers
- Shading Devices
- Cornices
- Punched Openings
- Window Reveals
- Screening Devices
- Balconies
- Or Similar


1


2

3

1. Punched Openings Example
2. Architectural Fins Example
3. Balcony Example

4.6 FC Façade Composition Cont'd

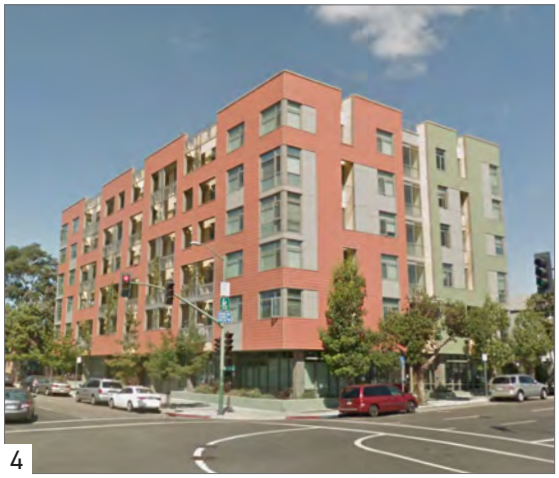
FC2 Façade Articulation


1

1. Vertical Recesses and Punched Openings Example
2. Architectural Fins and Louvers Example
3. Punched Openings Example
4. Balcony, Extensions and Recesses Example
5. Punched Openings Example
6. Shading Devices and Cornice Example


2


3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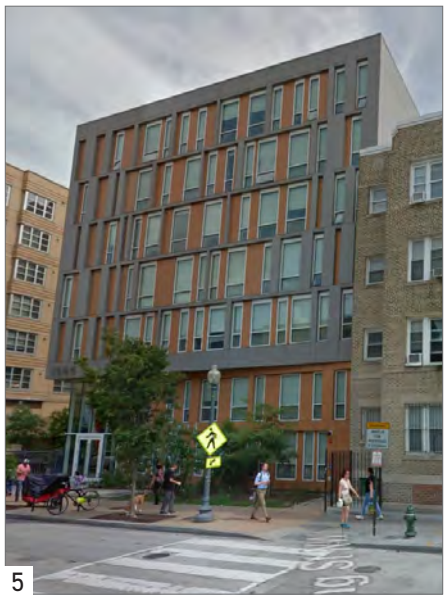
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4.6 FC Façade Composition Cont'd

FC3 Fenestration

INTENT

Building Fenestration strategies are Façade composition elements that contribute to the character of a building and the feel of the urban environment. These strategies modulate Daylight and potential for natural ventilation in buildings.

DEFINITION

"Fenestration"
The design, construction, or presence of openings in a building. Fenestration includes windows, doors, louvers, vents, wall panels, skylights, storefronts, curtain walls, and sloped systems.

APPLICATION

FC3 Fenestration

Fenestration strategies include a variety of techniques to bring Daylight into a building and help define the character of a building. Fenestration strategies include shape, size, pattern, rhythm, and location of façade apertures.

Successful fenestration strategies stand out as a central component or feature of a building's enclosure. Such strategies strengthen the expression of the building's architectural character. A non-exhaustive list of strategies are listed below:

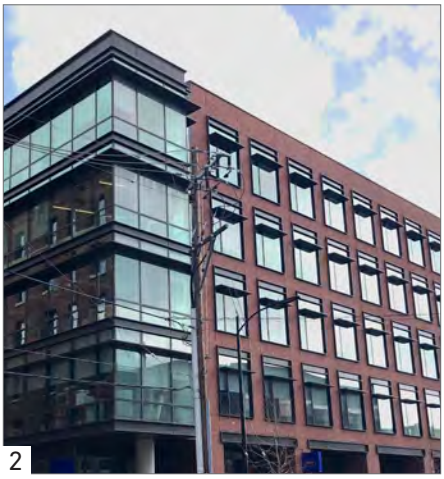
Fenestration Strategies:

- Glass Curtain Wall
- Punched Window
- Window Wall
- Double Skin
- Boxed Window
- Bay Window
- Glazed Atrium at the façade
- Or Similar

4.6 FC Façade Composition Cont'd

FC3 Fenestration


1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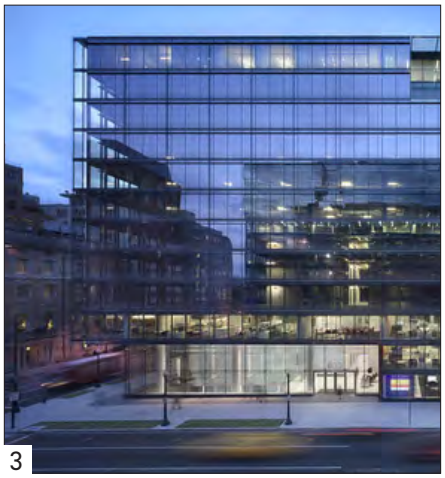
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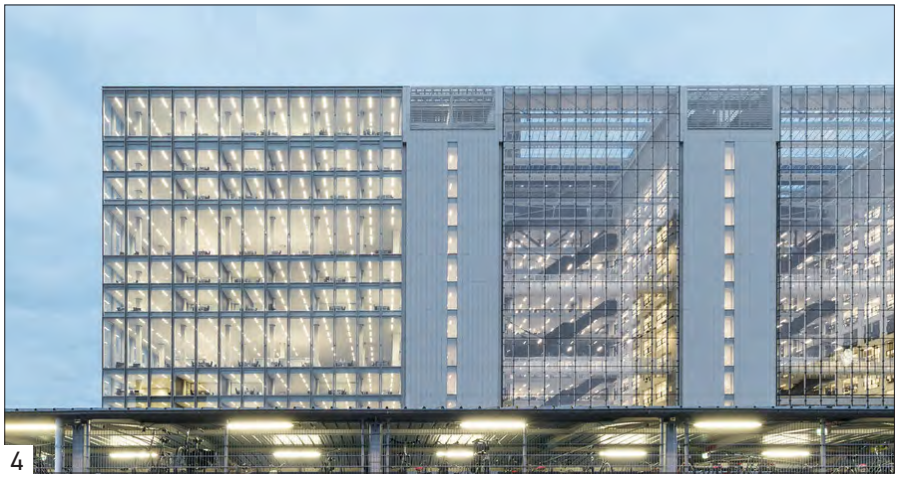
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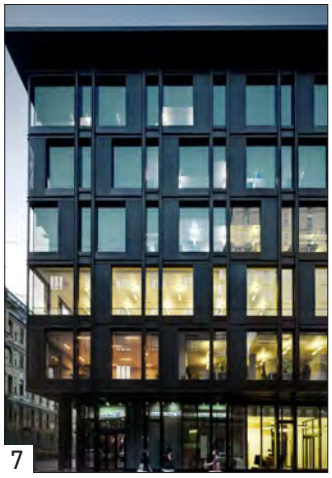
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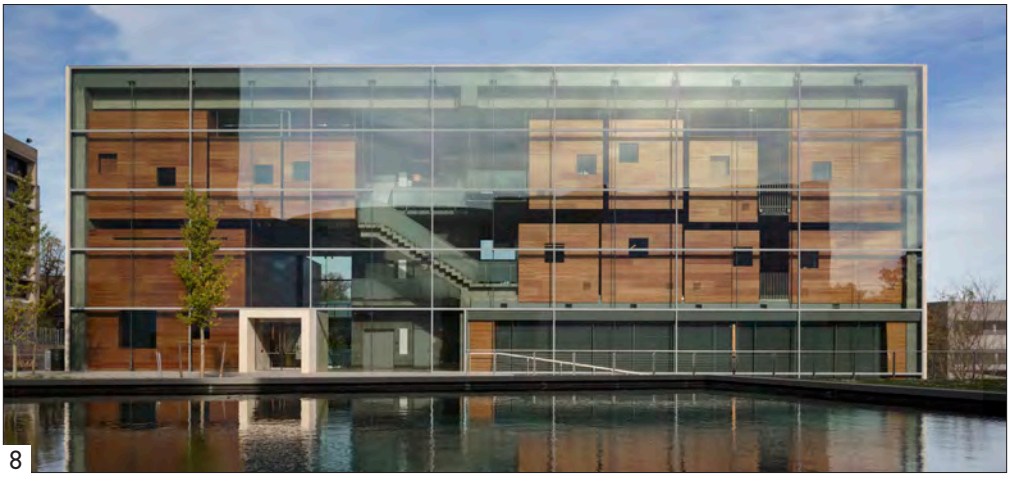
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1. Punched Windows Example
2. Punched Windows + Curtain Wall Example
3. Curtain Wall Example
4. Curtain Wall and Atrium Example
5. Curtain Wall with Boxed Windows Example
6. Window Wall Example
7. Double Skin Example

4.6 FC Façade Composition Cont'd

FC4 Material/Color

INTENT

The intentional application of Material/Color creates a defined architectural vocabulary that provides visual interest and contributes to the urban character. The materiality, patina, texture, color and craftsmanship respond to the unique quality of the district.

DEFINITION

"Material/Color"
The application of materials, color, shades and texture for a building when used as a quality- and character-defining features of the Façade.

For the purposes of meeting standard 4.6.1 Façade Composition, Variations in Material/Color strategies shall include a change in color and a change in material or a change in application of material such as change in pattern and/or texture. Color differences alone do not qualify as a variation.

APPLICATION

FC4 Material/Color

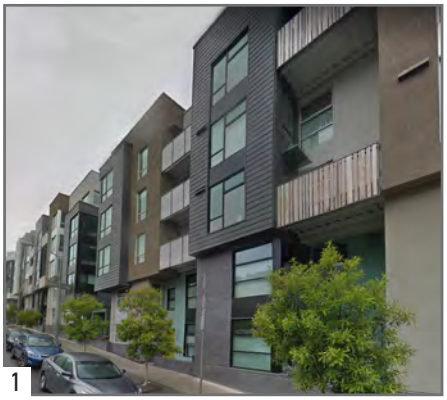
Material and color may be used as a volumetric application, as an organizing element, or to create contrast between different building elements. Refer to 4.6 Façade Materials. A non-exhaustive list of strategies are as follows:

Material/Color Strategies:

- Volumetric Application
- Organizing Feature
- Structural
- Tectonics
- Character Defining Feature

2

3



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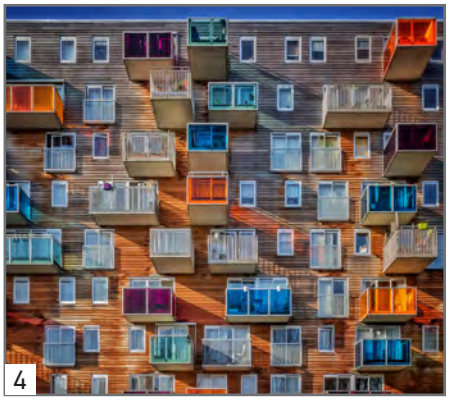

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1. Materials and Colors as a Volumetric Application Example
2. Metal used as Monolithic Application Example
3. Brick as Organizing Element Example
4. Character-Defining Façade Composition Example

4.7 BM Bulk and Massing

4.7.1 Bulk and Massing Approach

INTENT

To facilitate a varied urban form and shape building scale and geometry. To reflect neighborhood character and provide a human-scale pedestrian realm as well as an attractive skyline when viewed from afar.

DEFINITIONS

"Bulk and Massing"
Bulk and Massing regulations are the combination of controls (lot size, lot coverage, open space, yards, heights and setbacks) that determine the maximum Building Envelope.

"Apparent Face"
The unbroken plane of a Building within a single Façade composition.

"Primary Façade Plane"
The plane that incorporates the primary Façade of a Street Fronting Elevation.

STANDARDS

4.7.1 Bulk and Massing Approach

Medium, Large, and Extra Large Buildings shall use at least one[1] of the following approaches for breaking up the Bulk and Massing of Building Façades greater than [150] ft. in length. Buildings are not required to use the same Bulk and Massing Approach for every Façade.

Choose at least one[1] approach:

BM1 Significant Breaks

BM2 Upper Floor Stepbacks

BM3 Façade Variation

4.7 BM Bulk and Massing Cont'd

BM1 Significant Breaks

INTENT

To reduce the Bulk and Massing of buildings by the introduction of vertical breaks within the Façade Plane. Such breaks may articulate building mass or provide rhythm to the Facade.

APPLICATION

BM1 Significant Breaks

An Apparent Face on a Street Fronting Elevation shall be no greater than [150] ft. in length without a Significant Break in the Primary Façade Plane.

Significant Breaks shall be in the form of vertical interruptions within the Primary Façade Plane that are at least as wide and deep as 10% of the longest adjoining Apparent Building Face. (Example: If the longest Apparent Face is [100] ft. in length, the Significant Break shall be at least ten[10] ft. wide and ten[10] ft. deep; if the longest Apparent Face is [150] ft. in length, the Significant Break shall be at least [15] ft. wide and [15] ft. deep.)

Significant Breaks shall extend from the roof plane to a building height of [25] ft. or less from the sidewalk grade. The break may extend to grade.

Significant Breaks may occur at any rhythm or length of a Primary Façade Plane. The minimum Significant Break dimension is two[2] ft. by two[2] ft.

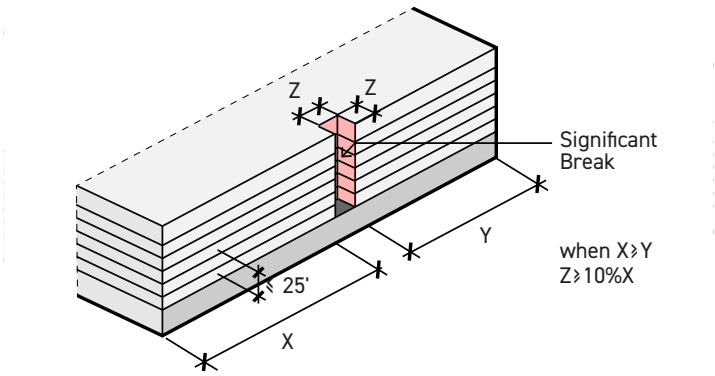


Figure 4.7a: SIGNIFICANT BREAKS A

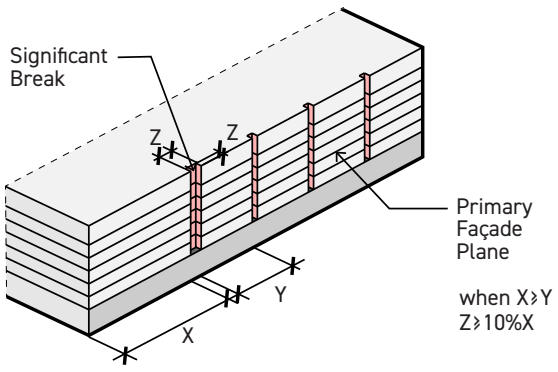


Figure 4.7b: SIGNIFICANT BREAKS B

4.7 BM Bulk and Massing Cont'd

BM1 Significant Breaks


1


2

1. & 2. Significant Break

4.7 BM Bulk and Massing Cont'd

BM2 Upper Floor Stepbacks

INTENT

To reduce the Bulk and Massing of buildings by stepping back the upper floors and thereby reducing the perceived height of the building, and to provide more sunlight to the public realm while reinforcing the character and providing visual interest to the building and roof plane.

APPLICATION

BM2 Upper Floor Stepbacks

At a minimum, the topmost floor of the building shall step back from the Primary Façade Plane.

The Stepback shall be an average minimum of ten[10] ft. from the Primary Façade Plane.

A minimum of 60% of the façade length shall step back a minimum of ten[10] ft. from the Primary Façade Plane.

Upper floor(s) shall Stepback at the following heights:

STEPBACK REQUIREMENTS BY BUILDING HEIGHT	
Building Height	Stepback Height
≤85 ft.	Top floor or lower
85 - 120 ft.	86 ft. or lower

Figure 4.7c: STEPBACK REQUIREMENTS BY BUILDING HEIGHT

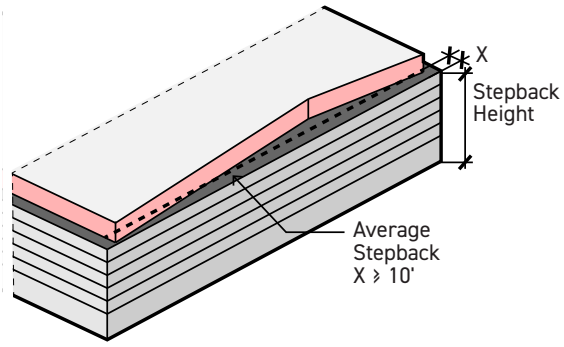


Figure 4.7d: AVERAGE MINIMUM STEPBACK

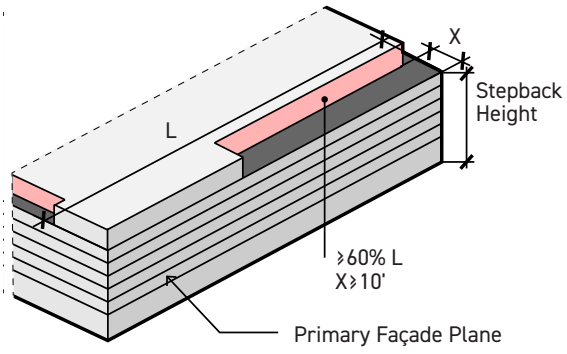


Figure 4.7e: MINIMUM LENGTH OF STEPBACK

4.7 BM Bulk and Massing Cont'd

BM2 Upper Floor Stepbacks

1. Upper Floor Building Stepback

4.7 BM Bulk and Massing Cont'd

BM3 Façade Variation

INTENT

To reduce the appearance of building bulk by incorporating significant changes within the Primary Façade's composition.

DEFINITION

"Variation"
A significant change or difference in form, proportion, position, condition, quantity, level or other compositional characteristic. Variation describes adjacent elements comprising both similar and different attributes that are recognizable as related.

APPLICATION

BM3 Façade Variation

Façades on all Street Fronting Elevations greater than [150] ft. in length shall be broken down into smaller Façade segments, or Apparent Faces, through significant changes in Façade Composition. The significant change may be a Horizontal Variation, a Vertical Variation, or a combination of Horizontal and Vertical Variations, including an angular Variation in the façade.

A significant change in Façade Composition shall include a Variation in at least two[2] of the following Façade Compositions: Modulation, Articulation, Fenestration, and/or Material/Color.

FV1 Horizontal Variations
At least two[2] Horizontal Variations shall occur for any façade that exceeds [150] ft. in length representing a building base, middle and top. Or at least one[1] Horizontal Variations with a Vertical Variation in at least one[1] of the horizontal façade compositions. See *Figure 4.7f* and *Figure 4.7g*.

FV2 Vertical Variations
A Variation in Façade Composition shall occur at a minimum [150] ft. or less of façade plan length. The adjacent apparent face shall be at least 10% as wide as the longest adjoining apparent face. Variations may occur at any rhythm or cadence. See *Figure 4.7h* and *Figure 4.7i*.

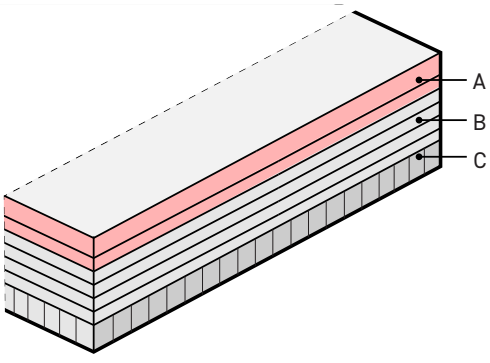


Figure 4.7f: EXAMPLE OF FV1 HORIZONTAL VARIATION A

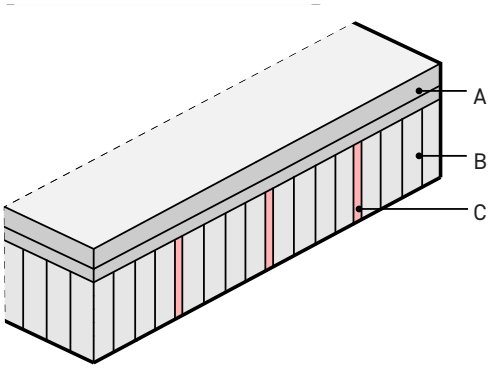


Figure 4.7g: EXAMPLE OF FV1 HORIZONTAL VARIATION B

4.7 BM Bulk and Massing Cont'd

BM3 Façade Variation

1

2

1. Façade Variation FV1 Horizontal
2. Façade Variation FV2 Vertical

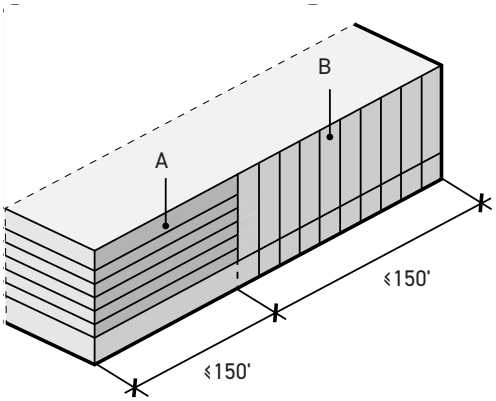


Figure 4.7h: EXAMPLE OF FV2 VERTICAL VARIATION A

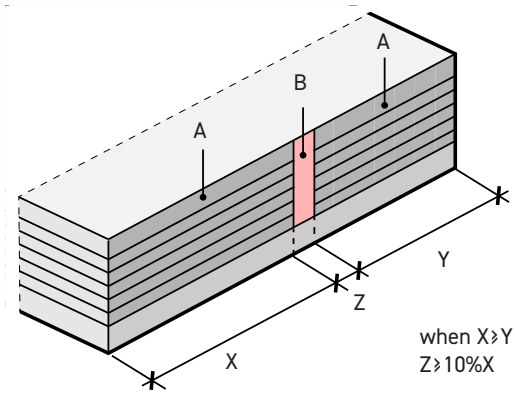


Figure 4.7i: EXAMPLE OF FV2 VERTICAL VARIATION B

4.8 BE/PE Building and Public Realm Enhancements

4.8.1 Building and Public Realm Enhancement Measures for M, L, XL Buildings

INTENT

To break down the scale of buildings and to create sufficient relationships between the interior of the building and the Public Realm through enhancement measures that shape architectural and spatial features.

DEFINITIONS

"Building Enhancement"
An architectural design feature that improves the character of the building and adds interest to the design.

"Public Realm Enhancement"
An expansion of the pedestrian network that provides public access through private developments.

STANDARDS

4.8.1 Building and Public Realm Enhancement Measures for M, L, XL Buildings

Medium (M), Large (L) and Extra Large (XL) buildings shall apply additional enhancement measures as outlined below. The required number of enhancement measures apply to and shall be visible from each Street Fronting Elevation. Any combination of building and Public Realm Enhancement Measures may be applied to a building so that the minimum required number of measures are visible from each Street Fronting Elevation. (Example: a Distinct Corner would apply to two[2] Street Fronting Elevations; an Expressive Entrance would only apply to each Street Fronting Elevation from which it is visible.)

Medium Buildings (M)
Medium Buildings shall apply at least one[1] additional Building Enhancement Measures and/or Public Realm Enhancement Measure.

Large Buildings (L)
Large Buildings shall apply at least three[3] additional Building Enhancement Measures or shall apply at least one[1] additional Building Enhancement Measure and at least one[1] Public Realm Enhancement Measure.

Extra Large Buildings (XL)
Extra Large Buildings shall apply at least four[4] additional Building Enhancement Measures or shall apply at least two[2] additional Building Enhancement Measures and at least one[1] Public Realm Enhancement Measure.

4.8 BE/PE Building and Public Realm Enhancements

BE Building Enhancement Measures
PE Public Realm Enhancement Measures

Cont'd

BUILDING ENHANCEMENT MEASURES (BM)

BE1 Apply One[1] Additional Bulk/Massing Approach
Apply one[1] additional approach from the 4.7.1 Bulk and Massing Approach. See *Figure 4.8a.*

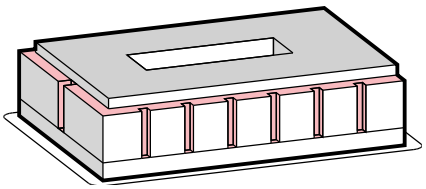


Figure 4.8a: BE1 - APPLY ONE ADDITIONAL BULK/MASSING CONTROL (EXAMPLE: SIGNIFICANT BREAKS + UPPER FLOOR STEPBACK EXAMPLE)

BE2A Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
A minimum of one[1] private courtyard and/or Atrium shall face onto a public right-of-way or Mid-Block Break. Courtyards and Atria shall be of a minimum dimension of [40] ft. x [40] ft. Lowest level of courtyards and/or Atria shall be no higher than [25] ft. from sidewalk grade. See *Figure 4.8b.*

BE2B Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
A minimum of two[2] open-air courtyards shall face onto two[2] public rights-of-way or Mid-Block Breaks or HPS2 open spaces. The two[2] open-air courtyard area dimensions shall be a total of 20 percent of the longest Street Fronting Elevation. Courtyards and Atria shall be of a minimum dimension of [40] ft. x [40] ft. All Street Fronting Elevations receive credit for applying this measure. See *Figure 4.8b.*

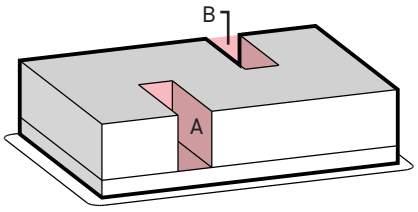


Figure 4.8b:
BE2A - COURTYARD/ATRIA A OR B
BE2B - COURTYARD/ATRIA A + B

BE3 Provide Visual and Physical Access to Interior Courtyard and/or Atrium
Provide Visual and Physical Access through an open-air portal entry into an interior courtyard or direct access into an Atrium from a public right-of-way, open space or Mid-Block Break. Visual access into the building shall be at minimum [25] ft. wide and a minimum two[2] stories in height. The lowest level of courtyards and/or Atria shall be no higher than [25] ft. from sidewalk grade. The physical access may be public or private. See *Figure 4.8c.*

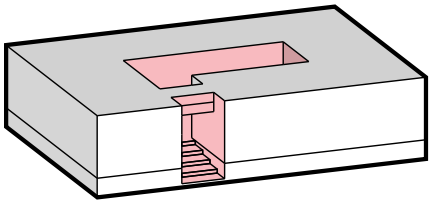


Figure 4.8c: BE3 - PROVIDE VISUAL AND PHYSICAL ACCESS TO INTERIOR COURTYARD AND/ OR ATRIUM

BE4 Permanently Open Public Access to Open Space
Provide ground floor open space with no fencing or barriers that is permanently open and accessible to the public. Ground floor publicly accessible open space shall have a minimum dimension of [40] ft. by [40] ft. See *Figure 4.8d.*

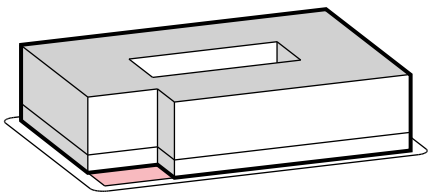


Figure 4.8d: BE4 - PERMANENTLY PUBLIC ACCESS TO OPEN SPACE

4.8 BE/PE Building and Public Realm Enhancements

BE Building Enhancement Measures
PE Public Realm Enhancement Measures

Cont'd

BE5 Reduction in Floor Plate Area of Upper Floors

Provide an additional 30% reduction of Floor Plate at the upper levels as follows: for buildings [75] ft. and taller, reduce the upper two levels by 30% of Floor Plate relative to the floor beneath; for buildings less than [75] ft. tall, reduce the top Floor Plate by 30% relative to the floor beneath. Each Street Fronting Elevation receives credit for applying this measure. See *Figure 4.8e.*

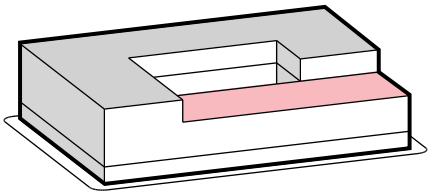


Figure 4.8e: BE5 - REDUCTION IN FLOOR PLATE AREA OF UPPER FLOORS

BE6 Expressive Entrance

Provide an Expressive Entrance to enhance identity and visual access into the building. For residential buildings, the Expressive Entrance shall be at minimum [20] ft. wide along the façade and a minimum two[2] stories in height. For commercial and mixed-use buildings, the Expressive Entrance shall be at minimum [35] ft. wide along the façade and a minimum two[2] stories in height. See *Figure 4.8f*.

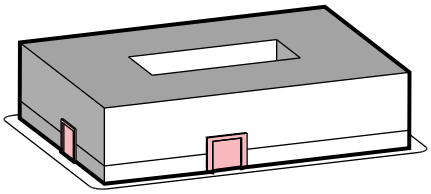


Figure 4.8f: BE6 - EXPRESSIVE ENTRANCE

BE7 Increased Transparency

For commercial buildings, provide a minimum 60% Transparency for the entire Street Fronting Elevation. For residential buildings, provide a minimum 35% Transparency for the entire Street Fronting Elevation. Areas counted in meeting this requirement must be comprised of Transparent Glazing. See *Figure 4.8g*.

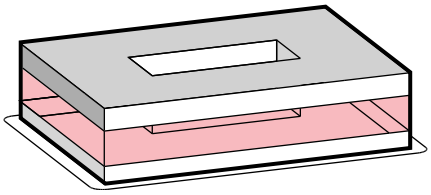


Figure 4.8g: BE7 - INCREASED TRANSPARENCY

BE8 Distinct Corner Architectural Feature

Provide a distinct architectural feature of special character and design that accentuates a change or interruption in the architectural language of the building. The corner element shall be at least [25] ft. in width and change in height by a minimum of five[5] ft. above or below the adjacent roof line and/or be integrated with a Roof Expression. See *Figure 4.8h*.

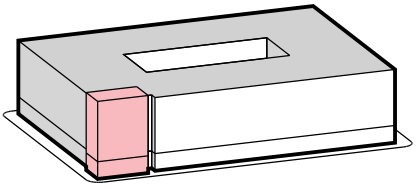


Figure 4.8h: BE8 - DISTINCT CORNER ARCHITECTURAL FEATURE

4.8 BE/PE Building and Public Realm Enhancements

BE Building Enhancement Measures
PE Public Realm Enhancement Measures

Cont'd

BE9 Roof Expression
A roof expression shall be observed as a recognizable shape or profile against the sky as visible from eye-level in the adjacent pedestrian realm. It may accentuate a change or interruption in the architectural language of the building. See *Figure 4.8i*.

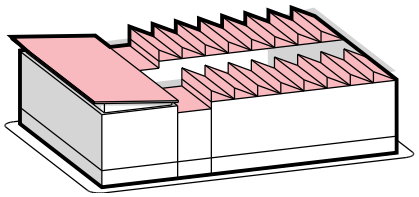


Figure 4.8i: BE9 - ROOF EXPRESSION

BE10 Additional Active Entrances
For Ground Floor Zones 1 and 2, provide a total of two[2] Active Entrances per [75] ft. of Street Fronting Elevation. For Zone 3, provide a total of two[2] Active Entrances per [100] ft. of Street Fronting Elevation. Refer to 4.11 Ground Floor Activation. See *Figure 4.8j*.

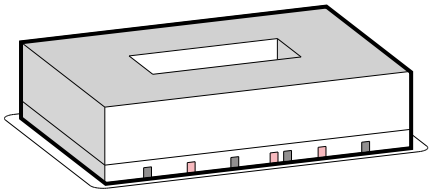


Figure 4.8j: BE10 - ADDITIONAL ACTIVE ENTRANCES

BE11 Additional Ground Floor Activation
Increase Ground Floor Activation from that required by designated Ground-Floor Active Use Zone to meet the percentage of Ground Floor Activation required by the next higher Ground-Floor Active Use Zone (see Ground-Floor Activation Plan on Page 95). Example: Building in Ground-Floor Active Use Zone 2 increases Ground Floor Activation to meet the requirements of Ground-Floor Active Use Zone 1.

PUBLIC REALM ENHANCEMENT MEASURES

PE1 Public Access through the Building
Provide at-grade public access during business hours extending through to the opposite side of the block. Public access shall provide access between a public right-of-way, Mid-Block Break or HPS2 open space to another public right-of-way, Mid-Block Break or HPS2 open space. This pass-through shall be at a minimum two[2] stories in unobstructed height and [25] ft. in width. Above the lowest two[2] stories, public access pass-through may be crossed by catwalks, Skyway connections, habitable spaces, and/or floor plates. All Street Fronting Elevations receive credit for applying this measure. See *Figure 4.8k*.

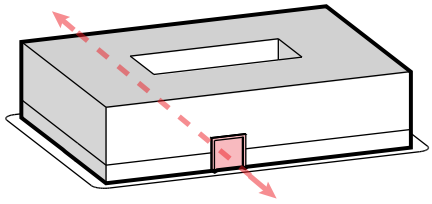


Figure 4.8k: PE1 - PUBLIC ACCESS THROUGH THE BUILDING

PE2 Public Access through Open Space Connection
Provide at-grade public access during business hours in the form of a private common open space that connects through to the opposite side of the block. Open space shall be open to the sky at a minimum of [40] ft. in width. Skyways may be located over open spaces. All Street Fronting Elevations receive credit for applying this measure. See *Figure 4.8l*.

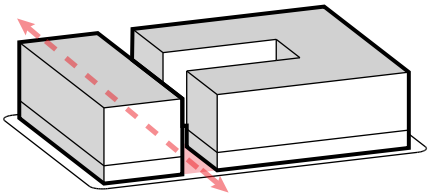


Figure 4.8l:
PE2 - PUBLIC ACCESS THROUGH OPEN SPACE CONNECTION

4.9 Tower Controls

INTENT

To provide standards particular to Towers. Where Towers are designed to meet the ground, Tower standards apply to the entire Tower, all the way to the ground. Where Tower designs are integrated with a podium on the same block, all other standards apply to the portion of the block that is not within the footprint of the tower above.

DEFINITIONS

"Floor Aspect Ratio"
The ratio that controls the proportions of the Floor Plate. Floor Aspect Ratio compares the shorter plan dimension of the Floor Plate to the longer plan dimension. A square Floor Plate would have an aspect ratio of 1:1.

STANDARDS

4.9.1 Tower Locations

Towers shall be located within the flexible tower zones and Towers "A" and "B" shall be a minimum [160] ft. apart. See *Figure 4.9a*.

4.9.2 Tower Floor Aspect Ratio

To maintain the slender appearance of Towers, the Floor Plates shall not exceed [12,500] sq. ft. and the Floor Aspect Ratio shall range between 1:1.2 and 1:1.6. A rectangular Floor Plate without notches is an acceptable form. See *Figure 4.9b*.

4.9.3 Tower Height Variation

The Towers on Blocks 15 and 33 shall differ in height from one another by at least 33%.

4.9.4 Tower Massing and Articulation

Towers shall be stepped, sculpted, tapered, and/or have FC2 - Façade Articulation.

If stepped, the building shall have a 33% reduction in floor area for the top 10% of floors. If sculpted, tapered, or articulated, the maximum floor area for the Tower above [85] ft. in height shall be no greater than the equivalent maximum floor area if there was a 33% reduction in floor area for the top 10% of floors.

4.9.5 Tower Mechanical Equipment

Mechanical Equipment shall not exceed the Maximum Building Height of the Tower by more than 10%. The mechanical equipment shall not occupy a floor plate greater than [10,625] sq. ft. (85% of the allowable floor plate size).

4.9.6 Tower Mechanical Equipment Screening

Mechanical equipment shall be screened from view to its full vertical extent.

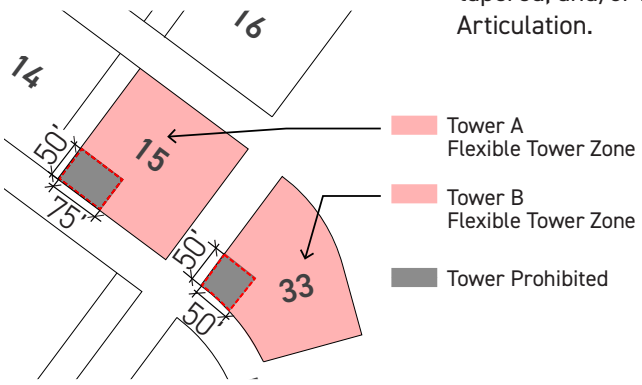


Figure 4.9a: FLEXIBLE TOWER ZONE

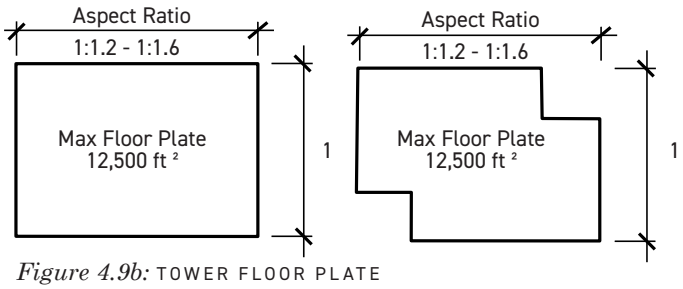


Figure 4.9b: TOWER FLOOR PLATE

4.9 Tower Controls Cont'd

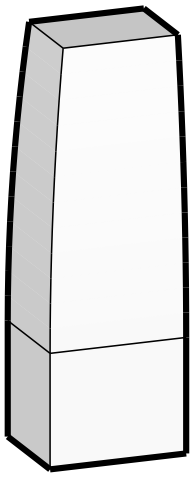


Figure 4.9c: TAPERED TOWER EXAMPLE

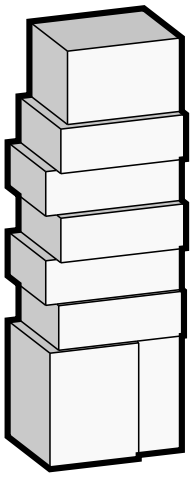


Figure 4.9d: SCULPTED TOWER EXAMPLE

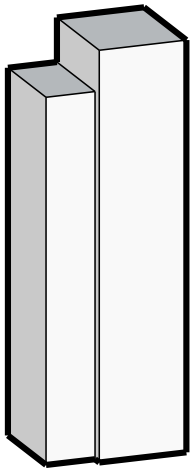


Figure 4.9e: STEPPED TOWER EXAMPLE

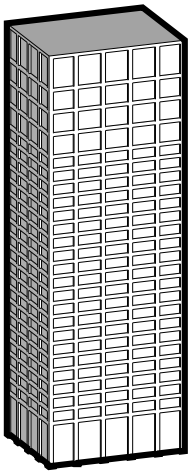


Figure 4.9f: FAÇADE ARTICULATION TOWER EXAMPLE

1

2

3

4

1. Tapered Tower Example
2. Sculpted Tower Example
3. Stepped Tower Example
4. Facade Articulation Tower Example

4.10 Projections

INTENT

To provide visual interest and architectural creativity.

DEFINITIONS

"Habitable Projection"
A portion of the building enclosed by walls and a roof which extends beyond the property or minimum Setback line. Examples include a bay window, a corner element, or a regularly occurring Façade modulation that extends through some or all floors of a building.

"Non-Habitable Projection"
A portion of the building not enclosed by walls and a roof which extends beyond the property or minimum Setback line. Examples include usable balconies or outdoor decks, structural projections, screens, Awnings, fins, or similar architectural elements.

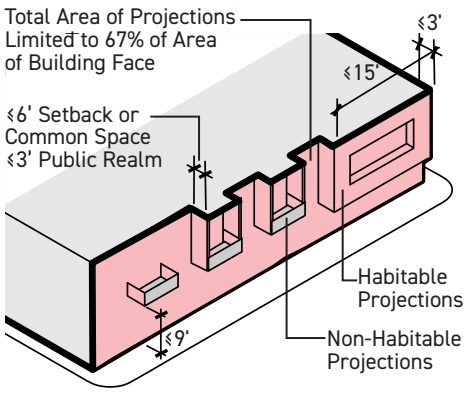


Figure 4.10a: PROJECTIONS

STANDARDS

4.10.1 Projections

Projections into the Setback area, right-of-way, Mid-Block Break, or public open space are allowed as follows:See *Figure 4.10a*.

4.10.2 Habitable Projections

A habitable space may project three[3] ft. beyond the Building Face, either into a Setback zone or into the public realm. No individual Habitable Projection may exceed [15] ft. in length. All Projections shall have a minimum vertical clearance of nine[9] ft. above the sidewalk. All Projections shall have a minimum separation distance equal to the depth of the Projection.

4.10.3 Non-Habitable Projections

Non-habitable spaces may extend into Setbacks or private open spaces by no more than six[6] ft. into a Setback or private open spaces or in no case over three[3] ft. into the public realm. No individual Non-Habitable Projection may exceed [15] ft. in length. All Projections shall have a minimum vertical clearance of nine[9] ft. above the sidewalk. All Projections shall have a minimum separation distance equal to the depth of the Projection.

4.10.4 Other Projections

Decorative elements such as belt courses, cornices, sills and eaves that extend not more than [30] in. beyond the building face are exempt from this standard.

4.10.5 Projection Exemptions

Decks, patios and steps at the first floor of occupancy that extend to the property line are exempt from this standard.

Fences and railings up to [42] in. in height are exempt from this standard.

Retail signs, canopies and awnings that do not extend more than five[5] ft. beyond the property line with a minimum vertical clearance above the sidewalk of at least nine[9] ft. are exempt from this standard.

4.10.6 Maximum Projection Area

The cumulative total of all types of projections shall not exceed 67% of the Building Face.

4.11 Ground Floor Activation

INTENT

To create an interesting and inviting pedestrian environment and to enhance neighborhood safety and security by encouraging "eyes on the street." The goal of Ground Floor design is to employ architectural methods to increase visibility and foster activity while also deterring unwanted behaviors.

DEFINITIONS

"Active Uses"
Ground Floor land uses that create an interesting and inviting pedestrian environment that enhance neighborhood safety and security by encouraging, "eyes on the street," visibility and vibrancy.

"Active Entrance"
A building entrance into an active Ground Floor use. Entrance may be public or private. Single uses may have multiple active Ground Floor entries.

"Active Frontage"
Building Façade length lined with Active Uses

Type "A" Active Uses:
- Retail
- Restaurants
- Community uses
- Commercial lobbies
- Entertainment uses
- Or similar

Type "B" Active Uses:
- Commercial services
- Medical offices
- Storefront offices
- Commercial and residential lobbies
- Parking Structure lobbies
- Professional services
- On-site sales and leasing offices
- Childcare facilities
- Private common open spaces or atria
- Maker spaces
- Art-related uses such as publicly accessible gallery spaces
- Amenity spaces
- Co-working spaces
- Open offices
- Conference rooms
- Cafeterias
- Break rooms
- Bicycle Workshop
- Bicycle Parking*
- Or similar

Type "C" Active Uses:
- Residential lobbies
- Residential amenity spaces
- Stoop porches
- Terraces
- Ground Floor dwelling units with direct, individual pedestrian access to a public right-of-way, MBB or public open space (Ground Floor studio units, embedded one bedrooms and senior housing units are not required to have direct access)

Non-Active Uses:
- Vehicle parking
- Parking and loading entrances
- Emergency egress
- Mechanical and utility rooms
- Exit stairwells and service shafts
- Or similar

4.11 Ground Floor Activation Cont'd

*Bicycle Parking may be considered an Active Use if it is consistent with the Guidelines below:

- Bicycle Parking rooms shall have circulation space along the entire street-facing perimeter.
- Direct and secure access shall be provided from the sidewalk or pedestrian easement.
- Bicycle Parking shall be visually interesting and can use graphics, art, color, etc. to meet this requirement.
- Bicycle Parking Façade shall provide direct visual access into the bicycle parking room. Individual Bicycle Parking stalls or racks can be screened from the Public Realm for security.
- Bicycle Parking shall be well lit but light trespass and glare shall be kept to a minimum.

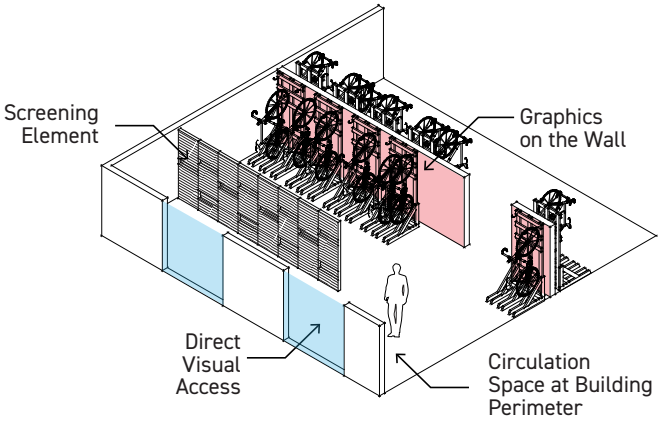


Figure 4.11a: BICYCLE PARKING


1


2

1. & 2. Active Bicycle Storage Examples

4.11 Ground Floor Activation Cont'd

INTENT

To create an interesting and inviting pedestrian environment through increased activity in and out of Ground Floor Active Uses and to maintain an adequate size and scale of Active Use spaces.

STANDARDS

4.11.1 Zone 1 and 2 Active Entrances

Each Street Facing Elevation in Zones 1 and 2 shall have a minimum average of one[1] Active Entrances per [75] ft. or less of Active Frontage. See *Figure 4.11b.*

4.11.2 Zone 3 Active Entrances

Each Street Facing Elevation in Zone 3 shall have a minimum average of one[1] Active Entrances per [100] ft. or less of Active Frontage. See *Figure 4.11b.*

4.11.3 Active Ground Floor Depth

The minimum depth of ground floor active uses for all non-residential buildings, not including service corridors, is [20] ft.; for residential buildings the minimum is ten[10] ft.

4.11.4 Ground Floor Height

Type "A" and Type "B" active uses shall have a minimum ground floor to floor height of [15] ft.

4.11.5 Waterfront Activation

A minimum [3,500] sq. ft. of publicly accessible Type "A" use shall be provided along the waterfront façades of Blocks 26, 27 or 28. The Type "A" Active Use may be located in one or multiple spaces and/or blocks.

4.11.6 Guidelines for Ground Floor Residential Design

Ground floor residential Active Uses shall follow the San Francisco "Guidelines for Ground Floor Residential Design."

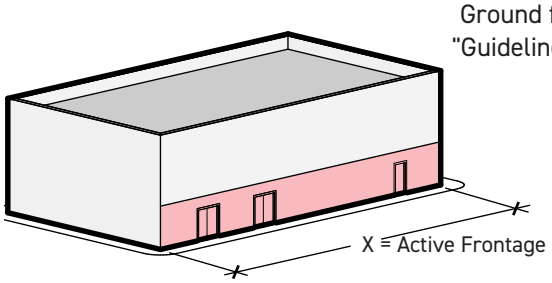


Figure 4.11b: ACTIVE ENTRANCES CALCULATION

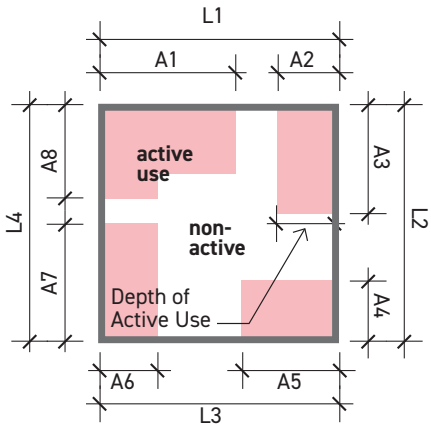
4.11 Ground Floor Activation Cont'd

INTENT

To maintain a minimum amount of active ground floor frontages on all public right-of-ways, Mid-Block Breaks, and public open spaces.

DEFINITIONS

"Shared Parking Structure"
A separate structure providing Accessory Parking to off-site lawful non-Accessory uses and not attached to or included within a building containing a lawful non-Accessory use.



$$\frac{(A1 + A2 + A3 + A4 + A5 + A6 + A7 + A8)}{(L1 + L2 + L3 + L4)} = \%\ \text{Active}$$

Figure 4.11c: ACTIVE USE PERCENTAGE CALCULATION

STANDARDS

4.11.7 Ground Floor Activation

The percentage of Ground Floor Activation is calculated by taking the total combined length of all Active Frontages around the perimeter of a Block and dividing by the overall length of all Façades within that same Block. See *Figure 4.11c.*

At Zones 1, 2 and 3, each Street Facing Elevation shall have a minimum of 50% Active Uses.

Zone 1
Buildings shall contain a minimum 85% of Type "A" Active Frontages uses on the Ground Floor.

Zone 2 and 3
Buildings shall contain a minimum 75% of Active Frontages on the Ground Floor. Active uses shall consist of those established in *Figure 4.11d.*

Zone 4
Shared Parking Structures in Zone 4 shall comply with 4.11.8 Shared Parking Structures Activation. If buildings in Zone 4 are built as primarily commercial or residential uses, Ground Floor activation rules for Zones 2 and 3 shall apply.

4.11.8 Shared Parking Structures Activation

All corners of Shared Parking Structures shall include Type "A", "B" or "C" Active Uses for a minimum of [20] ft. by [20] ft. dimension. In addition, Shared Parking Structures shall include a minimum of 25% of Type "A", "B" or "C" Active Uses on the ground floor.

If two[2] Shared Parking Structures face one another, at least one[1] of the two facing façades shall include at minimum 75% of active uses on the ground floor.

Figure 4.11d: GROUND FLOOR ACTIVATION REQUIREMENTS

4.11 Ground Floor Activation Cont'd

INTENT

To provide visual access to the Ground Floor Building interior, enhance Public Realm safety by providing "eyes on the street", to provide lighter color architectural materials at the ground floor and to minimize blank walls.

DEFINITIONS

"Transparent Glazing"
Glass and glazing systems that are designed to provide visual access and light transmittance.

"Active Use Transparency"
The surface area of Transparent Glazing as a proportion of the surface area of the Ground Floor Active Frontage.

STANDARDS

4.11.9 Ground Floor Active Use Transparency

Active Frontage shall be fenestrated with transparent windows and doorways and allow visibility to the inside of the Building to meet the minimum percentage for each Active Use type as follows and as illustrated in *Figure 4.11e.*

4.11.10 Ground Floor Active Use Glass and Glazing

Ground Floor and retail storefront glass shall be maximum 15% reflective, visible light transmittance greater than 80%, and without tint or coloration in the glass substrate. Non-storefront glazing may have up to 50% reflectivity.

Transparent Glazing shall be used to allow a constant relationship between the inside space and the public realm. Dark tinted and/or opaque glazing is not permitted.

Type "A" and "B":
Active Frontage shall incorporate no less than 60% of transparent glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from finished Ground Floor.

Type "C":
Active Frontage for Residential units shall incorporate no less than 30% of Transparent Glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished ground floor.

Lobby and amenity spaces shall be 60% transparency glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished Ground Floor.

Area of Transparent Façade(sq. ft.) between 4 ft. and 8 ft. in Height / Length of Active Frontage(ft) *4 ft. = % of Transparency

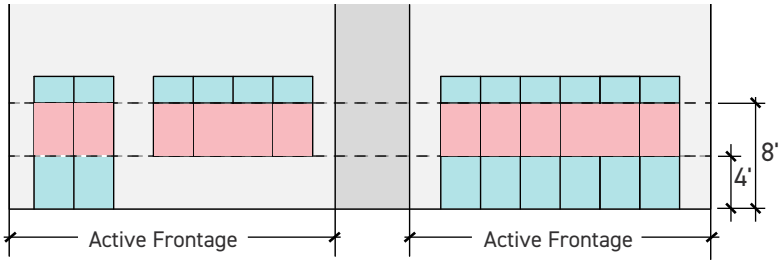


Figure 4.11e: GROUND FLOOR TRANSPARENCY CALCULATION

1 & 2. Ground Floor Transparency Examples


1


2

4.11 Ground Floor Activation Cont'd

This table summarizes the ground floor design controls of the four different Ground Floor Activation zones. Each of the controls listed here is defined in Section 4.11 and 4.17.

Ground Floor Frontage	Zone 1	Zone 2	Zone 3	Zone 4
4.11 Active Uses	Type "A"	Type "A" or "B"	Type "A","B" or "C"	Type "A","B" or "C"
4.11.1 & 4.11.2 Active Entrances	Each Street Facing Elevation in Zones 1 and 2 shall have a minimum average of one[1] active entrances per [75] ft. or less of Façade length		Each Street Facing Elevation in Zone 3 shall have a minimum average of one[1] active entrances per [100] ft. or less of Façade length	N/A
4.11.6 Ground Floor Activation	Buildings shall contain a minimum 85% of Type "A" Active Frontages uses on the Ground Floor	Buildings shall contain a minimum 75% of Active Frontages on the Ground Floor Each Street Facing Elevation shall have a minimum 50% of Active Uses		N/A
4.11.7 Shared Parking Structure Activation	N/A	N/A	N/A	All corners of Shared Parking Structures shall include Type"A", "B" or "C" Active Uses for a minimum of [20] ft. by [20] ft. dimension. In addition, Shared Parking Structures shall include a minimum of 25% of Type "A", "B" or "C" Active Uses on the ground floor If two[2] Shared Parking Structures face one another, at least one[1] of the two facing Façades shall include at minimum 75% of Active Uses on the Ground Floor
4.17.1 Ground Floor Blank Walls	(Not active use zone): Each Blank Wall shall not occupy over eight[8] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 20% of the total Active Frontage.		Each Blank Wall shall not occupy over [12] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 30% of the total Active Frontage.	N/A
4.17.2 Upper Floor Blank Walls	For all buildings, upper level Blank Walls shall not occupy over [30] linear ft. for the entire height of the façade above the base. The total amount of Blank Wall shall be limited to 50% of the total upper-level Building Façade. Shared property-line Building faces are exempt.			For Shared Parking Structures, Screening and/or openings shall not be considered Blank Walls. Green walls that are a significant architectural feature of the Façade will not be considered a Blank Wall Site utilities on Blocks 36B, 55 and/or 56 and Adaptive Reuse Buildings are exempt from the Blank Wall standard.

Figure 4.11f: GROUND FLOOR ACTIVATION ZONE CHART

4.11 Ground Floor Activation Cont'd

This table summarizes the ground floor design controls of the three different Ground Floor Activation types. Each of the controls listed here is defined in Section 4.11.

Ground Floor Frontage	Type "A"	Type "B"	Type "C"
4.11.3 Active Ground Floor Depth	All non-residential Buildings, not including service corridors, is [20] ft. For residential buildings the minimum is ten[10] ft.		
4.11.4 Ground Floor Heights	Minimum ground floor to floor height of [15] ft.		N/A
4.11.5 Waterfront Activation	Minimum [3,500] sq. ft. of publicly accessible Type "A" use shall be provided along the waterfront Façades of Blocks 26, 27 or 28. The amount of use may be in one or multiple spaces and/or Blocks	N/A	N/A
4.11.9 Ground Floor Active Use Transparency	Active Frontage shall be fenestrated with transparent windows and doorways and allow visibility to the inside of the Building to meet the minimum percentage for each Active Use type.		
4.11.10 Ground Floor Active Use Glass and Glazing	Active Frontage shall incorporate no less than 60% of transparent glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from finished Ground Floor.		Active Frontage for Residential units shall incorporate no less than 30% of Transparent Glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished Ground Floor. Lobby and amenity spaces shall be 60% transparency glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished Ground Floor.

Figure 4.11g: GROUND FLOOR ACTIVATION TYPE CHART

4.12 Building Entries

INTENT

To provide Ground Floor activation, pedestrian access to buildings and architectural articulation.

DEFINITIONS

"Primary Building Entries"
The main entries to a building.

STANDARDS

4.12.1 Primary Building Entries

All buildings shall have a Primary Building Entry from a public right-of way, public open space, publicly accessible private open space, or Mid-Block Break.

4.12.2 Green Room Building Entries

Where a building is facing the Green Room, the Primary Building Entry shall front the Green Room

4.12.3 Ground Floor Residential Unit Entries

Ground Floor residential units shall be elevated above the street by a minimum average of between two[2] ft. and four[4] ft. Where street grades are in excess of 5% slope, the average height may exceed four[4] ft. in height.

GUIDELINES

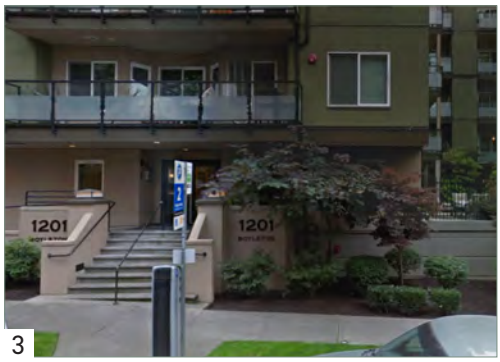
4.12.4 Building Entries

Entrances shall be easily identifiable and well-lit for convenience, visual interest and increased safety. commercial/retail entrances shall be easily identifiable and distinguishable from residential entrances.

1. Clearly Defined Building Entry Example
2. Primary Building Entry Example
3. Entry to Residential Example

1

2



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4.13 Parking and Service Entrances

INTENT

Strategically locate Parking and Service Entrances in order to mitigate adverse impacts to pedestrians and bicyclists.

DEFINITIONS

"Parking Entrance"
Entries allowing vehicular access to parking areas, including Shared Parking Structures, podium parking, and/or below grade parking.

"Service Entrance"
Entries allowing vehicular access for trucks and/or deliveries, loadings, and/or access to trash rooms.

STANDARDS

4.13.1 Parking and Service Entrances Locations

Parking and Service Entrances are permitted in locations established by *Figure 4.13b*.

4.13.2 Combined Parking and Service Entrances

Each combined parking ingress and egress for off-street parking shall be a maximum width of [24] ft. This may be increased to a maximum of [27] ft. where:

- there is shared access to off-street parking and loading; or
- the extra width is necessary to accommodate the fleet of emergency services or utility providers.

4.13.3 Separate Parking and Service Entrances

Separate vehicular ingress/egress shall each be a maximum width of [11] ft. and be spaced at a minimum of [60] ft. apart.

4.13.4 Maximum Parking and Service Entrances

The sharing of parking and Service Entrances is encouraged. The number of entrances is limited to two[2] ingress and two[2] egress points per block plus one[1] Service Entrance. Shared vehicular entrances shall be a minimum of [40] ft. from block corners and [20] ft. from building entrances.

4.13.5 Parking and Service Entrances

Block 25 may host a transit center. Shall this block require loading access, the design of that access will be developed in close coordination with SFMTA to minimize any potential conflicts with the transit center operations.

GUIDELINES

4.13.6 Parking and Service Entrances (Blocks 38 & 45)

Blocks 38 and 45 shall minimize the impact of parking and Service Entrances on public open spaces. Options to minimize the impact may include providing separate ingress and egress access, locating parking and service access on an MBB, or similar strategies.

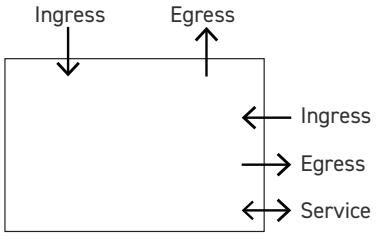

Figure 4.13a: PARKING INGRESS AND EGRESS PER BLOCK

Figure 4.13b: PARKING AND SERVICE ENTRANCES

4.14 Screening

INTENT

To mitigate any adverse impacts of utilities, equipment, and vehicles on the Public Realm.

DEFINITIONS

"Screening"
A physical visual barrier that obstructs or obscures the view of an object or objects. Screening may include shading devices, trellises, canopies, fences, landscaping, and architectural treatments.

STANDARD

4.14.1 Screening

Screening is required to limit visibility of the following facilities and conditions:

- At-grade utilities visible from the Public Realm
- Utilities in the Setback areas
- Ground Floor utilities, mechanical rooms, and alcoves with exterior walls
- Eco-District or Eco-Grid utilities and utility facilities visible above ground
- Rooftop mounted equipment
- Vehicles in parking stalls, rooftops and ramps at shared parking garage structures and podium parking garages

Solar collectors and wind turbines are exempt.

4.14.2 Screening of Utilities Visible at Grade

Enclosure or Screening shall be designed as a logical extension of and/or compatible with the adjacent Building and an integral part of the overall Building design. Screening material and detailing shall be comparable in quality to that of the rest of the Building. Landscaping alone shall not qualify as Screening of at-grade utilities.

1. Metal Screening Example
2. Landscaping and Metal Screening Example
3. Metal Screening Example


1


2


3

4.14 Screening Cont'd

4.14.3 Screening Materials

Screening materials shall be durable and high quality. Screening shall be consistent with the architectural character of the building.

Examples of Screening Materials:

- **Landscaping:** Planting must include systems for maintenance, such as irrigation.
- **Concrete:** Cast-in-place or pre-cast concrete
- **Metal:** Panels, sheet materials, or shingles
- **Wood:** Paneling, and other natural materials
- **Glass:** Clear, colored, or translucent with reflectivity up to 50%.

4.14.4 Screening for Rooftop Equipment

Rooftop mechanical equipment and appurtenances to be used in the operation or maintenance of a building shall be arranged so as not to be visible from any point at or below the roof level of the subject building. Rooftop mechanical equipment shall be obscured by walls, parapet, or Screening.

Enclosure or Screening shall be designed as a logical extension of the building form and integral part of the overall building design. Cladding and detailing shall be comparable in quality to that of the rest of the building.

If the required Screening is an extension of the building wall below, the architectural treatment or characteristics shall be continued on the "screen" and the top of the equipment shall be below the maximum Building Height. Height Exceptions are noted in 4.4.3.

4.14.5 Screening for Upper Floor Parking

All parapet edges and/or façades shall be designed to screen vehicles from public view at all levels. All parapet edges of parking trays, including the roofs, shall be high enough to screen adjacent properties from light trespass from vehicle headlights and direct view of building lighting.

Parking above the ground level shall be screened in a manner that accentuates ground floor uses, minimizes mechanical features and is in keeping with the overall massing and architectural vocabulary of the building.

4.14.6 Screening for Ground Floor Parking

Parking at the ground level shall be located at a minimum [25] ft. from any Setback line facing a public Right-of-way, MBB, or Open Space. Ground Floor parking in Shared Parking Structures and vertical mechanical parking structures may be located up to the Setback line. Ground Floor screening may include non-habitable spaces such as art installations, murals, green walls, landscaping, or similar uses.

4.14.7 Rooftop Screening for Parking

All exposed-to-the-sky parking stalls shall have shading or screening of one of the following types: trellises, solar collectors, PV trellises, trees, glass canopies, fabric shade structures or similar devices, such that parked vehicles cannot be viewed from any point below the roof level and not easily-viewed from adjacent buildings or public vista points.

4.15 Shared Parking Structures

INTENT

To provide architecturally integrated parking facilities that meet the needs and demands of the surrounding neighborhood.

DEFINITIONS

"Shared Parking Structure"
A separate structure providing Accessory Parking to off-site lawful non-Accessory uses and not attached to or included within a building containing a lawful non-Accessory use.

"Convertible"
A Shared Parking Structure designed to be converted into another use and/or designed to be mechanized and deconstructable.

STANDARDS

4.15.1 Shared Parking Structure Locations

Shared Parking Structures shall only be located on Blocks 1, 14, 22, 24, 32, 35, or 43. Shared Parking Structures on any other block not facing the waterfront, the Green Room or the Water Room shall require OCII Commission approval as a Secondary Use, pursuant to Secondary Use approval standards in the Plan. If a use other than a Shared Parking Structure is constructed in a Ground Floor Zone 4, the Ground Floor zone shall be revised to match the zone across the street, except along Robinson Street, which shall be Zone 2, Blocks 22, 24.

4.15.2 Number of Shared Parking Structures

A maximum number of seven[7] Shared Parking Structures shall be permitted in HPS2. An increase in number of Shared Parking Structures beyond seven[7] in HPS2 shall require OCII Commission approval as a Secondary Use, pursuant to Secondary Use approval standards in the Plan, as well as to better serve the transportation and circulation needs of HPS2 while enhancing the pedestrian-level activation and urban design of HPS2.

4.15.3 Shared Parking Structure Design

Shared Parking Structures shall comply with all applicable Standards and Guidelines, including, but not limited to, Architectural Controls by Building Scale, Section 4.5.

4.15.4 Convertible Shared Parking Structures

Shared Parking Structure shall be Convertible. All floors shall be flat except required ramps for vehicular circulation.

Exception: A Shared Parking Structure that does not comply with the convertibility standard shall contain a 25% increase in Ground

4.15 Shared Parking Structures Cont'd

Floor Active Frontage over the minimum amount required in the Ground Floor Zones on *Figure 4.11d*. Shared Parking on Block 32 shall contain a minimum of 75% Active Frontage.

4.15.5 Floor Heights for Convertible Shared Parking Structures

Ground Floor height for Convertible Shared Parking Structures shall be a minimum [15] ft. All upper floors shall have nine[9] ft. clear floor to ceiling height. If a mechanical parking system does not contain structural floors, it is exempt from this Standard.

4.15.6 Shared Parking Structure Lighting

Security lighting shall be directed away from surrounding land uses using state-of-the-art fixtures to minimize light trespass and glare.

GUIDELINES

4.15.7 Shared Parking Structure Ground Floor Uses

Shared Parking Structures shall include Ground Floor facilities that support commuter cyclists including at least one[1] of the following: bike share facilities, changing rooms and showers, bike repair shops, bike racks, and/or secure bike storage.

1. Lighting at Parking Garage Example
2. Screening Example
3. Lighting at Parking Garage Example

1


2


3

4.16 Rooftops

INTENT

To create distinctive or interesting roofs where visible from the hilltop or adjacent buildings.

DEFINITIONS

"High Albedo"
Materials that reflect sunlight and limit the amount of heat gained through those materials. High Albedo Roofing materials are chosen to reduce unwanted heating of roof surfaces.

"Vegetated Roof Covers"
A roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane.

GUIDELINES

4.16.1 Rooftop Façades

Rooftops visible from the hilltop, adjacent buildings, and/or from spaces within the same building shall be designed as a "fifth façade".

The "fifth façade" can be met in the following ways: Where building roofs are free of solar panels, mechanical equipment, or other sustainability infrastructure, they shall be designed to include systems such as roofing materials with high albedo surfaces to reduce heat island effect or vegetated roof covers in order to reduce heat island effect and slow rainwater runoff.

1. Roof with Vegetated Cover Example
2. Roof with Solar Panel Example
3. Roof with Mechanical Equipment Example

1

2

3

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4.17 Blank Walls

INTENT

To limit the location and expanse of Blank Walls and to provide greater building articulation and visual interest, especially at the Ground Floor level.

DEFINITIONS

"Blank Wall"
A building façade area greater than four[4] linear ft. in length parallel to the property line where there is not an entrance, window, or any building articulation, including solid doors and mechanical area wall(s).

STANDARDS

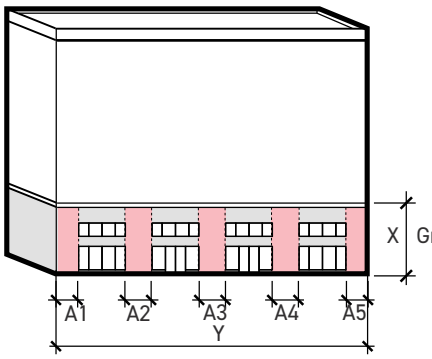
4.17.1 Ground Floor Blank Walls

Active Ground Floor Frontage Zone 1 & 2 (Not active use zone):
Each Blank Wall shall not occupy over eight[8] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 20% of the total Active Frontage.

Active Ground Floor Frontage Zone 3:
Each Blank Wall shall not occupy over [12] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 30% of the total Active Frontage. See *Figure 4.17a.*

Green walls that are a significant architectural feature of the Façade may not be considered a Blank Wall.

Site utilities on Blocks 36B, 55 and/or 56 and Adaptive Reuse Buildings are exempt from the Blank Wall standard.



Zone 1 & 2 (A ≤ 8')

$$\frac{(A1+A2+A3+A4+A5)X}{XY} = \leq 20\%$$

Zone 3 (A ≤ 12')

$$\frac{(A1+A2+A3+A4+A5)X}{XY} = \leq 30\%$$

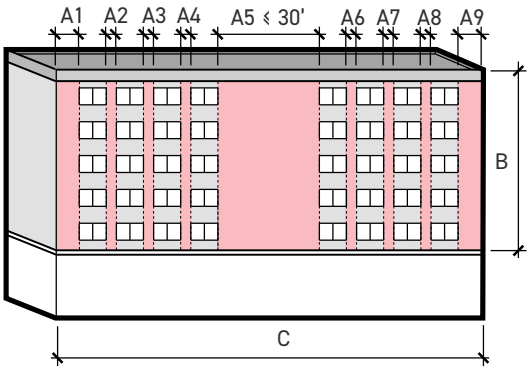
Figure 4.17a: GROUND FLOOR BLANK WALLS CALCULATION

4.17.2 Upper Floor Blank Walls

For all buildings, upper level Blank Walls shall not occupy over [30] linear ft. for the entire height of the façade above the base. The total amount of Blank Wall shall be limited to 50% of the total upper-level building Façade. Shared property-line Building Faces are exempt.

For Shared Parking Structures, screening and/or openings shall not be considered Blank Walls.
Green walls that are a significant architectural feature integrated into the Façade will not be considered a Blank Wall.

Site utilities on Blocks 36B, 55 and/or 56 and Adaptive Reuse Buildings are exempt from the Blank Walls standards. See *Figure 4.17b.*



$$\frac{(A1+A2+A3+A4+A5+A6+A7+A8+A9)X}{BC} = \leq 50\%$$

Figure 4.17b: UPPER FLOOR BLANK WALLS CALCULATION

4.18 Daylight

INTENT

To ensure regularly occupied building areas have access to Daylight.

DEFINITION

"Daylight"
The controlled admission of natural light, direct sunlight, and diffused-skylight into a building to reduce electric lighting and save energy.

"Regularly Occupied Floor Area"
An area where one[1] or more individuals normally spend time (more than one[1] hour per person per day on average) seated or standing as they work, study, or perform other focused activities inside a building.

STANDARDS

4.18.1 Residential Daylight

All residential units shall have at least one[1] bedroom or living area with a window facing outside with an unobstructed view of a minimum [25] ft. clear dimension. See *Figure 4.18a.*

4.18.2 Commercial Daylight

Option 1:
All Regularly Occupied Floor Areas of commercial buildings shall have direct access and/or a view to the exterior courtyard of the building or a daylit Atrium space. See *Figure 4.18b.*

-OR-

Option 2:
At a minimum, 55% of the Regularly Occupied Floor Area shall be within a Floor Plate depth dimension of no greater than two and a half [2.5] times the glazing height. See *Figure 4.18c.*

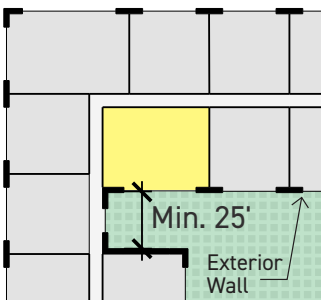


Figure 4.18a: RESIDENTIAL DAYLIGHT

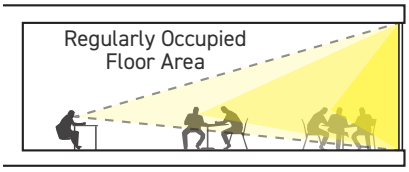


Figure 4.18b: COMMERCIAL DAYLIGHT OPTION 1

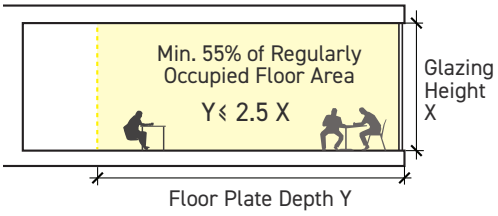


Figure 4.18c: COMMERCIAL DAYLIGHT OPTION 2

4.19 Façade Material

INTENT

To ensure the durability and quality of materials particularly at the Ground Floor that will enhance the pedestrian visual experience.

Material and craft are essential to maintaining a reference to the past use of the site as a Shipyard.

Care shall be taken to reference the streetscape improvements such that the materiality of each district is harmonious as a whole, reinforcing the intention to achieve a subtle variation for each various district.

STANDARDS

4.19.1 Bird-Safe Design

All buildings shall fully comply with bird-safe measures established in the Mitigation Monitoring and Reporting Program for HPS2.

GUIDELINES

4.19.2 Material Quality

Materials shall be high quality, durable, and consistent with industry standards of contemporary architecture.

4.19.3 Material Selection

Material selection and application shall reflect the Material Palette. See material palette in *Figure 4.19a* for reference. The material palette does not preclude the use of other materials or finishes not listed if they are applied in concert with a strategy that fits the HPS2 Vision.

Building materials and colors shall be carefully selected to achieve harmony with neighboring buildings, be environmentally sensitive, and contribute to a varied urban street fabric.

4.19.4 Ground Floor Materials

Active Frontages shall be designed with high-quality materials that offer color, variety, wear resistance, and visual interest to the pedestrian.

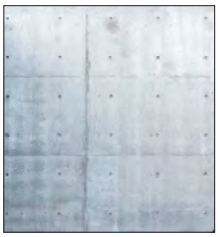
- Consider fine grained material modules and textures at Ground Floor façades to enhance the pedestrian realm and provide contrast to the upper levels.
- Ground Floor Façades shall be finished with more than one[1] material and be unique to the individual program or building.

4.19.5 Marine Environment Materials

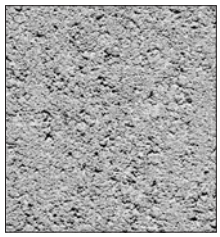
Due to the marine environment, materials selected shall demonstrate performance related to moisture protection, maintenance requirements, durability, and ultra violet resistance.

4.19.6 Prohibited Materials

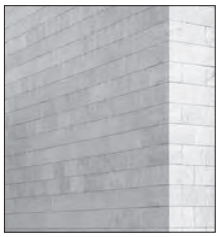
Vinyl and fabric awnings are prohibited. Dryvit as a material is prohibited.



CONCRETE
Cast-in-place or pre-cast



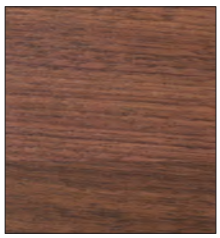
MASONRY
Veneer or structural

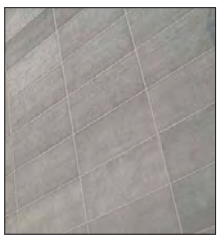


STONE
Veneer or structural

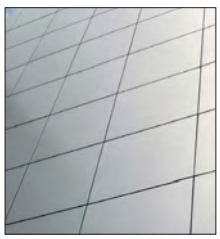
METAL
Panels, siding, sheet materials, or shingles (metal panels shall be minimum [18] gauge)

WOOD
Siding, paneling, and other natural materials (wood shall be FSC-Certified)

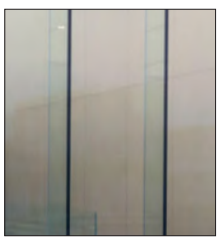




COMPOSITES
Cementitious board, and other composite materials



CEMENT PLASTER
May be used only in combination with other permitted materials



GLASS
Clear, colored, or translucent with reflectivity up to 50%

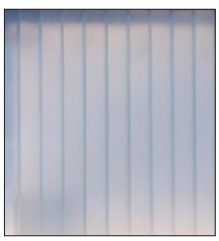


Figure 4.19a: MATERIAL PALETTE

4.19 Façade Material Cont'd

Water Room Palette

APPLICATION

ELEMENTAL MATERIALS:
The use of the following material and color palette is encouraged for the buildings fronting the Water Room and Dry Dock 4. See *Figure 4.19b*.

Materials at this location shall reflect the elemental qualities inherent in the idea of a Water Room.

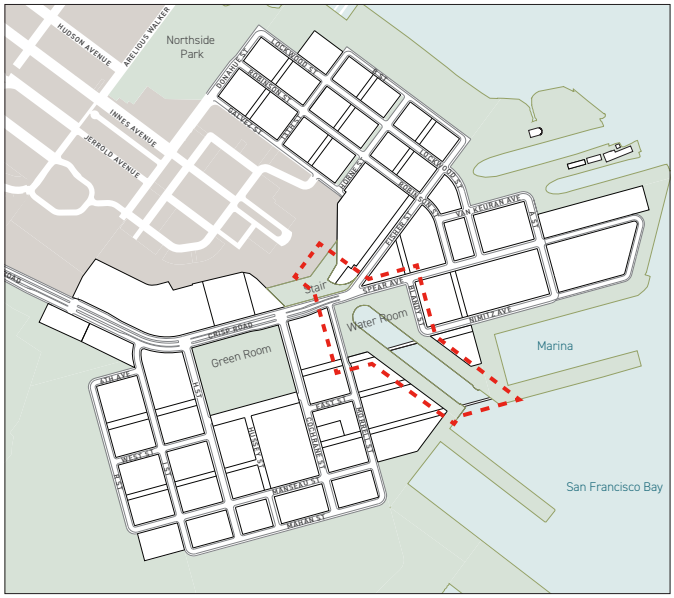
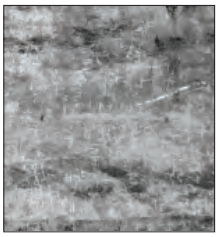
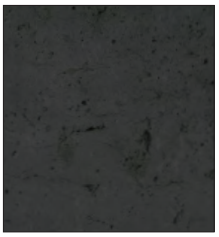


Figure 4.19b: LOCATION OF WATER ROOM





INDUSTRIAL/NAVAL CONCRETE

TINTED CONCRETES/COLORED AGGREGATES/ASPHALT

LIGHT STONE/
PRECAST CONCRETE

DARK STONE/
PRECAST CONCRETE

DARK METALS
(STANDARD USE)

WARM METALS
(STANDARD USE)

GLASS

BACK-PAINTED GLASS/
TRANSLUCENT SCREENS

TERRACOTTA
BAGUETTES

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19c: MATERIAL PALETTE

4.19 Façade Material Cont'd

Development Perimeter Palette

APPLICATION

POROUS & EARTHEN MATERIALS:
The use of the following material and color palette is encouraged for the waterfront and open space edges of the Shipyard North and Warehouse Districts. See *Figure 4.19d*.

Materials in this location shall relate the built environment along the edges of the development to the open spaces, the waterfront, and the sense of the natural topography of the shoreline.

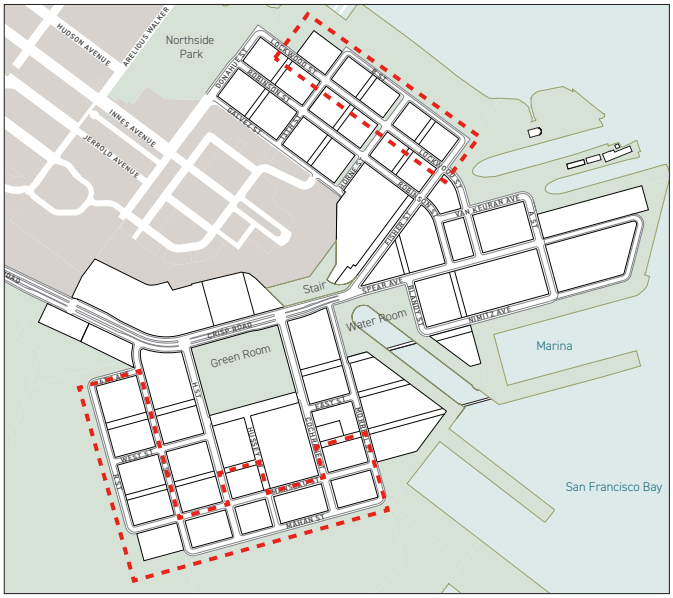
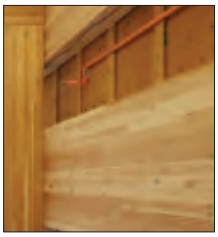
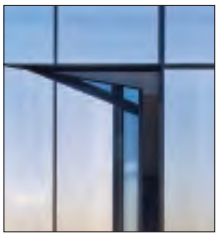


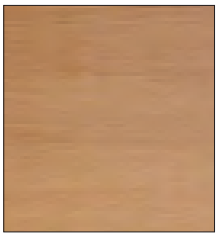
Figure 4.19d: LOCATION OF DEVELOPMENT PERIMETER


CROSS-LAMINATED TIMBER


WARM METALS (SPECIAL USE)


GLAZING

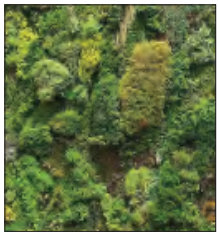

WOODS (MODULAR OR FIELD)

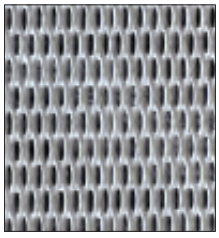



PRECAST CONCRETE

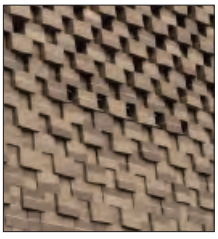

PRECAST CONCRETE


DARK METALS


GREEN WALLS


PERFORATED MESH/ EXPANDED METALS


CONCRETES


MASONRY (PREFAB PANELS OR IN SITU)

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19e: MATERIAL PALETTE

4.19 Façade Material Cont'd

Green Room Palette

APPLICATION

"INVERSE" MATERIALS:
The use of the following material and color palette is encouraged for the buildings fronting the Green Room. See *Figure 4.19f*.

Materials at this location shall contribute to the urban edge and Street Wall of the Green Room, while allowing for ample Daylight into the buildings. A sense of lightness shall be perceptible from the Green Room.

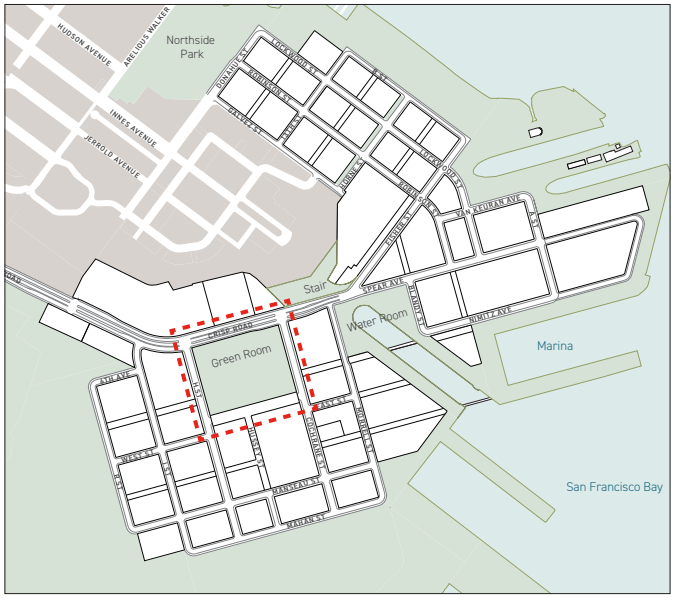
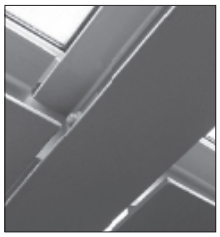
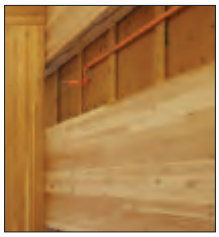


Figure 4.19f: LOCATION OF GREEN ROOM


LIGHT STONE/ PRECAST CONCRETE

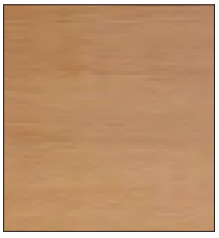

DARK STONE/ PRECAST CONCRETE

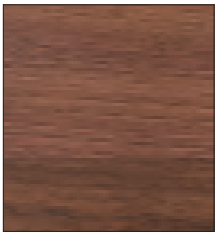

EXPOSED STEEL

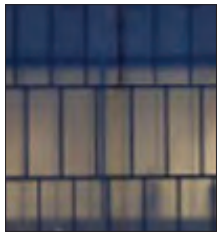

CROSS-LAMINATED TIMBER/GLULAM


WARM METALS (STANDARD USE)

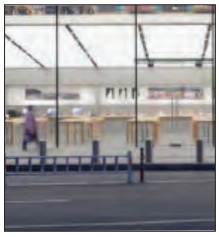

BACK-PAINTED GLASS/ TRANSLUCENT SCREENS


WOODS (MODULAR OR FIELD)




TINTED/OPAQUE GLAZING/SPANDRELS


DARK METALS


GROUND LEVEL GLASS FOR RETAIL(TRANSPARENT)

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19g: MATERIAL PALETTE

4.19 Façade Material Cont'd

Research District and Transit Hub Palette

APPLICATION

INDUSTRIAL MATERIALS:
The use of the following material and color palette is encouraged for the waterfront and open space edges of the Shipyard North and Warehouse Districts. See *Figure 4.19h*.

Materials at this location shall reference the former industrial uses of buildings on these blocks.

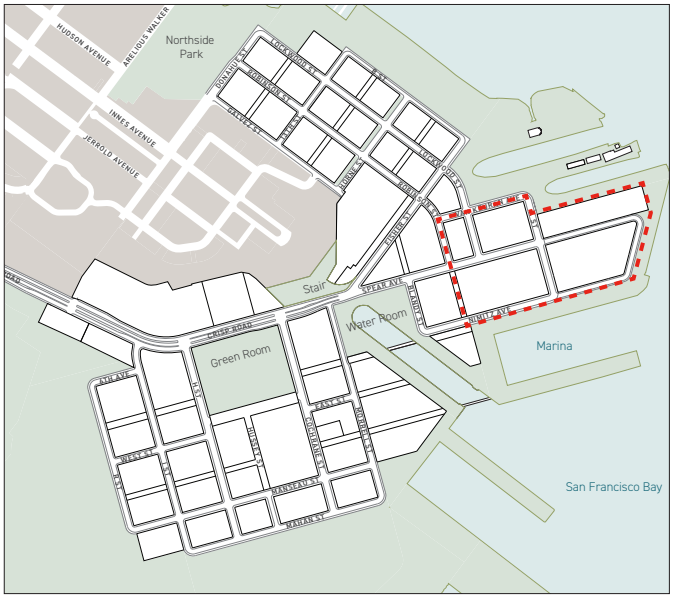
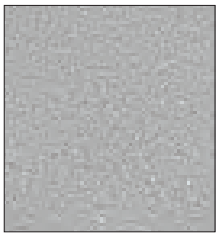
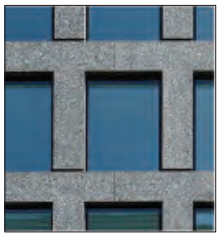


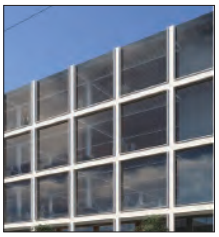
Figure 4.19h: LOCATION OF RESEARCH DISTRICT AND TRANSIT HUB


EXPOSED STEEL

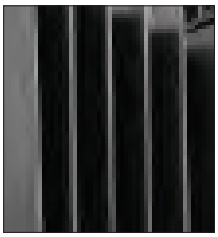

LIGHT METALS


DARK METALS

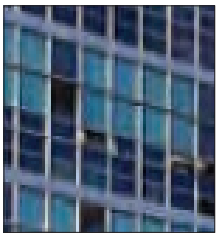

PRECAST CONCRETE/ METALS


STRUCTURAL STEEL/ CURTAIN WALLS


GLASS Façade/ CONCRETED STRUCTURE


METAL FINS


CAST IN PLACE CONCRETE


GLASS CURTAIN WALL


TERRACOTTA BAGUETTES

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19i: MATERIAL PALETTE

4.19 Façade Material Cont'd

Pedestrian Allée Palette

APPLICATION

MATERIAL VARIETY:
The use of the following material and color palette is encouraged for the Pedestrian Allée. See *Figure 4.19j*.

Materials that front the Pedestrian Allée shall provide varied experience as one moves through the allée. Materials shall reinforce the scale of the buildings and be compatible with the adjacent districts.

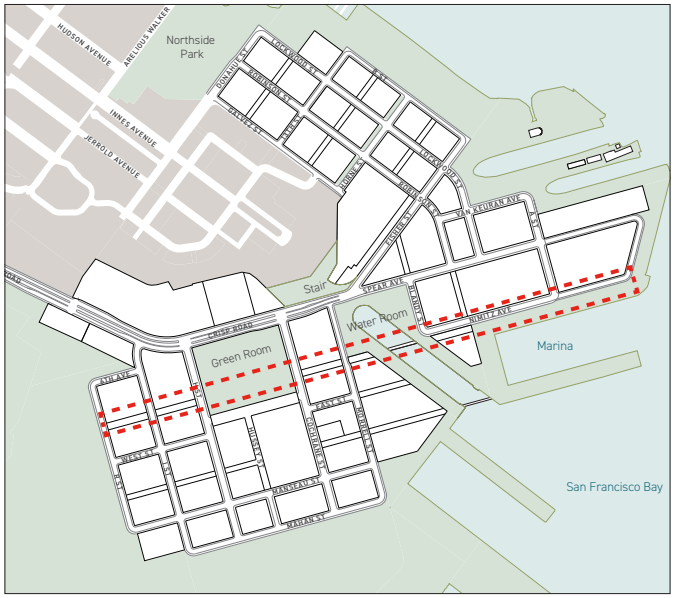
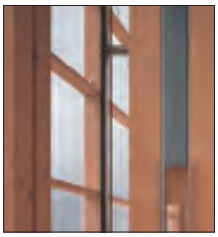
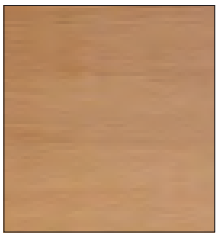


Figure 4.19j: LOCATION OF PEDESTRIAN ALLÉE


CROSS-LAMINATED TIMBER

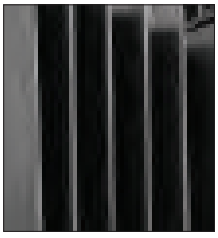

MASONRY (PREFAB PANELS OR IN SITU)


WOODS (MODULAR OR FIELD)


DARK METALS


LIGHT STONE / PRECAST CONCRETE


DARK STONE / PRECAST CONCRETE


METAL FINS


TERRACOTTA BAGUETTES

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19k: MATERIAL PALETTE

4.19 Façade Material Cont'd

Fisher Street Palette

APPLICATION

URBAN EDGE:
The use of the following material and color palette is encouraged for Fisher Street. See *Figure 4.19l*.

Materials at this location shall reinforce an urban edge along Fisher Street.

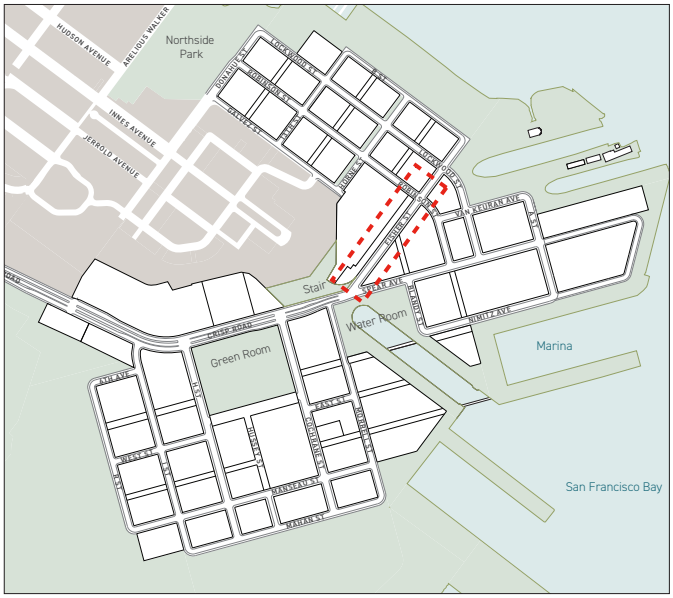


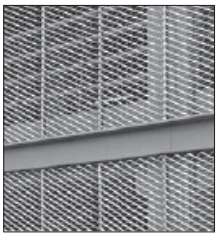
Figure 4.19l: LOCATION OF THE VILLAGE CENTER

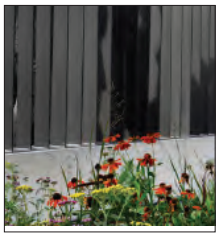

EXPOSED STEEL

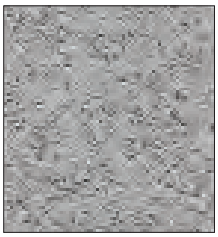

GLASS


TRANSLUCENT GLAZING


CORRUGATED STEEL


METAL FINS


METAL FINS


POLISHED STANDARD CONCRETE

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19m: MATERIAL PALETTE

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4.20 Class I - Bicycle Parking

INTENT

To provide safe, secure and convenient bicycle parking for residents, workers and visitors.

DEFINITIONS

"Class I - Bicycle Parking"
Spaces in secure, weather-protected facilities intended for use as long-term, overnight, and workday bicycle storage by dwelling unit residents, non-residential occupants, and employees.

STANDARDS

4.20.1 Bicycle Parking Capacity

Class I Bicycle parking shall be provided at the following ratios for the occupied floor area:

Office/R+D	1sp/5,000 sf
Community/Arts	1sp/5,000 sf
Retail/Restaurants	1sp/7,500 sf
Maker Spaces	1sp/7,500 sf
Hotel	1sp/30 room
School	4sp/classroom
Childcare	1sp/20 children
Residential	1sp/unit up to 100 units
	1sp/4 units above 100 units
Group/Senior Housing	1sp/10 units

4.20.2 Bicycle Parking Location

Class I Bicycle parking shall be provided for new building construction and adaptive re-use buildings. Bicycle Parking access shall be conveniently located, which may include locations on floors other than the ground floor, provided that pathways to reach Bicycle Parking are designed specifically to accommodate bicycles, (e.g. elevator sizes, hallway widths, etc shall be adequately sized for bicycles specifically).

Commercial bicycle parking may be consolidated in a separate building that is located either adjacent to or across the street from an access point to the subject building.

4.21 Vehicle Parking and Loading

4.21.1 Vehicle Parking and Loading

INTENT

To limit the number of vehicle parking spaces by land use and ensure adequate loading and service areas.

STANDARDS

4.21.1 Vehicle Parking and Loading

Parking and Loading minimum and maximum ratios shall be as follows in Figure 4.21a, Figure 4.21b, Figure 4.21c ,and Figure 4.21d. Parking may be provided in individual buildings together with the Principal or Secondary Use(s) served by such Parking or provided in Shared Parking Structures which serve one or more lawfully-permitted uses within HPS2.

MAXIMUM PARKING REQUIREMENTS	
Land Use	Rate
Residential	1 per unit
Regional Retail	3.0 per 1,000 sq. ft.
Neighborhood Retail/Maker Space	3 per 1,000 sq. ft.
Office	1 per 1,000 sq. ft.
Research and Development	1.3 per 1,000 sq. ft.
Hotel	0.25 per room
Film Arts Center	1 per 8 seats up to 1,000 seats, 1 per 10 above 1,000 seats
Artist's Space	1 per 2,000 sq. ft.
Community Uses	1 per 2,000 sq. ft.
Institution/School	0.07 per 1,000 sq. ft.
Marina Slips	0.6 per slip

Figure 4.21a: MAXIMUM PARKING REQUIREMENTS

CAR SHARE PARKING SPACE REQUIREMENTS	
Number of Residential Units	Number of Required Car Share Parking Spaces
0-49	0
50-200	1
201 or more	2, plus 1 for every 200 dwelling units over 200
Number of Parking Spaces Provided for Non-Residential Uses or in a Non-Accessory Parking Facility	Number of Required Car Share Parking Spaces
0-24	0
25-49	1
50 or more	1, plus 1 for every 50 parking spaces over 50

Figure 4.21b: CAR SHARE PARKING SPACE REQUIREMENTS

4.21 Vehicle Parking and Loading Cont'd

4.21.1 Vehicle Parking and Loading

OFF-STREET FREIGHT LOADING SPACE REQUIREMENTS OUTSIDE OF MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS		
Land Use	Size of Use	Number of Spaces Required (per block)
Retail, Wholesale, Manufacturing, Live/Work	0-10,000 sq. ft.	0
	10,000 - 60,000 sq. ft.	1
	60,000 - 100,000 sq. ft.	2
	> 100,000 sq. ft.	3, plus 1 for each additional 80,000 sq. ft.
Offices, Hotels, Residential and All Other Uses	0-100,000 sq. ft.	0
	100,000 - 200,000 sq. ft.	1
	200,000 - 500,000 sq. ft.	2
	> 500,000 sq. ft.	3, plus 1 for each additional 400,000 sq. ft.

Figure 4.21c: OFF-STREET FREIGHT LOADING SPACE REQUIREMENTS OUTSIDE OF MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS

OFF-STREET FREIGHT LOADING SPACE LIMITS MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS		
Land Use	Size of Use	Number of Space Permitted (per block)
Non-Residential Uses	0-50,000 sq. ft.	1
	>50,000 sq. ft.	1 space per 50,000 sq. ft.
Residential - Low Density	0 - 100 units	1
Residential - High Density	> 100 units	1, plus 1 additional loading space for every 200 additional units
Total Number of Loading Spaces Allowed for Any Single Building (all uses)		4

Figure 4.21d: OFF-STREET FREIGHT LOADING SPACE LIMITS MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS

4.22 Skyway Connections

INTENT

To provide upper level connections between buildings.

DEFINITION

"Skyways"
Upper level connections between buildings are primarily for pedestrians although they could also be used for small service vehicles. Skyways may be enclosed or open air.

STANDARDS

4.22.1 Skyway Connections

Skyways are permitted in the locations indicated in *Figure 4.22a* and only to the extent described below.

All Skyways shall provide a minimum of [30] ft. of vertical clearance below, to allow full pedestrian and automobile access at grade. Each Skyway shall be no wider than [30] ft. and no taller than one[1] story in height. Ground level landscaping may be adjusted as required to allow for solar access.

MBBs between Blocks 44 & 43, 35 & 36, and 28 & 29 shall have no more than two[2] Skyways each. The MBB between Blocks 32 & 33 shall have no more than three[3] Skyways.

Figure 4.22a: SKYWAY CONNECTIONS

4.23 Green Room Datum

INTENT

To provide a consistent architectural expression to unify the façades framing the Green Room.

DEFINITIONS

"Datum"
An articulation strategy on the building façade that, by its continuity and regularity, serves to gather, measure, and organize the pattern of forms and spaces.

STANDARDS

4.23.1 Green Room Datum

All buildings facing the Green Room are required to incorporate an architectural expression of the established Datum. This may be achieved by modulation in the building Façade, a change in material, or another architectural feature.

The Datum elevation shall be set by the first building constructed on the Green Room and be located between [15] ft. and [30] ft. above the sidewalk grade for that building. All future buildings around the Green Room are to match the approximate initial Datum elevation (minor deviations in Datum height, less than three[3] ft. may occur).

Datum Articulation Strategies

Choose at least one[1] strategy:

DS1 Cornice at the Datum
DS2 Change in material at the Datum
DS3 Change in color at the Datum
DS4 Change in building articulation at the Datum
DS5 Change in building modulation at the Datum
DS6 Canopies located at the Datum
DS7 Increase Ground Floor Transparency facing the Green Room to 80% for commercial façades and 60% for residential façades for the entire area up to the Datum
DS8 Applied Materials at the Datum

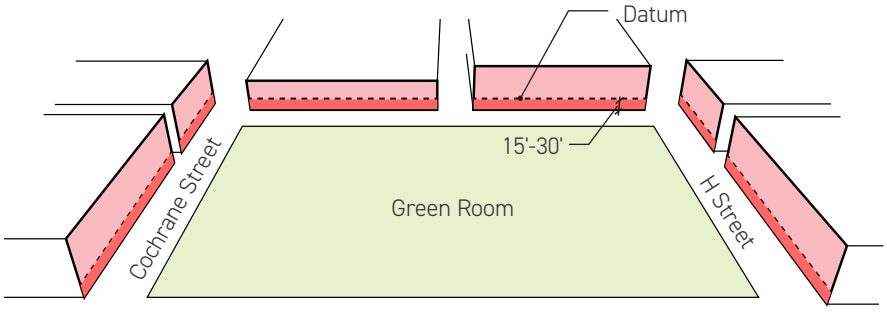

Figure 4.23a: GREEN ROOM DATUM

4.23 Green Room Datum Cont'd

1


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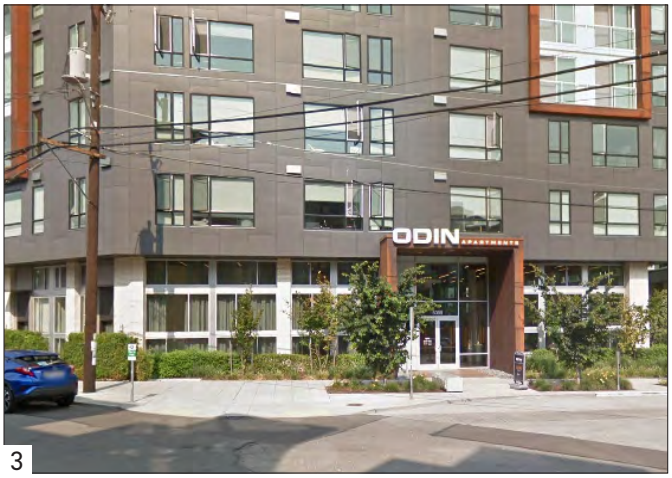

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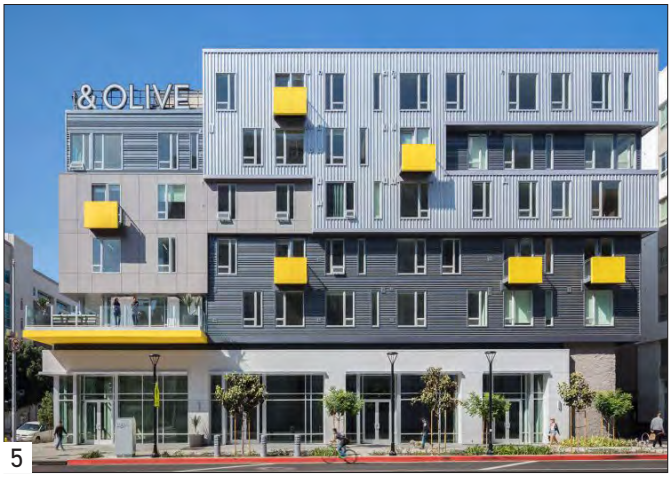

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1. Datum: Cornice Creates Datum Example
2. Datum: Change in Architectural Articulation / Modulation Example
3. Datum: Change in Material and Plane Example
4. Datum: Canopy Example
5. Datum: Change in Color and Plane Example
6. Datum: Change in Transparency Example

4.24 Adaptive Reuse

INTENT

There are a number of buildings that have not been officially recognized as cultural resources that reflect historic development patterns of the Hunters Point Shipyard and provide visual interest, cohesion, and a sense of the history of the site. As such, the following standards are intended to encourage the retention of these character-enhancing structures.

DEFINITIONS

"Adaptive Reuse"
Reuse or recreation of an existing structure in part or whole, in a manner that maintains the essence and character-defining building elements of the existing structure. Projects that propose adaptive reuse of any of the following buildings (140, 204, 205, 207, 211, 224, 231, 253) shall provide a written summary of compliance with the then-current Secretary of the Interior's Standards and Guidelines for Rehabilitation.

"Character-Enhancing Structures"
Buildings or structures that may be adaptively reused to enhance the neighborhood character and sense of place, as shown in Figure 4.24a. Detailed information regarding the specific designations of National Register Buildings and others to be studied or considered for retention can be found in the companion documents. (Refer to Section 1.2)

STANDARDS

4.24.1 Adaptive Reuse

When adopted, the Adaptive Reuse of an existing building shall retain at least one[1] public expression of a character-defining building element from the list below for the portions of the building that remain:

Building Elements

1. **Roof Profile:** Retain or replicate at least 50% of the character-defining roof profile.
2. **Structural System:** Retain, retrofit or replicate at least 75% of the character-defining external or internal structural systems. The structural system need not perform in its original function to be considered a character-defining feature.
3. **Building Enclosure:** Retain, replicate or rebuild at least 75% of the building enclosure in a manner that is consistent with the existing character, but may be different in materiality and transparency so long as such qualities are publicly expressed.
4. **Character-Defining Features:** Demonstrate a comprehensive and cohesive scheme that incorporates multiple features of one[1] or more character-defining building elements. Such scheme shall publicly express such character and represent a creative re-imagining of the existing building features without necessarily meeting the quantitative requirements of the three[3] building elements noted above (Roof Profile, Structural System, Building Enclosure).

1. Adaptive Reuse Example
2. Adaptive Reuse Example

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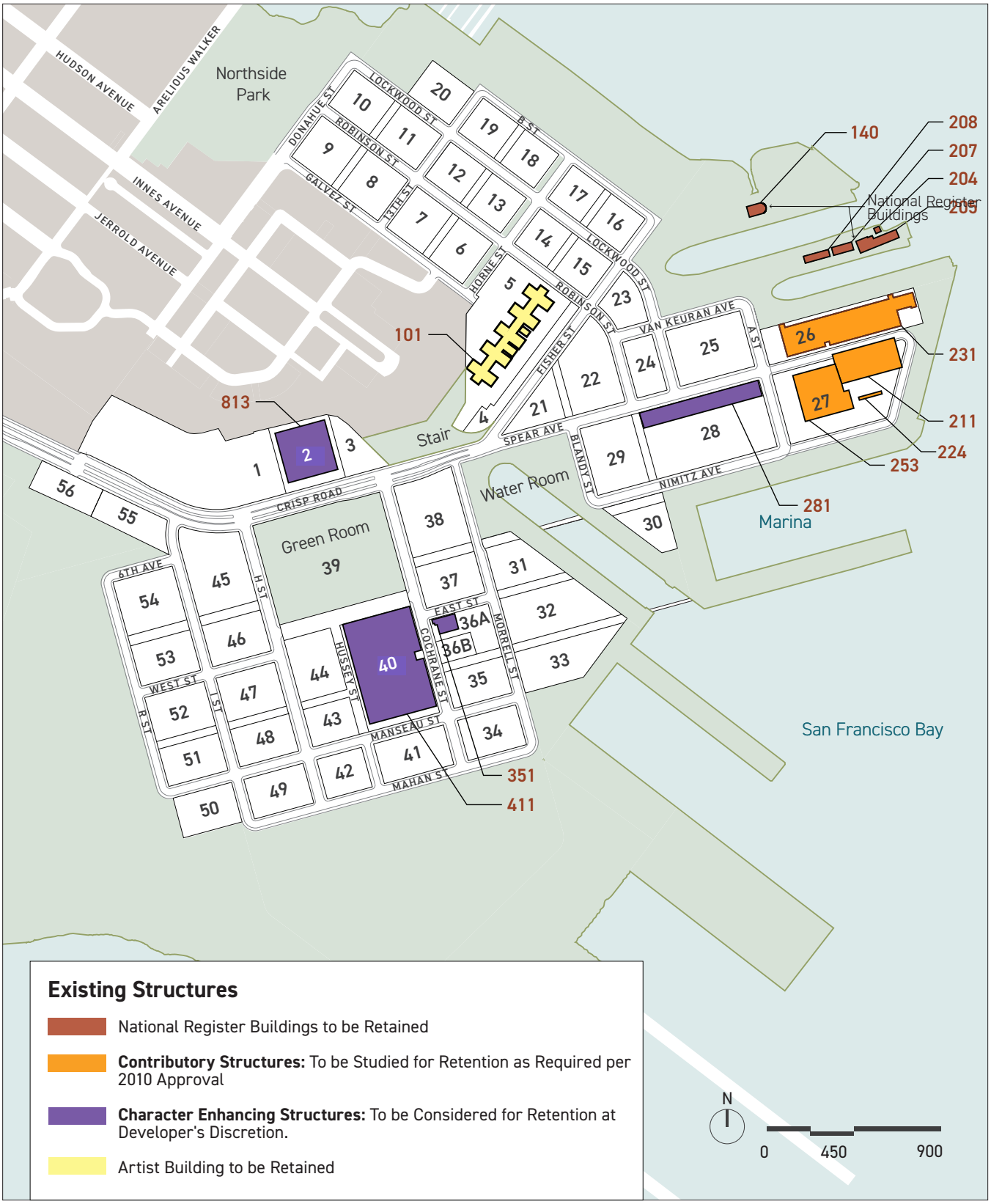

Figure 4.24a: EXISTING STRUCTURES

4.24 Adaptive Reuse Cont'd

4.24.2 Adaptive Reuse Exemptions

STANDARDS

4.24.2 Adaptive Reuse Exemptions

Where other standards in this document conflict with the Adaptive Reuse Standards or prevent the retention of a Contributory or Character-Enhancing Structure, the Adaptive Reuse project shall be exempt from such Standards. Specifically, development projects that comply with the Adaptive Reuse Standards shall be exempt from the following (other standard exemptions will be considered on a case-by-case basis):

4.2.1 Building Setback
4.3.1 Developable Area Coverage
4.4.5 Street Wall
4.5.2 Maximum Plan Length
4.6.1 Façade Composition
4.7.1 Bulk and Massing Approach
4.16.1 Rooftop Façades
4.17.1 Ground Floor Blank Walls
4.17.2 Upper Floor Blank Walls
4.23.1 Green Room Datum

Additions to Contributory or Character-Enhancing Structures are also exempt from these Standards. Designs are allowed to increase the height of the existing structure within the allowable Building Height. Vertical and horizontal additions should be clearly identifiable, but visually harmonious with the existing building's features and scale.

Development improvements extending horizontally outside of the original footprint shall comply with all relevant standards if the addition is not extending, highlighting, or reacting/responding to the character of the features of the existing structure.

4.25 Key Sites Blocks 28 and 40

INTENT

To assure that buildings on Blocks 28 and 40 are either retained pursuant to the Adaptive Reuse controls, or are redeveloped with exemplary architectural design.

STANDARDS

4.25.1 Key Sites Blocks 28 and 40

In addition to all applicable standards for new construction, apply one[1] additional **BE/PE** Building or Public Realm Enhancement Measure.

In addition, apply one[1] of the options below:

Option 1
Allow pedestrian access through the site at the Ground Floor using the following strategies:

- Provide Ground Floor public access through the block
- Public access shall be open during regular business hours
- The connection may be open to air or enclosed
- Upper floor connections above the pedestrian throughway area are permitted
- The scale of the connection shall be of a width and height that is inviting to the public

Option 2
Develop an architectural quality that meets or exceeds the expression and character of the Adaptive Reuse building using the following strategies:

- Building design shall be uniquely identifiable from afar
- Building design shall enhance the pedestrian experience through incorporation of tactile and fine grain materials
- Building design shall evoke or reference the character-defining elements of the building it replaces

4.26 Private Open Space

INTENT

To provide opportunities for individuals to seek a moment of respite or congregate with others in open space.

DEFINITION

"Residential Private Individual Open Space"
Intended for the use of individual residents within a unit and include terraces, patios, balconies, rooftop spaces and other similar areas.

"Residential Private Common Open Space"
Intended to be shared by all residents/users within a building or building cluster and includes rooftop spaces, internal courtyards, gardens, pools, play areas, and other similar areas.

STANDARDS

4.26.1 Private Open Space

Every residential building shall have a minimum net usable Private Open space equivalent to [60] sq. ft. per unit. Private Open Space shall be located on the same parcel as the residents it serves. Any combination of private or common open space may be used to count towards meeting this requirement.

Private Individual Open Space
Residential Private Individual Open Space shall be a minimum of [36] sq. ft. with a six[6] ft. linear dimension.

Private Common Open Space
Residential Private Common Open Space shall be a minimum [15] ft. linear dimension.

A Projection shall maintain nine[9] ft. of vertical clearance to the ground floor in order for the space beneath the Projection to be considered an open space. See *Figure 4.26a* to *Figure 4.26g*.

4.26.2 Private Common Open Space on Waterfront Blocks

Residential buildings adjacent to the waterfront shall have a courtyard opening to the waterfront.

4.26.3 Private Setbacks

The Setback zone of all residential buildings shall be used either to create high quality, usable open space for street facing units, or in the case of building entrances to create a transition zone between private-use and the public realm. Permitted uses within the Setback zone include street-facing stairs, stoops, porches, patios, landscaping, driveways and entry plazas. The Setback zone shall be landscaped with high quality materials from the building edge to the public sidewalk. Residential Ground Floor open space shall follow San Francisco "Guidelines for Ground Floor Residential Design".

4.26.4 Fences

In order to define Private Open Spaces of Ground Floor units, the following can be used: fences, railings, gates, grilles, planters and retaining walls to delineate private from public space. Such elements may be up to three[3] ft. high. If less than 25% opaque, such elements may be up to three and a half[3.5] ft. high.

4.26 Private Open Space Cont'd

GUIDELINES

4.26.5 Defensible Spaces

Stoops and patios shall provide safety measures to ensure the space is defensible. Defensible design includes gates and railings, planters, and appropriate landscaping to provide a buffer from the street, while also allowing for visual connections between the street and the residence.

4.26.6 Orientation

Buildings shall maximize solar access and views of private common open spaces. Balconies on high-rise towers are encouraged to be located away from building corners that face the prevailing wind direction.

4.26.7 Planting Palette

Native and climate appropriate plants are encouraged.

4.26.8 Irrigation

Water demand shall be minimized by carefully controlling irrigation timing and application as well as plant selection.


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1. Private Common Open Space - Rooftop Example
2. Private Individual Open Space - Balcony Example
3. Private Common Open Space - Internal Courtyard Gardens Example
4. Private Individual Open Space - Front Yard Example

4.26 Private Open Space Cont'd

Setback Zone 1 - Refer to Page 56 Setback requirements

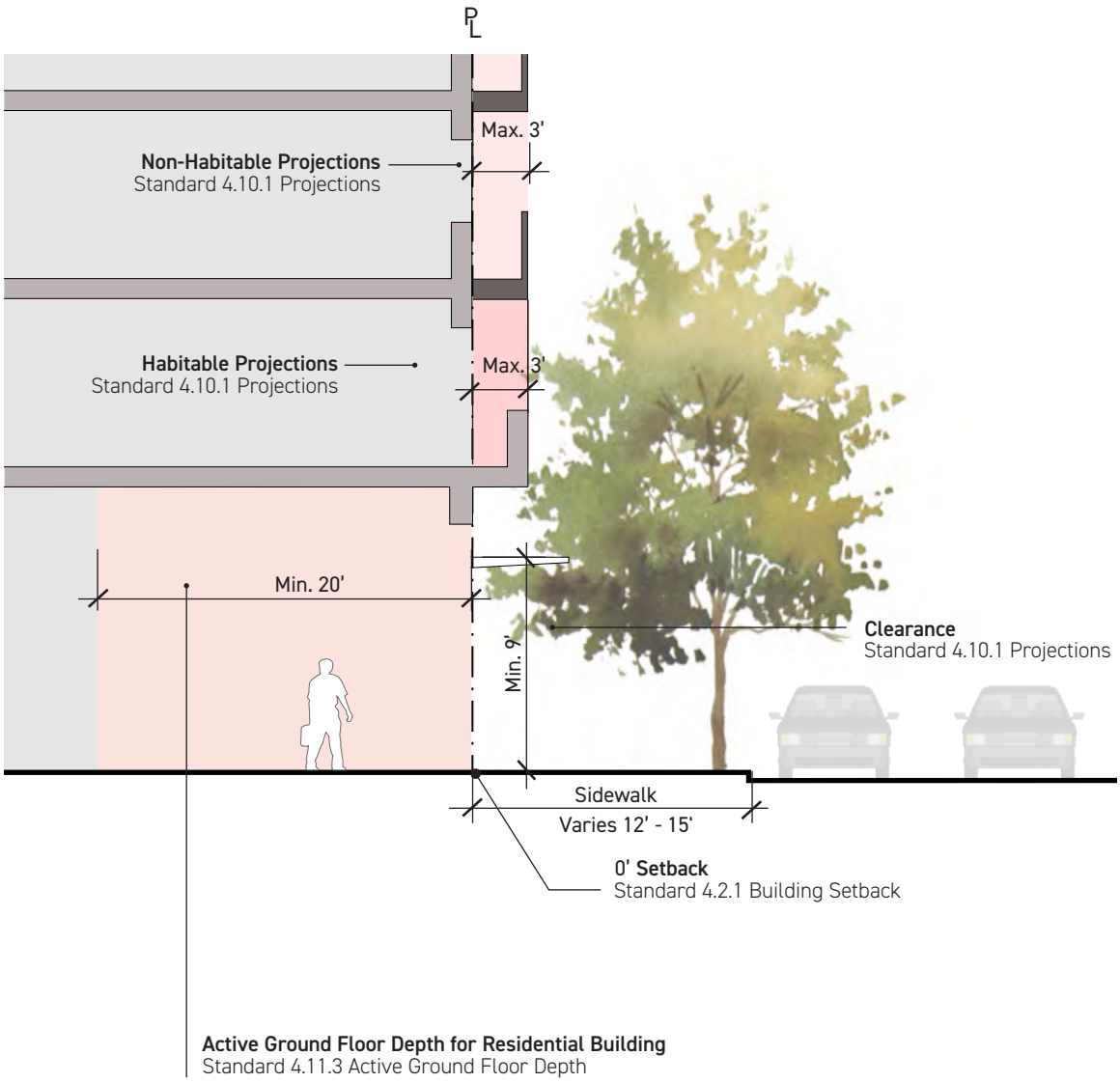

Figure 4.26a: SETBACK ZONE 1 (0' MIN./0' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 2 Variation 1 - Refer to Page 56 Setback requirements

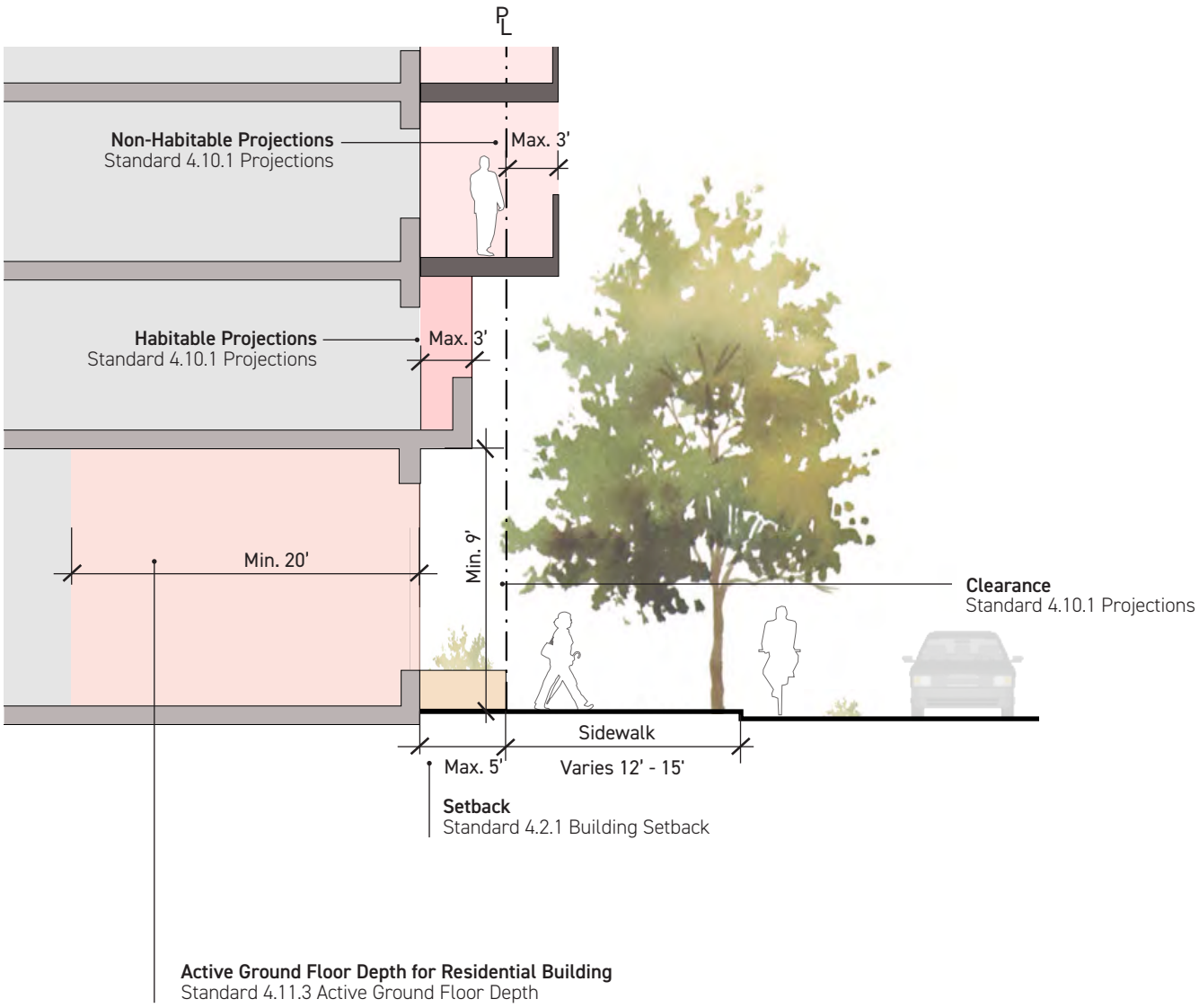

Figure 4.26b: SETBACK ZONE 2 VARIATION 1 (0' MIN./5' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 2 Variation 2 - Refer to Page 56 for Setback requirements

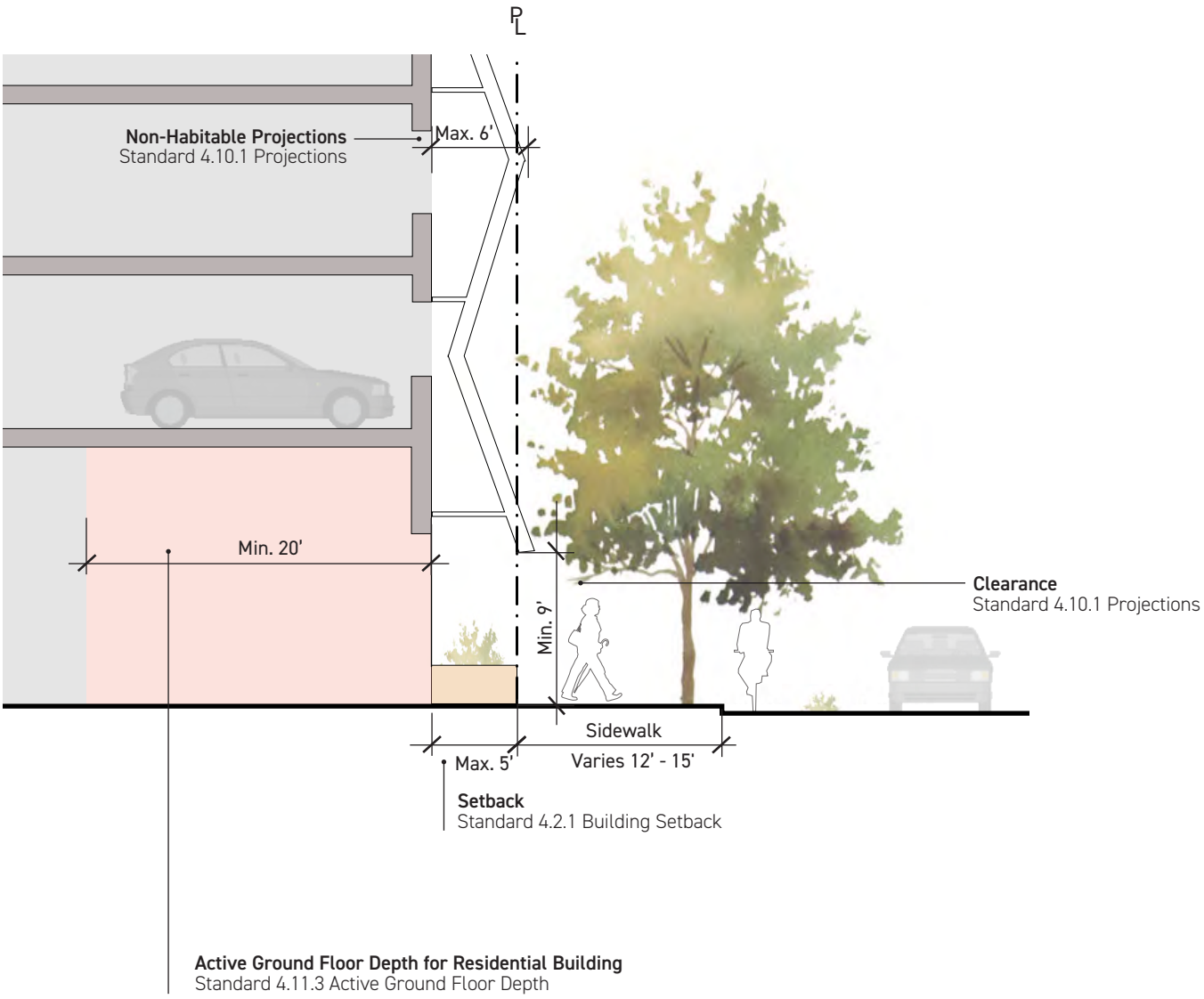

Figure 4.26c: SETBACK ZONE 2 VARIATION 2 (0' MIN./5' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 3 - Refer to Page 56 for Setback requirements

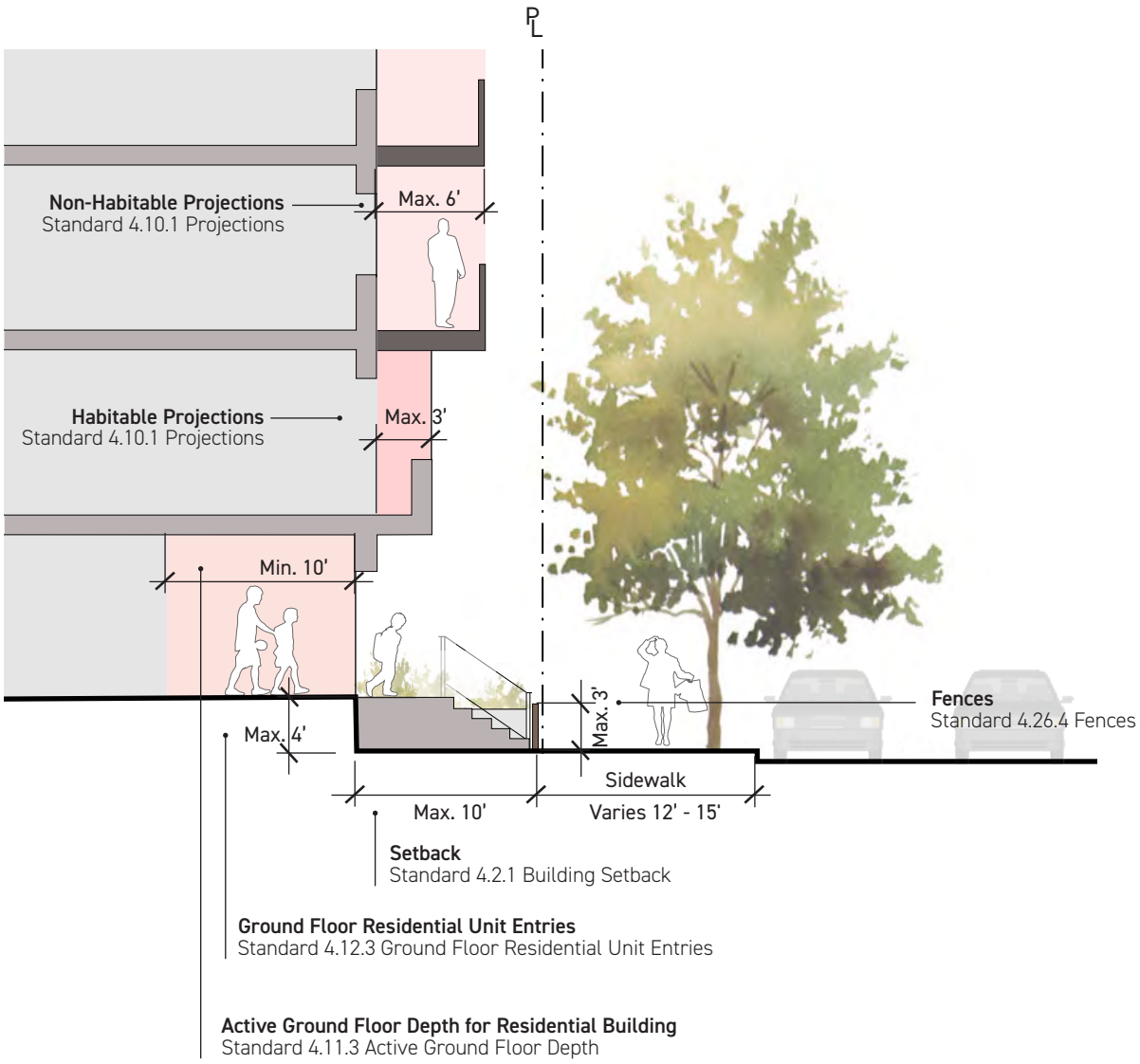

Figure 4.26d: SETBACK ZONE 3 (5' MIN./10' MAX.)

0 5' 10' 20'

4.26 Private Open Space Cont'd

Setback Zone 4 - Refer to Page 56 for Setback requirements

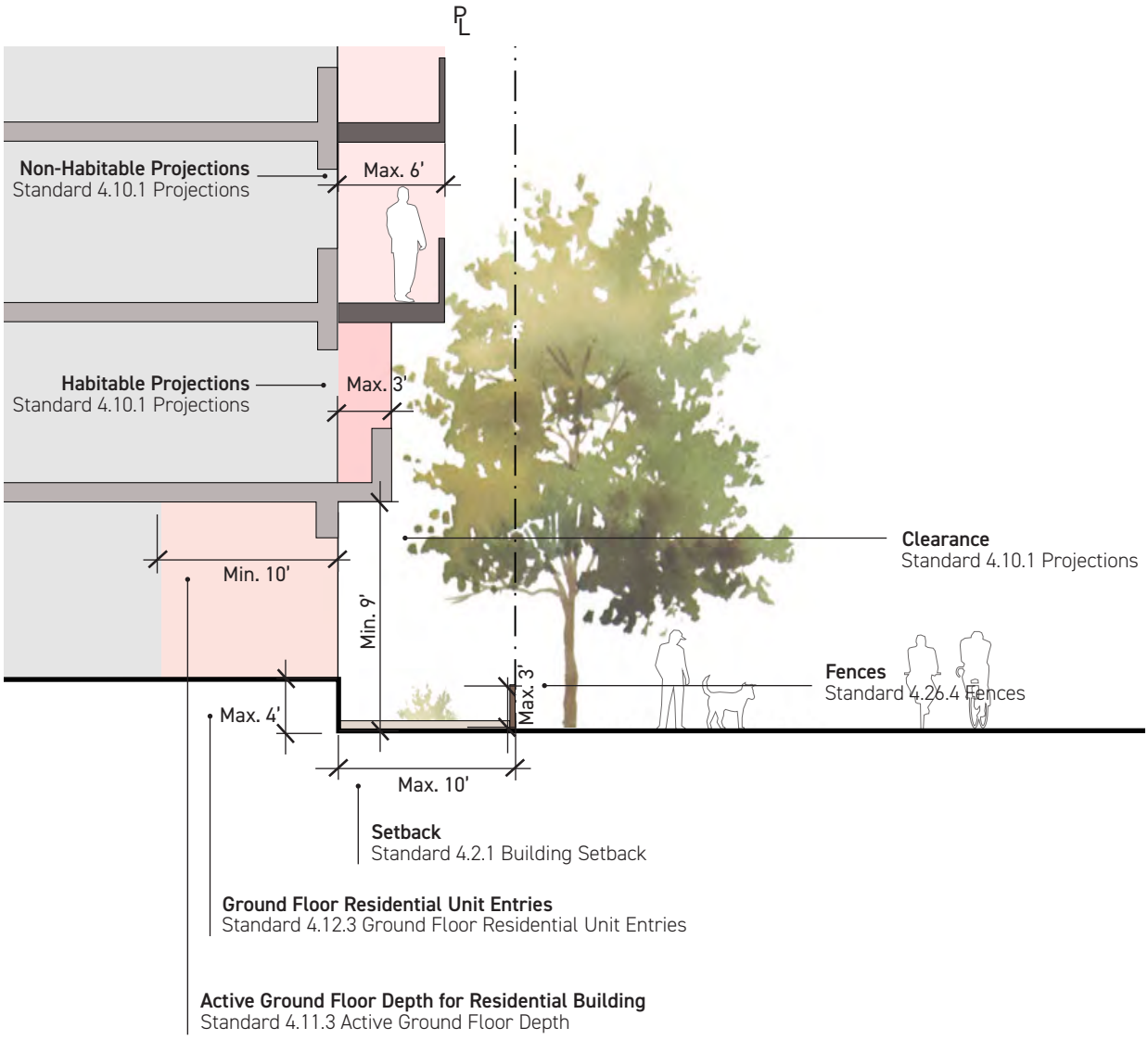

Figure 4.26e: SETBACK ZONE 4 (0' MIN./10' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 5 - Refer to Page 56 for Setback requirements

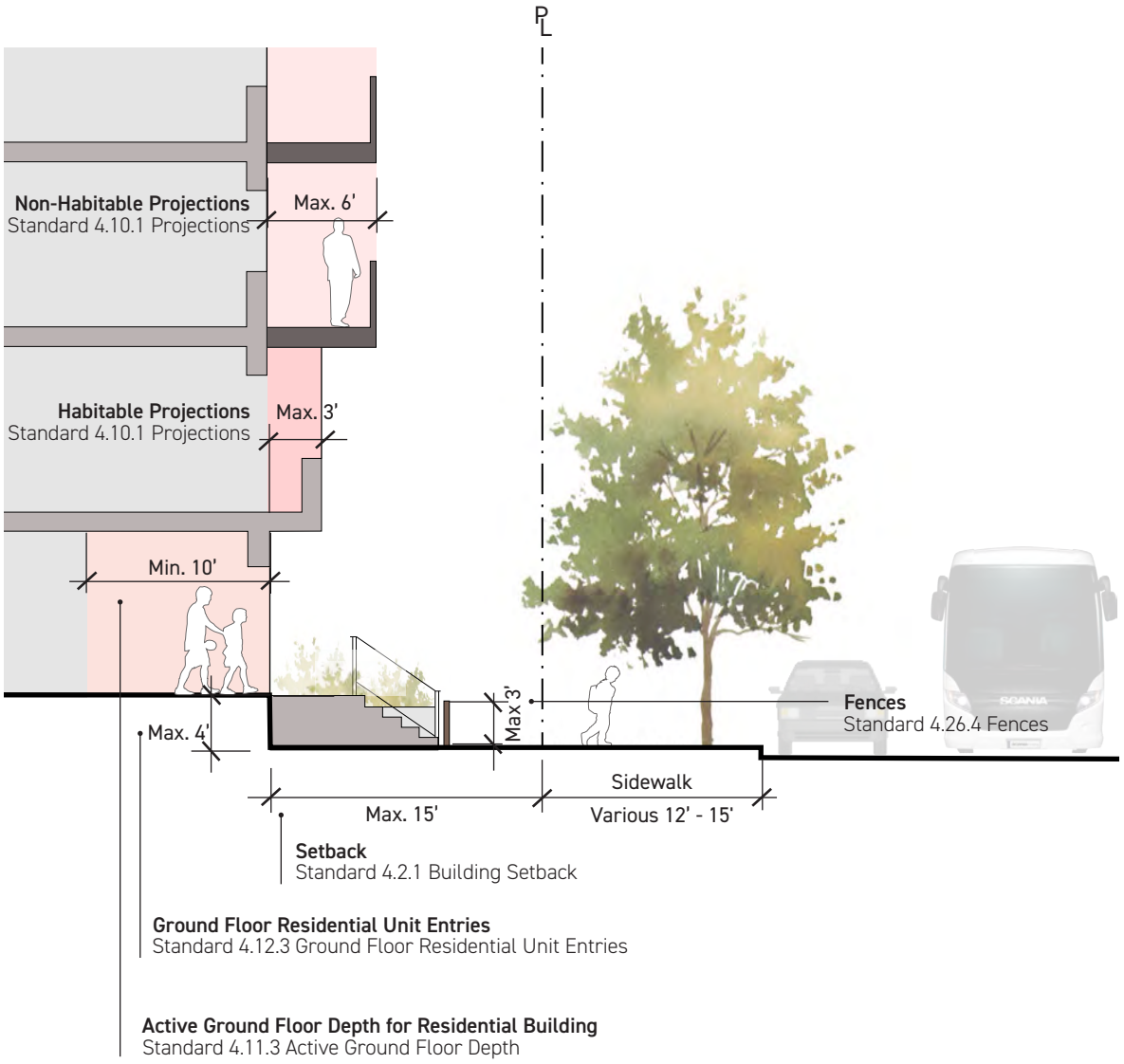

Figure 4.26f: SETBACK ZONE 5 (10' MIN./15' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 6 - Refer to Page 56 for Setback requirements

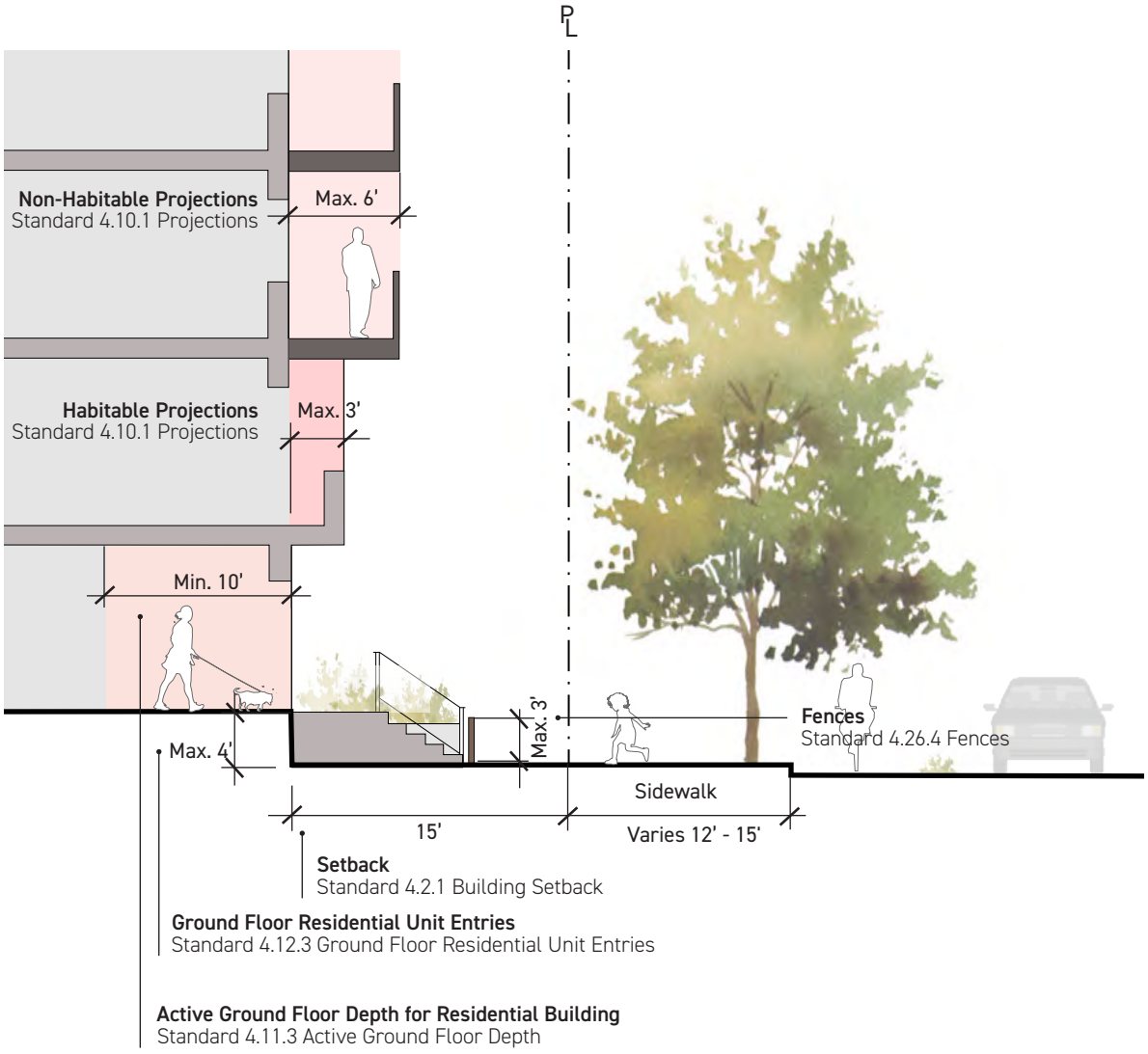

Figure 4.26g: SETBACK ZONE 6 (15' MIN./15' MAX.)

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4.27 Private Open Space - Mid-Block Breaks

INTENT

Mid-Block Breaks (MBBs) are intended to allow public access through private development blocks to promote connectivity and walkability and create a finer grain circulation system.

MBBs are regulated by the CPHPS2 Infrastructure Plan, Transportation Plan, and Streetscape Master Plan.

Block sizes may be legal parcels or may be part of a legal parcel.

Mid-Block Break Specification Book will be provided per the DRDAP.

Residential Mid-Block-Breaks
Residential Mid-Block-Breaks will be domestic in character with defined transition zones between the public throughway and the Ground Floor residential units and amenity spaces. Residential Mid-Block Breaks may accommodate pedestrian, bicycle and low-volume vehicular access. The design will prioritize pedestrian access and safety, incorporate traffic-calming design elements and other Public Realm amenities. Residential spaces such as terraces, Stoops, or porches may spill into landscaped Setback zones. Ground Floor residential units will be slightly raised above-grade, to allow for privacy and Stoops, while access to ground-floor amenity spaces may further activate the Mid-Block Break and provide 'eyes on the street'.

Commercial Mid-Block-Breaks
Commercial Mid-Block-Breaks will be more public in nature and framed by uses such as Ground Floor retail storefronts, office and amenity spaces. Commercial Mid-Block Breaks may accommodate pedestrian, bicycle and low-volume vehicular access. The design will prioritize pedestrian access and safety, incorporate traffic-calming design elements and other public realm amenities. Interior active uses such as workspaces and restaurant seating may spill out into the Mid-Block Breaks. Landscape plantings, furnishings, gathering spaces and other design elements may serve as visual cues to differentiate pedestrian-dedicated areas from shared pedestrian or vehicular zones.

STANDARDS

4.27.1 Public Access

Mid-Block Breaks shall have unrestricted public access.

4.27.2 Throughway Dimensions

All Mid-Block Breaks shall have a pedestrian path with a minimum dimensions of ten[10] ft. in width. The access may be configured as two five[5] foot paths on either side of the Mid-Block Break or as one ten[10] foot path. A pedestrian path may be shared with bicycles and vehicles.

4.27.3 Surfaces

Hardscape surfaces within the MBB Width including throughway and landscape zones/Setback zones shall be limited to 80% of the ground plane.

4.27.4 Street Trees

A double row of street trees shall be planted at a spacing that is not greater than [30] ft. on center. Tree planters should be a minimum of [28] sq. ft. in size each. Trees may be located in the Mid-Block Break or in private Setback zones.

4.27.5 Lighting

Adequate lighting shall be provided to ensure pedestrian and vehicular safety and may be located in the Mid-Block Break or in the Setback zones.

4.27 Private Open Space - Mid-Block Breaks Cont'd

GUIDELINES

4.27.6 Community Spaces

Social spaces, seating and places for informal play are encouraged and may be located in the Mid-Block Break or in the Setback zones.

4.27.7 Landscaping

All Mid-Block Breaks are intended to be an outdoor room. Rich landscaping is encouraged so the drive aisle (in the case of a vehicular lane way) is subordinate. This includes street trees, shrub beds, patios and steps, benches, and lighting. Landscape planters can be raised or at grade based on architectural design. Landscaping may be located in the Mid-Block Break or in the Setback zones.

4.27.8 Minimizing Vehicular Speeds

Features to reduce vehicle speeds are encouraged, such as narrow drive aisle and offsets in the drive aisle alignment.

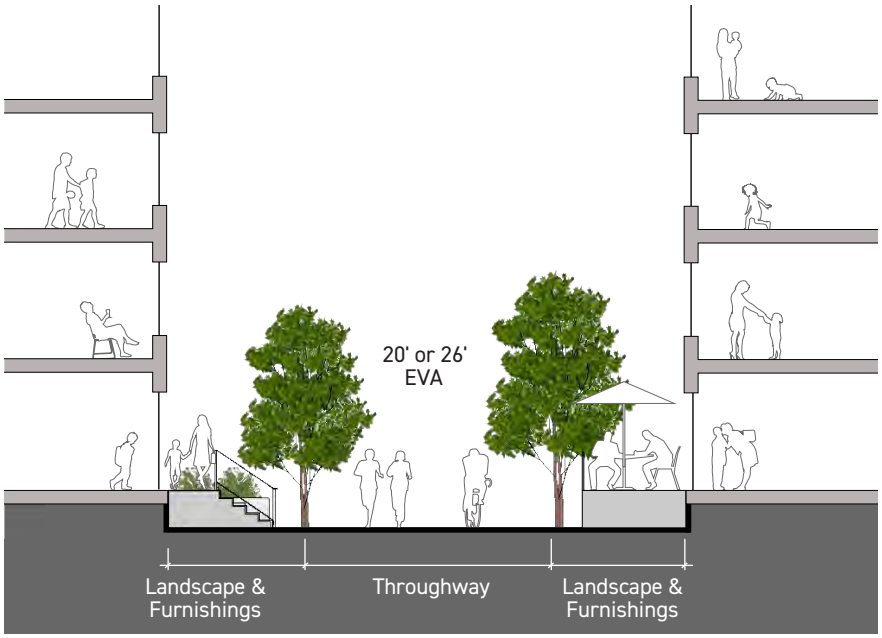

Figure 4.27a: RESIDENTIAL MID-BLOCK BREAK

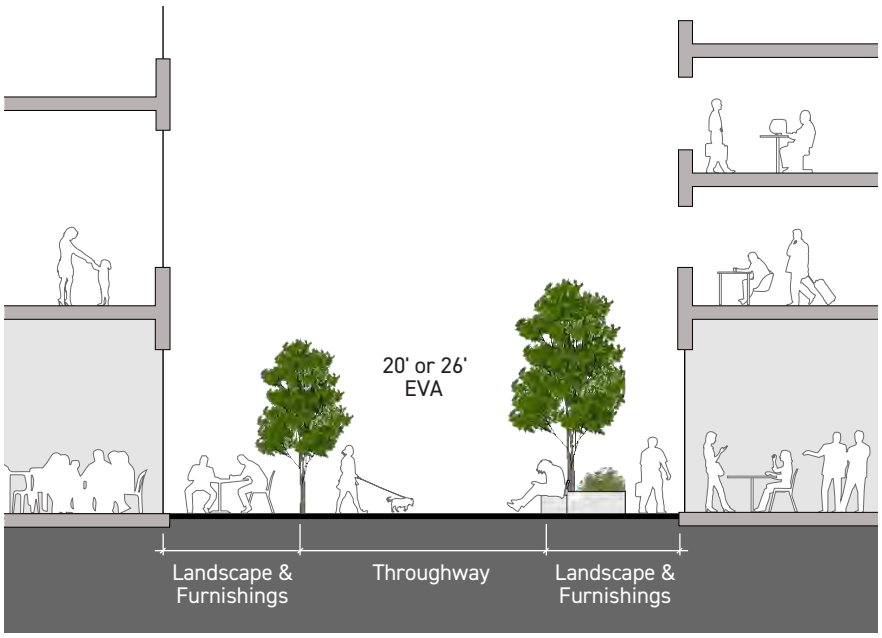

Figure 4.27b: COMMERCIAL MID-BLOCK BREAK

4.28 Building Signage

DEFINITIONS

"Sign"
Any structure, part thereof, or device or inscription which is located upon, attached to, or painted, projected or represented on any land or right-of-way; or on the outside of any building or structure including an Awning, Canopy, marquee or similar appendage; or affixed to the glass on the outside or inside of a window so as to be seen from the outside of the building, and which displays or includes any numeral, letter, word, model, banner, emblem, insignia, symbol, device, light, trademark, or other representation used as, or in the nature of, an announcement, advertisement, attention-arrester, direction, warning, or designation by or of any person, firm, group, organization, place, commodity, product, service, business, profession, enterprise or industry.

Two or more Sign faces shall be deemed to be a single Sign if such faces are contiguous on the same plane, or are placed back to back to form a single structure and are at no point more than two[2] ft. from one another. Also, on Awnings or marquees, two[2] or more faces shall be deemed to be a single Sign if such faces are on the same Awning or marquee structure.

"Business/Retail Signage"
A Sign which directs attention to the primary business, commodity, service, industry or other activity which is sold, offered, or conducted on the premises upon which the Sign is located or to which it is affixed. Where a number of businesses, services, industries or other activities are conducted on the premises, or a number of commodities, services, or other activities with different brand names or symbols are sold on the premises that one or more of those businesses, commodities, services, industries or other activities by brand name or symbol as an accessory function of the business Sign, provided that such advertising is integrated with the remainder of the business Sign, and provided also that any limits which may be imposed by the following standards on the area of the individual Signs and the area of the Signs on the property are not exceeded. The primary business, commodity, service, industry or other activity on the premises shall mean the use which occupies the greatest area of the premises upon which the business Sign is located, or to which it is affixed.

SIGN TYPES

Sign types for HPS2 are divided into two[2] general categories: Permanent Signs and Temporary Signs.

Permanent Signs
- Building Wall Signs
- Projecting or Blade Signs
- Canopy or Awning Signs
- Window Signs
- Street or Unit Address Signs
- Identifying Signs
- Freestanding or Directional Signs

Temporary Signs
- Temporary Signs
- Portable Signs

1. Hand-painted Wall Graphics Example
2 & 5-8. Building Wall Signs Example
3. Temporary Graphics and Signs Example
4. Awning Signs Example
9. Canopy Signs Example
10. Projecting or Blade Signs Example
11. Window Signs Example
12 & 13. Street and Unit Address Signs Example
14. Directional Signs Example
15. Identifying & Freestanding Signs Example
16. Directional Signs Example & Freestanding Signs Example

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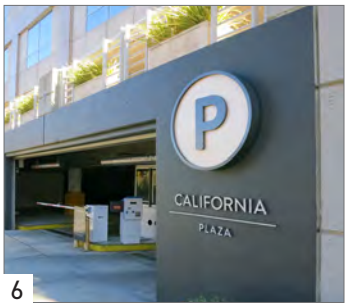

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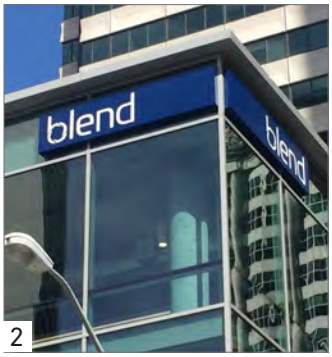

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4.29 All Signs

STANDARDS

4.29.1 Transparency

Window signage shall not diminish transparency for the area of the Sign. Where window Signs are used, they shall maintain a high degree of visibility between interior and exterior spaces.

4.29.2 Concealed Electrical Signage Elements

All electrical signage elements such as wires, exposed conduit, junction boxes, transformers, ballasts, switches, and panel boxes shall be concealed from view.

4.29.3 Typefaces & Colors

Sign typefaces shall be legible to approaching vehicles and pedestrians and of a scale that is appropriate with the neighboring buildings, allowing for larger formats in more urban or retail-oriented areas and smaller formats on residential neighborhood streets. Tenants may use their type style and brand on signage.

4.29.4 Sign Materials

High quality materials, workmanship and detailing are encouraged in the design of building Signs. Sign materials and overall scale shall be complimentary to the buildings' architectural materials and thoughtfully integrated into the building's wall detailing and fenestration. Sign materials shall be selected that are durable and weather resistant and appropriate for the marine environment typical of the site. Where window Signs are used, Sign materials shall maintain a high degree of transparency, avoiding large opaque shapes. Refer to FC4- Façade Composition - Material/Color for building materials palette reference examples.

4.29.5 Graphic Style

Visually representational Signs with a creative graphic or iconic character are encouraged to allow for clearer interpretation and a variety of graphic styles. Wall Signs are encouraged to employ individual, dimensional pan-channel lettering and/or logos. Cabinet Signs shall be allowed, but only where integral to the tenant's identity.

4.29.6 Integration

Signage shall be appropriate to the District's buildings and streetscapes; designed to relate to use, composition, scale, and architecture. Signage shall be considered an important architectural and artistic feature within the overall building design.

4.29 All Signs Cont'd

4.29.7 New Technology Signs
4.29.8 Sign Illumination

STANDARDS

4.29.7 New Technology Signs

Signage using new forms of technology, such as dynamic content Signs, digital displays, or light projections may be appropriate where it is integrated into the building façade or behind the window glass. The displays shall be designed, located, oriented, and operated in a manner that has no adverse safety impacts.

Restrictions on New Technology Signs may include, but are not limited to:

- Large format digital displays that may be considered "digital billboards".
- Limiting the hours of operation of the electronic Sign, generally between 5 am and midnight.
- Limiting the amount and frequency of animation, or ensuring the content on dynamic content or digital Signs has a minimum dwell time and transition time of [15] seconds.
- Limiting Sign brightness.
- Locating the Sign inside a business premises and set back from window glazing.
- Orienting the face of the Sign away from the adjoining street network and away from residential buildings / neighborhoods or facing the Green Room or the Bay. No flashing Signs.

4.29.8 Sign Illumination

Building wall, window or projecting Sign lighting may be externally or internally illuminated. Freestanding Sign types may be externally or internally illuminated; or during business hours, directly illuminated. However, cabinet Signs with internally face-lit plastic Sign faces are prohibited.

The amount of Sign illumination hours per day shall be limited to normal business hours, except as noted for electronic Signs.

Decorative, external light source fixtures are encouraged for externally illuminated Signs. However, junction boxes, tubing, conduits and raceways shall be concealed or incorporated into the design of the Sign structure to the greatest extent possible. No exposed LED, neon or other lighting sources is allowed.

1. Digital Display Sign

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4.29 All Signs Cont'd

4.29.9 Prohibited Signage

STANDARDS

4.29.9 Prohibited Signage

The following types of Signs and Sign conditions are not permitted:

- Signs attached to a building that extend or are located above the roof line of the building to which it is attached
- Wind Signs which are composed of one or more banners, flags, or other objects, except official City, State or Federal flags, mounted serially and fastened in such a manner as to move upon being subjected to pressure by wind
- Revolving Signs which rotate or spin
- Blinking or flashing Signs which exhibit rapidly changing levels of illumination
- Balloon or inflated Signs constructed of materials supported by inflated means
- Billboards, specifically a large graphic panel designed to carry outside advertising
- Posters or handbills of a temporary nature not contained in a designated wall-mounted or freestanding poster case or display fixture
- Signs that obstruct the passage or sight lines of motorists, bicyclists or pedestrians
- Signs that replicate, mimic or could be mistaken as a traffic control device
- Signs with mirror-reflective materials, colors or finishes. Reflective materials exclude LED signs behind glass
- Signs with sound, vibration, odor or other emissions, unless the emission is necessary as part of a community message or to meet applicable disability standards
- Video, moving or flashing Signs
- Exposed LED or neon Signs

4.30 Permanent Signs

4.30.1 Commercial Wall Signage

INTENT

Wall Signs utilizing the building structure as a mounting surface.

DEFINITIONS

"Wall Sign"
A Sign painted directly on the wall or mounted flat against a building wall with its copy or graphics parallel to the wall to which it is attached and not protruding more than the thickness of the Sign.

"Sign Area"
Sign Area is defined as the area of a Sign that is used for display purposes. Sign Area shall be calculated by measuring the size of a rectangle large enough to contain the entire Sign's display, graphics, and text that form an integral part of the display or are used to differentiate such Sign from the background against which it is placed. The calculation of Sign Area excludes the necessary supports or uprights on which such Sign is placed.

STANDARDS

4.30.1 Commercial Wall Signage

Commercial wall signage is used to highlight the building name, district identity, or primary tenant.

One[1] commercial Wall Sign is allowed for each building façade.

For commercial Wall Signs, the maximum height of a Sign affixed to a building shall be [24] ft. from sidewalk grade.

The area of all commercial building Wall Signs shall not exceed [125] sq. ft. for each building frontage. In no case shall any one[1] Wall Sign be taller than five[5] ft. in height.

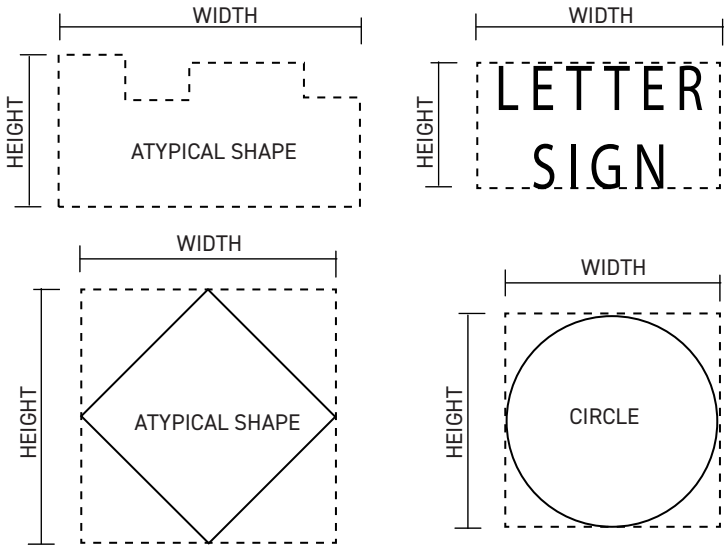


Figure 4.30a: SIGN AREA CALCULATION DIAGRAM

4.30 Permanent Signs Cont'd

STANDARDS

4.30.2 Storefront and Retail Wall Signage

No more than two[2] Wall Signs per single-tenant retail space are permitted. If a single-tenant retail space has more than one[1] street frontage, an additional Sign beyond the two[2] allowed on the main frontage is permitted on each additional frontage.

The area of all storefront or retail tenant Wall Signs shall not exceed two[2] sq. ft. for each one[1] linear ft. of street frontage occupied by the business measured along the wall to which the Signs are attached, or up to [100] sq. ft. for each street frontage, whichever is less. In no case shall the Wall Sign or combination of Wall Signs cover more than 50% of the surface of any wall, excluding openings.

The maximum height of a storefront or retail Sign affixed to a building shall be the bottom of the window sill of the first story, or [24] ft., whichever is lower.

4.30.3 Residential Wall Signage

Residential Wall Signs shall not exceed [20] sq. ft. total, except for Wall Signs providing the primary identification of multi-unit residential buildings, which shall not exceed [25] sq. ft. and one[1]ft. in height and shall be located at the building entrance, or up to [100] sq. ft. for each building frontage, whichever is less.

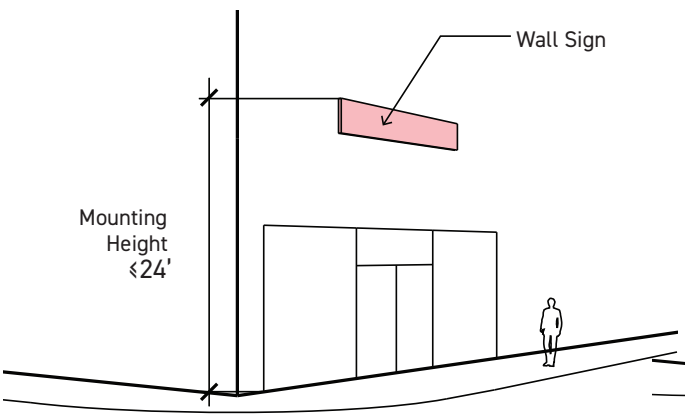


Figure 4.30b: BUILDING WALL SIGN

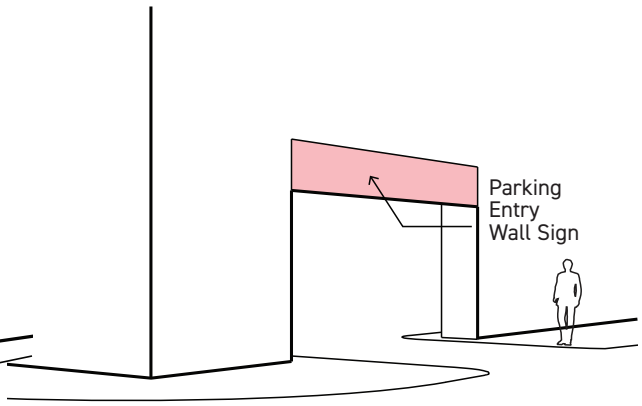


Figure 4.30c: ENTRY WALL SIGN

4.30 Permanent Signs Cont'd

4.30.4 Projecting Signs

INTENT

Projecting Signs are attached to a building and project perpendicularly from the mounting surface. They are intended to provide long distance visibility to approaching vehicles and pedestrians.

DEFINITIONS

"Projection"
The horizontal distance by which the furthermost point used in measuring the area of a Sign extends beyond a Street Property Line or a building Setback line.

STANDARDS

4.30.4 Projecting Signs

No part of a Projecting Sign shall project more than 75% of the horizontal distance from the Property Line to the curb line, or six[6] ft. six[6] in. from face of building, whichever is less. One[1] Projecting Sign is allowed per Ground Floor business and shall not exceed [24] sq. ft. in area. Corner businesses are allowed one[1] primary Projecting Sign per street frontage. Projecting Signs for retail tenants shall be attached below the second floor window sill level.

The height of a Projecting Sign shall not exceed [24] ft., or the height of the wall to which it is attached, or the height of the lowest of any residential windowsill on the wall to which it is attached, whichever is lowest, but bottom of Sign shall be least ten[10] ft. above sidewalk grade. Text shall be no greater than one[1] ft. in height.

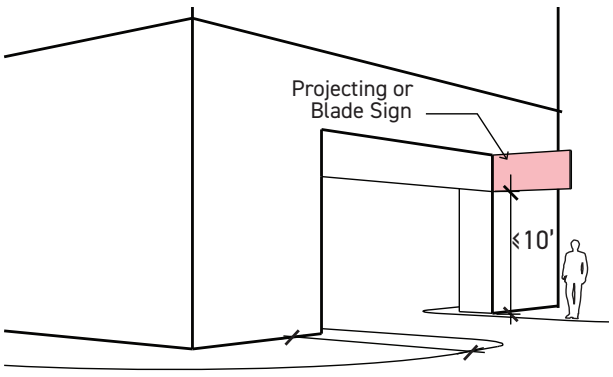


Figure 4.30d: PROJECTING SIGN

4.30 Permanent Signs Cont'd

4.30.5 Window Signs

INTENT

Window Signs provide messaging on, or behind, window glazing at building frontages.

DEFINITIONS

"Window Sign"
A Sign painted or applied directly on the surface of a window glass or placed behind the surface of a window glass.

STANDARDS

4.30.5 Window Signs

Window Signs applied to building glazing shall not cover more than a maximum of 30% of the storefront glazing area. Glazing transparency shall be maintained within the window graphics zone, avoiding large opaque shapes or materials.

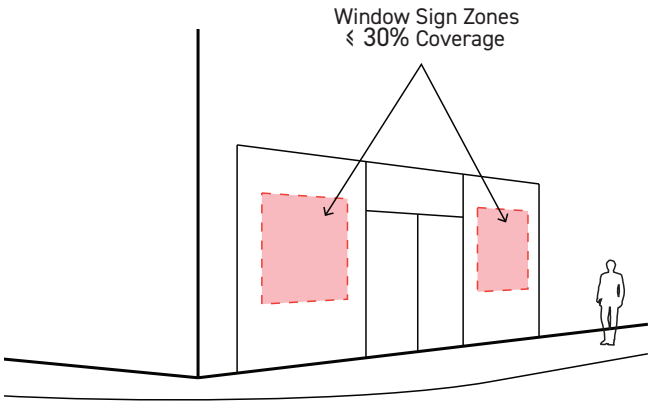


Figure 4.30e: WINDOW SIGNS

4.30 Permanent Signs Cont'd

4.30.6 Identifying, Freestanding, or Directional Signs

INTENT

Identifying Signs serve as the primary project or parcel identification, and are placed at the primary district entry points.

A Freestanding Sign is permitted in lieu of a Projecting Sign, if the building or buildings are recessed from the Street Property Line.

DEFINITIONS

"Freestanding & Directional"
Signs detached from the building and in no part supported by the building providing identification, information or direction to a building or group of buildings.

STANDARDS

4.30.6 Identifying, Freestanding, or Directional Signs

The maximum height for free-standing or Identifying Signs shall not exceed [12] ft., nor exceed [24] sq. ft. in total area. The existence of a Freestanding business Sign will preclude the placement of a Freestanding Identifying Sign on the same lot.

The location of pedestrian Directional Signs associated with a building or group of buildings shall not exceed a maximum height of eight[8] ft., nor more than [12] sq. ft. in total area.

Freestanding or Identifying Signs shall be limited to the Setback zone.

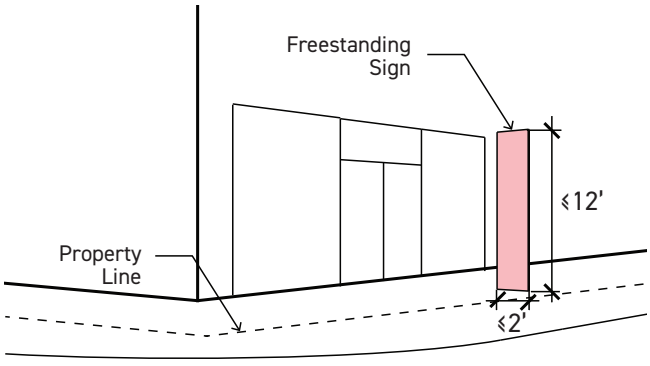


Figure 4.30f: FREESTANDING SIGNS

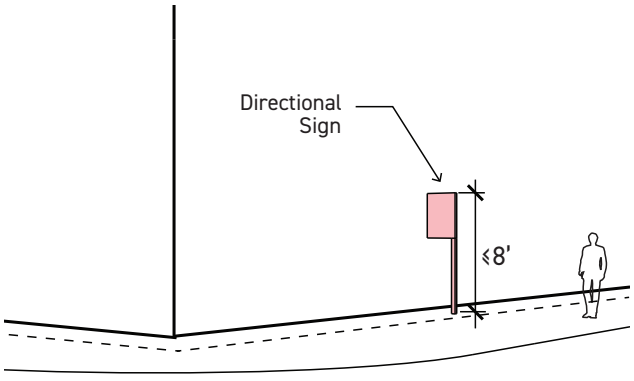


Figure 4.30g: DIRECTIONAL SIGNS

4.30 Permanent Signs Cont'd

4.30.7 Canopy/Awning Signage

INTENT

Signage or graphics messaging applied to an awning or projecting canopy structure in lieu of Projecting Signs.

DEFINITIONS

"Awning"
A light roof-like structure, supported entirely by the exterior wall of a building, consisting of a moveable frame covered with approved materials, extending over doors and windows, with the purpose of providing protection from sun and rain and embellishment of the façade.

"Canopy"
A light roof-like structure, supported by the exterior of a building, consisting of a fixed or frame covered with approved cloth, plastic or metal, with the purpose of providing protection from sun and rain and embellishment of the façade.

STANDARDS

4.30.7 Canopy/Awning Signage

Any signage on projecting building Awnings or Canopies shall not exceed a total of [24] sq. ft.. Residential projects may utilize signage on Awnings over the primary multi-unit entryway. Awning or Canopy Sign copy shall be non illuminated ,constructed of metal or fabric covered metal frame.

The bottom of any Awning or Canopy Sign shall be at least ten[10] ft. above finished grade.

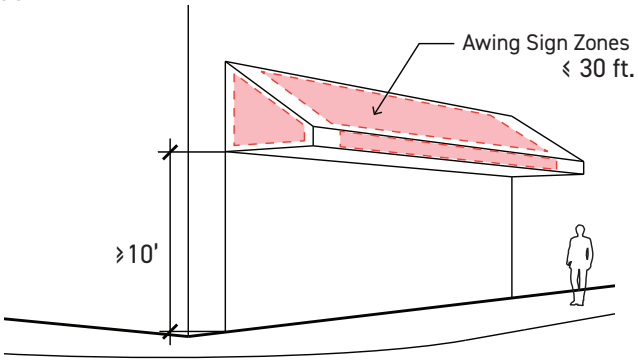


Figure 4.30h: AWNING SIGNS ZONES

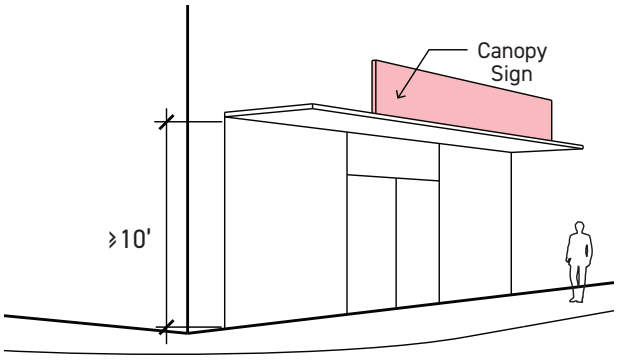


Figure 4.30i: CANOPY SIGNS

4.30 Permanent Signs Cont'd

4.30.8 Street or Unit Address Signs, Nameplates

INTENT

Street address or unit address signs provide address identification visible from streets and walkways. Nameplate Signs designate the names or individual name and professional occupations of persons in a building.

STANDARDS

4.30.8 Street or Unit Address Signs, Nameplates

Street address or unit identification applied to the building at entries shall be clearly visible from street, and shall comply with San Francisco Fire Department requirements, and shall not exceed eight[8] sq. ft. in total area. Nameplate Signs also shall be associated with the building wall adjacent to building entries, and shall not exceed two[2] sq. ft. in total area.

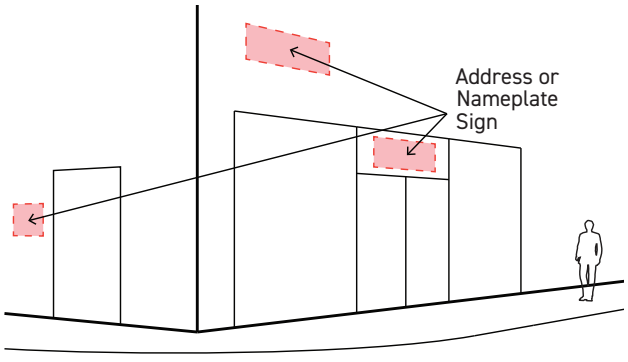


Figure 4.30j: ADDRESS OR NAMEPLATE SIGNS

4.31 Temporary Signs

4.31.1 Temporary Signs

INTENT

Freestanding, window-mounted, wall-mounted or barricade graphics or signage intended to be temporary in nature and duration.

1

1. Temporary Signs Example

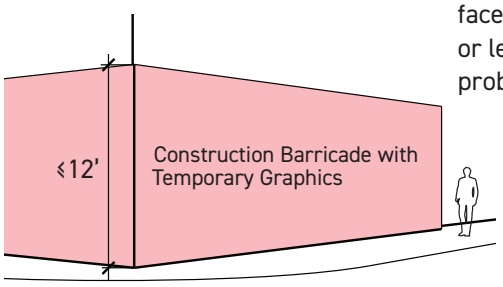


Figure 4.31a: TEMPORARY BARRICADE GRAPHICS ZONES

STANDARDS

4.31.1 Temporary Signs

Temporary, freestanding Signs shall not exceed [12] ft. in height, nor exceed a total area of [50] sq. ft.

Temporary construction project identification Signs or graphics shall not exceed [500] sq. ft. and shall be removed within seven[7] days of contract completion. Project signage is limited to one[1] Sign per frontage. Where there is more than one entity (e.g. general contractor, architect, broker etc.), a single project Sign shall be used, stating the name and contact information of all entities. Opaque storefront signage or coverings used during construction at Ground Floor storefronts such as applied film or other temporary window obscuring techniques are allowed while spaces remain unoccupied.

Temporary signage areas/applications shall be maintained free of posters, graffiti and in an otherwise presentable manner.

Temporary construction safety fencing, barricades or scaffolding are allowed to be covered with construction wrap/super graphics. Construction wrap/super graphics are allowed placed along the full length of temporary safety fencing or scaffolding up to [12] ft. high, but shall not restrict or obstruct vehicular or pedestrian access to the construction site, or information required to be publicly displayed, including but not limited to contractor contact information, regulatory and directional signage.

Construction wrap shall not be affixed to a fence, barricade or scaffolding unless the fence, barricade and/or scaffolding is constructed to withstand the consequence of wind and other loads.

All construction wrap/super graphics shall bear the name of the installer and a local or toll-free phone number, labeled “Service Number”, located on the face on the wrap at a minimum size of two[2] in., where citizens may contact or leave word for the installer of the banner regarding maintenance or repair problems.

4.31 Temporary Signs Cont'd

4.31.2 Portable Signs

INTENT

Portable Signs are movable Sign units placed adjacent to the business or tenant entry or frontage.

DEFINITIONS

"Portable"
Signs which are freestanding, movable and not permanently anchored or attached to the ground.

STANDARDS

4.31.2 Portable Signs

Portable Signs, such as sandwich boards, "A frames" or similar temporary Sign structures, are permitted and limited to no more than one[1] per business. All Portable Signage shall be located within frontage or furnishing zones not to exceed [20] ft. wide on sidewalks, or within open spaces fronting the businesses. Portable Signage shall not exceed five[5] ft. in height, nor be larger than ten[10] sq. ft. in area.

Portable Signs shall be sited so as to not obstruct the passage or sight lines of motorists, bicyclists or pedestrians.

1

1. Portable Signs Example

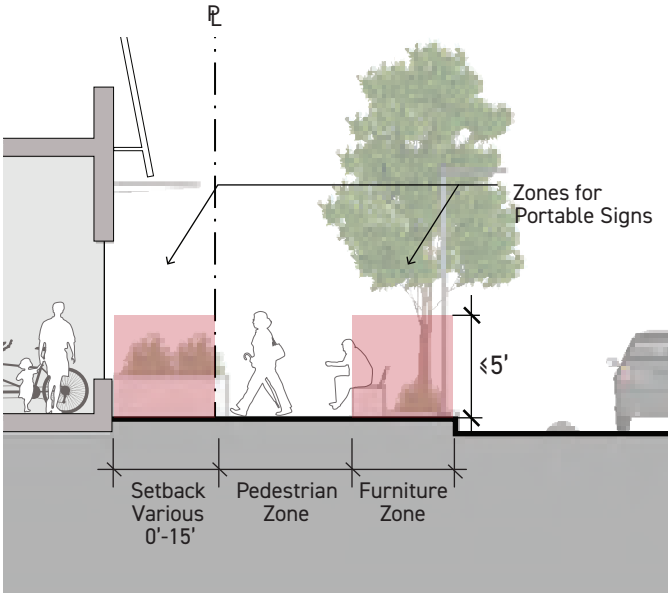


Figure 4.31b: PORTABLE SIGNS PLACEMENT ZONES

4.32 Building Lighting

INTENT

Building designs are encouraged to use lighting in innovative and engaging ways to create an attractive and secure environment, both during the day and at night. However, lighting shall not dominate the urban character of the neighborhood. Lighting shall be integrated with the design of the building, in harmony with building architecture, highlighting significant architectural features where appropriate; such as Signs, entrances, walkways, or display windows.

GUIDELINES

4.32.1 Glare Reduction

Lighting shall be designed to minimize glare and light trespass into neighboring buildings.

4.32.2 Energy Consumption

Smart lighting technology shall be incorporated where feasible or practical, such as those with automated controls that adjust based on occupancy or daylight availability, or use motion sensors. High-efficiency technology such as LED lighting with advanced controls, shall be utilized to minimize energy consumption.

4.32 Building Lighting Cont'd

STANDARDS

4.32.3 Building Entrances

Lighting at Building Entrances shall be provided for security. Pedestrian paths into and around the ground floor and stairways linking parking structures to public ways of the parking structure shall be well-lit at night.

GUIDELINES

4.32.4 Dark Sky

Lighting shall be shielded to prevent light from emitting above a 90-degree angle. Any lighting source located on rooftop parking shall be a full cutoff type.

4.32.5 Dark Sky Exception

Temporary accent lighting may be appropriate to create art, illuminate art, or highlight architectural features.

1

2

1. & 2. Entrances and Ground Level Lighting Examples

4.33 Private Infrastructure

INTENT

To implement odor control methods at the Recycled Water Treatment Facility and screening controls for above grade infrastructure on private property to mitigate any adverse impacts of utilities and equipment on the public realm.

GUIDELINES

4.33.1 Odor Control at the Recycled Water Facility

If the recycled water facility is constructed, the facility's odor control methods identified in the supporting environmental analysis will be implemented.

Odor control methods could include enclosed and covered process tanks, a suction blower to capture air from one or more unit processes, a scrubber system, and the off-site processing of sludge.

The operator shall post a telephone number in a conspicuous place at the facility to accept odor complaints, and in the highly unlikely event that the facility develops an odor issue, the existing odor control measures will be repaired or maintained, or additional odor control measures will be implemented until the odor issue is completely addressed.

4.33.2 Screening of Eco-District or Eco-Grid Utilities Visible at Grade

Enclosure or Screening shall be designed as a logical extension of and/or compatible with the adjacent building and an integral part of the overall building design. Screening material and detailing shall be comparable in quality to that of the rest of the building. Landscaping alone shall not qualify as Screening of at-grade utilities.

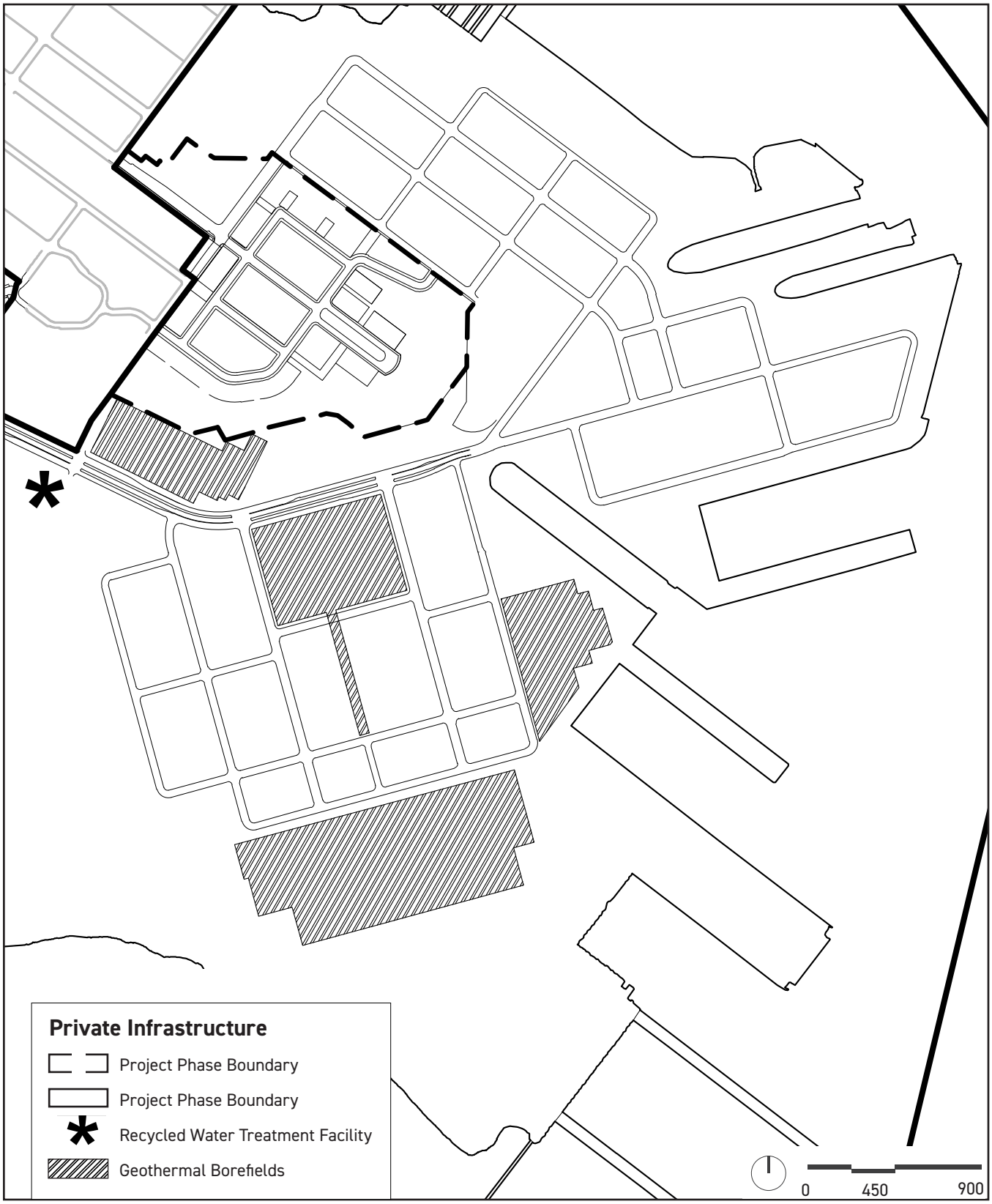


Figure 4.33a: PRIVATE INFRASTRUCTURE

HUNTERS POINT SHIPYARD PHASE 2 DESIGN FOR DEVELOPMENT

5 IMPLEMENTATION

5 Implementation

5.1 Review and Approval of Design Documents

The Design Review and Document Approval Procedures (DRDAP) establishes the processes by which applications for approvals are to be submitted and subsequently reviewed by the Commission of the Office of Community Investment and Infrastructure (OCII). Specific to the D4D, the DRDAP further establishes the processes and time lines for OCII review of architectural and design documents– including Schematic Design, Design Development and Construction Documents – for various improvements within the Shipyard that are subject to the Disposition and Development Agreement or Owner Participation Agreement.

The OCII and City agencies having jurisdiction have entered into an Interagency Cooperation Agreement that sets forth the City agencies' obligations in connection with review and approval of applications pursuant to the DRDAP, as well as review and approval of various permits, subdivision maps, and other authorizations required from the City.

As provided in the Shipyard Plan, OCII review of any application relating to development within the Shipyard shall be evaluated for consistency with the allowable land use set forth in the HPS Redevelopment Plan and in this Design for Development document.

5.2 Deviations and Variances

The owner of any property that is subject to this Design for Development document may make a written request for either a deviation or a variance from the design standards or any other provision of this document. A deviation is a minor modification no greater than ten[10] percent of a dimensional or numerical building standard. Only the following standards may be considered for a Deviation:

4.1.1 Block Sizes (dimensions only)
4.2.1 Building Setback
4.4.4 Roof Area Building Height Exception
4.4.5 Street Wall Requirement (Required Percentage of Build-up Only)
4.10.1 Projections
BM1 Significant Building Breaks (dimensions only)
BM2 Upper Floor Stepbacks (dimensions only)
BM3 Façade Variation (dimensions only)
4.11.3 Active Ground Floor Depth
4.11.9 Active Use Ground Floor Transparency
4.12.3 Ground Floor Residential Unit Entries
4.13.5 Parking and Service Entrances (dimensions only)
4.17.1 Ground Floor Blank Walls
4.17.2 Upper Floor Blank Walls
4.18.2 Commercial Daylight
4.22.1 Skyway Connections (dimensions only)
4.23.1 Green Room Datum
4.26.1 Private Open Space
4.26.4 Fences
4.27.4 Street Trees

Deviations must meet the purpose and intent statements of the Design for Development and may be authorized by the OCII Director. To the extent reasonably possible, proposed Deviations must be identified at the time of Schematic Design Document submittal pursuant to the DRDAP. The OCII Director's approval or disapproval of proposed Deviations shall be limited to a determination of its compliance with the Design for Development, the Redevelopment Plan and any applicable Redevelopment Requirements. Should a request for Deviation be made after OCII Commission approval of Schematic Design, the OCII Director, in her or his sole discretion, may seek comment and guidance from the public and OCII Commission on the granting of any deviations.

Variance decisions must be made by the OCII Commission. A request for a variance must state fully the grounds for the application and include relevant facts in support of the application. The OCII Commission may grant a variance from development controls under the following circumstances:

Due to unique physical constraints or other circumstances applicable to the property, the enforcement of development regulations would result in difficulties for the development and create undue hardship for the owner or developer, or would constitute an unreasonable limitation beyond the intent of the D4D; and

The effect of the variance would be in harmony with the goals of the D4D, and would not be materially detrimental to public welfare, neighboring property or nearby improvements.

The OCII Commission's decision to grant or deny a variance is final, and not appealable to either the San Francisco Planning Commission or the Board of Supervisors.

5.3 Process for Amendment of the Design for Development Document

D4D amendments require approval of both the San Francisco Planning Commission and the OCII Commission.

6 APPENDIX

6.1 Checklist

Building Design

STANDARD			NOTES
☐	**4.1**	**Block Sizes and Mid-Block Breaks**	
☐	4.1.1	Mid-Block Break Locations	
☐	**4.2**	**Building Setback**	
☐	4.2.1	Building Setbacks	
☐	4.2.2	Mid-Block Break Setback	
☐	**4.3**	**Developable Area Coverage**	
☐	4.3.1	Developable Area Coverage	
☐	**4.4**	**Building Height**	
☐	4.4.1	Building Height	
☐	4.4.2	MBB Building Stepbacks	
☐	4.4.3	Building Height Exceptions	
☐	4.4.4	Roof Area Building Height Exception	
☐	4.4.5	Street Wall	
☐	4.4.6	Implied Façade	
☐	4.4.7	Street Wall Exceptions for Adaptive Reuse	
☐	4.4.8	Street Wall Exceptions for Recessed Areas	
☐	**4.5**	**Architectural Controls by Building Scale**	
☐	4.5.1	Architectural Controls by Building Scale	
☐	4.5.2	Maximum Plan Length	
		Flow Chart for Architectural Controls	
☐	**4.6**	**FC Façade Composition**	
☐	4.6.1	Façade Composition (FC)	
☐	4.6.2	Block to Block Variation	
☐		FC1 Façade Modulation Strategies	
☐		FC2 Façade Articulation Strategies	
☐		FC3 Façade Fenestration Strategies	
☐		FC4 Material/Color Strategies	

STANDARD			NOTES
☐ **4.7**	**BM**	**Bulk and Massing**	
☐ 4.7.1		Bulk and Massing Approach	
☐	BM1	Significant Building Breaks	
☐	BM2	Upper Floor Stepbacks	
☐	BM3	Façade Variation (FV)	
☐ **4.8**	**BE/PE**	**Building and Public Realm Enhancements**	
☐ 4.8.1		Building and Public Realm Enhancement Measures for M, L, XL Buildings	
☐	BE1	Apply One[1] Additional Bulk/Massing Control	
☐	BE2A	Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)	
☐	BE2B	Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)	
☐	BE3	Provide Visual and Physical Access to Interior Courtyard and/or Atrium	
☐	BE4	24/7 Public Access to Open Space	
☐	BE5	Reduction in Floor Plate Area of Upper Floors	
☐	BE6	Expressive Entrances	
☐	BE7	Increased Transparency	
☐	BE8	Distinct Corner Architectural Feature	
☐	BE9	Roof Expression	
☐	BE10	Additional Active Entrances	
☐	BE11	Additional Ground Floor Activation	
☐	PE1	Public Access through the Building	
	PE2	Public Access through Open Space Connection	
☐ **4.9**		**Tower Controls**	
☐ 4.9.1		Tower Locations	
☐ 4.9.2		Tower Floor Aspect Ratio	
☐ 4.9.3		Tower Height Variation	
☐ 4.9.4		Tower Massing and Articulation	
☐ 4.9.5		Tower Mechanical Equipment	
☐ 4.9.6		Tower Mechanical Equipment Screening	

6.2 Checklist cont'd

STANDARD		NOTES
☐ **4.10**	**Projections**	
☐ 4.10.1	Projections	
☐ 4.10.2	Habitable Projections	
☐ 4.10.3	Non-Habitable Projections	
☐ 4.10.4	Other Projections	
☐ 4.10.5	Projection Exemptions	
☐ 4.10.6	Maximum Projection Area	
☐ **4.11**	**Ground Floor Activation**	
☐ 4.11.1	Zone 1 and 2 Active Entrances	
☐ 4.11.2	Zone 3 Active Entrances	
☐ 4.11.3	Active Ground Floor Depth	
☐ 4.11.4	Ground Floor Height	
☐ 4.11.5	Waterfront Activation	
☐ 4.11.6	Guidelines for Ground Floor Residential Design	
☐ 4.11.7	Ground Floor Activation	
☐ 4.11.8	Shared Parking Structures Activation	
☐ 4.11.9	Ground Floor Active Use Transparency	
☐ 4.11.10	Ground Floor Active Use Glass and Glazing	
☐ **4.12**	**Building Entries**	
☐ 4.12.1	Building Entries	
☐ 4.12.2	Green Room Building Entries	
☐ 4.12.3	Ground Floor Residential Unit Entries	
☐ 4.12.4	Building Entries	
☐ 4.12.5	Guidelines for Ground Floor Residential Design	
☐ **4.13**	**Parking and Service Entrances**	
☐ 4.13.1	Parking and Service Entrances Locations	
☐ 4.13.2	Combined Parking and Service Entrances	
☐ 4.13.3	Separate Parking and Service Entrances	
☐ 4.13.4	Maximum Parking and Service Entrances	
☐ 4.13.5	Parking and Service Entrances	
☐ 4.13.6	Parking and Service Entrances (Blocks 38 & 45)	
☐ 4.13.7	Residential Mechanical Parking	

STANDARD		NOTES
☐ **4.14**	**Screening**	
☐ 4.14.1	Screening	
☐ 4.14.2	Screening of Utilities Visible at Grade	
☐ 4.14.3	Screening Materials	
☐ 4.14.4	Screening for Rooftop Equipment	
☐ 4.14.5	Screening for Upper Floor Parking	
☐ 4.14.6	Screening for Ground Floor Parking	
☐ 4.14.7	Rooftop Screening for Parking	
☐ **4.15**	**Shared Parking Structures**	
☐ 4.15.1	Shared Parking Structure Locations	
☐ 4.15.2	Number of Parking Structures	
☐ 4.15.3	Shared Parking Structure Design	
☐ 4.15.4	Convertible Shared Parking Structures	
☐ 4.15.5	Floor Heights for Convertible Shared Parking Structures	
☐ 4.15.6	Shared Parking Structure Lighting	
☐ 4.15.7	Shared Parking Structure Materials	
☐ 4.15.8	Shared Parking Structure Ground Floor Uses	
☐ **4.16**	**Rooftops**	
☐ 4.16.1	Rooftop Façades	
☐ **4.17**	**Blank Walls**	
☐ 4.17.1	Ground Floor Blank Walls	
☐ 4.17.2	Upper Floor Blank Walls	
☐ **4.18**	**Daylight**	
☐ 4.18.1	Residential Daylight	
☐ 4.18.2	Commercial Daylight	

6.3 Checklist cont'd

STANDARD		NOTES
☐ **4.19**	**Façade Material**	
☐ 4.19.1	Bird-Safe Design	
☐ 4.19.2	Material Quality	
☐ 4.19.3	Material Selection	
☐ 4.19.4	Ground Floor Materials	
☐ 4.19.5	Marine Environment Materials	
☐ 4.19.6	Prohibited Materials	
☐ **4.20**	**Class I - Bicycle Parking**	
☐ 4.20.1	Bicycle Parking Capacity	
☐ 4.20.2	Bicycle Parking Location	
☐ **4.21**	**Vehicular Parking and Loading**	
☐ 4.21.1	Vehicle Parking and Loading	
☐ **4.22**	**Skyway Connections**	
☐ 4.22.1	Skyway Connections	
☐ **4.23**	**Green Room Datum**	
☐ 4.23.1	Green Room Datum	
☐ **4.24**	**Adaptive Reuse**	
☐ 4.24.1	Adaptive Reuse	
☐ 4.24.2	Adaptive Reuse Exemptions	
☐ **4.25**	**Key Sites Blocks 28 and 40**	
☐ 4.25.1	Key Sites Blocks 28 & 40	

Private Open Space

STANDARD		NOTES
☐ **4.26**	**Private Open Space**	
☐ 4.26.1	Private Open Space	
☐ 4.26.2	Private Common Open Space on Waterfront Blocks	
☐ 4.26.3	Private Setbacks	
☐ 4.26.4	Fences	
☐ 4.26.5	Defensible Space	
☐ 4.26.6	Orientation	
☐ 4.26.7	Planting Palette	
☐ 4.26.8	Irrigation	
☐ **4.27**	**Private Open Space - Mid-Block Breaks**	
☐ 4.27.1	Public Access	
☐ 4.27.2	Throughway Dimensions	
☐ 4.27.3	Surfaces	
☐ 4.27.4	Street Trees	
☐ 4.27.5	Lighting	
☐ 4.27.6	Community Spaces	
☐ 4.27.7	Landscaping	
☐ 4.27.8	Minimizing Vehicular Speeds	

6.4 Checklist cont'd

Signage

STANDARD			NOTES
☐	**4.28**	**Building Signage**	
☐	**4.29**	**All Signs**	
☐	4.29.1	Transparency	
☐	4.29.2	Concealed Electrical Signage Elements	
☐	4.29.3	Typefaces & Colors	
☐	4.29.4	Sign Materials	
☐	4.29.5	Graphic Style	
☐	4.29.6	Integration	
☐	4.29.7	New Technology Signs	
☐	4.29.8	Sign Illumination	
☐	4.29.9	Prohibited Signage	
☐	**4.30**	**Permanent Signs**	
☐	4.30.1	Commercial Wall Signage	
☐	4.30.2	Storefront and Retail Wall Signage	
☐	4.30.3	Residential Wall Signage	
☐	4.30.4	Projecting Signs	
☐	4.30.5	Window Signs	
☐	4.30.6	Identifying, Freestanding, or Directional Signs	
☐	4.30.7	Canopy/Awning Signage	
☐	4.30.8	Street or Unit Address Signs Nameplates	
☐	**4.31**	**Temporary Signs**	
☐	4.31.1	Temporary Signs	
☐	4.31.2	Portable Signs	

Lighting

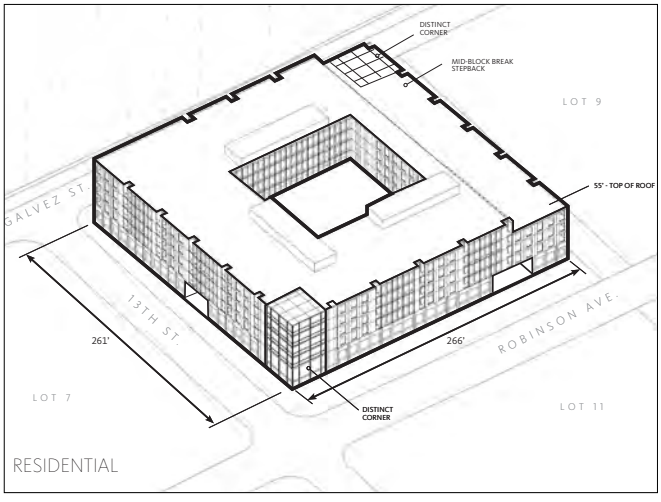
STANDARD		NOTES
☐ **4.32**	**Building Lighting**	
☐ 4.32.1	Glare Reduction	
☐ 4.32.2	Energy Consumption	
☐ 4.32.3	Building Entrances	
☐ 4.32.4	Dark Sky	
☐ 4.32.5	Dark Sky Exemption	

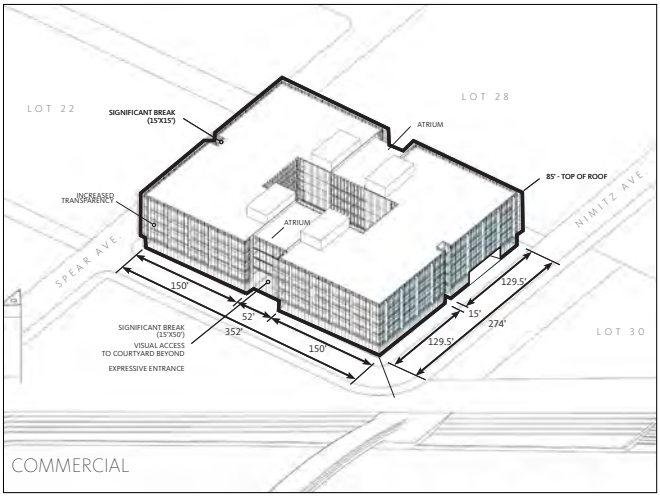
Private Infrastructure

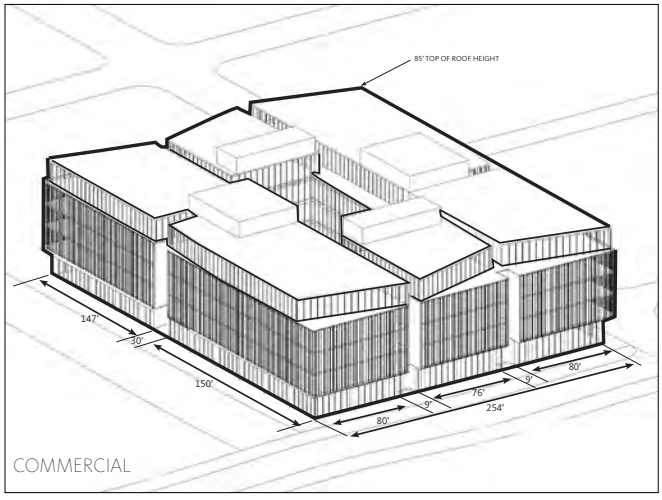
☐ **4.33**	**Odor Control at the Recycled Water Facility**	
☐ 4.33.1	Odor Control at the Recycled Water Facility	

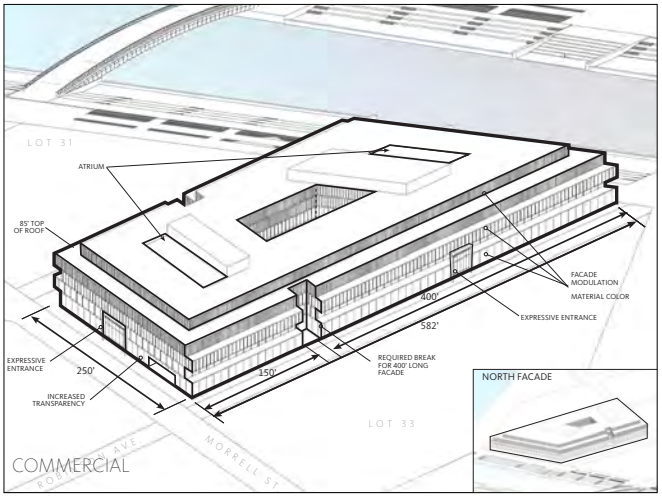
6.5 Building Design Application Studies

The following building studies illustrate how the Guidelines and Standards apply in combination for M, L and XL buildings to support the vision for HPS2. These options illustrate an example of real world applications and the building envelopes do not necessarily maximize allowable block coverage. Selected controls and enhancement measures are indicated in bold. These designs are for illustrative purposes only.






85' TOP OF ROOF HEIGHT
147'
30'
150'
80'
9'
76'
9'
80'
254'
COMMERCIAL

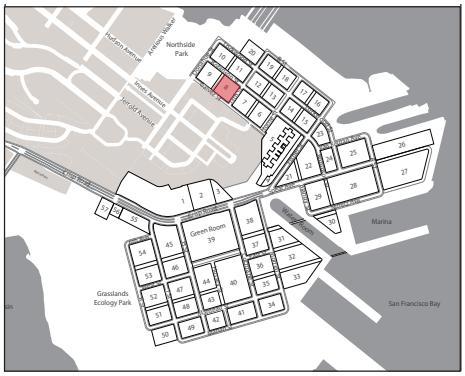

LOT 31
ATRIUM
85' TOP OF ROOF
FACADE MODULATION
MATERIAL COLOR
400'
582'
EXPRESSIVE ENTRANCE
EXPRESSIVE ENTRANCE
250'
150'
REQUIRED BREAK FOR 400' LONG FACADE
INCREASED TRANSPARENCY
NORTH FACADE
LOT 33
COMMERCIAL

6.5.3 MEDIUM BUILDING (RESIDENTIAL - BLOCK 8)

BUILDING SIZE:

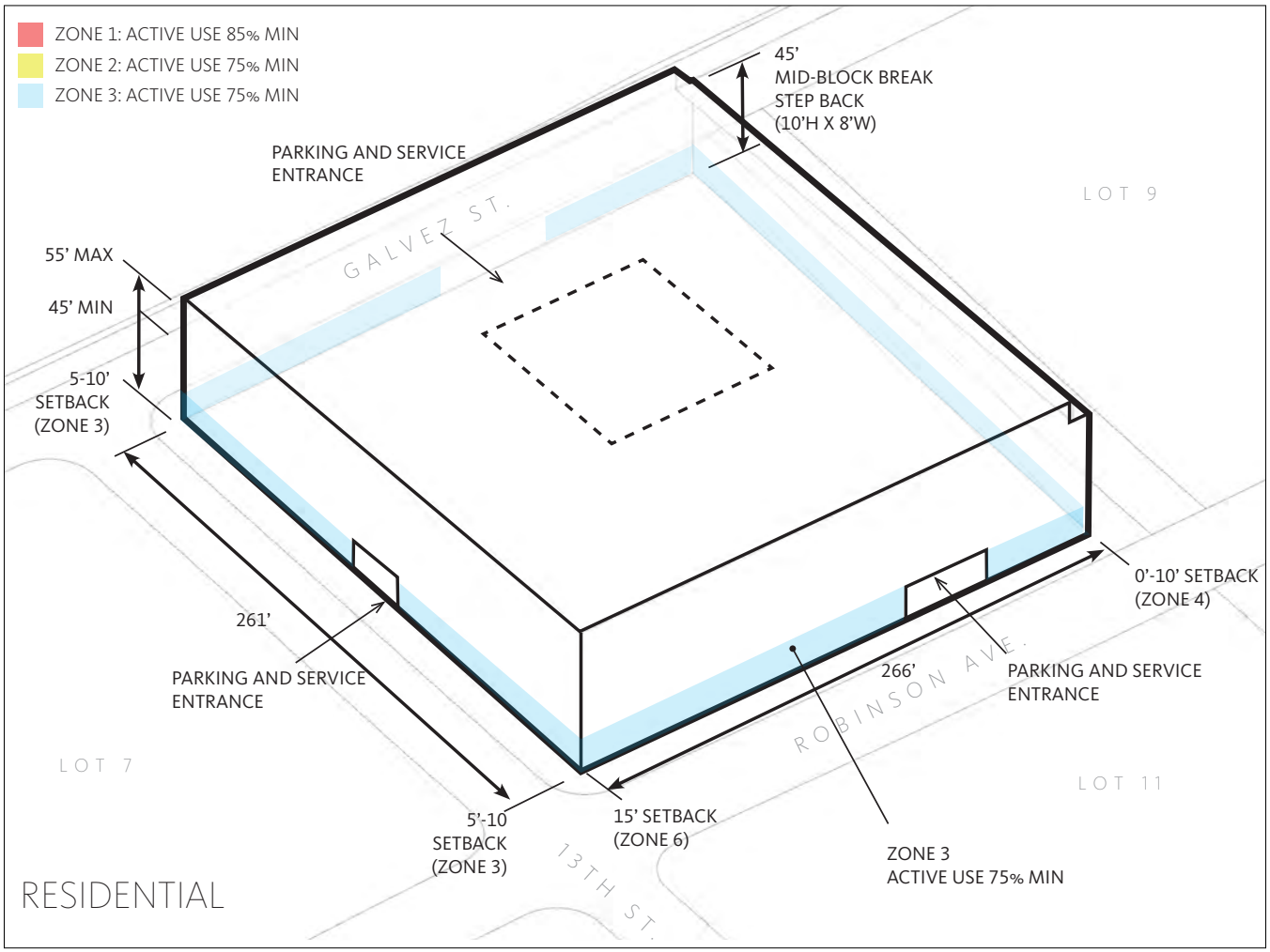
M

1 Bulk and Massing Control
and
1 Building Enhancement or
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Residential
Lot Area: ~ 69,233 SF
Developable Area:
0'-40' : 100%
41'-95' : 75%
Gross Floor Area: 311,549 SF
Setback: 5'-10' (Zone 3), 0'-10' (Zone 4-MBB), 15' (Zone 6)
Plan Length: 250'
Number of Stories: 5
Building Height: 45' Min / 55' Max)
Street Wall: 50%/20' (Typical)



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Façade Fenestration Strategies
FC4. Material/Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Façade Articulation
- Fenestration/ Transparency
- Material Color

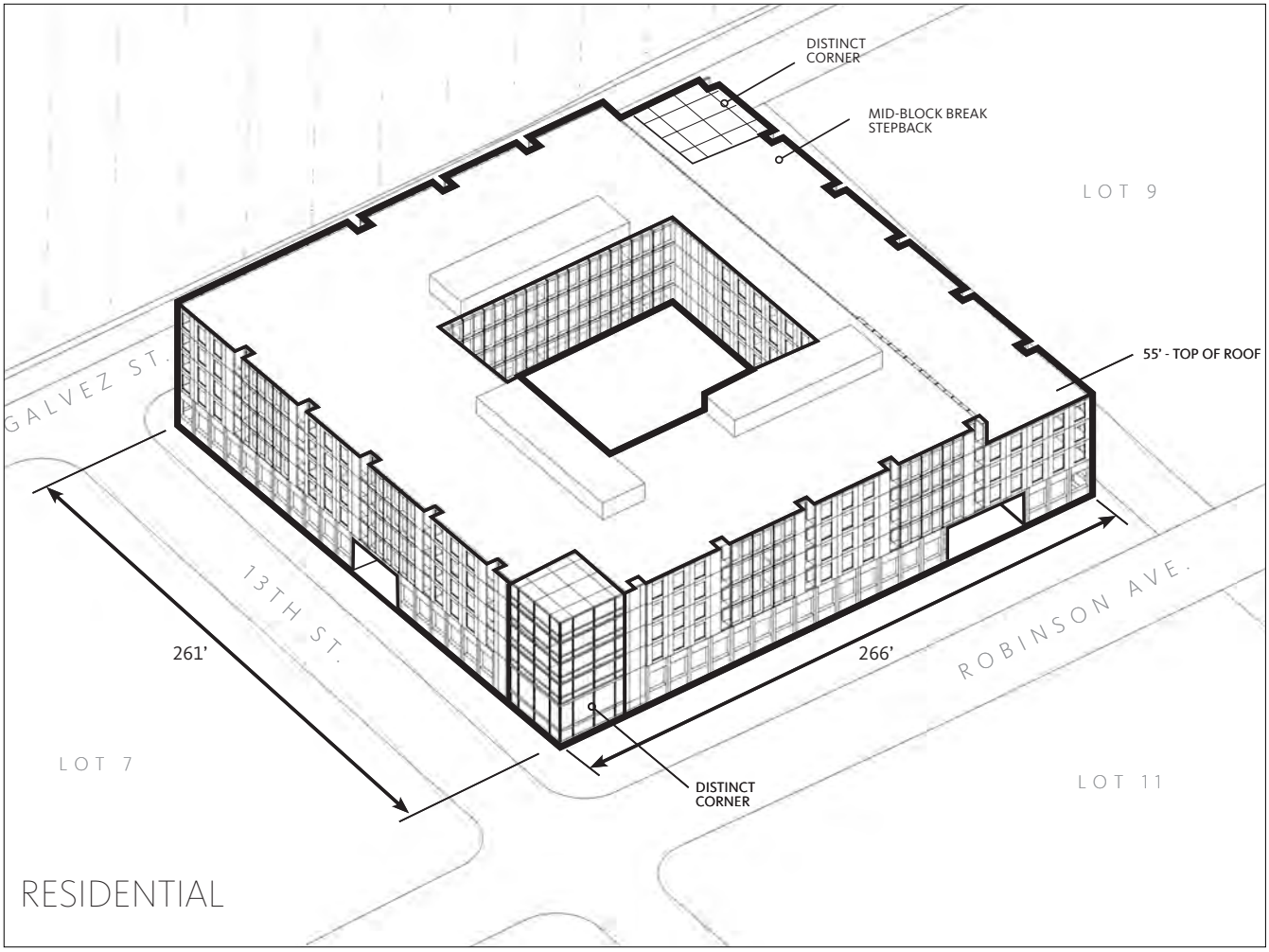
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual and Physical Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through the Building
PE2. Public Access though Open Space Connection

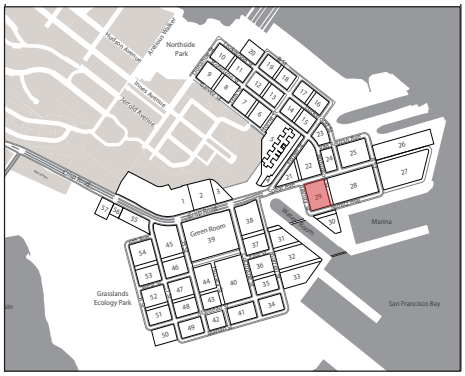


6.5.4 LARGE BUILDING (COMMERCIAL - BLOCK 29)

BUILDING SIZE:

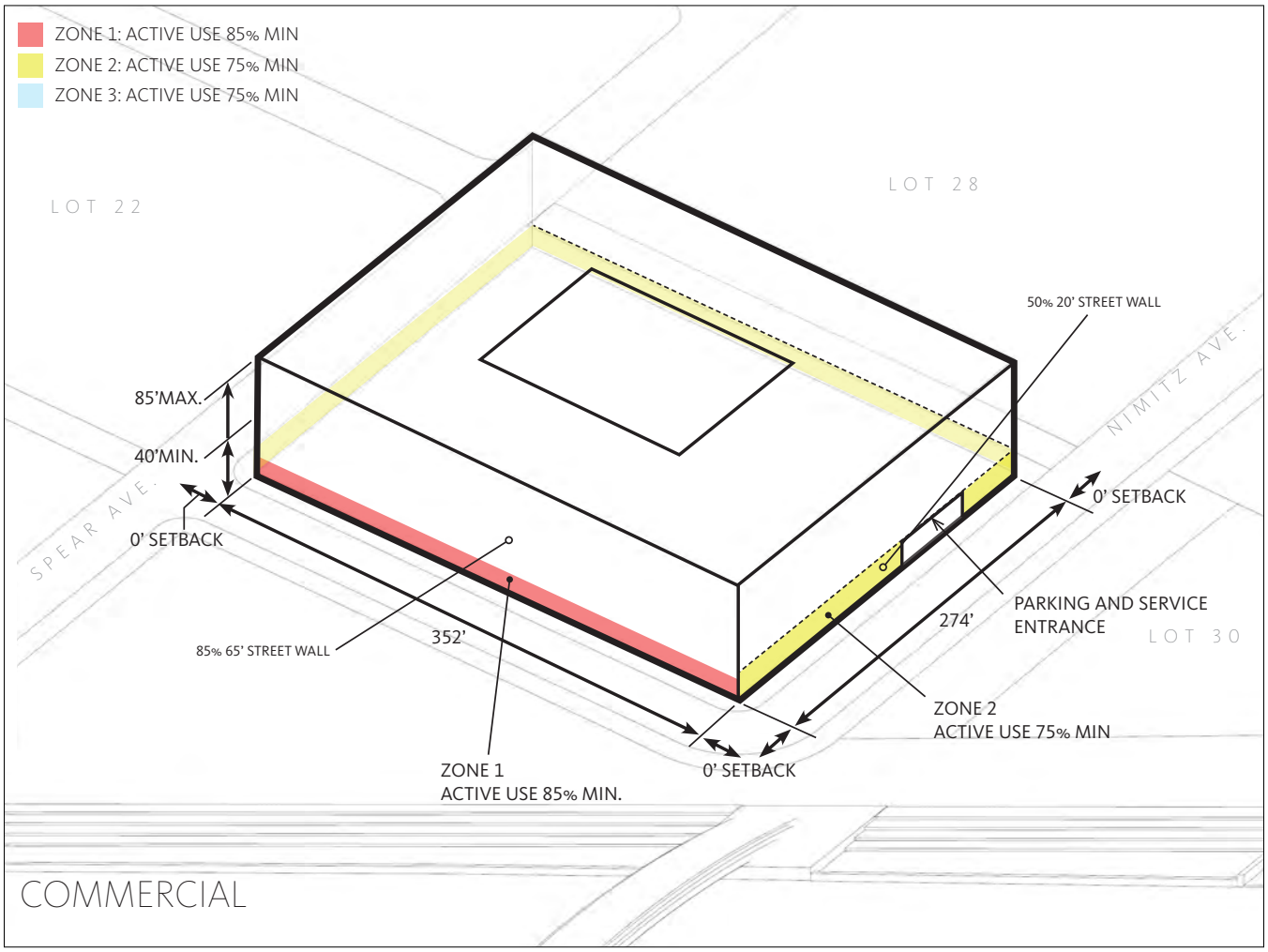
L

1 Bulk and Massing Control
and
3 Building Enhancements
or
1 Building Enhancement and
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Commercial
Lot Area: 96,478 SF
Developable Area:
0-40' : 100%
41'-95' : 90%
96'-120' : 80%
Gross Floor Area: 410,032 SF
Setback: 0' (Zone 1)
Plan Length: 350'
Number of Stories: 5
Building Height: 40' Min / 85' Max)
Street Wall: 85%/60', 50%/20'



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Façade Fenestration Strategies
FC4. Material/Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Façade Articulation
- Fenestration/ Transparency
- Material Color

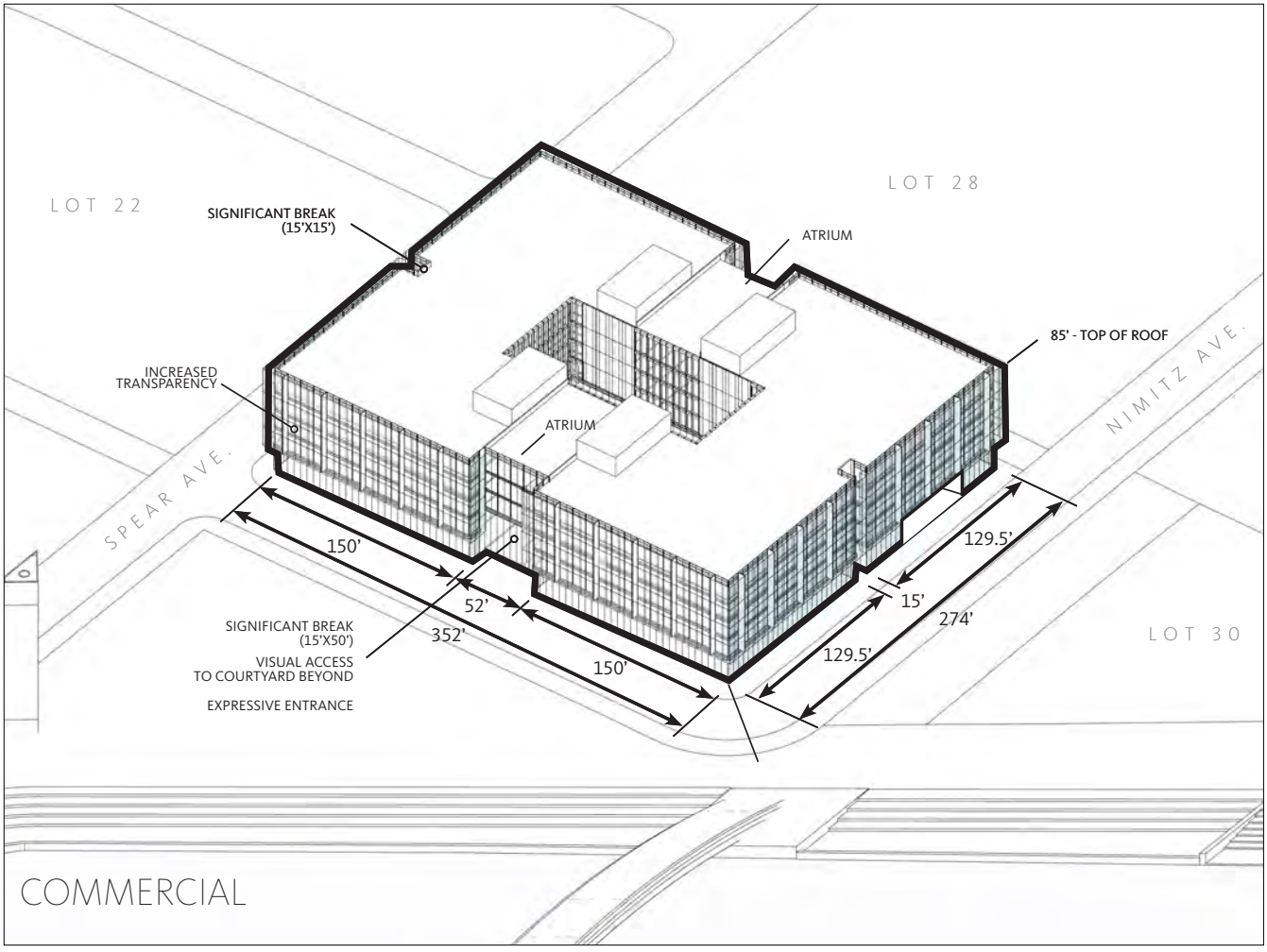
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual and Physical Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through the Building
PE2. Public Access though Open Space Connection

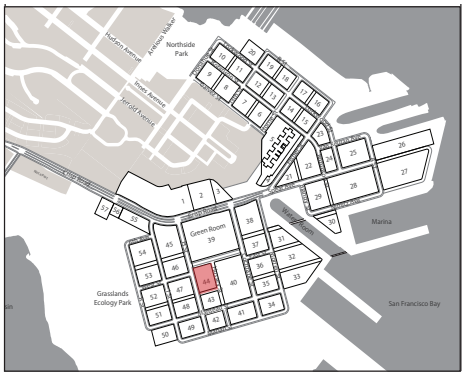


6.5.5 LARGE BUILDING (COMMERCIAL - BLOCK 44)

BUILDING SIZE:

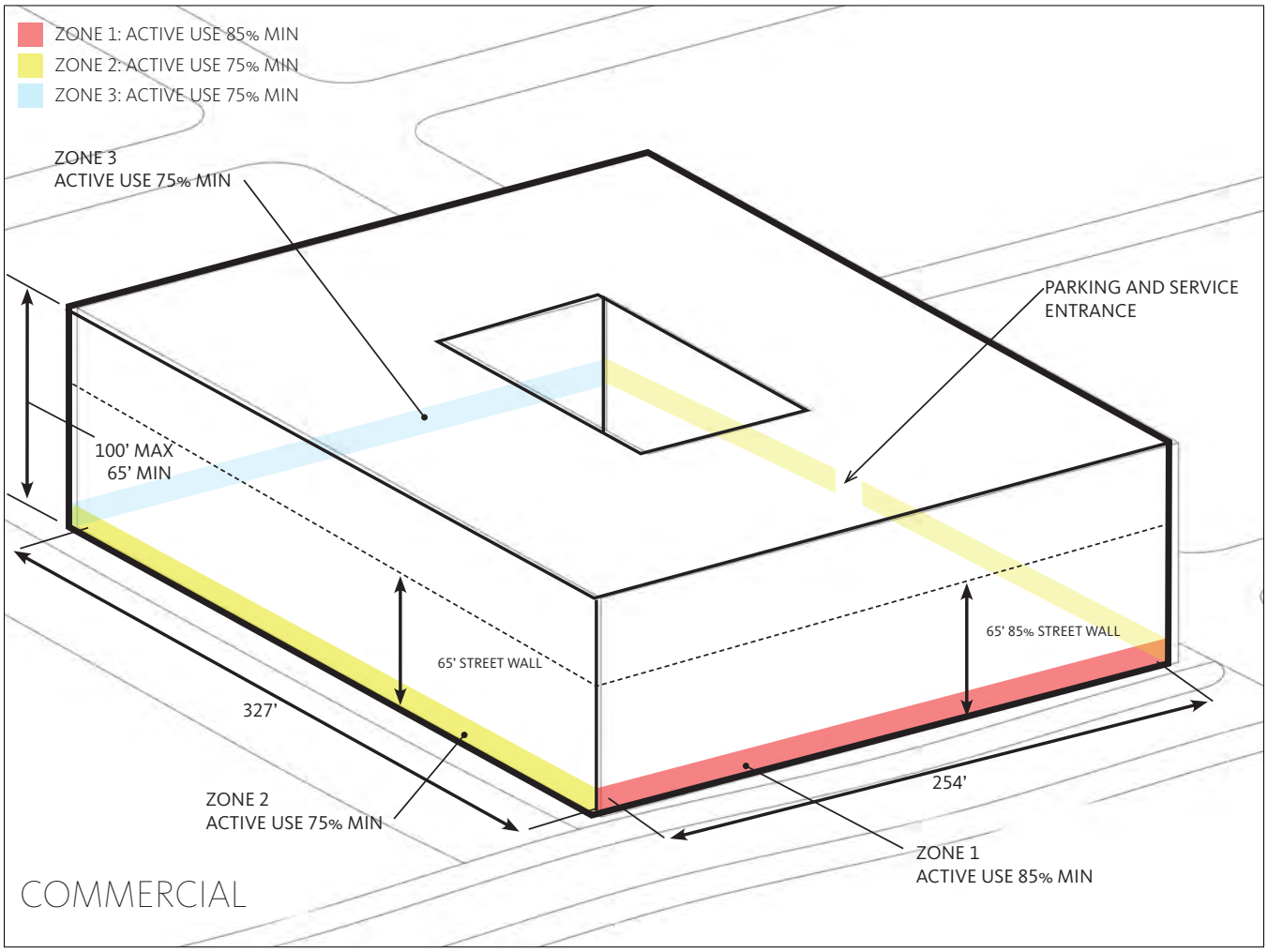
L

1 Bulk and Massing Control
and
3 Building Enhancements
or
1 Building Enhancement and
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Commercial
Lot Area: 83,017 SF
Developable Area:
0-40' :100%
41'-95' : 90%
96'-120' : 80%
Gross Floor Area: 415,082
Setback: 0' (Zone 1), 0'-5' (Zone 2)
Plan Length: 363'
Number of Stories: 5
Building Height: 40' Min / 85' Max)
Street Wall: 85%/60'



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Fenestration Strategies
FC4. Material / Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Façade Articulation
- Fenestration/ Transparency
- Material Color

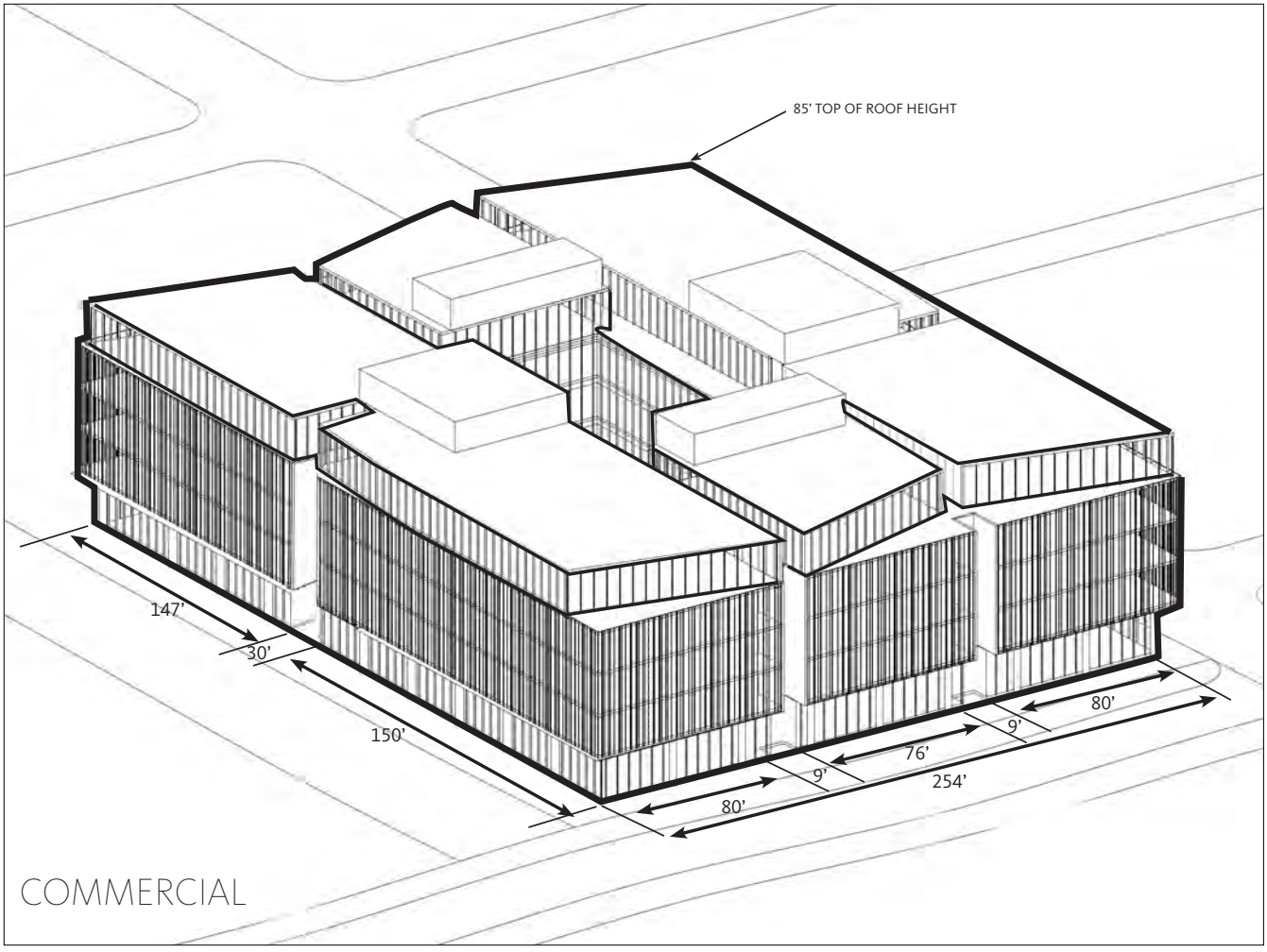
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through the Building
PE2. Public Access though Open Space Connection

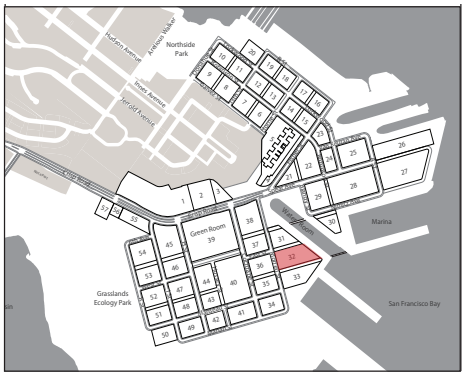


6.5.6 EXTRA-LARGE BUILDING (COMMERCIAL - BLOCK 32)

BUILDING SIZE:

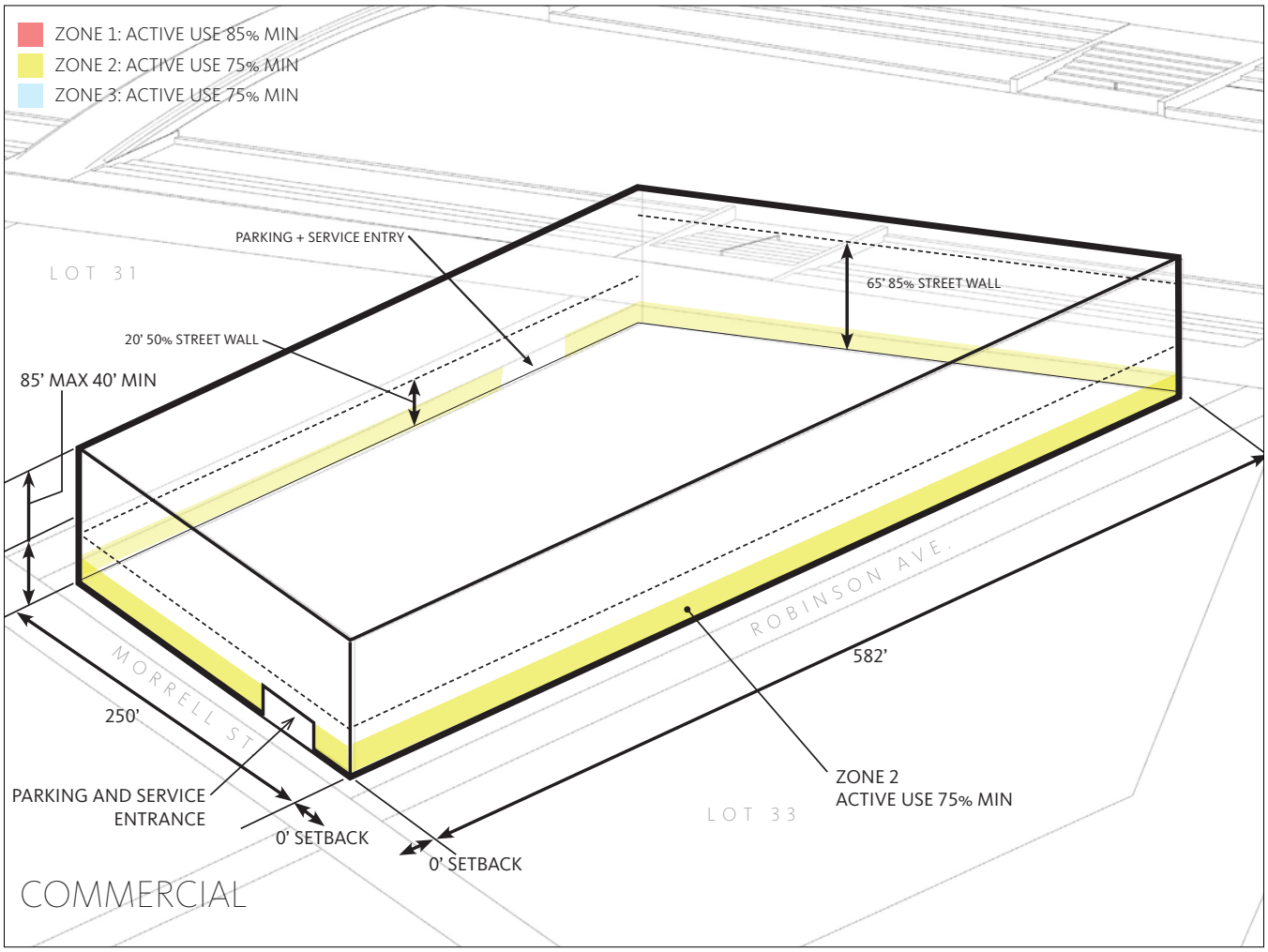
XL

1 Bulk and Massing Control
and
4 Building Enhancements
or
2 Building Enhancements and
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Commercial
Lot Area: 121,012 SF
Developable Area:
0-40' : 100%
41'-95' : 90%
96'-120' : 80%
Gross Floor Area: 514,301 SF
Setback: 0' (Zone 1)
Plan Length: 395'
Number of Stories: 5
Building Height: 40' Min / 85' Max)
Street Wall: 85%/60', 50%/20'



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Façade Fenestration Strategies
FC4. Material/Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Facade Articulation
- Fenestration/ Transparency
- Material Color

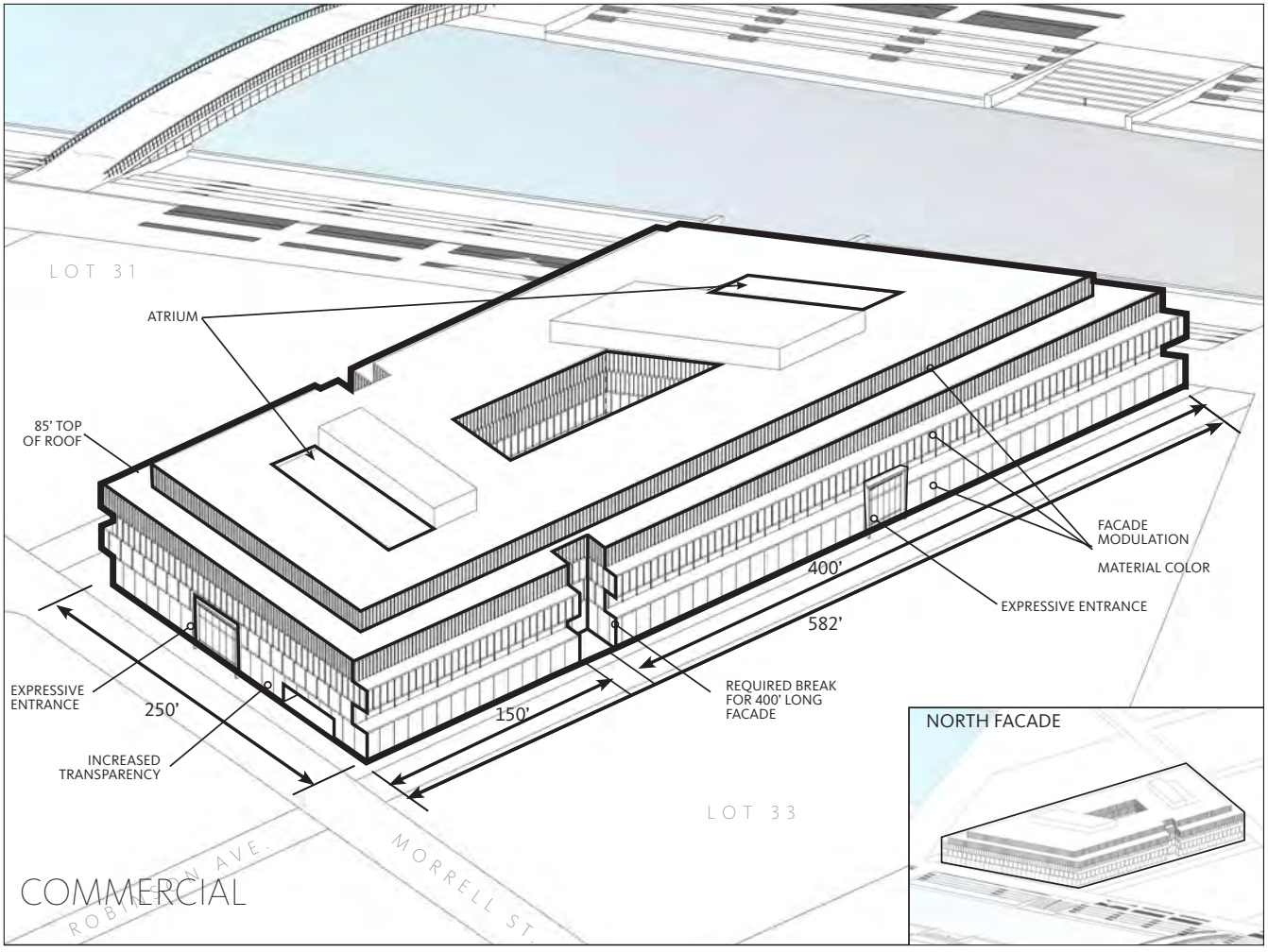
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual and Physical Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through Building
PE2. Public Access though Open Space Connection



6.6 Sitewide Diagrams

6.6.7 DISTRICTS MAP

Figure 6.3a: DISTRICTS AND DEVELOPMENT BLOCKS

6.6.8 ROUGH FINISH GRADES

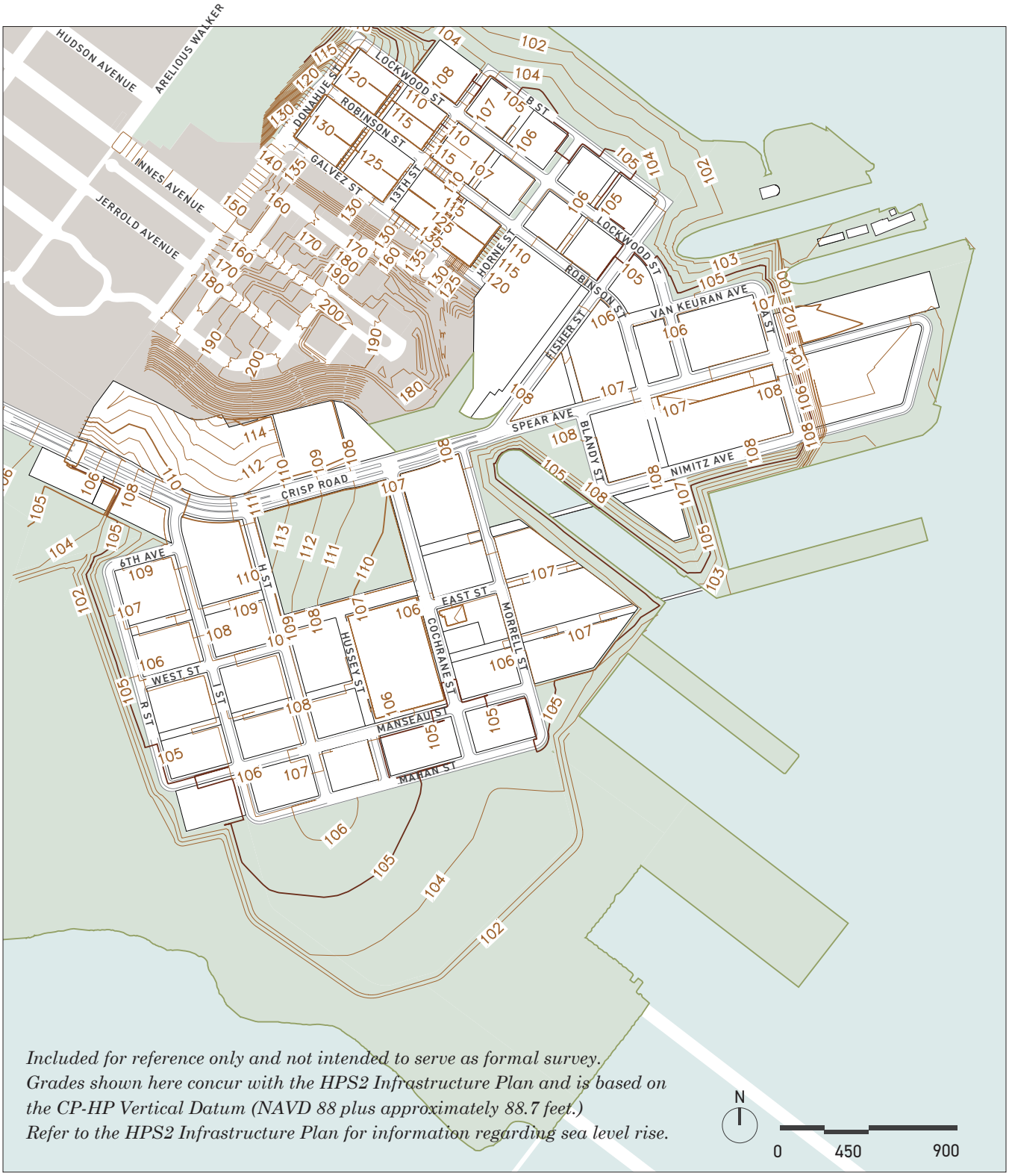


Figure 6.3b: TOPOGRAPHY

6.6.9 PHASING

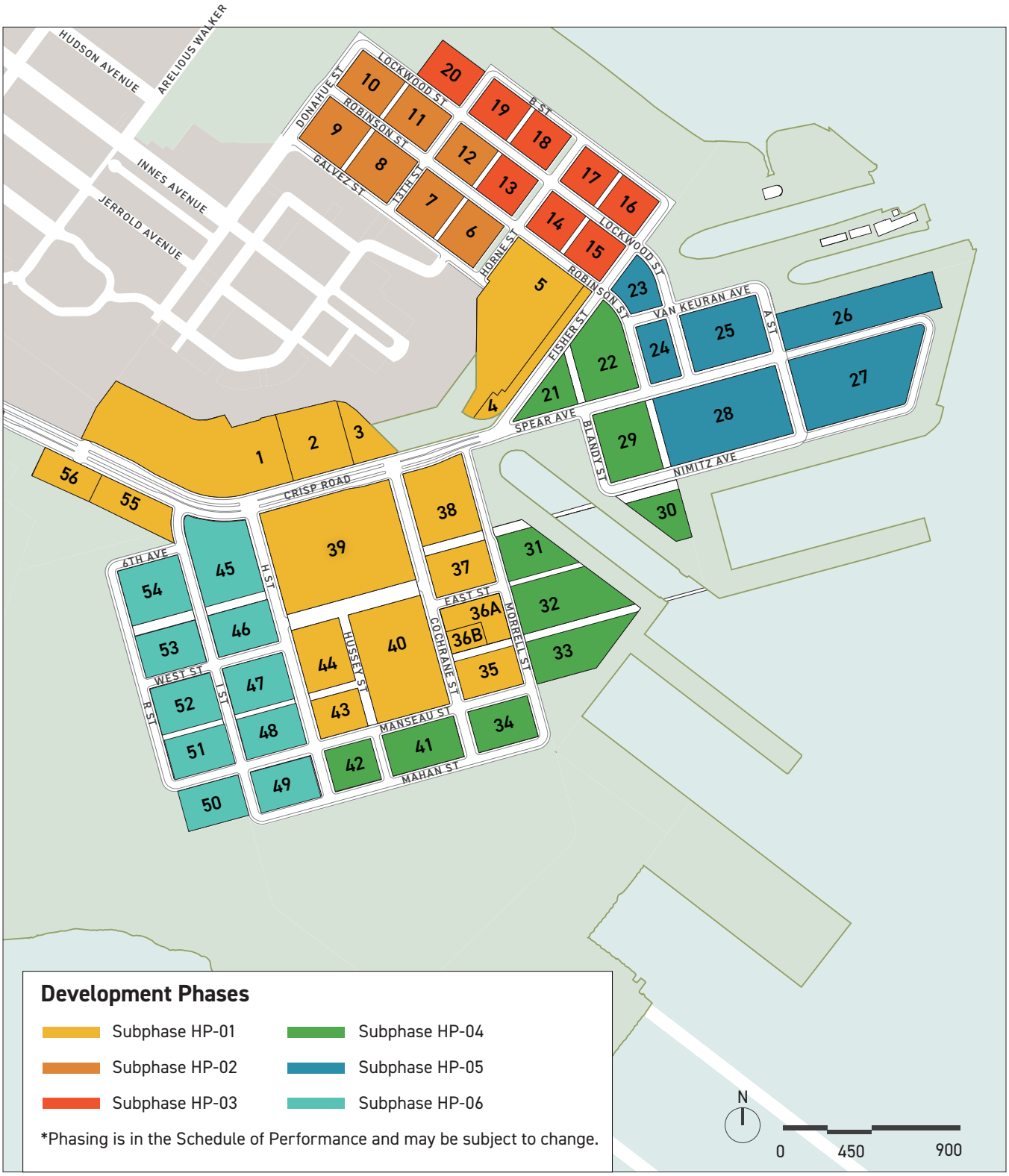


Figure 6.3c: DEVELOPMENT PHASES

6.7 Term Definitions

Terms used in the D4D shall have the meaning defined in Part XI of the HPS Redevelopment Plan, or as otherwise outlined below. In the event of inconsistency between a term definition in the HPS Redevelopment Plan and the D4D, the term definition in the HPS Redevelopment Plan shall prevail:

Active Entrance	A building entrance into an Active Use. Entrance may be public or private. Single uses may have multiple Active Entries.
Active Frontage	Building façade length lined with Active Uses.
Active Uses	Ground floor land uses that create an interesting and inviting pedestrian environment that enhances neighborhood safety and security by encouraging "eyes on the street," visibility and vibrancy.
Active Use Transparency	The surface area of Transparent Glazing as a proportion of the surface area of the Active Frontage.
Adaptive Reuse	Reuse or re-creation of an existing structure, in part or in whole, in a manner that maintains the essence and character-defining building elements of the existing structure.
Agency	The Office of Community Investment and Infrastructure, or Successor Agency to the San Francisco Redevelopment Agency.
Apparent Face	The unbroken plane of a building with a single façade composition.
Atrium	A multi-leveled enclosed building area that is glazed on one [1] or more sides and includes roof glazing and/or skylights.
Awning	A light, roof-like structure, supported entirely by the exterior wall of a building, consisting of a moveable frame covered with approved materials, extending over doors and windows, with the purpose of providing protection from sun and rain and embellishment of the façade.
Blank Wall	A building façade area greater than four [4] linear ft. in length, parallel to the property line where there is not an entrance, window, or any building articulation, including solid doors and mechanical area wall(s).
Block	An area bounded by a public right-of-way, open space, or Mid-Block Break.
Block Sizes	Block Sizes and legal parcels are defined in the Final Map. Approximate parcel dimensions are provided in *Figure 4.1b* and are subject to change. Block sizes may be legal parcels or may be part of a legal parcel.
Building Enhancement	An architectural design feature that improves the character of the building and adds interest to the building overall.
Building Entry	Building doors not including service or loading access, parking entries, or locked fire exits.

Building Envelope	The exterior dimensions dictating the maximum dimensions of width, depth, height, and bulk, within which a building may exist on a given site.
Building Face	A plane of the exterior wall of the building along a public right-of-way, open space, or other publicly accessible space. The term is often used in context with its relationship to an adjacent street or public area. In instances where a minimum Street Wall requirement presides, the Building Face aligns with the build-to line.
Building Height	Building Height is measured from the highest corner at finished sidewalk grade to the average point on the finished roof in the case of a flat roof, and the average height of the rise in the case of a pitched or stepped roof, or similarly sculpted roof form. For parcels adjacent to streets with a slope greater than 5%, Building Height is determined by measuring at the mid-point of the building at the sidewalk grade adjacent to each street-fronting Building Face. The maximum height envelope may extend from one frontage up to a depth of half the distance to the opposite side of the block. Multiple frontages may be used to determine maximum Building Height envelope.
Building Projection	A portion of the building that extends beyond the primary Building Face, either into a Setback or beyond the property line.
Bulk and Massing	Bulk and Massing regulations are the combination of controls (lot size, lot coverage, open space, yards, heights, and setbacks) that determine the maximum Building Envelope.
Business/Retail Signage	A Sign which directs attention to the primary business, commodity, service, industry or other activity which is sold, offered, or conducted on the premises upon which the Sign is located or to which it is affixed.
Canopy	A light, roof-like structure, supported by the exterior of a building, consisting of a fixed frame covered with approved cloth, plastic, or metal, with the purpose of providing protection from sun and rain, and embellishment of the façade.
Calculating Sign Area	Sign area is defined as the area of a sign that is used for display purposes. Sign area shall be calculated by measuring the size of a rectangle large enough to contain the entire sign's display, graphics, and text that form an integral part of the display or are used to differentiate such sign from the background against which it is placed. The calculation of Sign Area excludes the necessary supports or uprights on which such sign is placed.
Canopy or Awning Signs	Lettering or graphics applied to projecting architectural awnings or canopies at the first floor.
Character-enhancing Structure	Buildings or structures that may be adaptively reused to enhance neighborhood character and sense of place. Character-enhancing Buildings are 281, 351, 411, and 813.
Class I Bicycle Parking	Spaces in secure, weather-protected facilities intended for use as long-term, overnight, and workday bicycle storage by dwelling unit residents, non-residential occupants, and employees.

Clearly Defined Building Entry	A clearly identifiable building entry is expressed by such elements as taller volumes, recessed doorways, canopies, lighting, public art, special materials, and/or paving.
Convertible Parking	A Shared Parking Structure designed to be converted into another use and or designed to be mechanized and deconstructable.
Coverage	The percentage of Floor Plate in relation to the Developable Area that includes the total horizontal area when viewed in plan. Coverage is regulated at various height thresholds.
Datum	An articulation strategy on the building façade that, by its continuity and regularity, serves to gather, measure, and organize the pattern of forms and spaces.
Daylight	The controlled admission of natural light, direct sunlight, and diffused skylight into a building to reduce electric lighting and save energy.
Developable Area	All land inside the legal property line, excluding Setbacks.
District	A grouping of development blocks that share a number of similar characteristics.
EVA	Emergency Vehicular Access.
Extra Large Building (XL)	Buildings with a maximum floor plate area greater than [100,000] sq. ft.
Façade	Any vertical exterior face or wall of a building that is adjacent to or fronts a street, public or semi-private right-of-way, park, or plaza.
Façade Articulation	Expressions of material properties, craft, treatment, pattern, and/or assembly that create visible shadows and/or texture across the building façade. Facade Articulation strategies are intended to create visual interest, texture, and shadows through the tectonics, materiality, and craft of the facade.
Façade Composition	The design of large scale building form and smaller scale facade tectonics, including material selection and detailing.
Façade Modulation	
Fenestration	The design, construction, or presence of openings in a building. Fenestration includes windows, doors, louvers, vents, wall panels, skylights, storefronts, curtain walls, and slope glazed systems.
Floor Aspect Ratio	The ratio that controls the proportions of the Floor Plate. Floor Aspect Ratio compares the shorter plan dimension of the Floor Plate to the longer plan dimension. A square Floor Plate would have an aspect ratio of 1:1.
Floor Plate	The Gross Floor Area for an individual floor level of a building.
Freestanding or Directional Signs	Signs detached from the building, and in no part supported by the building, providing identification, information, or direction to a building or group of buildings.
Gateway	A primary vehicular or pedestrian point of entry into the development project, typically at a key intersection between two or more public streets.

Gross Floor Area	The sum of the gross areas of the several floors of a building or buildings, measured from the exterior faces of exterior walls or from the centerlines of walls separating two buildings. Where columns are outside and separated from an exterior wall (curtain wall) that encloses the building space or are otherwise so arranged that the curtain wall is clearly separate from the structural members, the exterior face of the curtain wall shall be the line of measurement, and the area of the columns themselves at each floor shall also be counted. Shall include, but not be limited to, the following: • Basement and cellar space, including tenants' storage areas and all other spaces except that used only for storage or services necessary to the operation or maintenance of the building itself • Elevator shafts, stairwells, exit enclosures, and smoke-proof enclosures at each floor • Floor space in penthouses except as specifically excluded in this definition • Attic space capable of being made into habitable space • Floor space in balconies or mezzanines in the interior of the building • Floor space in open or roofed porches, arcades, or exterior balconies, if such porch, arcade, or balcony is located above the ground floor or first floor of occupancy above basement or garage and is used as the primary access to the interior space it serves • Any floor area dedicated to accessory or non-accessory parking Shall not include the following: • Mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself if located at an intermediate story of the building and forming a complete floor level • Outside stairs to the first floor of occupancy at the face of the building which the stairs serve, or fire escapes • Required off-street loading and required car-share parking • Bicycle parking • Balconies, porches, roof decks, terraces, courts, and similar features, except those used for primary access provided that: • If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the clear space is less than 15 feet in either dimension, the area shall not be excluded from Gross Floor Area unless it is fully open to the sky • If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high), or by such walls and interior lot lines, and the clear space is 15 feet or more in both dimensions: (i) The area shall be excluded from Gross Floor Area if • If, however, 70 percent or less of the perimeter of such an area is enclosed by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the open side or sides face on a yard, street or court whose dimensions satisfy the requirements.
Ground Floor	The lowest story of a building that is at or nearest to sidewalk grade other than a basement or cellar as defined in the Building Code.

Habitable Projections	A portion of the building enclosed by walls and a roof which extends beyond the property or minimum Setback line. Examples include a bay window, a corner element, or a regularly occurring façade modulation that extends through some or all floors of a building.
High Albedo	Materials that reflect sunlight and limit the amount of heat gained through those materials. High Albedo Roofing materials are chosen to reduce unwanted heating of roof surfaces.
Horizontal Shift	A horizontal change in the building façade. A horizontal change shall include at least one floor of the building façade.
Identifying Signs	Primary parcel identification signs, which may be projecting, wall-mounted, or freestanding.
Implied Façade	An Implied Façade is a Building Face that completes the apparent massing through vertical and horizontal architectural elements, such as the roof line, columns, angular shifts, or other elements, that extend to and maintain the Street Wall.
Large Building (L)	Buildings with a maximum floor plate area between [70,000] and [100,000] sq. ft.
Lot Coverage	The percentage of the lot area that is covered by building area, which includes the total horizontal area when viewed in plan.
Maker Space	Uses for contemporary forms of small-scale manufacturing, repair, and post-manufacturing activities. Maker Space should typically include a retail component, and may include several other uses within a single space, including but not limited to light industrial, office, research and development, and Neighborhood Retail Sales and Services, among many others.
Material/Color	The application of materials, color, shades, and texture for a building when used as a quality- and character-defining feature of the façade.
Maximum Plan Length	The maximum linear dimension of a building measured in plan along a building elevation parallel to the immediately adjacent public right-of-way, MBB, or Public Open Space.
Medium Building (M)	Buildings that have a maximum plan dimension greater than [150] ft. in length along any facade and have a maximum floor plate area less than [70,000] sq. ft.
Mid-Block Breaks or MBBs	A pedestrian, bicycle, and/or vehicle lane way on private property.
Mid Block Break Width	The mandatory Street Wall to Street Wall width for a MBB and associated Setback Zones.
Non-habitable Projections	A portion of the building not enclosed by walls and a roof which extends beyond the property or minimum setback line. Examples include usable balconies or outdoor decks, structural projections, screening, awnings, and fins. Or similar architectural elements.
Parking Entrance	Entries allowing vehicular access to parking areas, including Shared Parking Structures, podium parking, and/or below grade parking.
Portable Signs	Signs which are freestanding, movable, and not permanently anchored or attached to the ground.

Primary Building Entries	The main entries to a building.
Primary Façade Plane	The plane that incorporates the primary façade of a Street Fronting Elevation.
Projecting or Blade Signs	Signs attached to a building, projecting perpendicular to the mounting surface.
Projection	The horizontal distance by which the furthermost point used in measuring the area of a sign extends beyond a Street Property Line or a Building Setback Line.
Public Realm	An expansion of the pedestrian network that provides public access through private developments.
Public Realm Enhancement	An expansion of the pedestrian network that provides a continuation of public access through private developments.
Regularly Occupied Floor Area	An area where one [1] or more individuals normally spend time (more than one [1] hour per person per day on average) seated or standing as they work, study, or perform other focused activities inside a building.
Residential Private Individual Open Space	Intended for the use of individual residents within a unit and includes terraces, patios, balconies, rooftop spaces and other similar areas.
Residential Private Common Open Space	Intended to be shared by all residents/users within a building or building cluster and includes rooftop spaces, internal courtyards, gardens, pools, play areas, and other similar areas.
Rounding	For purposes of calculating a number, any fraction equal to or greater than one half (1/2) shall be rounded up to the nearest whole number and any fraction less than one half (1/2) shall be rounded down to the nearest whole number.
Roof-Mounted Equipment	Any equipment installed on the roof of a structure, such as air conditioners, compressors, condensers, conduits, pipes, vents, ducts, and sustainable systems such as solar ready equipment.
Screening	A physical visual barrier that obstructs or obscures the view of an object or objects. Screening may include shading devices, trellises, canopies, fences, landscaping, and architectural treatments.
Setback	The required horizontal distance between a building face and a property line.
Service Entrance	Entries allowing vehicular access for trucks and/or deliveries, loading, and/or access to trash rooms.
Shared Parking Structure	A stand-alone structure providing Accessory Parking to off-site, lawful, non-Accessory uses and not attached to or included within a building containing a lawful non-Accessory use.
Sign	A display used to identify a place, business, or a product.
Significant Break	A vertical change in the building façade. A vertical plane break shall be at least as wide as 10% of the longest adjoining façade length.
Skyways	Upper level connections between buildings are primarily for pedestrians, although they could also be used for small service vehicles. Skyways may be enclosed or open air.

Small Building (S)	Buildings that have maximum plan dimensions that are less than [150] ft. in length along each building face and have a maximum floor plate area less than [22,500] sq. ft.
Stepback	The distance that upper levels of a building may be inset from the primary Building Face.
Stoop	An outdoor entryway into residential units raised above the sidewalk level.
Storefront	The façade of a ground-floor Active Use space between the street grade and the ceiling of the first floor.
Story	A level or floor of a building containing a ceiling and floor. A double height or two [2] Story space references two [2] combined levels/floors of space.
Street Fronting Elevation	Building façades facing onto a public right-of-way, MBB, or public open space.
Street Wall	The aggregate effects of the façades of buildings along a property line adjacent to a street or open space. The typical context for this term is in defining the public realm and framing or engaging the street.
Temporary Sign	Construction signs, super graphics applied to construction barricades, fences, project signs, or other temporary structures providing project graphics, development names, consultant information, or residential sales information.
Terrace	A raised, flat platform associated with and usually providing egress from a [usually residential] building.
Tower (High Rise)	Building with shared corridors and vertical circulation with a height greater than [120] ft.
Transparency	The degree of visibility through a building façade; or a characteristic of clear façade materials, such as glass, that provide an unhindered visual connection between the sidewalk and internal areas of the building.
Variation	A significant change or difference in form, proportion, position, condition, quantity, level, or other compositional characteristic. Variation describes adjacent elements comprising both similar and different attributes that are recognizable as related.
Vegetated Roof Covers	A roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane.
View Corridor	A three-dimensional area extending out from a viewpoint. The width of the view corridor depends on the focus of the view. The focus of the view may be a single object, which would result in a narrow corridor, or a group of objects, such as a distinct skyline, which would result in a wide corridor.
Wall	Any building or structure wall area that is not transparent, including solid doors and mechanical area wall(s).
Wall Sign	A Sign painted directly on the Wall or mounted flat against a building wall with its copy or graphics parallel to the Wall to which it is attached and not protruding more than the thickness of the Sign.
Window Sign	A Sign painted or applied directly on the surface of a window glass or placed behind the surface of a window glass.

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FIVEPOINT

Adjaye Associates

Gensler

SAN FRANCISCO
PLANNING DEPARTMENT

Executive Summary

HEARING DATE: APRIL 26, 2018

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Date:	April 12, 2018
Case Nos.:	2007.0946GPA-02 MAP-02 CWP-02 GPR
Project:	Candlestick Point and Hunters Point Shipyard Phase 2
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Project Sponsor:	Office of Community Infrastructure and Development One South Van Ness Avenue, 5th Floor San Francisco, CA 94103
Staff Contact:	Mat Snyder – (415) 575-6891 mathew.snyder@sfgov.org

ACTIONS SCHEDULED FOR THIS HEARING

The action before you at your April 26, 2018 hearing is for the following:

1. **Approval of General Plan Amendments** in association with proposed revisions to the Candlestick Point – Hunters Point Shipyard Phase 2 ("CP HPS2") Project. The Amendments would include (1) revising the Candlestick Point Sub-Area Plan of the Bayview Hunters Point Area Plan by removing Assessor's Block 4991 / Lot 276 ("Jamestown Parcel") from the boundaries of the SubArea Plan; and (2) revising the Hunters Point Area Plan by removing mention of the previously-proposed stadium from the Plan's text and its maps and by updating the graphics to align with the proposed Shipyard redesign.
2. **Approval of Planning Code Map Amendments.** The Map Amendments would amend Planning Code Sectional Maps SU10, and HT10 by revising the boundaries of the Candlestick Point Activity Node Special Use District (SUD) and CP Height and Bulk District to remove the Jamestown Parcel.
3. Finding the **Redevelopment Plan Amendments** for the Bayview Hunters Point Redevelopment Plan and the Hunters Point Shipyard Redevelopment Plan Consistent with the General Plan and Planning Code Section 101.1.
4. **Approving Amendments to the Candlestick Point Design for Development document,**

removing the Jamestown Parcel; and the completely revised Hunters Point Shipyard Design for Development Document.

PROJECT DESCRIPTION

Original Project and Approvals

In 2010, the City and County of San Francisco (City), and the San Francisco Redevelopment Agency (now the Office of Community Investment and Infrastructure or OCII) approved the Candlestick Point – Hunters Point Shipyard Phase II Development Project ("Project"). The Project consisted of the large scale mixed-use, multi-modal development at Candlestick Point and Hunters Point Shipyard, covering approximately 702 acres along the City's southeastern waterfront, including a proposed stadium for the San Francisco 49ers. More specifically, at the time of the 2010 approval, the Project (Stadium Alternative) included the following elements:

- 10,500 residential housing units (7,850 units at Candlestick Point and 2,650 units at Hunters Point Shipyard);
- 2,500,000 sq. ft. of research and development and office uses at the Shipyard;
- Over 300 acres of new and restored open space and active recreation areas, which includes neighborhood parks within Candlestick Point and the Shipyard, new waterfront parks around the entire perimeter of the Shipyard connecting to the region's Bay Trail, and a major renovation of the Candlestick Point State Recreation Area;
- Approximately 635,000 sq. ft. of regional retail on Candlestick Point;
- Approximately 250,000 sq. ft. of neighborhood-serving retail split between the Shipyard and Candlestick Point;
- Permanent new and renovated space for the existing Shipyard artists as well as an arts education center;
- New public and community facilities on both the Shipyard and Candlestick Point;
- A marina on the Shipyard.
- A stadium at the Shipyard for the San Francisco 49ers.

The Original Approvals included several alternative development scenarios in case a stadium was not constructed; one scenario among other aspects, allowed up to 5,000,000 sq. ft. of research and development / office use at the Shipyard.

The Jamestown Parcel was included as part of the Candlestick Point component of the Project, though it was owned by a private entity not associated with CP Development Co., LLC ("Developer").

Entitlement Structure

The CP HPS2 Project Area is within two Redevelopment Project Areas, which in turn, are governed by two Redevelopment Plans: Candlestick Point is designated as "Zone 1" under the Bayview Hunters Point Redevelopment Plan, and Hunters Point Shipyard is governed under the Hunters Point Shipyard

Redevelopment Plan. As Redevelopment Project Areas, OCII has land use and development approval jurisdiction.

The original approvals included the following among other approvals:

- A Disposition and Development Agreement (DDA) between the City, OCII, and FivePoint (previously Lennar Urban) (Developer) establishing development rights by the Developer stipulated on conditions set therein;
- HPS Redevelopment Plan Amendments;
- BVHP Redevelopment Plan Amendments, designating Candlestick Point as "Zone 1", indicating OCII would retain land use and entitlement jurisdiction;
- Creation of the Hunters Point Shipyard Area Plan and the Candlestick Point Sub-Area Plan to align with the Redevelopment Plans amendments;
- Creation of the Candlestick Activity Node SUD and the Hunters Point Shipyard SUD and the CP and HPS Height and Bulk District to refer land use controls to the respective Redevelopment Plans;
- Creation of Design for Development documents for both Candlestick and the Shipyard to provide specific development controls for the two Project Areas.

The Planning Commission's role in the ongoing implementation of the CP HPS II Project includes approving any future requested amendments to General Plan, Planning Code, Redevelopment Plans and D4Ds. In addition, through the Cooperative Agreement between the Planning Department and OCII, Planning staff is consulted on design review for Major Phase applications and schematic design review of buildings.

Modified Project

The Developer is currently pursuing changes to the CP HPS2 Project ("Modified Project"). The major components of these changes include, but are not limited to:

- Allowing up to 4,265,000 sq. ft. of research and development / office use at the Shipyard (note: the Original Project included ,the FEIR analyzed, and the HPS Redevelopment Plan authorized, the potential of up to 5,000,000 sq. ft. of R&D / office as an Non-Stadium Variant);
- Redistribution of the development of residential units between the Shipyard and Candlestick as follows:
    - Approximately 7,218 units at Candlestick
    - Approximately 3,454 units at the Shipyard

  (note: Original Project included and the FEIR analyzed up to 10,500 units altogether; the additional 172 units now proposed is equal to the number of units no longer being pursued in the Hunters Point Shipyard Phase 1 Project; those units are proposed to be developed to Phase 2 of the Shipyard).
- Addition of 410,000 sq. ft. of institutional use (proposal includes potential sites for an elementary school(s), middle school(s), and/or high school(s) ;
- Addition of green infrastructure including:
    - Geothermal heating and cooling;
    - Utility and building-scale battery storage system;
    - Centralized recycled water facility at the Shipyard that could serve entire development
- Addition of 276,000 sq. ft. of retail and "maker space" (i.e. small-scale production uses) at the Shipyard;
- Addition of a hotel at the Shipyard;

- Removal of the Jamestown Parcel from the Candlestick portion of the development;
- Establishment of a substantially re-envisioned urban design framework for the Shipyard as further described below;
- Enabling the ability to transfer up to 118,500 gsf of nonresidential use from HPS2 to CP, and to convert nonresidential uses within each respective area, subject to further review and analysis.

As such, the following amendments to the original entitlements approved by the Planning Commission are required:

- Amendments to the BVHP Redevelopment Plan removing the Jamestown Parcel from Zone 1 and designating it as part of Zone 2, thereby placing it in the Planning Department's jurisdiction wholly subject to the Planning Code and Zoning Maps;
- Amendments to the Candlestick Point Activity Node SUD and CP Height and Bulk District by removing the Jamestown Parcel;
- Amendments to the Candlestick Point Sub-Area Plan by removing the Jamestown Parcel from the Area Plan boundaries;
- Amendments to the HPS Redevelopment Plan, the HPS Design for Development, and the HPS Area Plan to reflect the removal of the stadium and the new urban design framework described below. Preparation of a new Hunters Point Shipyard D4D, implementing Master Developer's new vision for the site.

The Bayview Hunters Point Redevelopment Project Area and the Jamestown Parcel

As noted above, the Original Approvals included amendments to the BVHP Redevelopment Plan. A key aspect to these amendments divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that the Office of Community Investment and Infrastructure would retain jurisdiction over land use and would be the approval body for development approvals pursuant to State Redevelopment law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a Delegation Agreement established between the Planning Department and OCII when the BVHP Redevelopment Project Area was created in 2006.

Zone 1 currently includes the property once occupied by the Candlestick Stadium, its parking lots, the Candlestick Point State Recreational Area, the Alice Griffith Housing Authority site, several private parcels that are generally surrounded by the stadium site and the SFSRA, and the Jamestown Parcel, which is located on Jamestown Avenue above the stadium site.

As part of the Original Approvals, a Sub-Area Plan under the BVHP Area Plan of the General Plan was created for Candlestick Point (the Candlestick Point Subarea Plan) to specifically align provisions for Zone 1 of the BVHP Redevelopment Plan with the General Plan. Similarly, the Candlestick Point Activity Node SUD and the CP Height and Bulk District were created under the Planning Code to refer all land use and development regulations to the BVHP Redevelopment Plan for Zone 1. Consistent with the BVHP Redevelopment Plan, the boundaries of the Candlestick Point SubArea Plan, the Candlestick Point Activity Node SUD, and the CP Height and Bulk District include the Jamestown Parcel.

Proposed revisions to the BVHP Redevelopment Plan, the CP Sub-Area Plan, the CP Activity Node SUD, the CP Height and Bulk District and the CP Design for Development ("D4D") document entail removing the Jamestown Parcel from the boundaries of Zone 1 and associated plans and districts.

The Hunters Point Shipyard Redevelopment Project Area and Proposed Project Refinements

Also as part of the 2010 Approvals, an Area Plan under the General Plan was created for Hunters Point Shipyard to specifically align the Hunters Point Shipyard Redevelopment Plan with the General Plan. Similarly, the Hunters Point Shipyard SUD and HPS Height and Bulk District were created to specifically refer all land use and development regulations to the HPS Redevelopment Plan. Consistent with the HPS Redevelopment Plan, the HPS Area Plan anticipated the construction of a stadium as one of several development scenarios.

Subsequent to the 2010 Approvals, a new stadium for the 49ers was constructed in Santa Clara, removing the need to accommodate a stadium within the Shipyard portion of the CP HPS II Project. Also, subsequent to the 2010 Approvals, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office development within the CP HPS II Project area would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325.

Perhaps most significantly, the Developer engaged Architect Sir David Adjaye to help re-envision the Shipyard. The proposed re-envisioned Shipyard now includes, but is not limited to the following: (1) a new 8.1-acre central park ("The Green Room") and a strengthened open space around Dry Dock 4 ("The Water Room"); (2) a revised street grid in the Warehouse District (formerly HPS South) that uses the existing Shipyard street grid as a template for the new street grid; (3) other reconfiguration of the open space including the widening of the North Shoreline open space by one block, and the reconfiguration of the sports complex by consolidating it into a more compact and efficient area; (4) revising and strengthening the bicycle network by providing more separated bike paths removed from Crisp Avenue, the site's major thoroughfare; (5) revising the heights throughout by increasing in some areas and decreasing in others but assuring the retention of key views particularly from the Phase 1 Hillside Park and (6) revising the locations of the proposed towers (while maintaining their heights).

Revised HPS2 Design for Development

To implement the new vision, the HPS D4D has been completely revised. Gensler was retained by the Developer to work with both OCII and Planning staff to assure the revised document not only implements the Shipyard's new vision, but improves on the existing document in terms of clarity and usability. Design controls regarding setbacks, build-to lines, lot coverage, frontage activation, and relationship of the building frontages to the public right-of-way are addressed in the Revised D4D as they were in the previously approved D4D. However, unlike the previously approved D4D, the Revised D4D provides additional architectural controls that relate to a building's potential size, requiring additional interventions for larger buildings.

The revised D4D also provides more controls for above-grade parking garages to assure sufficient activation and to assure that the garages can be potentially converted to other uses if less parking is found to be needed in the future. The revised D4D also provides incentives (but not requirements) to retain not only buildings identified as historic resources, but four other Navy structures that celebrate the Shipyard's history and context.

HPS Redevelopment Plan Amendments

The Hunters Point Shipyard Redevelopment Plan proposed amendments include revising the maps to reflect the new vision, making minor changes to the land use section, including allowing hotel use in the

Wharf District, and allowing school uses more broadly across the site. Revisions to the Redevelopment Plan also clarify that certain green infrastructure is permitted and encouraged. Finally the revisions include adjustments to the development square footage caps to reflect the Modified Project as described above.

ENVIRONMENTAL REVIEW

The Planning Commission, the Redevelopment Commission and the Board of Supervisors certified the Final Environmental Impact Report in 2010. OCII, in collaboration with the Planning Department published several addenda to the FEIR, including Addendum No. 5, which analyzes the changes to the Project described here. OCII has concluded the Project Refinements will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effects that would alter the conclusions reached in the FEIR The Commission on Community Investment and Infrastructure is scheduled to take action on the Addendum at their April 17, 2018 meeting ahead of the Commission's April 26, 2018 meeting.

HEARING NOTIFICATION AND PUBLIC COMMENT

Below is a summary of the completed notifications of this hearing required under the Planning Code.

TYPE	REQUIRED PERIOD	REQUIREDNOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Classified News Ad	20 days	4/6/18	4/4/18	22 days
Posted Notice	[not required]			
Mailed Notice	20 days	4/6/18	4/6/18	20 days

BASIS FOR RECOMMENDATION

1. The Modified Project and all Commission actions thereto would enable development that would eliminate blight at Candlestick Point and Hunters Point Shipyard by updating the respective Redevelopment Plans to facilitate mixed-use development
2. The Modified Project and all Commission actions thereto enable vibrant high-density, mixed-use, multi-modal and transit oriented development as a means to fully realize its shoreline location and to help revitalize the Bayview.
3. The Modified Project and all Commission actions thereto support development that could provide a wide range of employment opportunities in a wide range of fields and employment levels. Development enabled by the amendments could support thousands of new permanent jobs at full build out and thousands of ongoing construction job opportunities throughout the buildout of the Project. By removing the stadium as a development scenario, additional land is made available for job creating uses.
4. The Modified Project and all Commission actions thereto promote, the possibility of new

emerging industries including green technology through the provision of a major new site and space for office and related uses. By removing the stadium as a development scenario, additional land is made available for these types of uses.

5. The Modified Project and all Commission actions thereto would strengthen the economic base of the Project Area and the City as a whole by strengthening retail and other commercial functions in the Project Areas and local community through the addition of more space for research and development, retail and community-facility uses. By removing the stadium as a development scenario, additional land is made available for these types of uses.
6. The Modified Project and all Commission actions thereto would enable development that would include substantial new housing opportunities, including a substantial amount of below market rate housing including the replacement of the Alice Griffith Public Housing development. By removing the Jamestown Parcel from Zone 1 of the BVHP Redevelopment Area, the Jamestown Parcel can be further developed beyond the limits of the BVHP Redevelopment Plan. By removing the stadium as a potential development scenario, additional land is made available to allow housing to be distributed more evenly across CP and HPS.

RECOMMENDATION:

1. Approval on All Actions

Attachments:

1. **Draft Planning Commission Resolution Amending the General Plan**
   Exhibit A: Draft Ordinance Amending the General Plan
   Attachment 1: Proposed Text Changes
   Attachment 2: Proposed Map Changes

2. **Draft Planning Commission Resolution Amending the Planning Code Maps**
   Exhibit A: Draft Ordinance Amending the Planning Code Maps
   Attachment 1: Map of Proposed Changes

3. **Draft Planning Commission Resolution Finding the Amendments to the Redevelopment Plans consistent with the General Plan**
   Exhibit A: Draft Amended BVHP Redevelopment
   Exhibit B: Draft Amended HPS Redevelopment Plan

4. **Draft Planning Commission Motion Approving Amendments to the CP D4D and the HPS D4D**
   Exhibit A: Draft Revised Hunters Point Shipyard Phase 2 D4D

5. **Addendum 5 to the CP HPS2 2010 FEIR**

6. **Master General Plan Findings**

Redsign\Legislation\CP HPS - Amendments Approvals - Ex Summary.docx

SAN FRANCISCO
PLANNING DEPARTMENT

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Planning Commission Resolution No.

HEARING DATE: APRIL 26, 2018

Date:	April 11, 2018
Case Nos.:	2007.0946GPA-02 PCM-02
Project:	Candlestick Point and Hunters Point Shipyard Phase2
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard Phase 2 SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Recommendation:	**Approval**

ADOPTING A RESOLUTION TO APPROVE AMENDMENTS TO THE CANDLESTICK POINT SUB-AREA PLAN OF THE BAYVIEW HUNTERS POINT AREA PLAN, THE HUNTERS POINT SHIPYARD AREA PLAN, AND AMENDMENTS TO MAPS THROUGHOUT THE GENERAL PLAN TO CONFORM TO THE SUBJECT CANDLESTICK SUB-AREA PLAN AMENDMENTS.

WHEREAS, Section 4.105 of the Charter of the City and County of San Francisco provides to the Planning Commission the opportunity to periodically recommend General Plan Amendments to the Board of Supervisors; and

The Planning Department is proposing edits to the Candlestick Sub-Area Plan of the Bayview Hunters Point Area Plan, and the Hunters Point Area Plan to accommodate proposed changes to the Candlestick Point Hunters Point Shipyard Phase 2 Development Project ("CP HPS2 Project" or "Project").

The proposed amendments to the Candlestick Point Sub-Area Plan and the Hunters Point Area Plan will facilitate the development of the Hunters Point Shipyard ("HPS") and Candlestick Point ("CP"), as envisioned in the HPS Redevelopment Plan, and the Bayview Hunters Point ("BVHP") Redevelopment Plan.

A primary objective of both the HPS Redevelopment Plan and the BVHP Redevelopment Plan is to create economic development, affordable housing, public parks and open space and other community benefits by development of the under-used lands within the two Redevelopment Plan project areas. In 2010, the City approved combining the planning and redevelopment of these two areas provides a more

cohesive overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and improves opportunities to finance the development of affordable housing and the public infrastructure necessary to expedite the revitalization of both areas. .

Approval actions in 2010 ("Original Approvals") included, but were not limited to, General Plan amendments including the creation of the CP Sub-Area Plan and the HPS Area Plan, Planning Code amendments creating the CP Activity Node Special Use District ("SUD") and the HPS Phase 2 SUD, amendments to the BVHP Redevelopment Plan and the HPS Redevelopment Plan and the adoption of Design for Development documents for both CP and HPS Phase 2.

More specifically, the Original Approvals included amendments to the BVHP Redevelopment Plan that divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that the Office of Community Investment and Infrastructure ("OCII") (previously the San Francisco Redevelopment Agency) would retain jurisdiction over land use and would be the approval body for development approvals pursuant to State Redevelopment law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a Delegation Agreement between the Planning Department and OCII.

Zone 1 includes the property once occupied by the Candlestick Stadium, its parking lot, the Candlestick Point State Recreational Area (CPSRA), the Alice Griffith Housing Authority site, several private parcels that are generally surrounded by the stadium site and the CPSRA, and Assessor's Lot 276 of Block 4991, which is located on Jamestown Avenue above the stadium site ("Jamestown Parcel").

The Original Approvals anticipated the potential construction of a new stadium at Hunters Point Shipyard for the San Francisco 49ers, as one of several potential development scenarios.

As a part of the Original Approvals, OCII and the City and County of San Francisco, entered into a Disposition and Development Agreement ("DDA") with FivePoint (previously, Lennar Urban) ("Developer") entitling the Developer to implement the Project pursuant to the provisions therein.

As part of the Original Approvals, an Area Plan under the General Plan was created for HPS to specifically align the HPS Redevelopment Plan with the General Plan. Similarly, the HPS Phse 2 SUD and HP Height and Bulk District were created to specifically refer all land use and development regulations to the HPS Redevelopment Plan. Consistent with the HPS Redevelopment Plan, the HPS Area Plan anticipated the construction of a stadium as one of several development scenarios.

As part of the Original Approvals, a Sub-Area Plan under the BVHP Area Plan of the General Plan was created for Candlestick Point (the Candlestick Point Sub-Area Plan) to specifically align provisions for Zone 1 of the BVHP Redevelopment Plan with the General Plan. Similarly, the Candlestick Point Activity Node SUD and the CP Height and Bulk District were created under the Planning Code to refer all land use and development regulations to the BVHP Redevelopment Plan for Zone 1. Consistent with the BVHP Redevelopment Plan, the boundaries of the Candlestick Point Sub-Area Plan, the Candlestick Point Activity Node SUD, and the CP Height and Bulk District include the Jamestown Parcel.

Subsequent to the Original Approvals, a new stadium for the 49ers was constructed in Santa Clara, removing the need to accommodate a stadium as a part of the Project.

Subsequent to the Original Approvals, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office

development would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325.

As a result of these circumstantial changes, the Developer and OCII are pursuing refinements to the Project ("Project Refinements"). As a part of the Project Refinements, the BVHP Redevelopment Plan is proposed to be amended to remove the Jamestown Parcel from Zone 1 to clarify that it is not a part of the Project being implemented by the Developer under the DDA. Similarly, as a part of the Project Refinements, the HPS Redevelopment Plan is proposed to be amended by removing description of a stadium and updating the text descriptions and graphic representations of the Project, among other changes.

This General Plan amendment would (1) amend the HPS Area Plan by removing discussion of the previously proposed stadium from the text; (2) amend the Hunters Point Area Plan Maps 2, "Context: Bayview Hunters Point Area Plan Area", Map 3, "Land Use", Map 4, "Extended Grid", Map 6, "Bay Trail and Bicycle Network", Map 7, "Pedestrian Circulation Network", and Map 8, "Open Space Network" by removing indications of the previously proposed stadium and conforming the block and street pattern to amended maps in the HPS Redevelopment Plan; (2) amend the CP Sub-Area Plan by removing the Jamestown Parcel from the boundaries of the Plan as shown in all of the Sub-Area Plan's Maps; (3) and making conforming changes regarding the revised boundaries to the CP Sub-Area Plan to all other maps in the General Plan.

The San Francisco Redevelopment Agency ("Redevelopment Agency"), together with the San Francisco Planning Commission of the City and County of San Francisco ("Planning Commission") acting as lead agencies under the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.), certified a Final Environmental Impact Report (hereinafter "FEIR") for the Candlestick Park-Hunters Point Shipyard Phase II Project ("Project") on June 3, 2010 by Motion No. 18096 and Resolution No. 58-2010, respectively. On July 14, 2010, the San Francisco Board of Supervisors affirmed the Planning Commission's certification of the FEIR (Motion No. M10-110). The FEIR analyzed a mixed used development, including a stadium use at the Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

On June 3, 2010, the Redevelopment Agency, by Resolution No. 59-2010 adopted findings pursuant to the California Environmental Quality Act, including a Mitigation Monitoring and Reporting Program ("MMRP") and a Statement of Overriding Considerations for the Project, and took various actions to approve the Project. On the same day, by Motion No. 18097 the Planning Commission also adopted findings pursuant to CEQA ("CEQA Findings") and took various approval actions related to the Project.

Since the certification of the FEIR the Planning Department, working with the Office of Community Investment and Infrastructure ("OCII", the successor agency to the San Francisco Redevelopment Agency), has issued several addenda to the FEIR to address project changes. The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to modifications to the Project (the "Modified Project") will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effect that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the

findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1, Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are available under Case No. 2007.0946E, and are incorporated herein by reference as though fully set forth.

The Planning Commission has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Motion No. 18097, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures.

A draft ordinance, **attached hereto as Exhibit A**, would amend the Candlestick Point Sub-Area Plan of the Bayview Hunters Point Area Plan, the Hunters Point Area Plan and amend maps throughout the General Plan to conform to the revised boundaries of the Candlestick Point Sub-Area Plan.

NOW THEREFORE BE It RESOLVED, That the Planning Commission finds that the actions contemplated by this Resolution are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Planning Commission hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. . Additionally, the Planning Commission approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

AND BE IT FURTHER RESOLVED, That the Planning Commission hereby finds that the General Plan amendments promote the public welfare, convenience and necessity for the following reasons:

1. The Project would continue to enable development that would eliminate blight in the Hunters Point Shipyard Redevelopment Project Area and Zone 1 (Candlestick Point) of the Bayview Hunters Point Redevelopment Project Area.
2. The General Plan amendments would provide clarity to the Candlestick Point Sub-Area Plan by removing the Jamestown Parcel and to the Hunters Point Shipyard Area Plan by removing discussion of the previously proposed stadium; the Area Plans would continue to set out

objectives and policies that promote vibrant high-density, mixed-use, multi-modal and transit oriented development as a means to fully realize its shoreline location and to help revitalize the Bayview.

3. The General Plan amendments would provide clarity to the two respective Area Plans, which in turn, would continue to support development that could provide a wide range of employment opportunities in wide range of fields and employment levels. By removing the stadium as a possible development scenario from HPS, additional land would be made available for these employment opportunities.

4. The two Area Plans would continue to promote, the possibility of new emerging industries including green technology through the provision of a major new site and space for adjacent office and related uses. By removing the stadium as a possible development scenario from HPS, additional land would be made available for these new industries.

5. The Area Plans with the amendments would continue to enable new development that would strengthen the economic base of the Project Area and the City as a whole; retail and other commercial functions in the Project Area would be strengthened through the ability to provide more space for research and development/office use, retail, and community-facility uses.

6. Development enabled by the Area Plans will continue to include the opportunity for substantial new and restored publicly accessible open space.

7. The General Plan amendments would enable development that would include substantial new housing opportunities, including a substantial amount of below market rate housing including the replacement of the Alice Griffith Public Housing development. By removing the Jamestown Parcel from the CP Sub-Area Plan, the Jamestown Parcel could develop with additional housing beyond what is planned for within the Project. By removing the stadium as a possible development scenario from HPS, additional land can be freed up for additional housing at HPS through a move even distribution between CP and HPS.

AND BE IT FURTHER RESOLVED, That the Planning Commission finds the General Plan amendments are in general conformity with the General Plan, and Planning Code section 101.1(b). On May 3, 2010, by Motion No. 18099, the Planning Commission adopted "Master General Plan and Planning Code Section 101.1 Finding" ("Original General Plan Findings") establishing that on balance, the Project under the Original Approvals consistent with the General Plan and Planning Code Section 101.1.

The Planning Commission finds that in light of the changes to the Project, including the subject General Plan Amendments, the Original General Plan Findings are still relevant and can be applied to the Project with the Project Refinements; therefore the Project with the Project Refinements, including the subject Amendments are, on balance, consistent with the General Plan and Planning Code Section 101.1. The findings attached to Resolution No. 18099 as Exhibit A, are hereby incorporated herein by this reference as if fully set forth.

AND BE IT FURTHER RESOLVED, That pursuant to Planning Code Section 340, the Planning Commission recommends to the Board of Supervisors **approval** the General Plan amendments.

I hereby certify that the foregoing Resolution was ADOPTED by the San Francisco Planning Commission on April 26, 2018.

Jonas P. Ionin

Commission Secretary

AYES:

NOES:

ABSENT:

FILE NO. ORDINANCE NO.

[General Plan Amendments – Candlestick Point and Hunters Point Shipyard Phase 2 Project.]

Ordinance amending the General Plan in connection with revisions to the Candlestick Point and Hunters Point Shipyard Phase 2 Project in order to facilitate redevelopment; adopting findings under the California Environmental Quality Act; making findings of consistency with the General Plan and eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience and welfare under Planning Code, Section 340.

NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
Additions to Codes are in *single-underline italics Times New Roman font*.
Deletions to Codes are in ~~*strikethrough italics Times New Roman font*~~.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~strikethrough Arial font~~.
Asterisks (* * * *) indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. The Board of Supervisors of the City and County of San Francisco hereby finds and determines that:

(a) The proposed amendments to the Candlestick Point Subarea Plan and the Hunters Point Shipyard Area Plan will facilitate the development of the Hunters Point Shipyard ("HPS") and Candlestick Point ("CP"), as envisioned in the HPS Redevelopment Plan, and the Bayview Hunters Point ("BVHP") Redevelopment Plan.

(b) A primary objective of both the HPS Redevelopment Plan and the BVHP Redevelopment Plan is to create economic development, affordable housing, public parks and open space and other community benefits by development of the under-used lands within the two Redevelopment Plan project areas. In 2010, the San Francisco Redevelopment Agency

(now the Successor Agency to the Redevelopment Agency of the City and County of San Francisco, commonly referred to as the Office of Community Investment and Infrastructure ("OCII") or the "Successor Agency",) and the City approved the Candlestick Point-Hunters Point Shipyard Phase 2 Project ("CP-HPS2 Project" or "Project"), which combined development in the HPS Redevelopment Plan area and the Candlestick Point portion of the BVHP Redevelopment Plan area into a cohesive overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and improved opportunities to finance the development of affordable housing and the public infrastructure necessary to expedite the revitalization of both areas. Approval actions in 2010 ("Original Approvals") included General Plan amendments creating the Candlestick Point ("CP") Subarea Plan and the Hunters Point Shipyard ("HPS") Area Plan, Planning Code amendments creating the Candlestick Point Activity Node Special Use District ("SUD") and the Hunters Point Shipyard Phase 2 SUD, amendments to the BVHP Redevelopment Plan and the HPS Redevelopment Plan, the adoption of Design for Development documents for both Candlestick and Hunters Point Shipyard, and various other approvals.

(c) More specifically, the Original Approvals included amendments to the BVHP Redevelopment Plan that divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that OCII would retain jurisdiction over land use and would be the approval body for development approvals pursuant to California Redevelopment Law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a delegation agreement between the Planning Department and OCII.

(d) Zone 1 includes the property once occupied by the Candlestick Stadium, its parking lot, the Candlestick Point State Recreational Area ("CPSRA"), the Alice Griffith

Housing Authority site, several private parcels that are generally surrounded by the stadium site and the CPSRA, and Assessor's Lot 276 of Block 4991, which is located on Jamestown Avenue above the stadium site ("Jamestown Parcel").

(e) The Original Approvals anticipated the potential construction of a new stadium at Hunters Point Shipyard for the San Francisco 49ers, as one of several potential development scenarios.

(f) As a part of the Original Approvals, the Successor Agency and CP Development Company, LLC ("Developer") entered into a Disposition and Development Agreement ("DDA") entitling the Developer to implement the Project pursuant to the provisions therein.

(g) As part of the Original Approvals, the City approved the HPS Area Plan under the General Plan for Hunters Point Shipyard specifically to align the Hunters Point Shipyard Redevelopment Plan with the General Plan. Similarly, the City approved the Hunters Point Shipyard Phase 2 SUD and HP Height and Bulk District specifically to refer all land use and development regulations to the HPS Redevelopment Plan. Consistent with the HPS Redevelopment Plan, the HPS Area Plan anticipated the construction of a stadium as one of several development scenarios.

(h) As part of the Original Approvals, the City approved the CP Subarea Plan under the BVHP Area Plan of the General Plan specifically to align provisions for Zone 1 of the BVHP Redevelopment Plan with the General Plan. Similarly, the City approved the Candlestick Point Activity Node SUD and the CP Height and Bulk District to refer all land use and development regulations to the BVHP Redevelopment Plan for Zone 1. Consistent with the BVHP Redevelopment Plan, the boundaries of the CP Subarea Plan, the Candlestick Point Activity Node SUD, and the CP Height and Bulk District include the Jamestown Parcel.

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(i) Subsequent to the Original Approvals, the San Francisco 49ers constructed a new stadium in Santa Clara, removing the need for the Project to accommodate a stadium.

(j) In 2016, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office development would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325. In 2017, the City approved amendments to the HPS Redevelopment Plan and the BVHP Redevelopment Plan to reflect a proposition approved by the voters.

(k) The Developer and OCII are now pursuing refinements to the Project ("2018 Modified Project Variant" or "Modified Project") to facilitate the redevelopment of the area. As a part of the Modified Project, OCII is proposing to amend the BVHP Redevelopment Plan to remove the Jamestown Parcel from Zone 1 to clarify that it is not a part of the Project being implemented by the Developer under the DDA. Similarly, as a part of the Modified Project, OCII is proposing to amend the HPS Redevelopment Plan by removing accommodation of a stadium, among other changes.

(l) California Environmental Quality Act.

(1) On July 13, 2010, the Board of Supervisors approved Motion No. 10-0110, affirming the Planning Commission's certification of the final environmental impact report ("FEIR") for the CP-HPS Phase 2 Project ("Project") in compliance with the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.).. A copy of said Motion is on file with the Clerk of the Board of Supervisors in File No. 100862 and available on the Board's website, and is incorporated herein by reference as though fully set forth. The FEIR analyzed a mixed used development, including a stadium use at the Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

(2) In accordance with the actions contemplated in 2010, this Board adopted Resolution No.347-10 concerning findings pursuant to CEQA, including a statement of overriding considerations and a mitigation monitoring and reporting program ("CEQA Findings"). Copies of said Resolution and supporting materials are in the Clerk of the Board of Supervisors File No. 100572 and available on the Board's website, and the Resolution and supporting materials are incorporated herein by reference as though fully set forth.

(3) The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to the Modified Project will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effects that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

(4) On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1, Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

(5) As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects

minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and are incorporated herein by reference as though fully set forth.

(6) The Board has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Resolution No. 0347-10, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures. The Board finds that the actions contemplated by this ordinance are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Board hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. . Additionally, the Board approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

(m) Planning Code Findings.

(1) Under San Francisco Charter, Section 4.105 and Planning Code Section 340, any amendments to the General Plan shall first be considered by the Planning Commission and thereafter recommended for approval or rejection by the Board of Supervisors. On _____, 2018, the Planning Commission conducted a duly noticed public hearing on the General Plan amendments pursuant to Planning Code, Section 340, and

by Resolution _____, found that the public necessity, convenience and general welfare required the proposed General Plan amendments, adopted the General Plan amendments, and recommended them for approval to the Board of Supervisors. A copy of the Planning Commission Resolution No. _____, is on file with the Clerk of the Board of Supervisors in File No. _____, and incorporated by reference herein.

(2) On _____, 2018, the Planning Commission, in Resolution No. _____, adopted findings that the actions contemplated in this ordinance are consistent, on balance, with the City's General Plan, as amended, and eight priority policies of Planning Code, Section 101.1. The Board adopts these findings as its own. A copy of said Resolution is on file with the Clerk of the Board of Supervisors in File No. _____, and incorporated by reference herein.

Section 2. The General Plan is hereby amended by revising the CP Subarea Plan boundaries on each of the following CP Subarea Plan maps by removing the Jamestown Parcel from the CP Subarea Plan area:

Map 1 – Candlestick Point Subarea Plan Area.

Map 2 – Context: Bayview Hunters Point Area Plan Area.

Map 3 –Land Use.

Map 4 – Block Pattern: Extended Grid.

Map 5 – Major Transit.

Map 6 – Bay Trail and Bicycle Network.

Map 7 – Pedestrian Circulation Network.

Map 8 – Open Space Network.

Section 3. The General Plan is hereby amended by revising the BVHP Area Plan of the General Plan by revising the maps throughout the General Plan that include references to

the CP Subarea Plan by changing the boundaries of the CP Subarea Plan to match the revised boundaries that remove the Jamestown Parcel from the CP Subarea Plan.

Section 4. The General Plan is hereby amended by amending the HPS Area Plan to remove discussion of the previously planned stadium and to amend the maps to indicate the revised block pattern without the stadium. The full text of the HPS Area Plan with the additions and deletions is shown in Exhibit A to this ordinance, which is on file with the Clerk of the Board of Supervisors in File No. _____. The HPS Area Plan maps that are amended are as follows:

Map 2 – Context: Bayview Hunters Point Area Plan Area.

Map 3 – Land Use.

Map 4 – Block Pattern: Extended Grid.

Map 6 – Bay Trail and Bicycle Network.

Map 7 – Pedestrian Circulation Network.

Map 8 – Open Space Network.

Section 5. Effective and Operative Dates.

(a) This ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

(b) This ordinance shall become operative on, and no rights or duties are affected until the date that the ordinances approving amendments to the Bayview Hunters Point Redevelopment Plan and amendments to the Hunters Point Shipyard Redevelopment Plan both have become effective. Copies of said Ordinances are on file with the Clerk of the Board of Supervisors in File Nos. _____ and _____.

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Section 6. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors intends to amend only those words, phrases, paragraphs, subsections, sections, articles, numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal Code that are explicitly shown in this ordinance as additions, deletions, Board amendment additions, and Board amendment deletions in accordance with the "Note" that appears under the official title of the ordinance.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: 
Elaine C. Warren
Deputy City Attorney
n:\legana\as2018\1800496\01266264.docx

EXHIBIT A to HUNTERS POINT SHIPYARD AREA PLAN AMENDMENTS
PROPOSED EDITS TO THE HUNTERS POINT SHIPYARD AREA PLAN

INTRODUCTION AND PURPOSE

Hunters Point Shipyard is located in the southeast corner of San Francisco, approximately 1.3 miles northeast of the City and County line and approximately six miles south of Downtown. The shipyard itself is comprised of a largely flat 493 acre landfill peninsula. It is surrounding on three sides by water and is bordered on its land side be Hunters Point Hill.

The Hunters Point Shipyard served as a working naval shipyard between1941 and 1974. The closing of the Shipyard was a major blow to the Bayview; about 5,100 jobs were suddenly lost – an event from which the Bayview Hunters Point community hasn't fully recovered. The United States Navy ceased operations at the Shipyard in 1974 and officially closed the base in 1988. The Shipyard was then included on the Department of Defense's 1991 Base Realignment and Closure (BRAC) list.

Planning for the Shipyard's redevelopment has been a long and complex process. In 1993, following designation of the Shipyard by the City's Board of Supervisors as a redevelopment survey area, the City and the Agency began a community process to create a plan for the economic reuse of the Shipyard and the remediation and conveyance of the property by the Navy. In 1997, after several years of community planning, the City and the Redevelopment Agency adopted the Hunters Point Shipyard Redevelopment Plan (Shipyard Redevelopment Plan) for the Shipyard and a Citizens Advisory Committee (CAC) was subsequently appointed. The CAC has been instrumental in guiding development at the Shipyard. One of the first actions they took was to establish general planning principles for the Shipyard which were developed through a number of public workshops and meetings. These principles have been incorporated into the goals and objectives outlined in this Area plan.

In March 2004, the Agency, in cooperation with the City, negotiated a comprehensive agreement with the Navy governing the terms and conditions of the hazardous materials remediation and conveyance of the Shipyard by the Navy to the Agency (the "Conveyance Agreement"). The Conveyance Agreement obligates the Navy to remediate hazardous materials on the Shipyard to levels consistent with the land uses designated in the original redevelopment plans for the Shipyard Redevelopment Plan as adopted in 1997 and to convey parcels to the Agency at no cost on a phased basis as the Navy successfully completes the remediation.

In 2003, the Agency entered into the Hunters Point Shipyard Phase 1 Disposition and Development Agreement ("Phase 1 DDA") with Lennar/BVHP Partners for the development of Parcel A on the Shipyard, which included the construction of infrastructure for up to 1,600 residential units, of which approximately 30% must be affordable and approximately 25 acres of public parks and open space. Parcel A was conveyed to the Agency by the Navy in 2005 and the Agency then closed escrow on its transfer of a portion of Parcel A to the Shipyard Developer under the terms of the Phase 1 DDA. A Design for Development document was also adopted. This development is currently underway and is widely referred to as Hunters Point Shipyard Phase I.

In May 2007, the Board of Supervisors adopted and the Mayor approved a resolution endorsing a Conceptual Framework for the integrated development of Candlestick Point and the remainders of the Shipyard – also known as Phase 2 (the "Conceptual Framework"). Combining the planning and redevelopment of these two project areas provides a more coherent overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and provides better ways to increase efficiencies to finance the development of affordable housing and the public infrastructure necessary to expedite the revitalization of both

areas. The Conceptual Framework, envisioned a major mixed-use project, including hundreds of acres of new waterfront parks and open space, thousands of new units of housing, a robust affordable housing program, extensive job-generating retail and research and development space, permanent space for the artist colony that exists in the Shipyard and a site for a potential new stadium for the 49ers on the Shipyard.

In June 2008, San Francisco voters approved Proposition G, an initiative petition measure named The Bayview Jobs, Parks, and Housing Initiative, regarding plans to revitalize Phase 2 of the Shipyard and Candlestick Point. Proposition G: (i) adopted overarching policies for the revitalization of the Project site; (ii) authorized the conveyance of the City's land in Candlestick Point currently under the jurisdiction of the Recreation and Park Department, for development in furtherance of the Project, provided that there is a binding commitment to replace the transferred property with other property of at least the same acreage that will be improved and dedicated as public parks or open space in the Project ; (iii) repealed Proposition D and Proposition F relating to prior plans for the development of a new stadium and retail entertainment project on Candlestick Point; and (iv) urged the City, the Agency and all other governmental agencies with jurisdiction to proceed expeditiously with the Project.

The purpose of this Area Plan is to outline broad General Plan objectives and policies to meet both the Bayview community's desire to redevelop the Shipyard and Candlestick Point in accordance with the project envisioned in the Conceptual Framework and Proposition G. Maps and figures provided here, as well as within the Bayview Hunters Point Redevelopment Plan, shall serve as the General Plan maps for the Hunters Point Shipyard area.

EXISTING CONDITIONS

As described above, Hunters Point Shipyard is largely comprised of a landfill peninsula of approximately 490 acres and five miles of shoreline. The historic geography of the area has changed dramatically: Hunters Point Hill originally stretched ½ mile into the Bay, meeting the waters edge with steep banks. The Shipyard today was created with fill at the end of the peninsula largely by removing portions of the hill. Today, the Shipyard is characterized by largely flat topography, meeting the shoreline with man-built wharves, piers, dry docks and sea walls. The central and most northern sections of the Shipyard, however, are on higher elevations partially a part of original hill geography.

The Shipyard ~~includes~~ had included upwards of 135 buildings associated with ship repair, piers, dry-docks and other former navy uses, largely from the World War II era. Only a few of the building remain occupied with the largest constituent being the 300 artists located in seven buildings. Most of the site is undergoing environmental clean-up by the Navy, and has controlled access~~e~~.

Currently, the only way in and out of the Shipyard is via Innes Avenue, which connects the area to Third Street (Bayview Hunters Point's main commercial and circulation thoroughfare), by way of Hunters Point Boulevard and Evans Avenue, through India Basin Shoreline, the neighborhood to the immediate northwest. There are other routes over Hunters Point Hill to Third Street and the rest of the City, but they are circuitous and not obvious choices. Crisp Road, on the northwestern side of Hunters Point Hill, does not currently allow through access.

The Shipyard is separated from Candlestick Point by Yosemite Slough and South Basin. Currently the only way to connect to Candlestick Point and neighborhoods further south and west is to transverse around the slough through the South Basin light industrial neighborhood.

RELATED PLANS

The Bayview Hunters Point Area Plan

The Shipyard is not technically within the boundaries of the Bayview Hunters Point Area Plan (BVHP Plan), However, because of the Shipyard's significance to the Bayview community, it is discussed throughout. The BVHP Plan addresses the Bayview as a whole in spelling out goals and priorities for ongoing community development. Themes discussed throughout the BVHP Plan include arresting the demographic decline of the African American population; providing economic development and jobs, particularly for local residents; eliminating health and environmental hazards including reducing land use conflicts; providing additional housing, particularly affordable housing; providing additional recreation, open space, and public service facilities, and better addressing transportation deficiencies by offering a wider range of transportation options. While the BVHP Plan addresses some specific areas, most discussions are kept general and apply to the neighborhood as a whole. The BVHP Plan was updated in 2006 when most of the Bayview was incorporated into the Bayview Hunters Point Redevelopment Plan's Project Area. The Shipyard is discussed within the BVHP Plan in the context of its potential to serve as an area to focus residential and mixed-use development that would also create jobs for the community. The BVHP Plan has been updated again subsequent to the adoption of the Candlestick Point Sub-Area Plan and this Area Plan.

Candlestick Point Sub-Area Plan

In accordance with the Conceptual Framework and Proposition G, Candlestick Point was also targeted for revitalization and development. By providing a potential new location for the stadium at the Shipyard, Candlestick Point could be freed up for more housing, retail, and other associated uses that would better benefit from its synergistic location next to Candlestick Point State Recreation Area. Even though a part of the same overall planning effort, a Candlestick Point Sub-Area Plan has been prepared separately in recognition that it is within a separate redevelopment plan area.

While a specific land use plan and design controls have been developed for Hunters Point Shipyard through Amendments to its Redevelopment Plan and associated Design for Development Document, the intent of this Area Plan is to distill planning principles that are reflected in these plans, and that relate back to other elements of the General Plan. As with other Area Plans, this plan provides broad planning parameters.

LAND USE

OBJECTIVE 1: REALIZE THE FULL POTENTIAL OF THE UNDERUTILIZED HUNTERS POINT SHIPYARD BY CREATING A COMPLETE AND THRIVING NEW NEIGHBORHOOD INTIMATELY CONNECTED TO THE BAYVIEW AND THE REST OF THE CITY, IN A WAY THAT FULLY REALIZES ITS SHORELINE LOCATION AND ACTS AS AN ECONOMIC CATALYST FOR THE REST OF THE BAYVIEW.

Policy 1.1 Create a balanced and complete mix of land uses.

Land use in San Francisco is to a large extent mixed use in nature. In such environments, neighborhood-serving retail, such as food stores, laundry services, and other sundry needs, are located adjacent to residential uses. Job-creating uses such as offices, workshops and institutions are also nearby providing residents opportunities to find employment in close proximity to their homes. Recreation and entertainment facilities are similarly interspersed throughout. Locating such uses in close proximity to each other makes life more convenient, decreases the need for car trips, and facilitates more use of the public realm in a more intimate and communal way. It is crucial that any new development be of similar mixed-use character. The mix of uses should facilitate daily life without an automobile, and should make it possible

to meet a significant portion of daily needs on foot or by bicycle.

Policy 1.2 Take full advantage of the underutilized site by providing high density sustainable development.

To create vital neighborhoods, it is also essential to assure density sufficient to support local retail and services and more robust transit service. Much of the Shipyard's 490-acres, is currently comprised of blighted and obsolete development that was associated with the former Navy operations and has not been in use in many years~~.~~. The opportunity to leverage high-density development for the revitalization of this underutilized land and at the same take advantage of the shoreline location is a unique opportunity for the Hunters Point Shipyard and surrounding community.

Developing at high densities is more sustainable in general while at the same time enabling the efficient use of innovative green development construction strategies.

Policy 1.3 Create a distinctive destination for the Bayview, the City, and the region.

The Shipyard's approximately five-miles of undeveloped shoreline is an unparalleled asset. ~~Locating the football stadium at the Shipyard would be a unique opportunity to create an iconic sports complex at the water's edge, repeating for San Francisco football what AT&T Park did for San Francisco baseball. Any plan needs to provide the 49ers with a clear viable option for typical football season operations, but should more particularly, emphasize the extraordinary opportunity it represents. Special attention should be given on how to treat stadium parking, includingopportunities for the use of dual use turf in order to take advantage of the surface parking areas on non game days for active and passive recreation. Special attention also needs to be given how the stadium entry is treated relative to the streets and surrounding buildings and neighborhoods. However, development of the Shipyard should also consider other uses for the stadium site, should the 49ers not avail themselves to the opportunity to locate a stadium at the Shipyard. Any non-stadium alternative should also be consistent with the objectives and provisions of the Shipyard Redevelopment Plan and associated Design for Development document.~~

Also unique to the Shipyard is the existing artist community which is considered one of the most thriving communities of artists in the region. New development should seize on the opportunity to build on this asset as a way to create a vibrant neighborhood. Artist galleries and other similar artist-based retail could be an important component to retail and commercial development.

The history of the Shipyard and surrounding community should also be celebrated as part of the development, in particular within the public realm. Celebrating the Shipyard's history is not only a worthwhile in its own right, it helps create a unique and special identity for new development adding overall value to the Shipyard and the Bayview neighborhoods.

The large expanse of undeveloped space also provides opportunities not practical in other areas of San Francisco and the region, such as the ability to accommodate focused campus-like development. In creating such development, care must be taken so that it does not take on the

characteristics of typical suburban office development. Such development must be public in nature with its street grid and circulation connecting to the rest of the City; parking must be appropriately treated so as to avoid broad swaths of surface parking typical of suburban campus development.

(INSERT – Map 03 – Land Uses (should generally match Redevelopment Map))

Policy 1.4 Ensure that new land uses will accommodate diverse residential, worker, and visitor populations.

Policy 1.5 Acknowledge history as part of the land use and urban design plan.

The project should include uses that acknowledge the history of the original native American inhabitants of the Hunters Point area and historic relationship of Bayview Hunters Point's African American community of the Shipyard and other communities with historic ties to the area.

A complete neighborhood must serve a wide variety of populations. Housing should serve a broad range of income levels, household size, and typology preferences. It should include housing for those at different stages of life, particularly for seniors, and consider housing for those with special needs. At the same time, the variety of housing types and populations served should be interspersed throughout as to avoid inadvertent spatial separation of residents of differing groups.

Similarly, employment opportunities should include jobs along the income spectrum. Any development will provide construction opportunities over a relatively long build out, however, development should include other permanent job opportunities including those in administrative, managerial, professional, maintenance, social ~~entrapenurship~~entrepreneurship and other positions. Any transit plan should consider how to get the new residential population efficiently to other clustered job centers including Downtown, Hunters Point Shipyard and regional transit that serves the Peninsula and East Bay in an efficient manner that will encourage the use of public transportation.

COMMUNITY DESIGN AND BUILT FORM

OBJECTIVE 2 CREATE A DIVERSE AND EXCITING URBAN NEIGHBORHOOD THAT IS ENGAGING, COMFORTABLE, AND HAS CONVENIENT ACCESS TO AMENITIES, OPTIMIZES ITS WATERFRONT SETTING AND REFLECTS SAN FRANCISCO BUILT FORM AND CHARACTER IN A CONTEMPORARY WAY.

Policy 2.1 Create a development that takes advantage of the shoreline location.

As an area surrounded on three sides by water, the primary urban design consideration must be its shoreline location. Care must be take to assure that shoreline open space is the focus of development.

Policy 2.2 Ensure a block pattern and street network that relates to adjacent neighborhood, is coherent, and provides the development with organization

and orientation.

Essential to any new neighborhood is its relationship to surrounding neighborhoods. Because of the topography of the Hunters Point Hill, its atypical block pattern to San Francisco, and its further disconnection by the undeveloped nature of India Basin Shoreline, there is no adjacent street grid to tie into. However, as a means of organizing new development and making it feel like a San Francisco neighborhood, a typical street grid with typically laid out blocks should be utilized. Equally important to assuring such integration is incorporating the same streetscape improvements envisioned for new development into the existing neighborhood, thereby knitting the new and existing into a single neighborhood fabric.

(INSERT – Map 04 – map diagram showing continuation of general block pattern)

(INSERT – Figures showing continuation of block pattern, break-up of blocks, and view corridors)

Policy 2.3 **Create a street system where streets are clearly an element of the public realm.**

Policy 2.4 **Assure buildings meet the street in a way that defines the street's three-dimensional space as well as activates and enlivens it.**

It is through the public realm elements, such as, streets, sidewalks, building facades, adjacent small spaces, parks that people experience the city and that neighborhoods derive their uniqueness and sense of place. Streets are to be thought of more than a means of mobility; they are places in their own right. Building faces must be designed to accommodate activation of the street: residential streets must feature landscaping and setbacks to allow for street-facing patios, stoops and entrances; retail streets must be designed to have a continuous set of storefronts typical of San Francisco neighborhood commercial districts. Where other uses face the street, such as office and research and development uses, other design interventions that enliven the façade must by included.

Policy 2.5 **Provide a development with a variety of building heights and sizes as a means to create variety and avoid monotonous development.**

The development of the new neighborhood has to be thoughtful in its phasing and eventual built-out. Because of the scale of Shipyard, overall development should be broken down into smaller districts with each having their own identity. Smaller districts are more manageable and legible and help in providing orientation.

To assure visual interest and avoid repetition, building sizes and types should be varied throughout. An overall strategy should assure some variety of building sizes across each block, but also designate building heights and sizes by their relationship with the development's districts, street hierarchy, and open space network. In general, buildings should step down toward the water; taller prominent streetwalls should be featured along important streets and open spaces. Predominant buildings heights should relate to their adjacent street and open space widths and areas.

(INSERT – figure showing typical 3D block configuration)

Policy 2.6 **Encourage tall buildings (towers) as a way to create an identifiable place, contribute to a variety of building forms, and efficiently use land.**

Tall buildings (towers) enable the efficient use of land and put more people near transit and supportive services, thus helping assure their viability. By putting greater densities on less land, more land can be freed up for the public realm. Towers in and of themselves help create identity and can be used to mark particularly important locations within a neighborhood. However, care must be taken in deciding their locations. Towers must maintain public view corridors through the area by means of height and bulk controls that ensure carefully spaced slender towers. Placement of towers must also preserve adequate light and air and minimize wind and shadow on public streets and open spaces. While it is important that towers be spaced far enough from each other to avoid crowding out the sky, they must not be placed so far from each other as to loose an overall coherent urban form. Similarly, towers should be varied in height so that the skyline takes on a dynamic form rather than presenting a single "benched" height when seen from a distance.

Policy 2.7 **Assure high quality architecture of individual buildings that work together to create a coherent and identifiable place while being individually distinguishable.**

Buildings and structures must not only work together to form a coherent whole, but should be individually attractive and distinguishable. Architects should be encouraged to be creative in meeting the sites' programming needs within required development controls. Any development should incorporate sustainable technologies in innovative ways and express these technologies architecturally. All buildings must emphasize the human scale; while the Subarea Plan allows for large buildings, all buildings, regardless of their size, should be broken down vertically and horizontally so that they relate to the scale of the human body. The manner in which buildings meet the ground and the public realm is also crucial. Ground floor programming must directly address the adjacent street or public realm.

Quality materials and detailing will be extremely important to convey durability and permanence. Thoughtful application of materials and detailing is most crucial at the building base, where pedestrians experience the building close-up.

TRANSPORTATION AND CIRCULATION

OBJECTIVE 3 INCLUDE TRANSPORTATION IMPROVEMENTS THAT ARE INHERENTLY MULTI-MODAL, ARE SEAMLESSLY CONNECTED TO THE BAYVIEW AND THE REST OF THE CITY, AND PROVIDE RESIDENTS WITH THE ABILITY TO MEET DAILY NEEDS WITHOUT HAVING TO DRIVE.

Policy 3.1 **Create a neighborhood with a safe, legible, and easily navigable street network.**

New streets and rights-of-way should be extensions of the existing neighborhood street network. A grid street pattern connects seamlessly to the existing network and offers travelers various choices of routes. Streets should be designed with the principles and objectives of the City's Better Streets Plan (currently in draft form) in mind. Street design should emphasize

pedestrian and bicyclist comfort and safety. Major routes to and from the Shipyard must serve pedestrians, bicyclists and transit riders, both for those traveling to specific destinations and for people who want to use streets for enjoyment and recreation.

Policy 3.2 Emphasize multi modal transportation as an integral feature of the street network.

Policy 3.3 Include enhanced transit that will not only serve the new community but improve transit for the Bayview and surrounding neighborhoods as well.

All streets throughout the community should be planned for multi-modal use. Street design should stress alternatives to the automobile and facilitate easier movement for transit, bicycles and pedestrians. Dedicated right-of-way for either bus rapid transit (BRT) or light rail transit (LRT) should be a major feature in any street network. BRT right-of-way should be connected to a broader regional BRT system connecting to CalTrain, BART, and the Third Street LRT. BRT stations should be strategically placed in the new neighborhood next to destination locations such as the ~~potential 49ers Stadium,~~ Arts Center, and R&D Neighborhood. Enhanced transit service should be planned to not only serve new residents and workers, but also those in the surrounding communities as well.

Beyond transit, a new development transportation strategy must focus on the pedestrian. The streets and adjacent buildings should be designed to ensure pedestrian comfort and interest. Sidewalk widths, street crossings, and ample street space dedicated to pedestrians will make traveling by foot easy and enjoyable. Land use patterns that provide clear destinations and short distances between supporting uses will help to make walking an obvious travel choice.

Facilitation of bicycle use is also important. The street network should accommodate travel by bicycle on most streets (excluding transit and freight routes) with particular routes indicated for special Class I and II treatment through the neighborhood. Planning for bicycles should include consideration for recreational use along the Bay Trail, efficient commuter bicycle routes connecting to existing City routes, and day-to-day use within the neighborhood.

(INSERT Map 05, 06, and 07 – Transportation Map showing BRT route, diagrammatic routing for bicycles, and pedestrians)

Policy 3.4 Identify Transportation Demand Management (TDM) measures to discourage the use of automobiles and encourages the use of bicycles, transit and walking.

An effective TDM program will reduce the amount of auto use and encourage residents, employees, and visitors to use alternative modes of travel, such as transit, walking and bicycling including at peak travel times. Such a program should be consistent with City policies and work with ongoing plans for nearby developments. The core of TDM strategies are to ensure that the true cost of driving is realized. Strategies include: setting parking rates that accurately reflect their cost of construction and other externalities caused by driving; selling or renting residential parking spaces separately from the units so that they are less expensive for those who choose not to own a car; and encouraging more efficient and economic use of parking resources by prioritizing parking for shared parking, van pools, and other alternative means of transportation. Similarly, TDM programs should make using transit more efficient by

providing a transit coordinator, and incorporating the cost of transit passes in HOA fees and as a part of employment compensation packages.

ECONOMIC DEVELOPMENT

OBJECTIVE 4 CREATE JOBS FOR ECONOMIC VITALITY.

Policy 4.1 Include commercial uses that will provide jobs at both a wide range of fields, and at a wide range of income levels.

Policy 4.2 Support the local artists' community.

Policy 4.3 Create an appropriate mix of new businesses.

A major theme throughout the adjacent Bayview Hunters Point Area Plan is to promote economic development largely through the provision of new job-generating uses. New development at the Shipyard will provide numerous construction jobs. But it should also look to ensuring a wide range of permanent jobs. It is essential that land uses create employment, business and entrepreneurial opportunities, cultural and other public benefits for Bayview and other San Francisco residents. Sufficient land should be set aside to provide diverse job-creating uses, such as research and development, light industrial, and office activities., and create opportunities for private entrepreneurship and small business development. The newly created parks and open space network should also provide opportunities for ongoing employment in open space maintenance and management.

In anticipation of the new construction and permanent jobs provided by new development, the City should incorporate job-training and job-preparedness programs for Bayview and other City residents. The City should partner with developers and community-based organizations on workforce programs to best meet employment needs of local residents and utilize it's existing workforce development infrastructure to ensure that local Bayview residents will be able to access the job opportunities created by the project. Similarly, land use programming should set aside space for local entrepreneurs and incubator activities.

OBJECTIVE 5 IN CREATING A NEW NEIGHBORHOOD, PRODUCE TANGIBLE ECONOMIC COMMUNITY BENEFITS, AND ENSURE THAT THE NEW DEVELOPMENT ACTS AS A CATALYST FOR FURTHER ECONOMIC AND COMMUNITY DEVELOPMENT THROUGHOUT THE BAYVIEW AND THE CITY.

Policy 5.1 Assure that the new Hunters Point development is financially self sufficient.

Any new development should be structured so that the financing for development and operation of the Project will not have a negative impact on the City's General Fund. Consideration should be given to land use densities and commercial uses that will be sufficient to generate revenues to make development financially viable and self-sufficient, help pay for transportation and other infrastructure improvements, and achieve other economic and public benefits.

RECREATION AND OPEN SPACE

OBJECTIVE 6 CREATE A WORLD CLASS SYSTEM OF OPEN SPACE THAT INCLUDES A SIGNIFICANT PORTION OF THE OVERALL HUNTERS POINT SHIPYARD, ENABLES IMPROVEMENTS THE SHORELINE ENHANCES ACCESS, PROVIDES A WIDE RANGE OF RECREATIONAL AND ECOLOGICAL RESTORATION OPPORTUNITIES, AND IS SEAMLESSLY INTEGRATED WITH THE EXISTING NEIGHBORHOOD.

Policy 6.1 Provide a wide variety of types and scale of open space with a wide variety of recreational and conservation opportunities.

Any proposed development plan should emphasize open space and recreational opportunities. The open space system should consist of a wide variety of parks, with diverse sizes, characters and programs, including neighborhood and community parks, grassland ecology parks, waterfront promenades and opportunities for sports and active recreation. It should include both large scale spaces suitable for large events, and more intimate gathering spaces essential for a living and working neighborhood. New open space and parks should orient visitors to the neighborhood and waterfront and serve the recreational needs of residents in both the new and existing adjacent communities. The park system should also provide ecological services, such as storm water management and habitat. Additionally, lands granted to the Agency by the State of California that are subject to the Public Trust should be administered and reconfigured in a manner consistent with the public trust for commerce, navigation and fisheries and enhances their value for public trust purposes, in accordance with Chapter 203 of the Statutes of 2009 ("Granting Act").

(INSERT – Map 08 – Open Space network)

Candlestick Point – Hunters Point Shipyard Phase II – Revised General Plan Maps

Map 01
CANDLESTICK POINT SUBAREA PLAN AREA

Candlestick Point Subarea Plan Boundary

Map to be revised

Map 01
CANDLESTICK POINT SUBAREA PLAN AREA

Candlestick Point Subarea Plan Boundary

Proposed Revision to Map

Map 02
CONTEXT: BAYVIEW HUNTERS POINT AREA PLAN AREA

BVHP Area Plan Boundary

Candlestick Point
Subarea Plan Boundary

Hunters Point Shipyard
Area Plan Boundary

Map to be revised

MAP 2: PLAN AREAS

BVHP Area Plan Boundary

Candlestick Point Subarea Plan Boundary

Hunters Point Shipyard Area Plan Boundary

Proposed Revision to Map

Map 03
LAND USE

LEGEND

- Project Area
- Outside Project Area
- Open Space
- Mixed Use - Predominantly Residential
- Mixed Use - Predominantly Commercial
- Outside Project Area - Predominantly Residential

Map to be revised

Candlestick Point
SubArea Plan

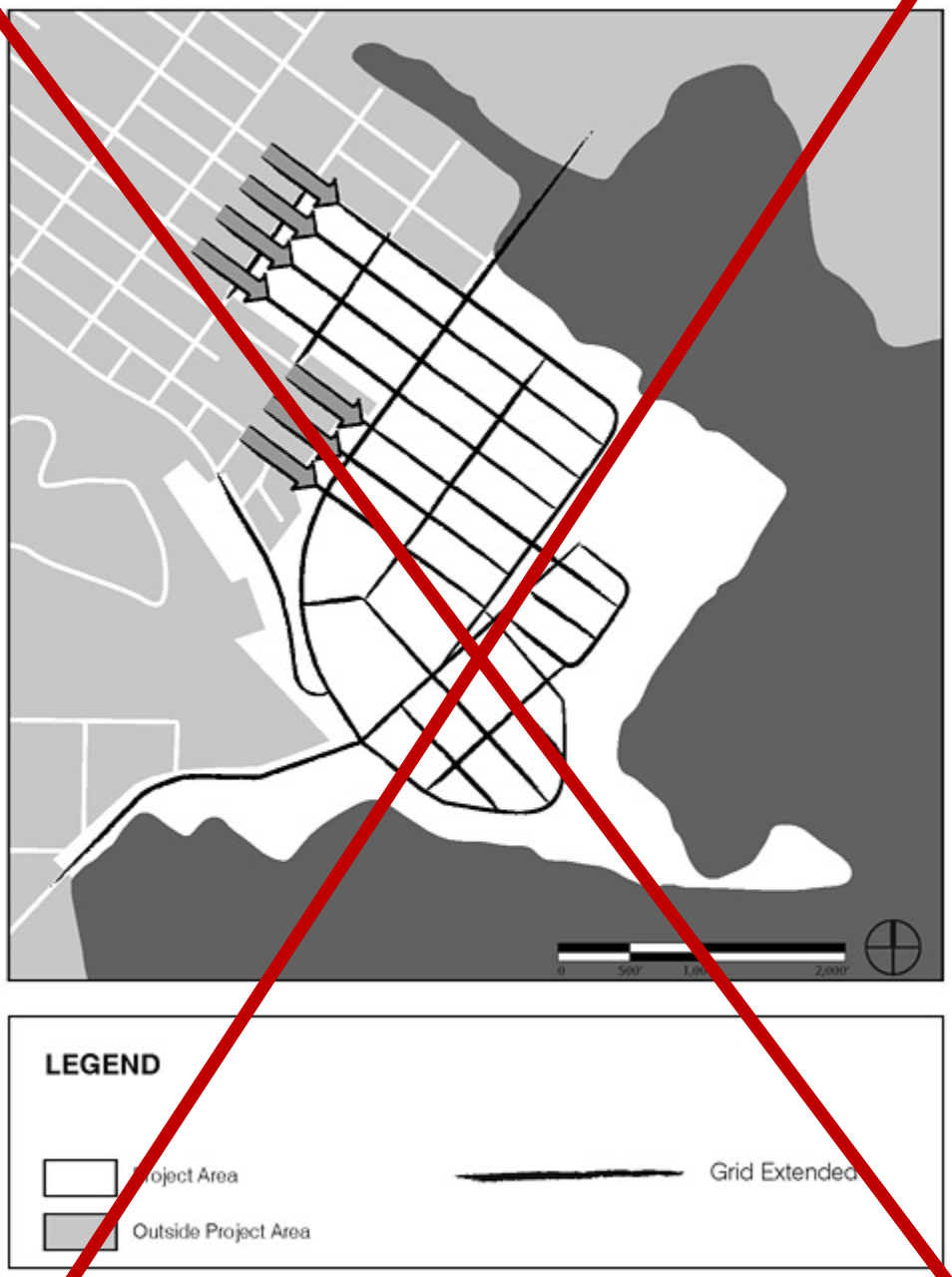
MAP 3: GENERALIZED LAND USE

LEGEND

- Project Area
- Outside Project Area
- Open Space
- Mixed Use - Predominantly Residential
- Mixed Use - Predominantly Commercial
- Outside Project Area - Predominantly Residential

Proposed Revision to Map

[MAP 4 – BLOCK PATTERN AND EXTENDED STREET GRID]



Map to be revised

Candlestick Point
SubArea Plan

Proposed Revision to Map

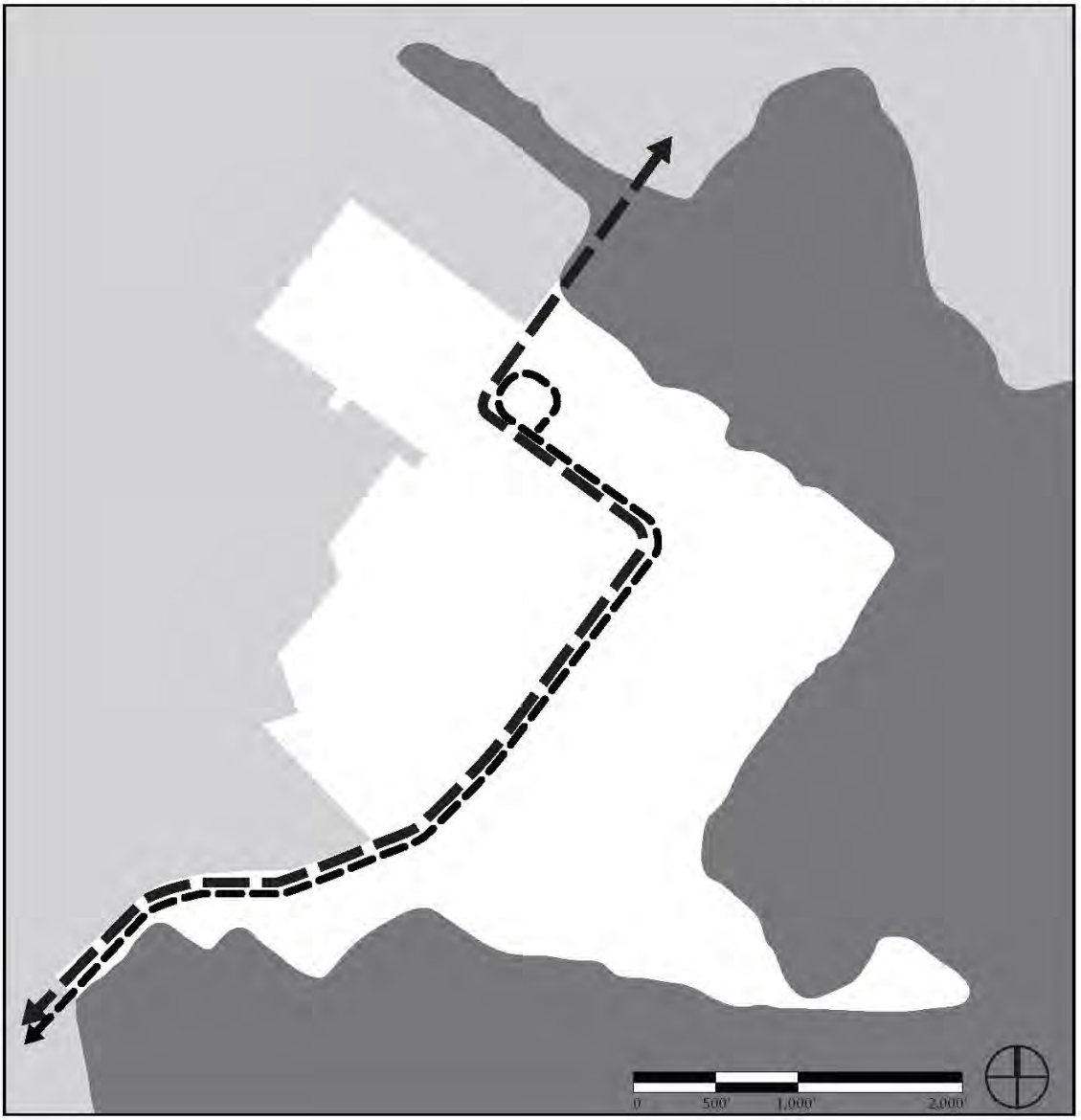
[MAP 6 – MAJOR TRANSIT]

Dedicated Transit R.O.W

Downtown Express Bus

Map to be revised

MAP 5: TRANSIT



LEGEND

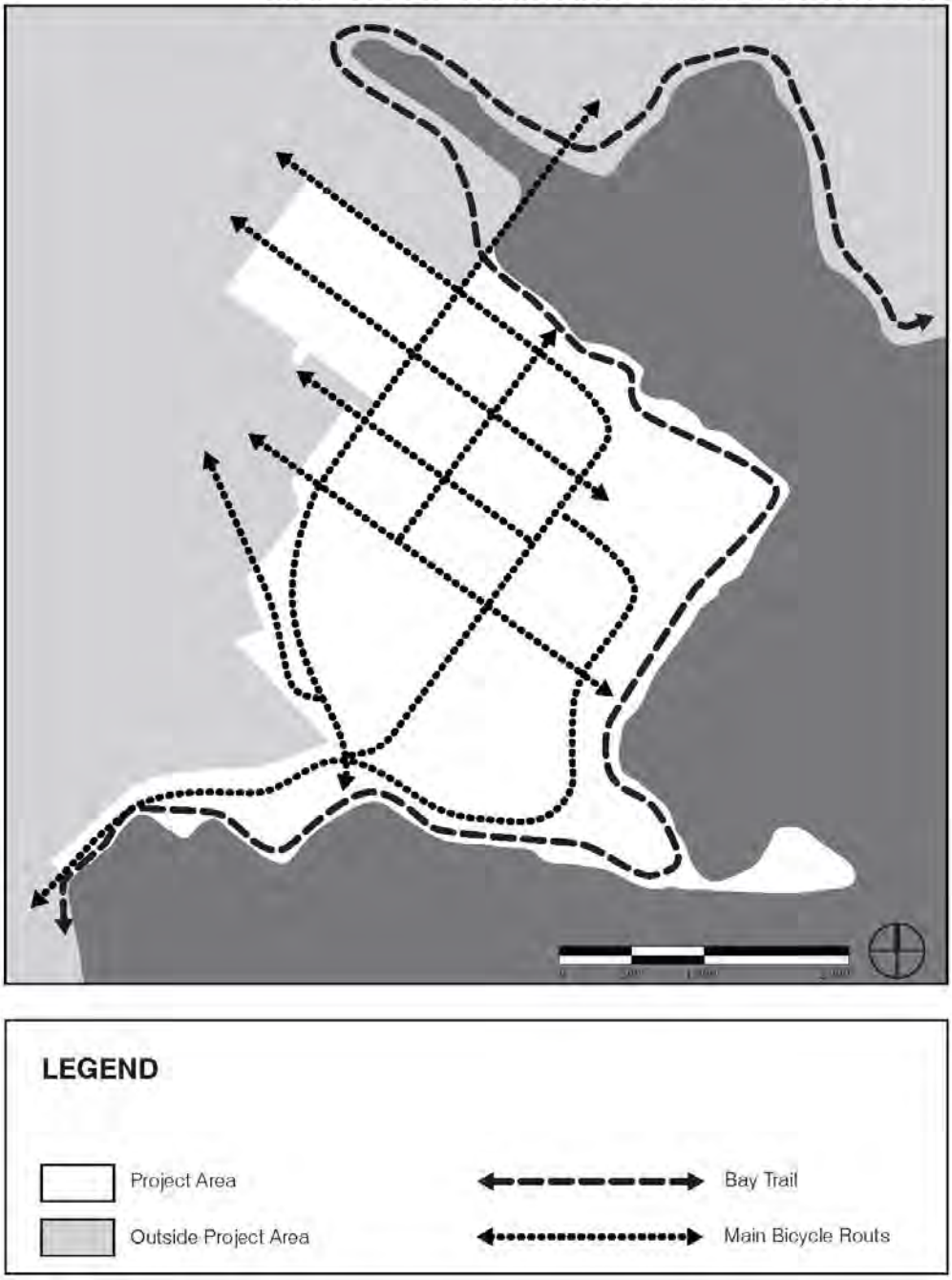
- Project Area
- Outside Project Area
- Dedicated Transit R.O.W
- Downtown Express Bus

Proposed Revision to Map

[MAP 6 – BAY TRAIL AND BICYCLE NETWORK]

Map to be revised

MAP 6: BAY TRAIL AND BICYCLE NETWORK



Proposed Revision to Map

[MAP 7 – PEDESTRIAN AND CIRCULATION NETWORK]

Map to be revised

Candlestick Point
SubArea Plan

MAP 7: PEDESTRIAN CIRCULATION NETWORK

LEGEND

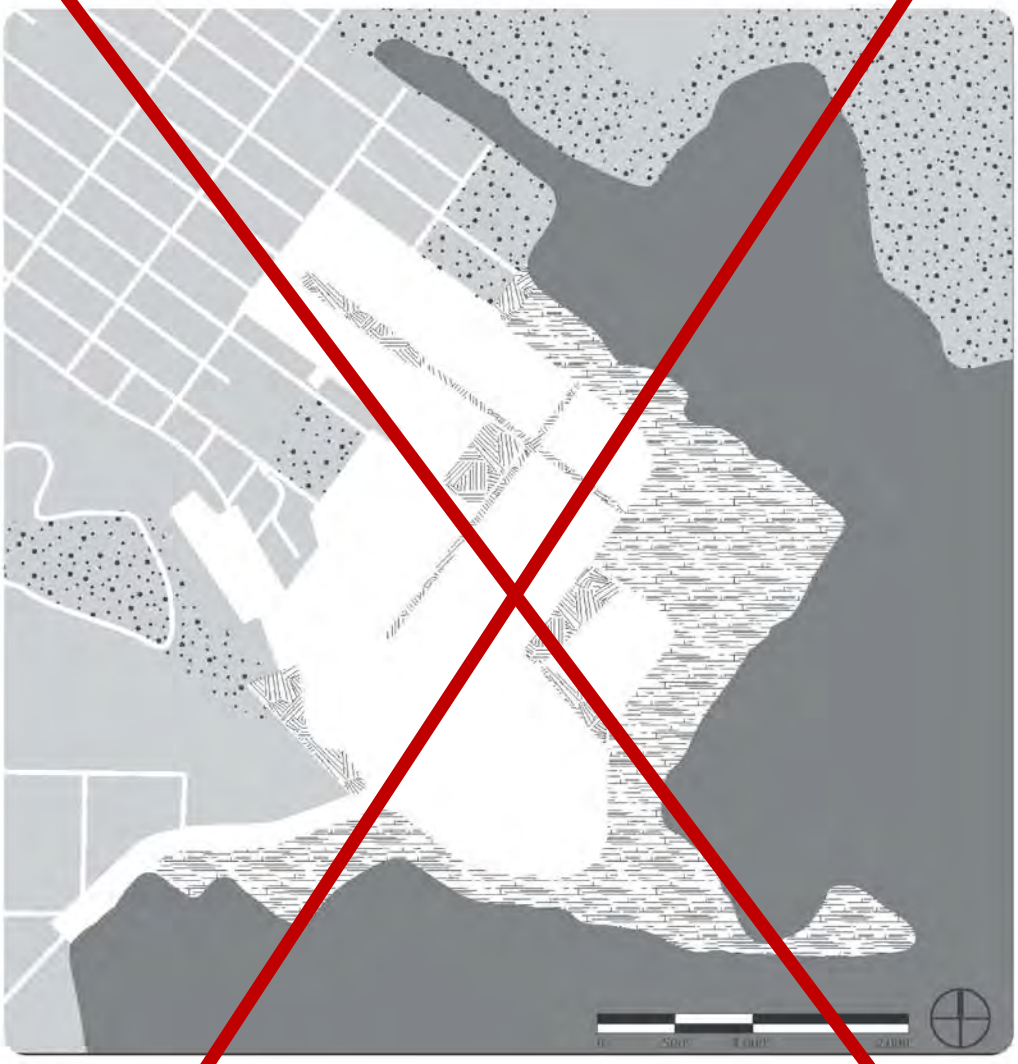
Project Area

Outside Project Area

Sidewalks and Pedestrian Paths

Proposed Revision to Map

Map 08
OPEN SPACE NETWORK



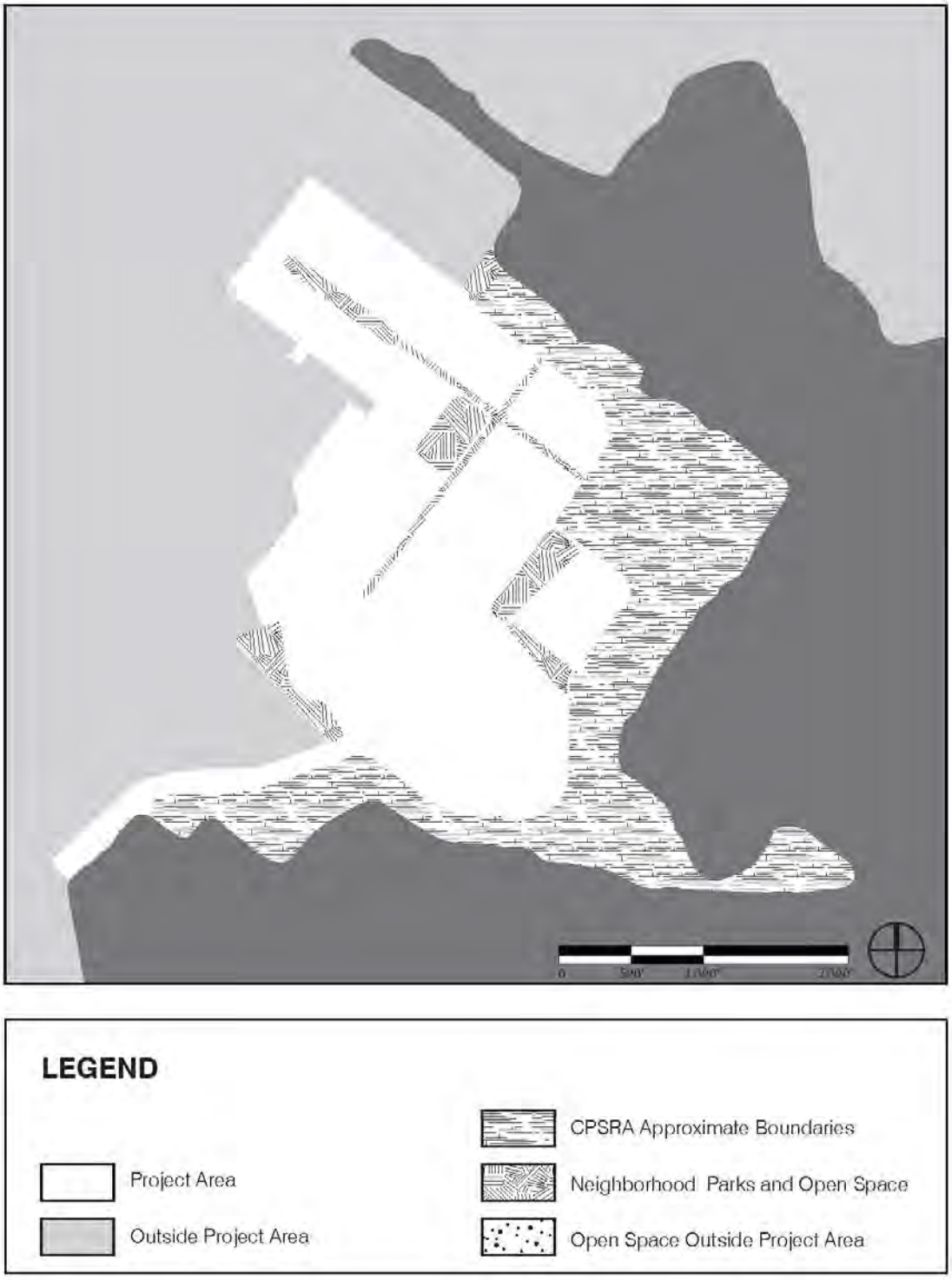
LEGEND

- Project Area
- Outside Project Area
- CPSRA Approximate Boundaries
- Neighborhood Parks and Open Space
- Open Space Outside Project Area

Map to be revised

Candlestick Point
SubArea Plan

[MAP 8 – OPEN SPACE NETWORK NETWORK]



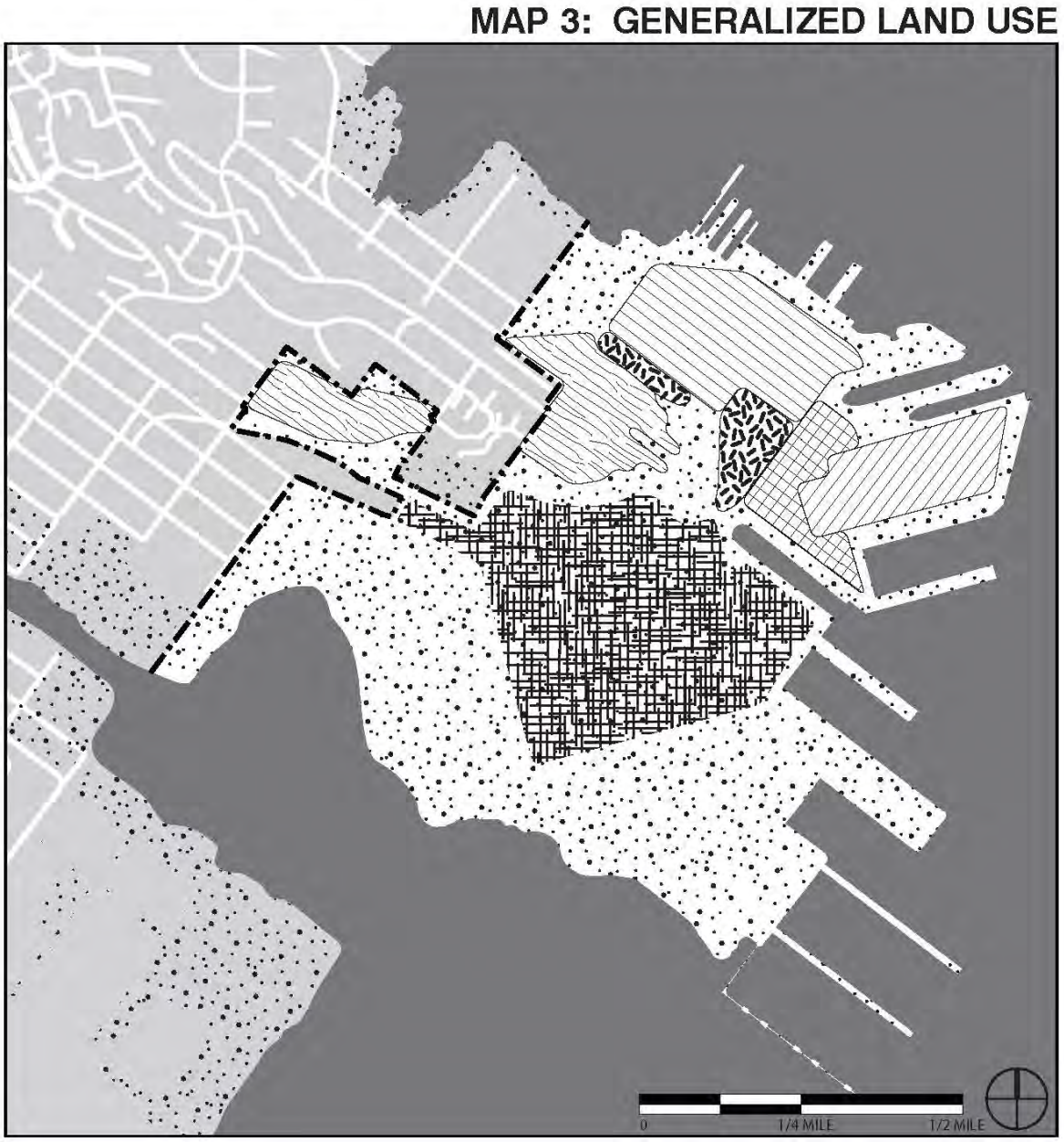
Proposed Revision to Map

Map 03
LAND USE

*Multi-Use (HPS South) includes Stadium use, R&D and Open Space, or if the stadium is not constructed, Mixed Use including Residential, R&D and Open Space, subject to the restrictions in the Hunters Point Shipyard Redevelopment Plan.

Map to be revised

Hunters Point Shipyard
Area Plan



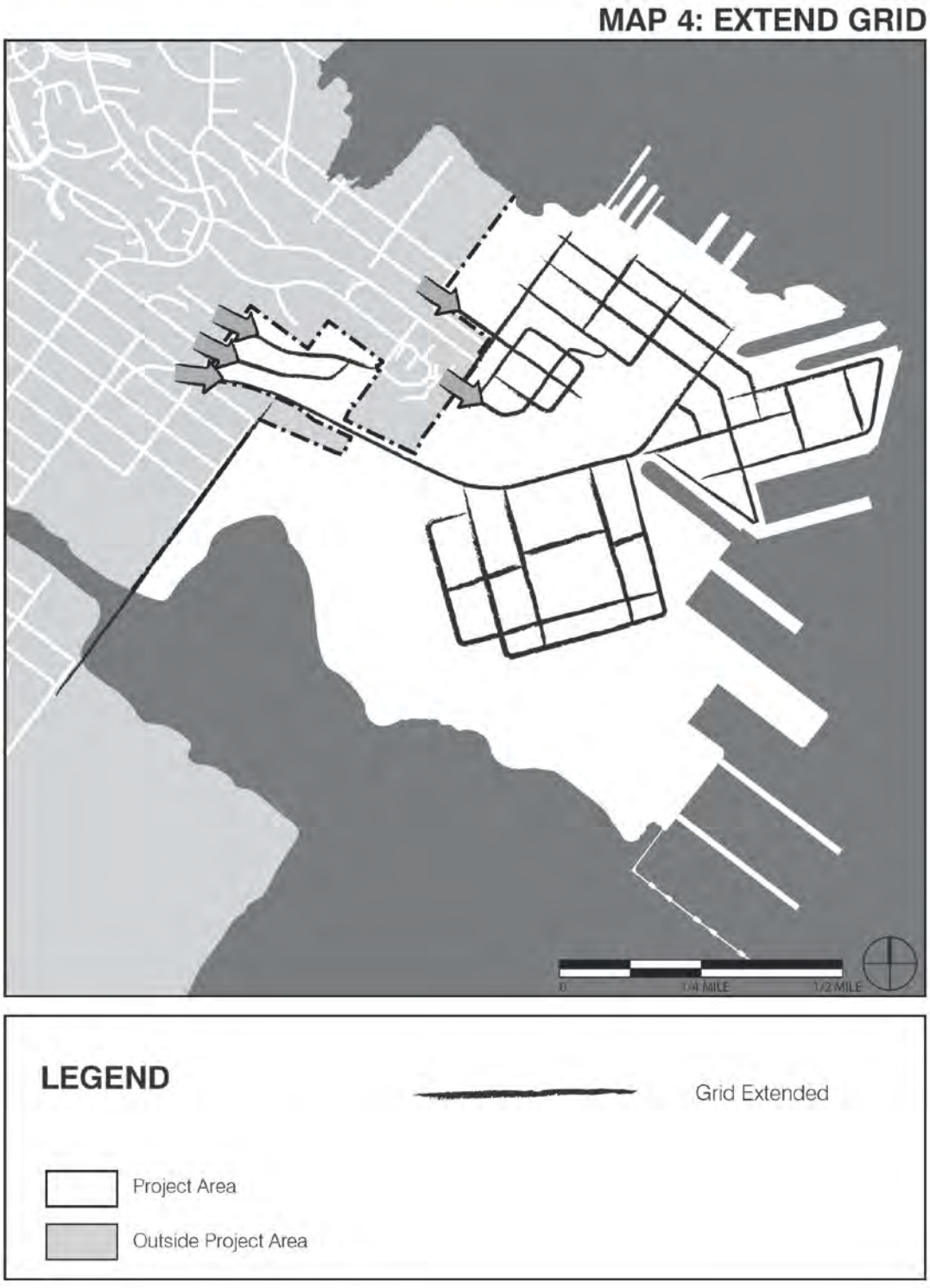
Proposed Revision to Map

[MAP 4 – EXTENDED GRID]

(In the event the 49ers do not avail themselves of the opportunity to build a new stadium in the southern portion of Hunters Point Shipyard, the street grid in that area would be extended to follow a pattern similar to that shown in the northern portion of Hunters Point Shipyard.)

Map to be revised

Hunters Point Shipyard
Area Plan

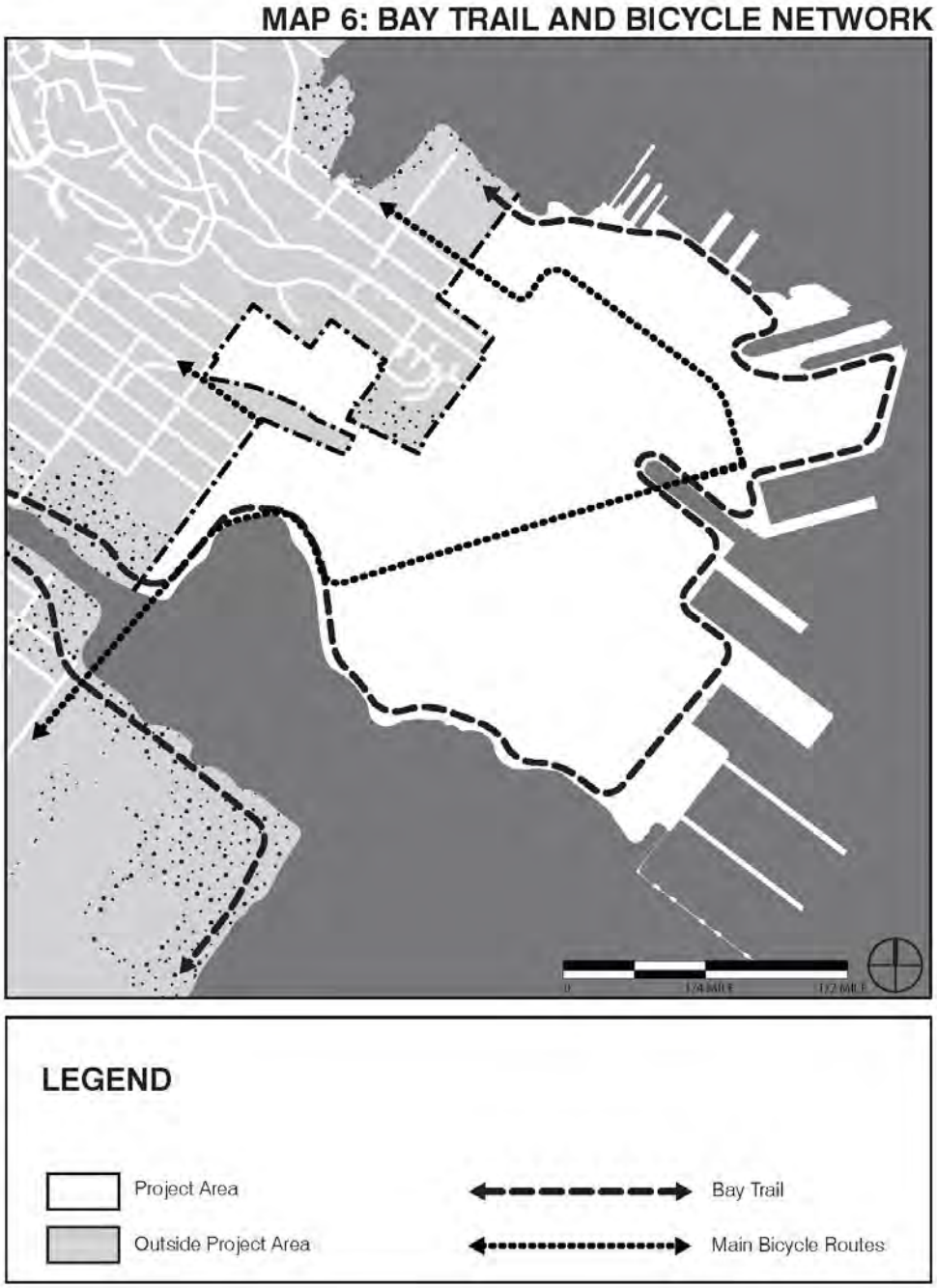


Proposed Revision to Map

[MAP 6 – BAY TRAIL AND BICYCLE NETWORK]

Map to be revised

Hunters Point Shipyard
Area Plan



Proposed Revision to Map

[MAP 7 – PEDESTRIAN AND CIRCULATION NETWORK]

Sidewalks and Pedestrian Paths

(In the event the 49ers do not avail themselves of the opportunity to build a new stadium in the southern portion of Hunters Point Shipyard, sidewalks and pedestrian paths in that area would follow a pattern similar to that shown in the northern portion of Hunters Point Shipyard.)

Map to be revised

Hunters Point Shipyard
Area Plan

MAP 7: PEDESTRIAN CIRCULATION NETWORK

LEGEND

Sidewalks and Pedestrian Paths

Project Area

Outside Project Area

Proposed Revision to Map

Map 08
OPEN SPACE NETWORK

LEGEND

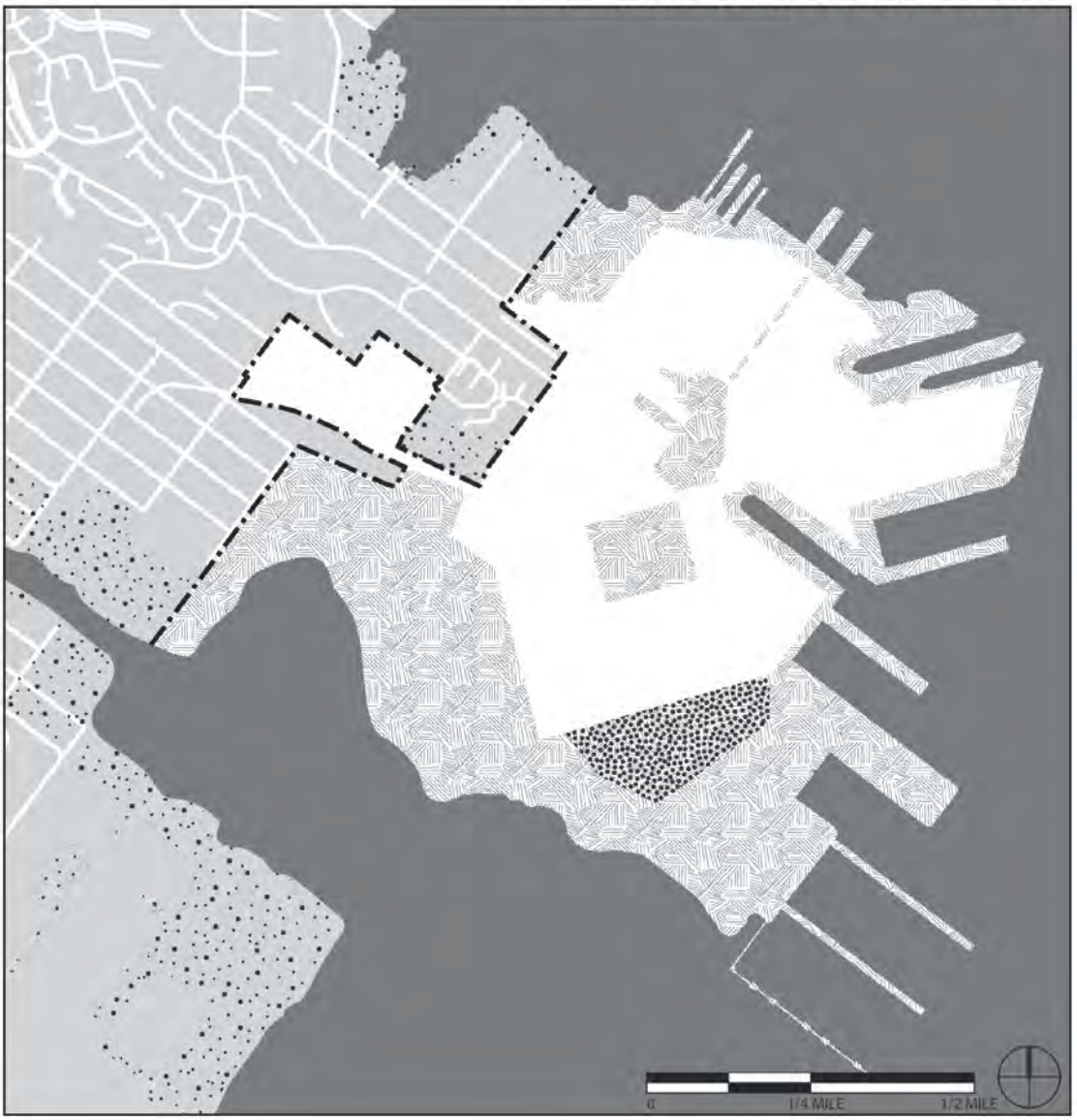
- Project Area Boundary
- Outside Project Area
- Open Space Outside Project Area
- Sports and Multi-Use Fields
- Parks and Open Space

(In the event the 49ers do not avail themselves of the opportunity to build a new stadium in the southern portion of Hunters Point Shipyard, Open Space in that area would include Sports and Multi-Use Fields and neighborhood parks.)

Map to be revised

Hunters Point Shipyard
Area Plan

MAP 8: OPEN SPACE NETWORK



LEGEND

- Project Area
- Outside Project Area
- Sports and Multi-Use Fields
- Parks and Open Space
- Open Space Outside Project Area

Proposed Revision to Map

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Planning Commission Resolution No.

HEARING DATE: APRIL 26, 2018

Date:	April 12, 2018
Case Nos.:	2007.0946GPA-02 MAP-02
Project:	Candlestick Point and Hunters Point Shipyard Phase II (see attached Map)
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Recommendation:	**Approval**

ADOPTING A RESOLUTION TO APPROVE AMENDMENTS TO THE SAN FRANCISCO ZONING MAPS BY AMENDING SECTIONAL MAPS SU10 TO AMEND THE BOUNDARIES OF THE CANDLESTICK POINT ACTIVITY NODE SPECIAL USE DISTRICT; AMENDING SECTIONAL MAP HT10 BY AMENDING THE BOUNDARIES OF THE CP HEIGHT AND BULK DISTRICT.

WHEREAS, Section 4.105 of the Charter of the City and County of San Francisco provides to the Planning Commission the opportunity to periodically recommend Planning Code Map Amendments to the Board of Supervisors; and

The Planning Department is proposing amendments to the Planning Code by amending the Zoning Maps by amending the boundaries to the Candlestick Activity Node Special Use District ("SUD") and the CP Height and Bulk District by removing Assessor's Bock 4991, Lot 276 from both. The Jamestown parcel would be redesignated as being within a 40-X Height and Bulk District.

The proposed amendments will facilitate the development of the Hunters Point Shipyard ("HPS") and Candlestick Point ("CP"), as envisioned in the Hunters Point Shipyard Redevelopment Plan, and the Bayview Hunters Point ("BVHP") Redevelopment Plan.

In 2010, the City approved combining the planning and redevelopment of these two areas to provide a more cohesive overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and improve opportunities to finance the development of affordable housing and the public infrastructure necessary to expedite the revitalization of both areas. This project

is referred to as the Candlestick Point – Hunters Point Shipyard Phase 2 Project ("CP HPS2 Project" or "Project").

Approval actions in 2010 ("Original Approvals") included, but were not limited to, General Plan amendments including the creation of the CP Sub-Area Plan and the HPS Area Plan, Planning Code amendments creating the CP Activity Node Special Use District ("SUD") and the HPS Phase 2 SUD, amendments to the BVHP Redevelopment Plan and the HPS Redevelopment Plan and the adoption of Design for Development documents for both CP and HPS Phase 2.

More specifically, the Original Approvals included amendments to the BVHP Redevelopment Plan that divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that the Office of Community Investment and Infrastructure ("OCII", the successor agency to the San Francisco Redevelopment Agency) would retain jurisdiction over land use and would be the approval body for development approvals pursuant to California Redevelopment Law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a Delegation Agreement between the Planning Department and OCII.

Zone 1 includes the property once occupied by the Candlestick Stadium, its parking lot, the Candlestick Point State Recreational Area ("CPSRA"), the Alice Griffith Housing Authority site, several private parcels that are generally surrounded by the stadium site and the CPSRA, and Assessor's Lot 276 of Block 4991, which is located on Jamestown Avenue above the stadium site ("Jamestown Parcel").

The Original Approvals anticipated the potential construction of a new stadium at Hunters Point Shipyard for the San Francisco 49ers, as one of several potential development scenarios.

As a part of the Original Approvals, OCII and the City and County of San Francisco, entered into a Disposition and Development Agreement ("DDA") with CP Development Co., LLC ("Developer") entitling the Developer to implement the Project pursuant to the provisions therein.

As part of the Original Approvals, an Area Plan under the General Plan was created for Hunters Point Shipyard to specifically align the HPS Redevelopment Plan with the General Plan. Similarly, the HPS Phase 2 SUD and HP Height and Bulk District were created to specifically refer all land use and development regulations to the HPS Redevelopment Plan. Consistent with the HPS Redevelopment Plan, the HPS Area Plan anticipated the construction of a stadium as one of several development scenarios.

As part of the Original Approvals, a Sub-Area Plan under the BVHP Area Plan of the General Plan was created for Candlestick Point (the Candlestick Point Subarea Plan) to specifically align provisions for Zone 1 of the BVHP Redevelopment Plan with the General Plan. Similarly, the Candlestick Point Activity Node SUD and the CP Height and Bulk District were created under the Planning Code to refer all land use and development regulations to the BVHP Redevelopment Plan for Zone 1. Consistent with the BVHP Redevelopment Plan, the boundaries of the CP Sub-Area Plan, the CP Activity Node SUD, and the CP Height and Bulk District include the Jamestown Parcel.

Subsequent to the Original Approvals, a new stadium for the 49ers was constructed in Santa Clara, removing the need to accommodate a stadium as a part of the Project.

Subsequent to the Original Approvals, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office

development would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325.

As a result of these circumstantial changes, the Developer and OCII are pursuing refinements to the Project ("Project Refinements"). As a part of the Project Refinements, the BVHP Redevelopment Plan is proposed to be amended to remove the Jamestown Parcel from Zone 1 to clarify that it is not a part of the Project being implemented by the Developer under the DDA. Similarly, as a part of the Project Refinements, the HPS Redevelopment Plan is proposed to be amended by removing description of a stadium and updating the text descriptions and graphic representations of the Project, among other changes.

This Planning Code Map amendment would (1) amend Sectional Map SU10 by removing the Jamestown Parcel from the Candlestick Point Activity Node SUD; and (2) amend Sectional Map HT10 by redesignating the Jamestown Parcel from "CP" Height and Bulk to a "40X" Height and Bulk.

The San Francisco Redevelopment Agency ("Redevelopment Agency"), together with the San Francisco Planning Commission of the City and County of San Francisco ("Planning Commission") acting as lead agencies under the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.), certified a Final Environmental Impact Report (hereinafter "FEIR") for the Candlestick Park-Hunters Point Shipyard Phase II Project ("Project") on June 3, 2010 by Motion No. 18096 and Resolution No. 58-2010, respectively. On July 14, 2010, the San Francisco Board of Supervisors affirmed the Planning Commission's certification of the FEIR (Motion No. M10-110). The FEIR analyzed a mixed used development, including a stadium use at the Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

On June 3, 2010, the Redevelopment Agency, by Resolution No. 59-2010 adopted findings pursuant to the California Environmental Quality Act, including a Mitigation Monitoring and Reporting Program ("MMRP") and a Statement of Overriding Considerations for the Project, and took various actions to approve the Project. On the same day, by Motion No. 18097 the Planning Commission also adopted findings pursuant to CEQA ("CEQA Findings") and took various approval actions related to the Project.

Since the certification of the FEIR the Planning Department, working with the Office of Community Investment and Infrastructure ("OCII", the successor agency to the San Francisco Redevelopment Agency), has issued several addenda to the FEIR to address project changes. The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to modifications to the Project (the "Modified Project") will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effect that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1,

Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are available under Case No. 2007.0946E, and are incorporated herein by reference as though fully set forth.

The Planning Commission has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Motion No. 18097, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures.

On April 26, 2018, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on the proposed Planning Code Map Amendments and has considered the information included in the File for these Amendments, the staff reports and presentations, public testimony and written comments, as well as the information provided about the Project from other City departments.

A draft ordinance, **attached hereto as Exhibit A**, would amend the Candlestick Point Activity Node Special Use District by removing the Jamestown Parcel from it and would redesignate the Jamestown Parcel from the CP Height and Bulk District to a 40X Height and Bulk District.

NOW THEREFORE BE IT RESOLVED, that the Planning Commission finds that the actions contemplated by this Resolution are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Planning Commission hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. Additionally, the Planning Commission approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

AND BE IT FURTHER RESOLVED, That the Planning Commission hereby finds that the Planning Code Map amendments promote the public welfare, convenience and necessity for the following reasons:

1. The Project would continue to enable development that would eliminate blight in the Hunters Point Shipyard Redevelopment Project Area and Zone 1 (Candlestick Point) of the Bayview Hunters Point Redevelopment Project Area.

2. The Planning Code Map amendments would provide clarity to the Project by removing the Jamestown Parcel. The Project would continue to provide a wide range of employment opportunities in wide range of fields and employment levels.

3. The Project with the amendments would continue to enable new development that would strengthen the economic base of the neighborhood and the City as a whole. By removing the Jamestown Parcel from the CP HPS2 Project, additional development potential could be realized that could further strengthen the economic base of the neighborhood and City.

4. The Project with the amendments would continue to enable development that would include substantial new housing opportunities, including a substantial amount of below market rate housing including the replacement of the Alice Griffith Public Housing development. By removing the Jamestown Parcel from the CP Activity Node SUD, the Jamestown Parcel could develop with additional housing beyond what is planned for within the Project.

AND BE IT FURTHER RESOLVED, That the Planning Commission finds the Planning Code Map Amendments are in general conformity with the General Plan, and Planning Code section 101.1(b). On May 3, 2010, by Motion No. 18099, the Planning Commission adopted "Master General Plan and Planning Code Section 101.1 Finding" ("Original General Plan Findings") establishing that on balance, the Project under the Original Approvals consistent with the General Plan and Planning Code Section 101.1.

The Planning Commission finds that in light of the changes to the Project, including the subject Planning Code Map Amendments, the Original General Plan Findings are still relevant and can be applied to the Project with the Project Refinements; therefore the Project with the Project Refinements, including the subject Amendments are, on balance, consistent with the General Plan and Planning Code Section 101.1. The findings attached to Resolution No. 18099 as Exhibit A, are hereby incorporated herein by this reference as if fully set forth.

AND BE IT FURTHER RESOLVED, That pursuant to Planning Code Section 302, the Planning Commission recommends to the Board of Supervisors **approval** the Planning Code Map amendments.

I hereby certify that the foregoing Resolution was ADOPTED by the San Francisco Planning Commission on April 26, 2018.

Jonas P. Ionin

Commission Secretary

AYES:

NOES:

ABSENT:

[Planning Code, Zoning Map – Candlestick Point Activity Node Zoning Map Amendments]

Ordinance amending the Planning Code by amending the Zoning Map Sheets SU-10 and HT-10 to remove Block 4991/Lot 276 from the Candlestick Point Activity Node Special Use District and the CP Height and Bulk District; adopting findings under the California Environmental Quality Act; making findings of consistency with the General Plan and the eight priority policies of Planning Code Section 101.1; and making findings of public necessity, convenience, and welfare under Planning Code, Section 302.

NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
Additions to Codes are in *single-underline italics Times New Roman font*.
Deletions to Codes are in ~~*strikethrough italics Times New Roman font*~~.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~strikethrough Arial font~~.
Asterisks (* * * *) indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. California Environmental Quality Act.

(a) On July 13, 2010, the Board of Supervisors approved Motion No. 10-0110, affirming the Planning Commission's certification of the final environmental impact report ("FEIR") for the CP-HPS Phase 2 Project ("Project") in compliance with the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.).. A copy of said Motion is on file with the Clerk of the Board of Supervisors in File No. 100862 and available on the Board's website, and is incorporated herein by reference as though fully set forth. The FEIR analyzed a mixed used development, including a stadium use at the

Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

(b) In accordance with the actions contemplated in 2010, this Board adopted Resolution No.347-10 concerning findings pursuant to CEQA, including a statement of overriding considerations and a mitigation monitoring and reporting program ("CEQA Findings"). Copies of said Resolution and supporting materials are in the Clerk of the Board of Supervisors File No. 100572 and available on the Board's website, and the Resolution and supporting materials are incorporated herein by reference as though fully set forth.

(c) The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to modifications to the Project (the "Modified Project") will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effects that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

(d) On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1, Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

(e) As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum

No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and are incorporated herein by reference as though fully set forth.

(f) The Board has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Resolution No. 0347-10, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures. The Board finds that the actions contemplated by this ordinance are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Board hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. . Additionally, the Board approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

Section 2. Planning Code Findings.

(a) On _____, 2018, in Resolution No. _____, the Planning Commission adopted findings under Planning Code Section 302, determining that this ordinance serves

the public necessity, convenience, and general welfare. The Board of Supervisors adopts as its own these findings. The Planning Commission Resolution is on file with the Clerk of the Board of Supervisors in File No. _____ and is incorporated herein by reference.

(b) On _____, 2018, the Planning Commission, in Resolution No. _____, adopted findings that the actions contemplated in this ordinance are consistent, on balance, with the City's General Plan, as amended, and eight priority policies of Planning Code, Section 101.1. The Board adopts these findings as its own. A copy of said Resolution is on file with the Clerk of the Board of Supervisors in File No. _____, and incorporated by reference herein.

Section 3. Under Sections 106 and 302(c) of the Planning Code, the following zoning use designation amendments to Sheet SU-10 of the Zoning Map are hereby approved:

Description of Property	Special Use District Hereby Removed
Assessor's Block 4991, Lot 276	Candlestick Point Activity Node

Section 4. Under Sections 106 and 302(c) of the Planning Code, the following zoning use designation amendments to Sheet HT-10 of the Zoning Map are hereby approved:

Description of Property	Height and Bulk District To Be Superseded	Height and Bulk District Hereby Approved
Assessor's Block 4991, Lot 276	CP	40X

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Section 5. Effective and Operative Dates.

(a) This ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

(b) This ordinance shall become operative on, and no rights or duties are affected until the date that the ordinances approving amendments to the Bayview Hunters Point Redevelopment Plan and amendments to the Candlestick Point Subarea Plan of the General Plan both have become effective. Copies of said Ordinances are on file with the Clerk of the Board of Supervisors in File Nos. _____ and _____.

Section 6. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors intends to amend only those words, phrases, paragraphs, subsections, sections, articles, numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal Code that are explicitly shown in this ordinance as additions, deletions, Board amendment additions, and Board amendment deletions in accordance with the "Note" that appears under the official title of the ordinance.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: Elaine C. Warren
Elaine C. Warren
Deputy City Attorney
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Candlestick Point
Activity Node
Special Use District /
CP Height and Bulk District

Zoning

P	Public
RH-1	One Unit per Lot
RH-1(S)	One Unit per Lot with Minor Secondary Unit
RH-2	Two Units per Lot
RM-1	Low Density (1 Unit per 800 sf)
NC-2	Small-Scale (2 Commercial Stories)
NC-3	Moderate-Scale (3+ Commercial Stories)
C-2	Community Business
M-1	Light Industrial
M-2	Heavy Industrial
PDR-1-B	Buffer
PDR-2	Core
HP-RA	See Hunters Point Redevelopment Plan

Existing

Candlestick Point
Activity Node
Special Use District /
CP Height and Bulk District

Zoning

P	Public
RH-1	One Unit per Lot
RH-1(S)	One Unit per Lot with Minor Secondary Unit
RH-2	Two Units per Lot
RM-1	Low Density (1 Unit per 800 sf)
NC-2	Small-Scale (2 Commercial Stories)
NC-3	Moderate-Scale (3+ Commercial Stories)
C-2	Community Business
M-1	Light Industrial
M-2	Heavy Industrial
PDR-1-B	Buffer
PDR-2	Core
HP-RA	See Hunters Point Redevelopment Plan

Revised

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Planning Commission Resolution No.

HEARING DATE: APRIL 26, 2018

Date:	April 12, 2018
Case Nos.:	2007.0946GPA-02 MAP-02 GPR CWP-02
Project:	Candlestick Point and Hunters Point Shipyard Phase II (see attached Map)
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Recommendation:	**Approval**

ESTABLISHING FINDINGS OF CONSISTENCY WITH THE GENERAL PLAN OF THE CITY AND COUNTY OF SAN FRANCISCO FOR PROPOSED AMENDMENTS TO THE BAYVIEW HUNTERS POINT REDEVELOPMENT PLAN AND THE HUNTERS POINT SHIPYARD REDEVELOPMENT PLAN

WHEREAS, In accordance with California Redevelopment Law, the Successor Agency to the San Francisco Redevelopment Agency (or the Office of Community Investment and Infrastructure or "OCII") is proposing to amend both the Bayview Hunters Point ("BVHP") Redevelopment Plan and the Hunters Point Shipyard ("HPS") Redevelopment Plan; and

The proposed amendments will facilitate the development of the Hunters Point Shipyard ("HPS") and Candlestick Point ("CP"), as envisioned in the two respective Redevelopment Plans.

A primary objective of both the HPS Redevelopment Plan and the BVHP Redevelopment Plan is to create economic development, affordable housing, public parks and open space and other community benefits by development of the under-used lands within the two Redevelopment Plan project areas. In 2010, the City approved combining the planning and redevelopment of these two areas provides a more cohesive overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and improves opportunities to finance the development of affordable housing and the public infrastructure necessary to expedite the revitalization of both areas. This project is referred to as the Candlestick Point – Hunters Point Shipyard Phase 2 Project ("CP HPS2 Project" or "Project").

Approval actions in 2010 ("Original Approvals") included, but were not limited to, General Plan amendments including the creation of the Candlestick Point Sub-Area Plan and the Hunters Point Shipyard Area Plan, Planning Code amendments creating the Candlestick Point Activity Node Special Use District ("SUD") and the Hunters Point Shipyard SUD, amendments to the Bayview Hunters Point Redevelopment Plan and the Hunters Point Shipyard Redevelopment Plan and the adoption of Design for Development documents for both Candlestick and Hunters Point Shipyard Phase 2.

More specifically, the Original Approvals included amendments to the BVHP Redevelopment Plan that divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that the Office of Community Investment and Infrastructure ("OCII") (previously the San Francisco Redevelopment Agency) would retain jurisdiction over land use and would be the approval body for development approvals pursuant to California Redevelopment Law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a Delegation Agreement between the Planning Department and OCII. The Original Approvals also contemplated the construction of a football stadium at HPS.

Subsequent to the Original Approvals, a new stadium for the 49ers was constructed in Santa Clara, removing the need to accommodate a stadium as a part of the Project.

Subsequent to the Original Approvals, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office development would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325.

As a result of these circumstantial changes, the Developer and OCII are pursuing refinements to the Project ("Project Refinements"). As a part of the Project Refinements, the BVHP Redevelopment Plan is proposed to be amended to remove the Jamestown Parcel from Zone 1 to clarify that it is not a part of the Project being implemented by the Developer under the DDA. Similarly, as a part of the Project Refinements, the HPS Redevelopment Plan is proposed by revising the street grid and block pattern and land use designations and development caps, including in the area previously proposed for a new stadium (now referred to as the "Warehouse District").

Pursuant to Sections 33346 and 33354.6 of the California Health and Safety Code regarding California Redevelopment Law, the planning policies and objectives and land uses and densities of the Redevelopment Plans must be found consistent with the General Plan prior to Redevelopment Plan approval or amendment by the Board of Supervisors.

The Planning Commission wishes to facilitate the physical, environmental, social and economic revitalization of the Bayview Hunters Point and Hunters Point Shipyard, using the legal and financial tools of a Redevelopment Plan, while creating jobs, housing and open space in a safe, pleasant, attractive and livable mixed use neighborhood that is linked rationally to adjacent neighborhoods.

The San Francisco Redevelopment Agency ("Redevelopment Agency"), together with the San Francisco Planning Commission of the City and County of San Francisco ("Planning Commission") acting as lead agencies under the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.), certified a Final Environmental Impact Report (hereinafter "FEIR") for the Candlestick Park-Hunters Point Shipyard Phase II Project ("Project") on June 3, 2010 by Motion No. 18096 and Resolution No. 58-2010, respectively. On July 14, 2010, the San Francisco Board of Supervisors

affirmed the Planning Commission's certification of the FEIR (Motion No. M10-110). The FEIR analyzed a mixed used development, including a stadium use at the Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

On June 3, 2010, the Redevelopment Agency, by Resolution No. 59-2010 adopted findings pursuant to the California Environmental Quality Act, including a Mitigation Monitoring and Reporting Program ("MMRP") and a Statement of Overriding Considerations for the Project, and took various actions to approve the Project. On the same day, by Motion No. 18097 the Planning Commission also adopted findings pursuant to CEQA ("CEQA Findings") and took various approval actions related to the Project.

Since the certification of the FEIR the Planning Department, working with the Office of Community Investment and Infrastructure ("OCII", the successor agency to the San Francisco Redevelopment Agency), has issued several addenda to the FEIR to address project changes. The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to modifications to the Project (the "Modified Project") will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effect that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1, Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are available under Case No. 2007.0946E, and are incorporated herein by reference as though fully set forth.

The Planning Commission has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Motion No. 18097, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures. The Planning Commission finds that the actions contemplated by this Resolution are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Planning Commission hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the

modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. Additionally, the Planning Commission approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

On May 3, 2010, by Motion No. 18099, the Planning Commission adopted "Master General Plan and Planning Code Section 101.1 Finding" ("Original General Plan Findings") establishing that on balance, the Project under the Original Approvals consistent with the General Plan and Planning Code Section 101.1.

The Planning Commission finds that in light of the changes to the Project, including the subject Redevelopment Plan Amendments, the Original General Plan Findings are still relevant and can be applied to the Project with the Project Refinements; therefore the Project with the Project Refinements, including the subject Amendments are, on balance, consistent with the General Plan and Planning Code Section 101.1. The findings attached to Resolution No. 18099 as Exhibit A, are hereby incorporated herein by this reference as if fully set forth.

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NOW, THEREFORE, BE IT RESOLVED, That the Planning Commission having considered this proposal at a public meeting on April 26, 2018 pursuant to Planning Code Sections 302(b) and 340, having heard and reviewed oral and written testimony and reports, and having reviewed and certified the Final Environmental Impact Report on the Redevelopment Plans as adequate, complete, and in compliance with CEQA, and having adopted findings regarding the subsequent addendum as described above, does hereby find the Bayview Hunters Point Redevelopment Plan, as amended, and the Hunters Point Shipyard Redevelopment Plan, as amended, dated _____ respectively, in conformity with the General Plan as it is recommended to be amended.

I hereby certify that the foregoing Resolution was ADOPTED by the San Francisco Planning Commission on April 26, 2018.

Jonas P. Ionin

Commission Secretary

AYES:

NOES:

ABSENT:

REDEVELOPMENT PLAN
FOR THE
BAYVIEW HUNTERS POINT REDEVELOPMENT PROJECT

~~June 22, 2017~~

_____, 2018

SUCCESSOR AGENCY TO THE SAN FRANCISCO REDEVELOPMENT AGENCY

Adopted August 3, 2010
Amended June 22, 2017
Amended _____, 2018

REDEVELOPMENT PLAN
FOR THE
BAYVIEW HUNTERS POINT REDEVELOPMENT PROJECT

Bayview Hunters Point Redevelopment Plan
Approved and Adopted by the Board of Supervisors
of the City and County of San Francisco,
Ordinance No. 25-69, January 20, 1969

Amendments Adopted and Approved by the Board of Supervisors
of the City and County of San Francisco,
Ordinance No. 280-70, August 24, 1970,
Ordinance No. 475-86, December 1, 1986,
Ordinance No. 417-94, December 12, 1994,
Ordinance No. 113-06, May 23, 2006,
Ordinance No. 210-10, August 3 , 2010; Ordinance No. 121-17; June 22, 2017
and Ordinance No. ~~121-17, June 13, 2017.~~ ___-18, _____, 2018.

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1.0 BAYVIEW HUNTERS POINT REDEVELOPMENT PLAN OVERVIEW

When adopted in 2006, this Bayview Hunters Point Redevelopment Plan[1] (the "**Redevelopment Plan**") amended the redevelopment plan formerly known as the Hunters Point Redevelopment Plan for the redevelopment project area formerly known as "**Hunters Point Redevelopment Project Area.**" In January 2009, the portion of this Redevelopment Plan covering the Hunters Point Redevelopment Project Area (also known as Project Area A) expired and, as a result, the Redevelopment Agency of the City and County of San Francisco (the "**Agency**") has no authority to act pursuant to that portion of this Redevelopment Plan except to pay previously incurred indebtedness, to enforce existing covenants, contracts, or other obligations, and to comply with affordable housing obligations, which includes the use of its tax increment for the funding of affordable replacement housing.[2] With the expiration of Project Area A, only the area added by the 2006 amendment constitutes the "**Bayview Hunters Point Redevelopment Project Area**" (sometimes referred to as the "**Project Area B**" **or the** "**Project Area**"). During the preparation of this Redevelopment Plan, the Agency consulted with the Project Area Committee, the Planning Department and other departments of the City and County of San Francisco (the "**City**").

1.1 Bayview Hunters Point Redevelopment Plan Overview

1.1.1 Significant Community Participation In Planning Process

The Hunters Point Redevelopment plan was adopted in 1969 to replace and rehabilitate former military housing units. The redevelopment activities in this area, termed Project Area A in this Redevelopment Plan, are complete. In 1995 the community completed planning work on the South Bayshore Area Plan, a specific area plan of the San Francisco General Plan. The South Bayshore Area Plan considered the use of redevelopment tools to continue the revitalization of the Bayview Hunters Point community. The same year, the Board of Supervisors created the Bayview Hunters Point Survey Area. In 1997, the PAC was formed through a public election process.

The PAC created the Community Revitalization Concept Plan for Bayview Hunters Point in 2000, which outlined a wide range of programs intended to bring about physical and economic improvements in the community. While the Concept Plan described many activities beyond the scope of redevelopment programs, it has served as the foundational policy document for this Redevelopment Plan. In 2004, the PAC completed the Framework Housing Program that described an array of affordable housing programs and policies supported by PAC members. This Redevelopment Plan incorporates relevant policies of the Framework Housing Program. Both the

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[1] Capitalized terms have the meaning set forth in Section 6 (Definitions) unless otherwise indicated in the text.

[2] Under Sections 33333.7 and 33333.8 of the California Health and Safety Code, the Agency may continue to incur indebtedness and receive tax increment from the Hunters Point Project Area (Project Area A) to fulfill its housing obligation to replace affordable housing units that were previously destroyed and never replaced. Ordinance No. 15-05 (Jan. 21, 2005).

Concept Plan and the Framework Housing Program should continue to guide the policies of the Agency and other city departments working in Bayview Hunters Point.

In June 2008, San Francisco voters approved Proposition G, which adopted policies for revitalization of Candlestick Point and Hunters Point Shipyard Phase Phase 2. This Redevelopment Plan implements Proposition G.

1.1.2 Contents of this Redevelopment Plan

This Redevelopment Plan consists of this text, the Project Area Boundary map (Map 1), the Legal Descriptions of Project Areas A and B (Attachments A & B), the Project Area B Redevelopment Zones map (Map 2), the Area B Activity Nodes map (Map 3), the Zone 1 Land Use Districts Map (Map 4), the Zone 2 Generalized Land Use Map (Map 5), the list of Authorized Public Improvements (Attachment C), the List of Blocks and Lots within Zone 1 as of the 2010 Plan Amendment Date (Attachment D), Planning Code Section 314 (Attachment E), Planning Code Section 295 (Attachment F), Planning Commission Resolution 18102 (Attachment G) (subject to ~~section~~Section 4.3.16 (below)), and Proposition O (Attachment H). All attachments and maps are incorporated into this Redevelopment Plan by reference. This Redevelopment Plan was prepared by the Agency pursuant to the California Community Redevelopment Law (CRL), the California Constitution, and all applicable local codes and ordinances. The Project Area is in Bayview Hunters Point, City and County of San Francisco, State of California and includes all properties within the Project Area boundary shown on Map 1.

1.1.3 Project Area Boundaries

The Project Area consists of Project Area B which has two sub-areas: Zone 1 (also known as the Candlestick Point Sub-Area) and Zone 2. [3]

Project Area B includes portions of the Survey Area designated and described in Resolution No. 26-95 adopted by the Board of Supervisors of the City and County of San Francisco on January 3, 1995, and formally designated in name as the "Bayview Hunters Point Survey Area" in Resolution No. 439-99 adopted by the Board of Supervisors on May 10, 1999. The BVHP Project Area was adopted on June 1, 2006 by Ordinance No. 113-06. The boundaries of Project Area B are indicated on Map 1, Project Area Boundary Map, and the legal description is found in Attachment B. The sub-areas of Project Area B are illustrated in Map 2. The parcels, as of the 2010 Plan Amendment Date, within Zone 1 are listed by Assessor Block and Lot numbers in Attachment D.

A portion of the original Bayview Hunters Point Survey Area created in 1995 centered around the Hunters Point Shoreline Activity Node, also referred to as the India Basin Shoreline,

[3] Prior to its expiration in 2009, Project Area A comprised all of the Redevelopment Area G (Hunters Point), as designated and described in Resolution No. 711-63 adopted by the Board of Supervisors on December 23, 1963, portions of the Survey Area as designated and described in Resolution No. 100-68 adopted by the Board of Supervisors on February 13, 1968, and Survey Areas as designated and described in Resolution No. 313-70 adopted by the Board of Supervisors on May 25, 1970. The boundaries of Project Area A are indicated on Map 1, Project Boundary Map, and the legal description is found in Attachment A.

may be added as Project Area C as part of a future plan amendment, as described in Section 1.1.8 below.

1.1.4 Conformance with the General Plan

The Redevelopment Plan is consistent with the General Plan of the City and County of San Francisco and its applicable elements, including the BVHP Area Plan and the Candlestick Point Sub-Area Plan, each as ~~in effect on~~of the ~~2010~~2018 Plan Amendment Date~~. The Redevelopment Plan~~, and is ~~also~~ in conformity with the eight Priority Policies of Section 101.1 of the San Francisco Planning Code ~~in effect on the 2010 Plan Amendment Date.~~ .

1.1.5 Powers, Duties and Obligations for Implementation of this Redevelopment Plan

This Redevelopment Plan provides the Agency with the powers, duties and obligations to implement and further the programs generally described herein for the redevelopment, rehabilitation and revitalization of the Project Area. This Redevelopment Plan provides a framework and sets forth the objectives, redevelopment programs, and land use controls within which specific redevelopment activities in the Project Area will be pursued. It also describes the tools available to the Agency to develop and proceed with specific plans, projects, and solutions. The development of all real property in Zone 1 of the Project Area is subject to the controls and requirements of this Redevelopment Plan, and the other applicable Plan Documents, including the development standards and design guidelines established in the Candlestick Point Design for Development. The development of all real property in Zone 2 of the Project Area is subject to the controls and requirements of this Redevelopment Plan, the Planning Code and the other applicable Plan Documents, as described herein.

1.1.6 Powers and Duties of the Project Area Committee

The PAC has the role and duties listed in Section 33347.5 and Sections 33385 through 33388 of the CRL, which requires, among other things that the Agency consult with and obtain the advice of a project area committee on policy matters affecting the residents of the project area "throughout the period of preparation of the redevelopment plan and for a three-year period after the adoption of the redevelopment plan, subject to one-year extensions by the legislative body." Section 33386. The required three-year period for the PAC is reset by the amendment of this Redevelopment Plan by Ordinance No. 210-10. When the term of the existing PAC expires, the Agency shall request, on an annual basis, that the Board of Supervisors authorize one-year extensions of the PAC for the duration of this Redevelopment Plan or otherwise ensure, pursuant to CRL Section 33385(f), that another advisory committee is formed for the duration of this Redevelopment Plan. The Agency will consult with and seek the advice of the PAC or other advisory committee on policies and programs designed to implement this Redevelopment Plan.

1.1.7 Preliminary Plan

This Redevelopment Plan is based on the Amended Preliminary Plan for the South Bayshore Redevelopment Project Area, formulated and adopted by the Planning Commission by

Motion No. 14205 on October 10, 1996 and as revised by the Planning Commission by Motion No. 14257 on December 12, 1996. The Planning Commission also formulated and adopted the India Basin Preliminary Plan by Motion No. 17932 on July 23, 2009.

1.1.8 Remaining Survey Area Subject to Further Analysis and Incorporation

A portion of the Bayview Hunters Point Survey Area that is centered around the Hunters Point Shoreline Activity Node, as shown on Map 3 ~~–~~ Area B Activity Nodes, is subject to further analysis and planning by the Agency, in conjunction with the Planning Department and other City departments. Although this area suffers from severe blighting conditions, further analysis and study are required before the Agency can recommend to the Board of Supervisors that the area be included in the Project Area. The Agency anticipates that further planning and blight analysis will support a future amendment to this Redevelopment Plan to include most of this area. If supported by further analysis, the Agency anticipates incorporation of the India Basin Shoreline area as Project Area C through a further amendment of this Redevelopment Plan.

1.2 Planning Goals and Objectives for the Project Area

1.2.1 Redevelopment Project Area Objectives

The following goals for this Redevelopment Plan were established in conjunction with the PAC through its endorsement of the Concept Plan and in meetings with members of the public at large. Together with the other related Plan Documents, these goals and objectives will direct the revitalization of the community and guide the direction of all future development within the Project Area. The goals and objectives for the Project Area are as follows:

- Providing opportunities for participation by owners in the redevelopment of their properties.
- Increasing the community's supply of housing by facilitating economically feasible, affordable housing for existing very low-, low- and moderate-income households and residents in the community.
- Strengthening the economic base of the Project Area and the community by strengthening retail and other commercial functions within the Project Area through the facilitation of new retail space, and as appropriate, new commercial and light industrial uses.
- Providing public parks and open space.
- Administering lands granted to the Agency by the State consistent with the Public Trust for commerce, navigation and fisheries, and reconfiguring those lands in a manner that enhances their value for Public Trust purposes, in accordance with Chapter 203 of the Statutes of 2009 (as amended from time to time, the "**Granting Act**").

- Retaining existing residents and existing cultural diversity to the extent feasible.
- Encouraging participation of area residents in the economic development that will occur.
- Supporting locally-owned small businesses and local entrepreneurship.
- Facilitating emerging commercial-industrial sectors through facilitating improvement of transportation access to commercial and industrial areas, improvement of safety within the Project Area, and the installation of needed site improvements to stimulate new commercial and industrial expansion, employment, and economic growth.
- Facilitating public transit opportunities to and within the Project Area to the extent feasible.
- Providing land, as feasible and appropriate, for publicly accessible open spaces.
- Facilitating the preservation, rehabilitation, and seismic retrofitting of historic buildings and other landmarks.
- Providing assistance towards the improvement of key transportation routes to meet the needs of alternative transportation modes, industrial trucking operations, and emergency operations.
- Eliminating blighting influences and correcting environmental deficiencies within the Project Area, including, abnormally high vacancies, abandoned, deteriorated and dilapidated buildings, incompatible land uses, depreciated or stagnant property values, and inadequate or deteriorated public improvements, facilities and utilities.
- Removing structurally substandard buildings, removing impediments to land development, and facilitating modern, integrated development with improved pedestrian and vehicular circulation within the Project Area and vicinity.
- Redesigning and developing undeveloped and underdeveloped areas, which are improperly utilized.
- Providing flexibility in the development of real property within the Project Area to respond readily and appropriately to market conditions.

1.2.2 Implementation Plan for the Project Area

Community Redevelopment Law Section 33490 requires the Agency to adopt, after a public hearing, an implementation plan that contains the specific goals and objectives of the Agency for the Project Area, the specific programs, including potential projects, estimated expenditures proposed to be made during the next five years, and an explanation of how the goals and objectives, programs, and expenditures will eliminate blight within the Project Area and implement the requirements of CRL Sections 33334.2, 33334.4, 33334.6, and 33413. After adoption of the first implementation plan, subsequent implementation plans must be adopted every five years either in conjunction with the City's housing element cycle, new redevelopment plan

amendments, or the implementation plan cycle and report on the Agency's compliance with CRL Sections 33334.2, 33334.4, 33334.6, and 33413.

1.2.3 Related Plan Documents for the Project Area

In order to facilitate the implementation of this Redevelopment Plan, the Agency has developed, or may develop in the future, related Plan Documents such as the Design for Development, Interagency Cooperation Agreement, Business Occupant Re-Entry Policy, Delegation Agreement, Implementation Plan, OPA Rules and Relocation Plan. In addition, the State or, subject to the provisions of this Redevelopment Plan, the City may pass legislation related to this Redevelopment Plan.

1.2.4 Historical Survey of the Project Area

As part of the Agency's annual budget, the Agency shall seek funding from the Board of Supervisors to conduct a building-by-building historical survey of each parcel in the Project Area. The Agency shall complete the survey within five (5) years from the date that the Agency first receives sufficient funding from the City to initiate the survey. If funded, this survey will include, among other things, an architectural description and analysis together with historical documentation of each building, structure, or object and will also note whether it has been designated in any existing City survey or other official listing. In seeking this funding, the Agency may identify particular subareas of the Project Area that will be surveyed incrementally over a period of time so that completion of the entire survey of the Project Area will occur over a five year period. The Agency may request funding for a subarea survey based on its inclusion in the Planning Department's rezoning efforts, its identification in this Redevelopment Plan as an Economic Development Activity Node, or some other reasonable classification of an area for survey purposes. As of the 2010 Plan Amendment Date, a Historic Survey has been conducted for the Candlestick Point (Zone 1), the Hunters Point Shoreline (including Survey Area C), and the Town Center Activity Nodes.

1.2.5 Performance Audit

The City Services Auditor will conduct periodic performance audits of the activities of the Agency and other relevant City departments in implementing this Redevelopment Plan. Such audits will include a review of the overall performance and effectiveness of the Agency, together with relevant City departments, in the planning, undertaking, construction and operation of redevelopment projects in furtherance of the goals and objectives for the Project Area as set forth in this Redevelopment Plan. The Agency and City will provide for the cost of such performance audit in the Agency's annual budget.

1.3 Redevelopment Plan Duration

1.3.1 Plan Duration for Project Area A

On January 1, 2009, the Agency's land use jurisdiction over Project Area A ended, and this Redevelopment Plan has no further effect as to development in Project Area A, except to pay previously incurred indebtedness, to enforce existing covenants, contracts, or other obligations, and to comply with affordable housing obligations, which include the use of its tax increment for the funding of affordable replacement housing. In 2005, the Board of Supervisors adopted a plan amendment by Ordinance No. 15-05, allowing the Agency to incur additional indebtedness and receive additional tax increment revenues from Project Area A to repay the additional indebtedness, but only for the purpose of funding low- and moderate-income housing fund activities. The 2005 plan amendment was authorized under Section 33333.7 and Section 33333.8 of the CRL, which is also known as SB 2113.

Any declaration of restrictions formulated pursuant to this Redevelopment Plan may contain provisions for the extension of such declaration of restrictions for successive periods. Tax increment financing will remain in place beyond this expiration date.

1.3.2 Plan Duration for Project Area B

The provisions of this Redevelopment Plan for Project Area B will be effective for thirty years from the adoption of the ordinance approving the Bayview Hunters Point Plan by the Board of Supervisors on June 1, 2006; except that the nondiscrimination and nonsegregation provisions will run in perpetuity. After this time limit on the duration and effectiveness of this Redevelopment Plan, the Agency will have no authority to act pursuant to this Redevelopment Plan except (i) to pay previously incurred indebtedness and to enforce existing covenants or contracts, and (ii) if the Agency has not completed its housing obligations pursuant to CRL Section 33413, it will retain its authority to implement its requirements under CRL Section 33413, including its ability to incur and pay indebtedness for this purpose, and will use this authority to complete these housing obligations as soon as reasonably possible.

1.4 Redevelopment Activities for the Project Area

1.4.1 Redevelopment Actions

The Agency may exercise all of its powers in Project Area B, including but not limited, to the following:

- Providing very low-, low- and moderate-income housing, including supportive housing for the homeless;

- Preserving the availability of affordable housing units assisted or subsidized by public entities, which are threatened with conversion to market rates;
- Requiring the integration of affordable housing sites with sites developed for market rate housing;
- Assisting the development of affordable and supportive housing by developers;
- Providing relocation assistance to eligible occupants displaced from property in the Project Area by Agency Actions;
- Providing for participation in redevelopment by owners presently located in the Project Area and extending preferences to business occupants and other tenants desiring to remain or relocate within the Project Area;
- Acquiring land or building sites;
- Demolishing or removing certain buildings and improvements;
- Constructing buildings, structures, roadways, and park facilities;
- Improving land, building sites, or public infrastructure with on-site or off-site improvements;
- Encouraging the rehabilitation of structures and improvements by present owners or their successors;
- Disposing of property by sale, lease, donation or other means to public entities or private developers for uses in accordance with this Redevelopment Plan;
- Financing insurance premiums pursuant to CRL Section 33136;
- Developing plans, paying principal and interest on bonds, loans, advances or other indebtedness or paying financing or carrying charges;
- Promoting the retention of existing businesses and attraction of new businesses and the provision of assistance to the private sector, if necessary; and
- Remedying or removing a release of hazardous substances on, under, or from property within the Project Area.

To accomplish the above activities in the implementation and furtherance of this Redevelopment Plan, the Agency is authorized to use all the powers provided in this Redevelopment Plan and all the powers now or hereafter permitted by law as may be limited by this Redevelopment Plan.

1.4.2 Personal Property Acquisition and Disposition

The Agency is not authorized to acquire personal property in the Project Area, except as necessary in the execution of this Redevelopment Plan. For purposes of this section, personal property includes but is not limited to, structures and improvements without acquiring the land upon which those structures or improvements are located. The Agency is authorized to lease, sell,

exchange, transfer, assign, pledge, encumber or otherwise dispose of personal property acquired by the Agency.

1.4.3 Real Property Acquisition

The Agency may acquire real property, either the entire fee or any other interest in real property less than a fee, including underground easements, located in the Project Area by any means authorized by law, as may be limited by this Redevelopment Plan. The use of eminent domain is totally prohibited in Project Area A and is partially prohibited in Project Area B, as set forth in Section 1.4.5 of this Redevelopment Plan.

1.4.4 Real Property Disposition and Development

The Agency is authorized to sell, lease, exchange, subdivide, transfer, assign, pledge, encumber by mortgage or deed of trust or otherwise dispose of any interest in real property in the Project Area, except to the extent prohibited by the Granting Act. To the extent permitted by law, the Agency is authorized to dispose of or acquire real property by negotiated lease, sale or transfer without public bidding.

All real property acquired by the Agency in the Project Area will be sold or leased to public or private persons or entities for development of the uses permitted in this Redevelopment Plan, or may be developed by the Agency for uses consistent with the Community Redevelopment Law.

The Agency will obligate all purchasers or lessees of property acquired from the Agency to use the property for the purposes designated in this Redevelopment Plan, to begin and complete development of the property within a period of time that the Agency fixes as reasonable and to comply with other conditions that the Agency deems necessary to carry out the purposes of this Redevelopment Plan.

To provide adequate safeguards to ensure that the provisions of this Redevelopment Plan will be carried out and to prevent the recurrence of blight, all real property sold, leased or conveyed by the Agency, as well as all property subject to owner participation agreements, is subject to the provisions of this Redevelopment Plan.

The Agency will reserve powers and controls in the disposition and development documents as necessary to prevent transfer, retention or use of property for speculative purposes and to ensure that development is carried out consistent with this Redevelopment Plan.

Leases, deeds, contracts, agreements and declarations of restrictions of the Agency may contain restrictions, covenants, covenants running with the land, rights of reverter, conditions subsequent, equitable servitudes or any other provisions necessary to carry out this Redevelopment Plan. Where appropriate, as determined by the Agency, such documents, or portions thereof, will be recorded in the office of the County Recorder.

Property acquired by the Agency in the Project Area will be under the management and control of the Agency during its ownership of such property. Such property may be rented or leased by the Agency pending its conveyance.

The Agency is authorized to assist financially (and otherwise) any public entity in the cost of public land, buildings, facilities, structures or other improvements where such land, buildings, facilities, structures or other improvements, are or would be, of benefit to the Project Area.

1.4.5 Prohibitions and Limitations on Use of Eminent Domain

The Agency may exercise the power of eminent domain in the Project Area only if the Agency complies with state law including the requirement: that the Agency make every effort to acquire property by negotiation, instead of by condemnation or eminent domain; that the Agency pay just compensation based upon fair market value; and that the Agency adopt at a public hearing by a vote of not less than two-thirds of all members of the Agency Commission, a resolution of necessity finding that acquisition of such property through eminent domain is in the public interest, and necessary to carry out this Redevelopment Plan. In addition, the use of eminent domain will be subject to the following limitations and prohibitions:

- The Agency may not use eminent domain to acquire property without first receiving a recommendation from the PAC or appointed citizens advisory committee. As stated in Section 1.1.6, the Agency commits to maintain a PAC or an appointed citizens advisory committee for the duration of this Redevelopment Plan.
- The Agency may not use eminent domain to acquire publicly owned property including property owned by the San Francisco Housing Authority.
- Eminent domain proceedings, if used in the Project Area, must be commenced, pursuant to CRL Section 33333.2(a)(4), within twelve (12) years from the Effective Date. This time limitation may be extended, pursuant to the standards of CRL Section 33333.2(a)(4), only by amendment of this Redevelopment Plan, as adopted and approved by the Board of Supervisors and the Agency Commission, following a community process.
- The Agency may not acquire, through the use of eminent domain, real property in a Residential (R) District, as defined by the Planning Code ("R" zone), as of the Effective Date, in the Project Area.
- The Agency may not acquire, through the use of eminent domain, property that contains legally occupied Dwelling Units.
- The Agency may not acquire, through the use of eminent domain, property owned by churches or other religious institutions, as defined in Planning Code Section 209.3(j).
- The Agency may not acquire real property in the Project Area to be retained by an owner pursuant to an Owner Participation Agreement, unless the owner fails to

perform under that agreement and as a result the Agency exercises its reverter rights, if any; or successfully prosecutes a condemnation or eminent domain action.

- The Agency will use eminent domain on a parcel not zoned "R" (Residential) only as a last resort after the property owner has failed, after reasonable notice, to correct one or more of the following conditions:
  - The property contains an unreinforced masonry building (UMB) that has not been seismically retrofitted by the date required by City ordinance.
  - The property contains a building in which it is unsafe or unhealthy for persons to live or work as determined by the Department of Building Inspection, after failure to comply with an order of abatement of such conditions pursuant to Section 102 of the Building Code.
  - The property contains uses that pose a threat to the public's safety and welfare as formally determined through major citations by the appropriate City agencies or departments, including the San Francisco Police Department, San Francisco Fire Department, San Francisco City Attorney's Office, San Francisco District Attorney's Office, San Francisco Department of Public Health, San Francisco Department of Building Inspection, and San Francisco Planning Department.
  - A parcel that is vacant, used solely as a surface parking lot (not accessory to another use), or contains a vacant or substantially vacant (approximately seventy five percent (75%) or more of the rentable area) building(s) and the owner has no active plans for a new use or development.
  - Under-utilization of a property of irregular form and shape, and of inadequate size that substantially hinders its economically viable uses for development consistent with this Redevelopment Plan.

1.4.6 Rehabilitation, Conservation and Moving of Structures

The Agency is authorized to rehabilitate and conserve or to cause to be rehabilitated and conserved, any building or structure in the Project Area and to encourage others to do so. The Agency is also authorized to acquire, restore, rehabilitate, move and conserve historic resources in the Project Area.

It is a purpose of this Redevelopment Plan to encourage the retention of existing businesses that are generally compatible with this Redevelopment Plan and to add to the economic viability of businesses by programs that encourage voluntary participation in conservation and rehabilitation. The Agency is authorized to conduct a program of assistance and incentives to encourage owners of property within the Project Area to upgrade and maintain their property in a manner consistent with this Redevelopment Plan and with other standards that may be established by the Agency.

1.5 Community Revitalization Activity Nodes

The Agency shall encourage the promotion of policies and land use decisions that provide job-training, employment and business opportunities to local residents with a focus on economic development efforts within the seven Community Revitalization Activity Nodes of the Project Area: Town Center, Health Center, South Basin, Oakinba, Candlestick Point and a portion of the Hunters Point Shoreline and Northern Gateway Activity Nodes. The Community Revitalization Activity Nodes are shown on Map 3. The Agency may implement Activity Node development programs for all or part of each Activity Node. The Agency may also pursue economic development efforts outside of the Project Area where these efforts are determined to be necessary to effect the elimination of blighting conditions within the Project Area and are consistent with CRL Section 33445.1 (Stat.2009, Chapter 555). The design of each Community Revitalization Activity Node will facilitate and support the Agency's efforts under its Affordable Housing Program.

The Agency's Housing programs, economic development efforts, and community enhancements will focus on the following Activity Nodes as illustratively described below:

1.5.1 Northern Gateway

- Promote mixed-use, transit-oriented development on Third Street, including local shopping, office space, entertainment venues and, where appropriate, light industrial activities.
- Develop industrial and large-scale commercial space on properties.
- Encourage the development of major business and employment development centers.
- Maintain and expand industry to increase the job base and support the development of entrepreneurial opportunities.
- Encourage clean industry and facilities to improve the quality of life for Project Area residents and workers.

1.5.2 Town Center

- Promote appropriately scaled, mixed-use, transit-oriented development on Third Street.
- Assist the retention of existing buildings and facades where feasible and appropriate.
- Encourage the growth of commercial retail, including restaurants, boutique shops, arts, theaters, museums, a conference center, cultural and entertainment uses that contribute to development of a cultural destination.
- Promote infill development in residential neighborhoods, as appropriate.
- Create community service spaces centered around Third Street and Oakdale Avenue.

- Promote the enhancement of transit hubs, including Muni and CalTrain, to bring people to Bayview Hunters Point and to provide residents with improved connections to employment.
- Develop community destinations and gathering places ~~—~~ including plazas and locations for festivals, fairs, a farmer's market and community events.

1.5.3 Health Center

- Assist the development of mixed-use, transit oriented projects on Third Street with ground floor commercial retail space.
- Enhance public amenities designed to serve an aging population.
- Promote commercial activities focused on medical, medical-related and supportive services.
- Assist in the renovation and expansion of the Southeast Health Center.
- Construct community destinations and gathering places ~~—~~ including plazas.
- Develop housing for seniors including assisted-living facilities.
- Develop an commercial office area, with medical and other types of office uses bounding the Southeast Health Center with buffer zones between adjacent residential and industrial uses.

1.5.4 South Basin

- Promote transit-oriented development adjacent to Third Street, with residential units, including affordable housing units, in appropriate locations.
- Encourage the development of industrial and large-scale commercial space on properties zoned for light industrial uses.
- Create buffer land use zones between residential and industrial uses to minimize potential adverse environmental health impacts and other land use conflicts.
- Promote locally-owned businesses and local entrepreneurs.
- Promote retail growth focused on neighborhood-serving businesses that meet the basic shopping needs of the community.
- An eco-industrial park in the southeast portion of the district, with defined truck routes linking the Shipyard and the freeway.
- Protect historic residential neighborhoods, with a range of new infill housing and transit-oriented mixed-use development focused around light rail stations.

1.5.5 Oakinba

- Create a vibrant commercial center with limited larger-scale, city-serving commercial businesses along Bayshore Boulevard consistent with Planning Code standards.
- Ensure the compatibility of larger-scale commercial and light industrial uses with nearby residential neighborhoods.
- Develop job-training, employment and business opportunities to local residents.
- Promote economic development that fosters clean industry and commercial facilities to protect and improve the quality of life for area residents and workers.
- Maintain and expand industry within the area to increase the job base and support the development of entrepreneurial opportunities.
- Facilitate the creation of a 'green' home improvement district along Bayshore Boulevard.

1.5.6 Hunters Point Shoreline

- Promote new housing on available infill development sites where appropriate.
- Assist with the renovation of Housing Authority projects such that the housing fits in architecturally with other residential development in the community.
- Emphasis on encouraging artists and artisans, such as those of African or Pan-African influence.
- Improve access to water recreation along the India Basin shoreline and enhance public access to the waterfront from the hillside housing.
- Assist with the redesign of Innes Avenue to improve pedestrian safety and enhance the neighborhood commercial area.
- Facilitate the development of a maritime center focused on historic boating activities and creating future recreational opportunities.
- Conduct specific land use planning for the remaining survey area.

1.5.7 Candlestick Point

- Administer the development of a new, high density, transit-oriented mixed-use development that includes residential units with a range of housing types and densities regional retail and entertainment venues; a hotel and entertainment arena; neighborhood-serving commercial and retail uses; and office and community service uses, consistent with Proposition G, which San Francisco voters approved on June 3, 2008.

- Create community and regional recreational destinations and gathering places, including a restored, reconfigured, and redeveloped Candlestick Point State Recreation Area land, and other public parks and civic spaces.
- Rebuild the Alice Griffith Housing to provide at least one-for-one replacement units targeted to the same income levels as those of the existing residents and ensure that Alice Griffith households leasing units from the Housing Authority have the opportunity to move to the new, upgraded units directly from their existing Alice Griffith Housing units without having to relocate to any other area.
- Construct new public infrastructure and transportation facilities to service new development at Candlestick Point, Alice Griffith and the Hunters Point Shipyard.

1.6 ~~1.6~~ Community Enhancements and Benefits Program for the Project Area

1.6.1 Community Benefits Program

The Agency may adopt and implement a community enhancements and benefits program that will promote the full revitalization of the Bayview Hunters Point neighborhood and that will involve the Agency and as appropriate, other city, regional and state agencies in its implementation.

1.6.2 Proposed Benefits Programs

The following community benefit program elements are suggested under this Redevelopment Plan:

- Streetscape plans for Third Street, Evans-Innes Avenue, Oakdale Avenue or other major roadways in Zone 2 of the Project Area, including traffic calming where needed;
- Green Streets Program to provide for the landscaping and lighting of local streets;
- Façade Improvement Program in concert with the streetscape plans to enhance key catalyst areas along the major roadways;
- Development of "way finding" programs such as local signage and gateway elements;
- Development of public parks and recreational facilities;
- Preservation of historic structures;
- Commitment of land and ground floor spaces in mixed use projects for community facilities;
- Planning and development of community facilities and health clinics; and
- Creation of job readiness, training, and placement programs for local residents.

1.6.3 Open Space

The generalized park and open space areas consist of a system of new and reconfigured state park facilities, community and neighborhood parks, plazas, recreational facilities, and habitat preservation areas.

In Zone 1, the Agency will work with developer(s), City and State agencies, toward the construction of a comprehensive and integrated system of new and reconfigured public parks in the Candlestick Point Activity Node. The Agency may assist in land transactions and the funding of new public parks or the enlargement and/or enhancement of existing public facilities within Zone 1 of the Project Area and maintenance of those improvements. The Agency encourages the cooperation of developers in the construction and maintenance of private and semi-public outdoor open spaces (plazas, balconies, patios, courtyards, rooftops).

In Zone 2, the Agency will work with city agencies toward the construction of a comprehensive and integrated system of inviting and well-lighted "Green Streets" to provide direct pedestrian movement to and from schools, parks, playgrounds, commercial areas, and other frequently visited facilities and places. These pedestrian routes, both on and away from public streets, should be marked with distinctive landscaping. The Agency may assist in the purchase of land and the development of new public parks or the enlargement and enhancement of existing public facilities within Zone 2 of the Project Area. The Agency encourages the cooperation of developers in the construction and maintenance of private and semi-public outdoor open spaces (plazas, balconies, patios, courtyards, rooftops).

1.6.4 Public Improvements and Public Facilities

The Agency is authorized to install and construct or to cause to be installed and constructed the public improvements, public facilities, and public utilities, on any parcel within or outside the Project Area, appropriate or necessary to carry out this Redevelopment Plan. Such public improvements and public facilities are described in Attachment C.

1.7 ~~1.7~~ Affordable Housing in the Project Area

1.7.1 Affordable Housing Program

The Agency shall implement an Affordable Housing Program and, as feasible, may dedicate affordable housing funds for the production of affordable housing outside of the Project Area if such production is determined to be necessary to effect the elimination of blighting conditions within the Project Area and the implementation of this Redevelopment Plan.

Further the Agency may only utilize citywide affordable housing funds generated from Zone 1 of the Project Area for the production of affordable housing outside of Zone 1 as provided in the applicable Tax Allocation Agreement and disposition and development agreement.

The Affordable Housing Program shall be consistent with the City's Consolidated Housing Plan and the General Plan and will include below market rate apartment development, affordable home ownership project development, supportive housing projects serving high need populations, and Agency programs such as a model block single family rehabilitation program.

1.7.2 Affordable Housing Production Goals

Subdivision (b)(2) of Section 33413 of the Community Redevelopment Law requires that at least fifteen percent (15%) of all new and substantially rehabilitated Dwelling Units developed within Project Area B by public or private entities or persons other than the Agency will be available at affordable housing cost to, and occupied by, persons and families of extremely low-, very low-, low- or moderate-income, as defined by the CRL.

In Zone 1, the Agency shall meet this Community Redevelopment Law requirement through implementation of one or more disposition and development agreements that include the Candlestick Point Hunters Point Shipyard Phase 2 Below Market Rate Housing Plan. In Zone 2 of the Project Area, the Agency shall exceed the Community Redevelopment Law requirement by making at least twenty-five percent (25%) of all new and substantially rehabilitated Dwelling Units developed within Project Area B by public or private entities or persons other than the Agency be available at affordable housing cost to, and occupied by, persons and families of extremely low-, very low-, low- or moderate-income, as defined by the CRL. Not less than forty percent (40%) of the Dwelling Units in Zone 2 required to be available at affordable housing cost to, and occupied by, persons and families of extremely low-, very low-, low- or moderate-income shall be available at affordable housing cost to, and occupied by, extremely low- and very low-income households.

1.7.3 Affordable Housing Participation Policy

To facilitate the Agency's compliance with the above-described affordable housing production goals, the developers of market rate housing shall have an inclusionary housing obligation.

In Zone 1 of the Project Area, developers of housing shall comply with the requirements of any disposition and development agreement, including the Candlestick Point and Hunters Point Shipyard Phase 2 Below-Market Housing Plan, which requires, among other things, Permanently Affordable, inclusionary units that are restricted to households earning between eighty percent (80%) and one hundred-twenty percent (120%) of AMI (As defined in the Candlestick Point and Hunters Point Shipyard Phase 2 Below-Market Housing Plan) and developer subsidies for affordable housing units constructed on Agency-owned land in Zone 1 of the Project Area.

In Zone 2 of the Project Area, developers of housing shall comply with the citywide Inclusionary Housing Ordinance, as described in Sections 315 et seq. of the Planning Code, and as it may be further amended from time to time, except that: (a) the duration, monitoring, marketing, and controls for affordable units shall be consistent with the Community Redevelopment Law and Agency policy; (b) the number of units required under Sections 315.4 and 315.5 of the Planning Code shall be increased to at least fifteen percent (15%) of all units constructed on the project site

and twenty percent (20%) of all units constructed off-site; (c) the construction of off-site units under Sections 314.4(e)(1) and 315.5 of the Planning Code shall occur only at a site within Zone 2 of the Project Area; (d) the payment of an in lieu fee under Sections 314.4(e)(2) and 315.6 of the Planning Code shall be made to the Agency instead of the Mayor's Office of Housing; and (e) the definition of "affordable to qualifying households" in Section 315.1 means: (1) for rental units in an affordable housing project, the goal will be to establish, to the extent feasible, a rent that is affordable to households whose combined annual gross income for all members does not exceed fifty percent (50%) of Area Median Income; and (2) for owned units in an affordable housing project, the goal will be to establish, to the extent feasible, an average maximum purchase price that is affordable to households whose combined annual gross income for all members does not exceed eighty percent (80%) of Area Median Income, assuming an annual payment of all housing costs of thirty-three percent (33%) of the combined household annual net income, a five percent (5%) down payment and available financing consistent with the Limited Equity Program, or such successor affordable homeownership program as the Agency may implement. However, notwithstanding anything herein to the contrary, if the ownership structure of any housing development in Zone 2 includes a long-term leasehold, with fee title ownership of the land held by the Agency, then the requirements and procedures of Section 315.1-315.9 of the Code, as they may become applicable, shall apply only to the leasehold estate, and no affordability restrictions shall be recorded against the Agency's fee title interest.

1.7.4 Tax Increment Committed To Housing

In a given year, the Agency shall use no less than the amount required under CRL Section 33334.2, which mandates that not less than twenty percent (20%) of all taxes allocated to the Agency pursuant to CRL Section 33670(b) shall be used by the Agency for the purposes of increasing, improving and preserving the City's supply of housing for persons and families of very low-, low- or moderate-income unless certain findings are made as required by that section to lessen or exempt such requirement. In Zone 1 of the Project Area, these funds are to be used solely for the costs related to the construction of affordable housing units and related development expenses.

Over the term of this Redevelopment Plan, the Agency shall use no less than fifty percent (50%) of the total tax increment funds that the Mayor and Board of Supervisors allocate to the Agency for its redevelopment activities for the purposes of increasing, improving, and preserving the City's supply of housing for persons and families of extremely low-, very low-, low- or moderate-income, consistent with Board Resolution No. 427-05 and Agency Resolution No. 134-2005; provided, however, that in Zone 1 the Agency may use funding sources other than tax increment to provide the amount of funding that meets or exceeds the amount equivalent to fifty percent (50%) of the total tax increment funds allocated to the Agency. For purposes of this Section, "redevelopment activities" means the Agency's work program for the Project Area as described in its annual budget but does not include any statutory pass-through obligations.

Within Zone 1 of the Project Area the Agency may utilize Zone 1 housing funds for the construction of infrastructure directly related to affordable housing development, subject to compliance with the standards of Section 33334.2.

The Agency may use the funds specified in CRL Section 33334.2 to meet, in whole or in part, the replacement housing provisions or the affordable housing production provisions. These funds may be used inside the Project Area. These funds may be used outside the Project Area only if findings of benefit to the Project Area are made as required by CRL Section 33334.2(g).

1.7.5 Replacement Housing

In accordance with CRL Section 33334.5, whenever Dwelling Units housing persons of low or moderate income are destroyed or removed from the low- and moderate-income housing market, as part of the implementation of this Redevelopment Plan, the Agency shall, within four (4) years of such destruction or removal, rehabilitate, develop or construct, or cause to be rehabilitated, developed or constructed, for rental or sale to persons and families of low- or moderate-income an equal number of comparably affordable replacement Dwelling Units, within the Project Area or within the territorial jurisdiction of the City in accordance with the provisions of CRL Sections 33413 and 33413.5.

1.7.6 Occupancy Preferences

Whenever the Agency provides a subsidy, financial assistance or some other material benefit such as site assembly, site specific capital improvements, or an amendment to this Redevelopment Plan, that results in low- or moderate- income housing units being developed in Zone 2 of the Project Area or elsewhere pursuant to this Redevelopment Plan, the Agency shall require by contract or other appropriate means that such housing be made available for rent or purchase to persons and families of low- and moderate-income in the following order of priority, to the extent permitted by law: (1) Hunters Point Certificate of Preference Holders; (2) other Certificate of Preference Holders; (3) rent burdened or assisted housing residents, defined as persons paying more than fifty percent (50%) of their income for housing, or persons residing in public housing or Project-Based Section 8 housing; (4) San Francisco residents and workers; and (5) members of the general public. Any residency preference authorized under this Section will be permitted only to the extent that such preference: (a) does not have the purpose or effect of delaying or otherwise denying access to a housing development or unit based on race, color, ethnic origin, gender, religion, disability, age, or other protected characteristic of any member of an applicant household; and (b) is not based on how long an applicant has resided or worked in the area.

1.8 ~~1.8~~ Methods of Financing this Redevelopment Plan in the Project Area

1.8.1 General Description of Proposed Financing Method

The Agency is authorized to finance the implementation of this Redevelopment Plan with financial assistance from the City, State, federal government, tax increment funds, interest income, Agency bonds, donations, loans from private financial institutions, assessments, the lease or sale of Agency-owned property and any other available source, public or private.

The Agency is also authorized to obtain advances, borrow funds and create indebtedness in carrying out this Redevelopment Plan. The principal and interest on such advances, funds and indebtedness may be paid from tax increments or any other funds available to the Agency.

The City or any other public agency may expend money to assist the Agency in carrying out this Redevelopment Plan. As available, gas tax funds from the State and County may be used for transportation improvements and public transit facilities.

1.8.2 Tax Increment Financing

All taxes levied upon taxable property within the Project Area each year, by or for the benefit of the State, the City, any district or any other public corporation (sometimes called "Taxing Agencies") after the Effective Date shall be divided as follows:

That portion of the taxes that would be produced by the rate upon which the tax is levied each year by or for each of the Taxing Agencies upon the total sum of the assessed value of the taxable property in the Project Area as shown upon the assessment roll used in connection with the taxation of such property by such Taxing Agencies, last equalized prior to the Effective Date, shall be allocated to and when collected shall be paid into the funds of the respective Taxing Agencies as taxes by or for the Taxing Agencies on all other property are paid. For the purpose of allocating taxes levied by or for any Taxing Agency or agencies that does not include the territory of the Project Area as of the Effective Date but to which such territory is annexed or otherwise included after such Effective Date, the assessment roll of the County of San Francisco last equalized on the Effective Date will be used in determining the assessed valuation of the taxable property in the Project Area on the Effective Date.

Except as provided in CRL Section 33670(e) or in Section 33492.15, that portion of levied taxes each year in excess of such amount shall be allocated to and when collected shall be paid into a special fund of the Agency to pay the principal of and interest on loans, monies advanced to or indebtedness (whether funded, refunded, assumed or otherwise) incurred by the Agency to finance or refinance, in whole or in part, the redevelopment project; provided, however, that the portion of the levied taxes from Zone 1 of the Project Area shall be allocated each year and when collected shall be paid into a special fund of the Agency to pay the principal of and interest on loans, money advanced to, or indebtedness (whether funded, refunded, assumed or otherwise) incurred by the Agency to finance or refinance, in whole or in part, the implementation of those sections of this Redevelopment Plan for Zone 1. Unless and until the total assessed valuation of the taxable property in the Project Area exceeds the total assessed value of taxable property in the Project Area as shown by the last equalized assessment roll referred to herein, all of the taxes levied and collected upon the taxable property in the Project Area shall be paid into the funds of the respective Taxing Agencies. When the loans, advances or indebtedness, if any, and interest thereon, have been paid, all monies thereafter received from taxes upon the taxable property in the Project Area shall be paid into the funds of the respective Taxing Agencies as taxes on all other property are paid.

The Agency irrevocably pledges the portion of taxes mentioned above and hereby for the payment of the principal and interest on the advance of monies, or making of loans or the incurring

of an indebtedness (whether funded, refunded, assumed or otherwise), to finance or refinance the implementation of this Redevelopment Plan in whole or in part, including direct and indirect expenses; provided, however, that the portion of taxes received from Zone 1 of the Project Area shall be pledged for the implementation of those sections of this Redevelopment Plan for Zone 1; and provided further that the portion of taxes received from Zone 2 of the Project Area shall be pledged for the implementation of those sections of this Redevelopment Plan for Zone 2. The Agency is authorized to make pledges as to specific advances, loans and indebtedness as appropriate in carrying out this Redevelopment Plan.

1.8.3 Agency Bonds

The Agency is authorized to issue bonds from time to time, if it deems it appropriate to do so, in order to finance all or any part of the implementation of this Redevelopment Plan. Neither the members of the Agency Commission nor any persons executing the bonds are liable personally on the bonds by reason of their issuance.

For the Project Area, the amount of bonded indebtedness of the Agency to be repaid from the allocation of taxes to the Agency pursuant to CRL Section 33670, which can be outstanding at one time, may not exceed $1.2 billion except by amendment of this Redevelopment Plan. Notwithstanding the foregoing, the principal amount of bonded indebtedness of the Agency to be repaid from such allocation of taxes to the Agency, which can be outstanding at one time for Zone 1 may not exceed a total of $800,000,000, determined in a manner prescribed in a tax allocation agreement between the Agency and the City. Further, notwithstanding the foregoing, available tax increment that may be paid, pursuant to a tax allocation agreement or other agreement, for the implementation of those sections of this Redevelopment Plan for Zone 1 from the allocation of increment to the Agency under Section 1.8.2 above shall be limited to available increment levied against property within and collected from Zone 1 of the Project Area and shall exclude all of the following: the amount specified in Section 1.8.2 and annual fees to the Agency for the purpose of administering the implementation of those sections of this Redevelopment Plan and related documents for Zone 1 in the amount in accordance with an agreement between the Agency, master developer of Zone 1, and/or the City and pursuant to State law. Likewise, notwithstanding the foregoing, available tax increment that may be paid, pursuant to a tax allocation agreement or other agreement, for the implementation of those sections of this Redevelopment Plan for Zone 2 from the allocation of increment to the Agency under Section 1.8.2 above shall be limited to available increment levied against property within and collected from Zone 2 of the Project Area and shall exclude all of the following: the amount specified in Section 1.8.2 and annual fees to the Agency for the purpose of administering the implementation of those sections of this Redevelopment Plan and related documents for Zone 2 in the amount in accordance with an agreement between the Agency, developers and/or landowners in Zone 2, and/or the City and pursuant to State law.

The bonds and other obligations of the Agency are not a debt of the City or the State, nor are any of its political subdivisions liable for them, nor in any event shall the bonds or obligations be payable out of any funds or properties other than those of the Agency, and such bonds and other obligations shall so state on their face. The bonds do not constitute indebtedness within the meaning of any constitutional or statutory debt limitation or restriction.

1.8.4 Time Limit on Establishment of Indebtedness

The Agency may not establish or incur loans, advances or indebtedness to finance in whole or in part its activities in the Project Area beyond twenty (20) years from the Effective Date unless amended following applicable provisions of the Community Redevelopment Law, except that the Agency may incur loans, advances or indebtedness beyond twenty (20) years from the Effective Date to be paid from the Low and Moderate Income Housing Fund as defined by the Community Redevelopment Law or to meet the Agency's replacement housing or inclusionary housing requirements as set forth in CRL Sections 33413 and 33413.5. This limit will not prevent the Agency from refinancing, refunding, or restructuring indebtedness after the time limit if the indebtedness is not increased and the time during which the indebtedness is to be repaid is not extended beyond the time limit to repay indebtedness required by CRL Section 33333.2.

1.8.5 Time Limit for Receipt of Tax Increment Funds

The Agency may not pay indebtedness or receive property taxes pursuant to CRL Section 33670 from Project Area B after forty-five (45) years from the Effective Date.

1.8.6 Other Loans, Grants and Miscellaneous Financing Sources

Any other loans, grants, guarantees or financial assistance from the federal government, the State, the City or any other public or private source will be used if available.

2.0 GENERAL POLICIES APPLICABLE TO THE PROJECT AREA

In order to eliminate existing blight in the Project Area, to prevent its reoccurrence and to accomplish the goals of this Redevelopment Plan, the Agency may implement the following policies listed in this Section, as said policies may be amended from time to time. In addition, the Agency may adopt additional policies, from time to time, in its sole discretion, as are desirable and necessary to accomplish the goals of this Redevelopment Plan.

2.1 Relocation of Displaced Persons, Businesses and Others in Project Area

2.1.1 Assistance in Finding other Locations

The Relocation Plan of the Agency for the relocation of families or single persons to be displaced by a project shall provide that no persons or families of low- or moderate-income may be displaced unless and until there is a suitable housing unit available and ready for occupancy by such displaced person or family at rents comparable to those at the time of their displacement. Such housing units shall be a standard dwelling that is suitable to the needs of such displaced persons or families and must be decent, safe, sanitary, and otherwise standard dwellings. The

Agency may not displace such person or family until such housing units are available and ready for occupancy.

To the extent required by State and Federal law, the Agency shall: (1) pursuant to a Relocation Plan, assist or cause to be assisted all eligible persons (including individuals and families), business concerns and others, if any, displaced from Project Area B by redevelopment activities undertaken or assisted by the Agency in finding other locations and facilities, and, where possible, shall relocate businesses to a location of similar size within the Project Area; and (2) in order to implement this Redevelopment Plan with a minimum of hardship to eligible persons, business concerns and others, if any, displaced by the implementation of this Redevelopment Plan, the Agency shall assist such persons, business concerns and others in finding new locations in accordance with Community Redevelopment Law, California Relocation Assistance Law and other applicable State and Federal law.

2.1.2 Relocation Payments

The Agency shall make or cause to be made relocation payments to persons (including individuals and families), business concerns and others displaced by implementation of this Redevelopment Plan as may be required by State and Federal law. The Agency shall make such relocation payments pursuant to the California Relocation Assistance Law (Government Code §§ 7260 *et seq.*), Agency rules and regulations adopted pursuant thereto, and, as may be applicable in the event that the Agency uses federal funding to implement this Redevelopment Plan, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The Agency may make such other payments as it determines to be appropriate and for which funds are available.

2.1.3 Business Tenant Preference

The Agency shall extend reasonable preferences to persons who are engaged in business within the Project Area to participate in the redevelopment of the Project Area, or to reenter into business within the redeveloped Project Area, if they otherwise meet the requirements of this Redevelopment Plan. In order to extend reasonable preferences to businesses to reenter into business within the redeveloped Project Area, the Agency has promulgated rules for the Business Occupant Re-Entry Policy within the redeveloped Project Area. For development in Zone 1, the Agency may elect to promulgate rules pursuant to a new Business Occupant Re-Entry Policy specific to Zone 1.

2.2 Nondiscrimination and Equal Opportunity

2.2.1 Nondiscrimination in Implementation

All property in the Project Area is hereby subject to the restriction that there shall be no discrimination or segregation based upon race, color, creed, religion, sex, gender identity, sexual orientation, age, marital or domestic partner status, national origin or ancestry, height, weight, or disability including HIV/AIDS status permitted in the sale, lease, sublease, transfer, use, occupancy, tenure or enjoyment of property in the Project Area. All property sold, leased, conveyed or subject to an Owner Participation Agreement shall be expressly subject by appropriate documents to the restriction that all deeds, leases or contracts for the sale, lease, sublease or other transfer of land in the Project Area shall contain such nondiscrimination and non-segregation clauses.

2.2.2 Employment and Contracting Opportunities in Implementation

The Agency, after consultation with the PAC, will adopt and implement programs for the Project Area, that meet or exceed City policies regarding workforce development, contracting opportunities, and equal opportunity, particularly for economically-disadvantaged Bayview Hunters Point residents and businesses.

For those projects that require Agency Action, the Agency shall require the developer to comply with the Agency's equal opportunity and local hiring policies, including: the Small Business Enterprise Program, the Bayview Employment and Contracting Policy, Nondiscrimination and Equal Benefits policies, Minimum Compensation and Healthcare Accountability policies and the Agency's Prevailing Wage Policy, where applicable, as such policies are amended or succeeded from time to time. For public housing redevelopment projects, compliance with SFHA contracting requirements is mandatory.

2.3 Owner Participation Agreements

2.3.1 Participation by Property Owners

Owners of real property in the Project Area may participate in the redevelopment of the Project Area by new development or rehabilitation in accordance with the standards for development or the standards for rehabilitation, which will be set forth in the OPA Rules.

The Agency may require, as a condition to participate in redevelopment in the Project Area, that each participant may enter into a binding written Owner Participation Agreement with the Agency by which the property will be developed, maintained or rehabilitated for use in conformity with this Redevelopment Plan, the Planning Code, the OPA Rules, declaration of restrictions, if any, and applicable design guidelines promulgated by the Agency. Owners of property in Zone 1 of the Project Area that is not subject to a disposition and development agreement must enter into an OPA in order to coordinate the delivery of public infrastructure with the development of other land within Zone 1.

Owner participation necessarily will be subject to and limited by such factors as the nature, condition, and use of existing improvements; the reduction of the total number of individual parcels in the Project Area; the elimination of certain land uses; the realignment of streets; the

construction of new public facilities and improvements; and the ability of owners to finance acquisition, rehabilitation, and/or redevelopment in accordance with this Redevelopment Plan and the declaration of restrictions and in accordance with such controls as are necessary to ensure that redevelopment is carried out pursuant to the Standards for Development.

2.3.2 OPA Rules

Property owners will be given a reasonable opportunity to participate in redevelopment. The Agency has adopted, after a public hearing, rules governing participation by property owners, which are subject to amendment from time to time. These rules were adopted pursuant to the CRL in order to implement the provisions of this Redevelopment Plan regarding participation by property owners. These rules incorporate the procedures to encourage, permit and govern the participation by property owners within the boundaries of the Project Area to the maximum extent consistent with the objectives of this Redevelopment Plan.

2.4 Enforcement, Amendments and Severability of Redevelopment Plan

2.4.1 Actions by the City

The City shall aid and cooperate with the Agency in carrying out this Redevelopment Plan and shall take all actions necessary to ensure the continued fulfillment of the purposes of this Redevelopment Plan and the other applicable Plan Documents, including preventing the recurrence or spread of conditions causing blight in the Project Area. The City shall comply with the provisions of the Community Redevelopment Law that generally entitle the Agency to all of the property tax revenues realized from growth in property values since the inception of this Redevelopment Plan.

2.4.2 Administration and Enforcement

Except as otherwise specified in any Delegation Agreement, Interagency Cooperation Agreement, or Cooperation Agreement to be adopted by the Agency, the administration and enforcement of this Redevelopment Plan, including the preparation and execution of any documents implementing this Redevelopment Plan, will be performed by the Agency.

The provisions of this Redevelopment Plan or other documents entered into pursuant to this Redevelopment Plan may also be enforced by legal action instituted by the Agency and/or, to the extent set forth in a Delegation Agreement, Interagency Cooperation Agreement, or Cooperation Agreement, the City. Any such legal action may seek appropriate remedies that may include, but are not limited to, specific performance, damages, re-entry, injunctions or any other remedies appropriate to the purposes of this Redevelopment Plan.

Members of the PAC may, to the extent permitted by law, enforce this Redevelopment Plan in a court of competent jurisdiction.

2.4.3 Procedures for Plan Amendment

This Redevelopment Plan may be amended by means of the procedure established in CRL Sections 33450-33458 or by any other procedure hereafter established by law.

2.4.4 Severability

If any provision, section, subsection, subdivision, sentence, clause or phrase of this Redevelopment Plan is for any reason held to be invalid or unconstitutional, such decision will not affect the validity of the remaining portion or portions of this Redevelopment Plan.

3.0 EXPIRED REDEVELOPMENT PLAN FOR PROJECT AREA A

On January 20, 1969, by Ordinance No. 25-69, the Board of Supervisors adopted the redevelopment plan for Hunters Point, which became Project Area A of the Bayview Hunters Point Redevelopment Plan pursuant to Ordinance No. 113-06 and which expired in January 2009. Accordingly, the Agency has no authority to act pursuant to the portion of the former redevelopment plan for Project Area A except to pay previously incurred indebtedness, to enforce existing covenants, contracts, or other obligations, and to comply with affordable housing obligations, which includes the use of its tax increment for the funding of affordable replacement housing.[4] The regulation of land use and development in Project Area A reverted back to the Planning Code with the expiration of Project Area A in January 2009.

3.1 Methods of Financing under this Redevelopment Plan for former Project Area A

3.1.1 General Description of Proposed Financing Method

Under the prior Hunters Point Redevelopment Plan, which this Redevelopment Plan amended in 2006, the Agency has been authorized to finance redevelopment activities related to Project Area A with financial assistance from the City, the State or the federal government, tax increment funds, interest income, Agency bonds, donations, loans from private institutions, assessments, the lease or sale of Agency-owned property or any other available source, public or private. The City or any other public agency may expend money to assist the Agency in carrying out this Redevelopment Plan. As available, gas tax funds from the State and County may be used for street improvements and public transit facilities. In accordance with CRL, the Agency has been authorized to obtain advances, borrow funds and create indebtedness in carrying out redevelopment activities and to pay the principal and interest on such indebtedness from tax increment funds.

[4] Under Sections 33333.7 and 33333.8 of the California Health and Safety Code, the Agency may continue to incur indebtedness and receive tax increment from the Hunters Point Project Area (Project Area A) to fulfill its housing obligation to replace affordable housing units that were previously destroyed and never replaced. Ordinance No. 15-05 (Jan. 21, 2005).

All taxes levied upon taxable property within Project Area A each year, by or for the benefit of the State, the City, any district or any other public corporation (sometimes called "Taxing Agencies") after the effective date of the ordinance initially approving the allocation of taxes from Project Area A pursuant to Section 33670 ("**Effective Date of the Project Area A Ordinance**"), shall be divided as follows:

That portion of the taxes that would be produced by the rate upon which the tax is levied each year by or for each of the Taxing Agencies upon the total sum of the assessed value of the taxable property in Project Area A as shown upon the assessment roll used in connection with the taxation of such property by such Taxing Agencies, last equalized prior to the Effective Date of the Project Area A Ordinance, shall be allocated to and when collected shall be paid into the funds of the respective Taxing Agencies as taxes by or for the Taxing Agencies on all other property are paid. For the purpose of allocating taxes levied by or for any Taxing Agency or agencies which does not include the territory of the Project Area A as of the Effective Date of the Project Area A Ordinance but to which such territory is annexed or otherwise included after such Effective Date, the assessment roll of the County of San Francisco last equalized on the Effective Date of the Project Area A Ordinance will be used in determining the assessed valuation of the taxable property in the Project Area on the Effective Date of the Project Area A Ordinance.

Except as provided in CRL Section 33670(e) or in Section 33492.15, that portion of levied taxes each year in excess of such amount shall be allocated to and when collected shall be paid into a special fund of the Agency to pay the principal of and interest on loans, monies advanced to or indebtedness (whether funded, refunded, assumed or otherwise) incurred by the Agency to finance or refinance, in whole or in part, the redevelopment project. Unless and until the total assessed valuation of the taxable property in Project Area A exceeds the total assessed value of taxable property in Project Area A as shown by the last equalized assessment roll referred to herein, all of the taxes levied and collected upon the taxable property in Project Area A shall be paid into the funds of the respective Taxing Agencies. When the loans, advances or indebtedness, if any, and interest thereon, have been paid, all monies thereafter received from taxes upon the taxable property in Project Area A shall be paid into the funds of the respective Taxing Agencies as taxes on all other property are paid.

The Agency irrevocably pledges the portion of taxes mentioned above and hereby for the payment of the principal and interest on the advance of monies, or making of loans or the incurring of an indebtedness (whether funded, refunded, assumed or otherwise), to finance or refinance the implementation of redevelopment activities in whole or in part, including direct and indirect expenses. The Agency is authorized to make pledges as to specific advances, loans and indebtedness as appropriate in carrying out redevelopment activities.

Prior to 2005, the amount of Project Area A taxes allocated to the Agency pursuant to Section 33670 of the CRL was limited to $15.1 million. This tax increment financing cap has been reached. In addition, the deadline for incurring debt for non-housing redevelopment activities was January 1, 2004. However, by virtue of Section 33333.7 of the CRL and Board of Supervisors' Ordinance No. 15-05, the Agency has the ability to incur indebtedness exclusively for the purpose of building affordable housing until the earlier of January 1, 2014 or until the Agency's replacement housing obligation, as defined in Section 33333.7 (SB 2113), is met.

3.1.2 Limits on Indebtedness and Tax Increment for Non-Housing Purposes

The Agency may not pay indebtedness or receive property taxes for non-housing purposes in Project Area A after January 1, 2019.

3.1.3 Extension of Indebtedness and Tax Increment for Housing under Senate Bill (SB) 2113

Notwithstanding the expiration of this Redevelopment Plan with respect to Project Area A, the Agency will have the continuing authority to incur indebtedness and to receive tax increment to meet its replacement housing obligation under CRL Section 33333.7 (SB 2113). Pursuant to state law, the Board of Supervisors amended the Hunters Point Redevelopment Plan by Ordinance No. 15-05 which became effective on January 21, 2005, to allow the Agency to incur indebtedness exclusively for the purpose of building affordable housing until the earlier of January 1, 2014 or until the Agency's replacement housing obligation under SB 2113 is met. The Agency will have the ability to receive tax increment for the purpose of repaying the indebtedness incurred to meet its replacement housing obligation under SB 2113 until January 1, 2044.

4.0 REDEVELOPMENT PLAN FOR ZONE 1 OF THE PROJECT AREA

This Redevelopment Plan amendment designates Zones 1 and 2 of the Project Area as shown on Map 2, within the Bayview Hunters Point Redevelopment Project Area B. The Agency's Redevelopment Plan for the elimination of blight, increased affordable housing and economic development in Zone 1 of the Project Area are set forth below. The Agency retains land use authority within Zone 1 of the Project Area. The blocks and lots contained within Zone 1 as of the 2010 Plan Amendment Date are listed in Attachment D.

All real property in Zone 1 of the Project Area is hereby made subject to the controls and requirements of this Redevelopment Plan. The Redevelopment Plan designates allowed uses and building types for Zone 1 of the Project Area and relies upon the Candlestick Point Design for Development to provide more detailed development standards, design guidelines, and controls on use within Zone 1 of the Project Area. No real property or real property interest may be developed, rehabilitated, or otherwise changed after the 2010 Plan Amendment Date except in conformance with the provisions of this Redevelopment Plan and the Candlestick Point Design for Development.

4.1 Existing Conditions in Zone 1 of the Project Area

Zone 1 of the Project Area contains a mixture of vacant lands, surface parking lots, Candlestick Stadium, under-utilized park lands, blighted industrial properties, and the Alice Griffith San Francisco Housing Authority property in need of revitalization. The area is served by inadequate public infrastructure and deficient public facilities. These conditions constitute a substandard living environment and have a detrimental effect on the neighborhoods within and surrounding Zone 1 of the Project Area.

4.2 Generalized Neighborhood Land Uses

Neighborhoods correspond to portions of Zone 1 with distinct characteristics and planning objectives, as reflected both in this Redevelopment Plan and the Candlestick Point Design for Development. This Redevelopment Plan identifies general objectives for each of this Neighborhoods in order to help determine what additional, complementary land uses may be allowed in a Land Use District and to assist with implementation of the Candlestick Point Design for Development.

4.2.1 Alice Griffith Neighborhood

Objectives for This Neighborhood: This Neighborhood will accommodate a diverse range of housing types with improved connections to the surrounding neighborhoods. Existing affordable homes will be rebuilt to provide at least one-for-one replacement units targeted to the same income levels as those of the existing residents and ensure that eligible Alice Griffith Housing residents have the opportunity to move to the new, upgraded units directly from their existing Alice Griffith Housing units without having to relocate to any other area. A focus of this Neighborhood will be a centrally located park that extends the length of this Neighborhood that may include community gardens, active sports uses, and picnic areas.

This Neighborhood will include mixed-income housing developments that may include townhomes, stacked townhomes, live-work units, group housing, and multi-unit, multi-story apartment and condominium buildings.

4.2.2 Candlestick North Neighborhood

Objectives for This Neighborhood: This Neighborhood will accommodate a compact, mixed-use community with higher densities than the Alice Griffith Neighborhood and an anchoring main street for neighborhood-serving shops and services. Given the higher density and greater number of units in the neighborhood than in the Alice Griffith Neighborhood, this Neighborhood will include a greater concentration of neighborhood-serving retail, business, service, and office uses, most of which will be concentrated in the ground floor beneath residential uses along the southern edge of this Neighborhood, adjacent to the Candlestick Center Neighborhood. This Neighborhood will include community facilities uses as well as two parks — one in the center of this Neighborhood intended to serve this Neighborhood and a wedge-shaped park at the southeastern edge forming a connection between the development, the State Park and the Bay waterfront.

This Neighborhood may include townhomes; lofts; live-work units; group housing, low- and mid-rise multi-unit, multi-story condominium or apartment buildings; and high-rise towers.

4.2.3 Candlestick Center Neighborhood

Objectives for This Neighborhood: This Neighborhood will accommodate the commercial heart of Zone 1. It is a mixed-use neighborhood with regional shops and services, offices, hotel, public uses and residential uses. The regional retail uses in this Neighborhood may include entertainment uses such as movie theaters, clubs with live music, and restaurants. This Neighborhood may include large format, anchor retailers to be accompanied by smaller stores fronting onto neighborhood streets. This Neighborhood will include office uses to be located above the ground-floor retail and entertainment uses and residential units above base floors containing commercial uses and parking areas. Parking areas would be included on the interiors of blocks.

Residential uses in this Neighborhood may include townhomes; lofts; live-work units; and senior and disabled housing, and multi-unit, multi-story condominium or apartment buildings.

4.2.4 Candlestick South Neighborhood

Objectives for This Neighborhood: This Neighborhood will accommodate a broad range of residential housing types as well as neighborhood-serving retail designed to complement its position adjacent to the beach and surrounding parkland. Most of the neighborhood-serving retail, business, service, and office uses will be concentrated in the ground floor beneath residential uses along the northern edge of this Neighborhood, adjacent to the Candlestick Center Neighborhood. This Neighborhood will include a mini-wedge park that would bisect this Neighborhood and provide a direct connection to the State parklands that are adjacent to this Neighborhood and provide the area's principal recreational resources.

Residential uses in this Neighborhood will include townhomes; lofts; live-work units; group housing, low- and mid-rise multi-unit, multi-story condominium or apartment buildings; and high-rise towers.

4.2.5 ~~Jamestown Neighborhood~~ Intentionally Deleted.

~~*Objectives for This Neighborhood:* This Neighborhood will accommodate a residential neighborhood. Given the Neighborhood's topography, hillside open space will be preserved in its natural state, while some smaller open space areas may be developed with neighborhood park uses.~~

~~Residential uses in this Neighborhood may include townhomes, lofts, live-work units, group housing, and multi-unit, multi-story apartment and condominium buildings.~~

4.2.6 Land Use Districts

Zone 1 of the Project Area consists of three land use districts (each referred to as a "**District**" or "**Land Use District**") as shown on Map 4. The map shows the general boundaries of the Districts; precise boundaries of the Districts are to be interpreted in light of the objectives of this Redevelopment Plan at the time specific parcels are subdivided in accordance with City and State subdivision laws.

Allowable land uses within each District will be all those that are consistent with the character of the District as described in this Redevelopment Plan. The specific uses identified below for each District illustrate the appropriate scope and nature of permitted uses.

Principal Uses. Within each District, "**Principal Uses**" shall be allowed as of right.

Secondary Uses. Within each District, "**Secondary Uses**" will be permitted, through the determination of the Agency Commission or its designee, provided that such use: (a) generally conforms with the redevelopment objectives of this Redevelopment Plan, the objectives of the District as set forth in this Redevelopment Plan and the Candlestick Point Design for Development; (b) is compatible with the District's Principal Uses, nearby public facilities, and broader community; (c) is consistent with the Mitigation Measures and appropriately mitigates any adverse impacts; and (d) does not at the proposed size and location materially impede the planned uses and development of the District or Project Area. The Agency Commission or its designee may place conditions on the Secondary Use as necessary to make the findings in clauses (a) through (d) above.

Non-Designated Uses. Uses that are proposed but are not specifically defined herein ("**Non-Designated Uses**") may be classified by the Executive Director as Principal Uses, Secondary Uses, Temporary Uses, Interim Uses, or Prohibited Uses. The Executive Director or his or her designee may allow a Non-Designated Use as a Principal Use subject to approval by the Agency Commission, provided the Executive Director or his or her designee finds that such Non-Designated Use: (a) is consistent with the other Principal Uses allowed in the applicable District; (b) is consistent with the objectives for the applicable District; (c) generally conforms with the Candlestick Point Design for Development; and (d) is consistent with the Mitigation Measures and appropriately mitigates any adverse impacts. For Temporary or Interim Uses, the Executive Director shall in addition make the findings required for such uses as set forth in Section 4.2.10 and 4.2.11 below.

In the event the Executive Director determines that a Non-Designated Use should be evaluated as a potential Secondary Use rather than a Principal Use, the Executive Director shall require that the proposed use be considered by the Agency Commission pursuant to the Secondary Use process set forth above.

Prohibited Uses. Within most Districts, certain land uses are expressly prohibited in order to maintain the intended character of the District, avoid conflicts of land uses, or maintain public welfare in response to specific conditions of the District ("**Prohibited Uses**"). The following uses will be Prohibited Uses in all Districts within Zone 1: ~~Medical Cannabis Clubs;~~ Mortuary; and Adult Entertainment uses.

Provisions Applicable Generally.

Certain lands within the Zone 1 are or may be subject to the Public Trust. The Public Trust doctrine limits the uses that are permitted on Public Trust lands. A Principal Use or Secondary Use shall be permitted on Public Trust land only to the extent the use is permitted under the Public Trust and is consistent with the Agency's management of those lands on behalf of the State for Public Trust purposes. Thus, even though a particular use or uses may be shown as a permitted Principal or Secondary Use within the Zone 1, that use or uses may nevertheless not be permitted on lands subject to the Public Trust within Zone 1.

In all cases below, the height, bulk, setback, parking and open space requirements will be established in the Candlestick Point Design for Development.

Parking is a permitted Accessory Use to every Principal Use and Secondary Use permitted in each Land Use District. The design and location of parking is controlled by the Candlestick Point Design for Development.

Infrastructure elements that are required to provide access, utilities, and public services to the development described in this Section 4.2 shall be allowed as Principal Uses to the provided they are consistent with the Mitigation Measures and subject to the Candlestick Point/Hunters Point Shipyard Phase 2 EIR.

Additional infrastructure elements such as decentralized wastewater treatment facilities, automated trash centralized collection facilities, and district heating and cooling facilities that serve the Project Area will be subject to the Candlestick Point/Hunters Point Shipyard Phase 2 EIR, the Mitigation Measures, and the Infrastructure Plan for the Hunters Point Shipyard Phase 2-Candlestick Point Project (as amended from time to time, the "**Infrastructure Plan**"). Decentralized wastewater treatment facilities shall be permitted as a Secondary Use in all Districts except the Open Space District. Automated trash centralized collection facilities shall be permitted as a Secondary Use in the Candlestick Mixed Use Commercial District. District Heating and Cooling Facilities shall be permitted as a Secondary Use in all Districts except the Open Space District.

4.2.7 Candlestick Mixed Use Residential District

The Candlestick Mixed Use Residential District consists of residential uses and some compatible local-serving retail and services. The primary land use is residential units ranging from attached single family homes to high-rise multi-family residential developments. Related uses also include local-serving businesses, neighborhood retail, community facilities, family Child-Care Facilities, small professional offices, home occupations, and recreation facilities. This district covers the allowable land uses for the residential neighborhoods of Alice Griffith Neighborhood, Candlestick North Neighborhood~~,~~ and Candlestick South Neighborhood~~, and Jamestown Neighborhood~~ described above. This District also includes a planned neighborhood park, the final location of which has not been determined.

The following Uses are Principal Uses in this Land Use District:

Residential Uses:

- Dwelling Units
- Live-Work Units
- Group Housing
- Supportive Housing
- Home Office

Retail Businesses, Offices and Personal Services Uses:

- Neighborhood Retail Sales and Services (up to 10,000 sq. ft. per tenant)
- Restaurants
- Physical fitness and health facilities
- Automated teller machines (ATMs)
- Dry Cleaning Facility (without on-site dry cleaning plant)
- Commercial Wireless Transmitting Facilities

Civic and Institutional Uses:

- Community Uses
- Arts Education
- Recreation Facilities
- Religious Institutions
- Elementary School
- Child-Care Facility
- Vocational / Job Training Facility (Clerical/Administrative)

Parks and Recreation Uses:

- Parks
- Public Art
- Open Space
- Bicycle Storage
- Public Restrooms
- Maintenance Facilities

The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in Section 4.2.6 are met:

Retail Businesses, Offices and Personal Services Uses:

- Neighborhood Retail Sales and Services (over 10,000 sq. ft. per tenant)
- Grocery Store
- Bars
- Office

Civic and Institutional Uses:

- Secondary School
- Post-Secondary Institution

- Nighttime Entertainment
- Amusement Enterprise
- Vocational / Job Training Facility (Mechanical/Industrial)

The following Uses are Prohibited Uses in this Land Use District:

- Commercial Storage
- Automotive Sale
- Automotive Service Station
- Automotive Repair
- Automotive Gas Station
- Motor Vehicle Tow Service
- Drive-through facilities
- Dry Cleaning Facility (with onsite cleaning operations)
- Wholesale Retail
- Warehousing
- Cannabis-Related Uses

4.2.8 Candlestick Center Mixed Use Commercial District

The Candlestick Center Mixed Use Commercial District consists of small-, moderate- and large-scale retail and commercial operations, residential units, office and professional services, hotels, and entertainment uses. This land use district covers the allowable uses within the Candlestick Center Neighborhood described above.

The following Uses are Principal Uses in this Land Use District:

Residential Uses:

- Dwelling Units
- Group Housing
- Supportive Housing
- Live-Work Units
- Home Office

Retail Businesses, Offices and Personal Services Uses:

- Regional Retail Sales and Services
- Neighborhood Retail Sales and Services
- Grocery Store
- Professional, medical, and business offices,
- Physical fitness and other health facilities
- Restaurants
- Bars
- Commercial Wireless Transmitting Facilities

Commercial, Entertainment and Visitor Serving Uses:

- Performance Arts
- Multi-screen cinema
- Hotel
- Meeting Rooms
- Conference Facilities

Education, Arts and Community Activities Uses:

- Arts Production
- Community Use
- Nighttime Entertainment
- Amusement Enterprise
- Post-Secondary Institution
- Recreation Facilities
- Religious Institutions
- Child-Care Facility
- Vocational / Job Training

Parks and Recreation Uses:

- Parks
- Active Recreation Facilities
- Public Art
- Open Space
- Bicycle Storage
- Public Restrooms
- Maintenance Facilities

The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in Section 4.2.6 are met:

Retail Businesses, Offices and Personal Services:

- Non-Retail Sales and Services
- Dry Cleaning Facility (with on-site dry cleaning plant)
- Animal Services
- Automotive Rental

Education, Arts and Community Activities Uses:

- Secondary School

The following Uses are Prohibited Uses in this Land Use District:

- Commercial Storage
- Automotive Sale
- Automotive Service Station
- Automotive Repair
- Automotive Gas Station
- Motor Vehicle Tow Service

- Drive-through facilities
- Industrial Activities
- Warehousing

4.2.9 Open Space

The open space areas consist of land owned by the Agency, City or the State to be developed into regional and local-serving public parks including appropriate recreational facilities and equipment and park maintenance areas. Park lands that are subject to the Public Trust will be managed as state or regional parks consistent with the Public Trust. No other uses beyond those described below are permitted in open space areas.

The following Uses are Principal Uses in this Land Use District:

Parks and Recreation Uses:

- Active Recreation Facilities
- Public Art
- Open Space
- Bicycle Storage
- Public Restrooms
- Maintenance Facilities
- Recreational Equipment Rental

Civic, Arts & Entertainment Uses:

- Recreational Facility
- Transit Shelters

In areas not subject to the Public Trust, the full range of Uses allowed in Parks, open air marketplaces, and similar active recreational Uses shall be allowed in addition to the Permitted Uses listed above.

The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in Section 4.2.6 are met:

- Performance Arts
- Restaurants

4.2.10 Interim Uses

"**Interim Uses**" are uses proposed during the time prior to or concurrent with development of land within a Land Use District consistent with this Redevelopment Plan. Interim Uses may be authorized in all areas not subject to the Public Trust for an initial time period to be determined by the Executive Director, upon a determination by the Executive Director that the authorized uses will not impede the orderly development of the Project Area as contemplated in this Redevelopment Plan. Where approved, Interim Uses will be permitted for a defined period of time not to exceed five (5) years. Permissible Interim Uses are as follows:

- Rental or sales office incidental to a new development, provided that it is located in the development or a temporary structure
- Structures and uses incidental to environmental cleanup and staging
- Temporary structures and uses incidental to the demolition or construction of a structure, building, infrastructure, group of buildings, or open space, including construction staging of materials and equipment
- Commercial Storage
- Parking (either primary or accessory to other uses)
- Truck parking and loading accessory to the uses above
- Other Interim Uses that do not conflict with the objectives of the Plan, the Plan Documents, and the Public Trust, where applicable.

Interim Uses of areas subject to the Public Trust shall be authorized only if the authorized uses are determined to be consistent with, necessary and convenient for, or incidental or ancillary to, the purposes of the Public Trust, or if the following criteria are met:

- There are no immediate Public Trust-related needs for the property,
- The proposed lease for the use prohibits construction of new structure or improvements that, as a practical matter, could prevent or inhibit the property from being converted to a permissible Public Trust use if necessary,
- The proposed lease for the use provides that the Agency has the right to terminate the lease in favor of Public Trust uses as Public Trust needs arise, and
- The proposed use of the leased property would not interfere with commerce, navigation, fisheries, or any other existing Public Trust use or purpose.

Extensions of the above approval periods may be authorized by the Executive Director in increments of up to five (5) year periods, subject to the same determinations as required for the initial period.

4.2.11 Temporary Uses

"**Temporary Uses**" are short-term, transitory uses that may be proposed either prior to or following development of land within a Land Use District consistent with this Redevelopment Plan. Temporary Uses will be permitted by the Executive Director or his or her designee for such period of time as the Executive Director or his or her designee determines to be reasonable provided the Executive Director or his or her designee finds

that such Temporary Use is consistent with the objectives of the this Redevelopment Plan and the Candlestick Point Design for Development, as appropriate. Permissible Temporary Uses include:

- Booth for charitable, patriotic or welfare purposes
- Exhibition, celebration, festival, circus or neighborhood carnival
- Open air sales of agriculturally-produced seasonal decorations, including Christmas trees and Halloween pumpkins
- Convention staging
- Parking (either primary or accessory to other uses)
- Truck parking and loading accessory to the uses listed above
- Other Temporary Uses that do not conflict with the objectives of the Plan, the Plan Documents, and the Public Trust, where applicable.

4.2.12 Public Rights-of-Way

The proposed street layout for Zone 1 is illustrated on the Map 4. Streets and alleys may be widened, narrowed, altered, realigned, abandoned, depressed or closed as necessary for proper redevelopment of Zone 1 of the Project Area. Additional public streets, alleys, rights-of-way and easements, may be created in Zone 1 of the Project Area as needed for development and circulation.

Certain streets in Zone 1 will be impressed with the Public Trust. These streets will provide key vehicular, bicycle and pedestrian access ways to and along the wedge parks at the center of Candlestick Point, and linking the northern, eastern, and southern waterfronts in the State Park.

4.3 Standards and Procedures for Development in Zone 1

For Zone 1, this Redevelopment Plan and the other Plan Documents, including the Candlestick Point Design for Development, establish the standards for development and supersede the San Francisco Planning Code in its entirety, except as otherwise expressly provided herein. The only sections of the Planning Code that shall apply within Zone 1, pursuant to the provisions of this Redevelopment Plan, are Sections 101.1, 295, and 314, as such sections are in effect as of the 2010 Plan Amendment Date. Both the Agency Commission and the Planning Commission must approve any amendments to the Candlestick Point Design for Development.

4.3.1 Applicability of City Regulations; City's Duty to Protect Public Health and Safety

(a) *General.* Regardless of any future action by the City or the Agency, whether by ordinance, resolution, initiative or otherwise, the rules, regulations, and official policies applicable to and governing the overall design, construction, fees, use or other aspect of development of Zone 1 will be (i) this Redevelopment Plan and the other Plan Documents, (ii) to the extent not inconsistent therewith or not superseded by this Redevelopment Plan, the Existing City

Regulations (including all provisions of the Building Construction Codes, which are not inconsistent with or superseded by this Redevelopment Plan), (iii) New City Regulations to the extent permitted under this Redevelopment Plan; (iv) new or changed Development Fees and Exactions to the extent permitted under Section 4.3.15 of this Redevelopment Plan; (v) any disposition and development agreement or owner participation agreement related to development within Zone 1; and (vi) the Mitigation Measures (collectively, the "**Applicable City Regulations**").

(b) *Protection of Public Health and Safety; Federal or State Law.* Notwithstanding any provision of this Redevelopment Plan to the contrary, the Agency and any City Agency having jurisdiction, shall exercise its sole discretion under this Redevelopment Plan and the applicable Plan Documents in a manner that is consistent with the public health and safety and shall at all times retain their respective authority to take any action that is necessary to protect the physical health and safety of the public (the "**Public Health and Safety Exception**") or to comply with changes in Federal or State law, including applicable Federal and State regulations (the "**Federal or State Law Exception**"), including the authority to condition or deny a permit, approval, agreement or other entitlement or to adopt a New City Regulation, but subject, in all events, to any rights to terminate between an owner or developer and the Agency as set forth in either the Plan Documents or any disposition and development agreement or owner participation agreement related to development within Zone 1. Except for emergency measures, any City Agency or the Agency, as the case may be, will meet and confer with the owner of the affected Real Property and/or any affected party under any disposition and development agreement or owner participation agreement related to development within Zone 1 in advance of the adoption of any New City Regulations or New Construction Requirements to the extent feasible.

(c) *Permitted New City Regulations.* The City Agencies and the Agency reserve the right to impose any New City Regulations (except for the Planning Code sections superseded by this Redevelopment Plan) provided that (i) they are imposed on a Citywide Basis and (ii) they do not conflict with the development permitted or contemplated within Zone 1 by this Redevelopment Plan, the Plan Documents, or any disposition and development agreement or owner participation agreement related to development within Zone 1, or any portion of such development (unless such conflict is waived by the owners and developers of all affected property). As used in this paragraph (c), a New City Regulation "conflicts with the development permitted or contemplated" if it would change the aforementioned development regulations to:

(1) limit or reduce the density or intensity of development, or otherwise require any reduction in the square footage or number of proposed buildings (including number of Dwelling Units) or other improvements;

(2) limit or reduce the height or bulk of development within Zone 1, or any part thereof, or of individual proposed buildings or other improvements;

(3) materially change, restrict, or condition any land uses, including permitted or conditional uses, of development within Zone 1;

(4) materially limit or control the rate, timing, phasing, or sequencing of approval, development, or construction (including demolition);

(5) require the issuance of additional land use-related permits or approvals by the City or the Agency;

(6) materially limit or control the availability of public utilities, services or facilities or any privileges or rights to public utilities, services or facilities for Zone 1, including but not limited to water rights, water connections, sewage capacity rights and sewer connections;

(7) control or limit commercial or residential rents or purchase prices (excluding property owned or controlled by the Agency or the City during the period of Agency or City ownership and only to the extent such controls or limits would not survive transfer to a successive owner);

(8) materially limit the processing or procuring of applications and approvals for any subsequent City or Agency approvals;

(9) subject to Section 4.3.15, impose any new Development Fees and Exactions or expand or increase Development Fees and Exactions;

(10) subject to section 4.3.1.d (New Construction Requirements), materially increase the cost of construction or maintenance of all or any development permitted or contemplated in Zone 1 or of compliance with any provision of this Redevelopment Plan, the Plan Documents, any disposition and development agreement or owner participation agreement related to development within Zone 1 or Existing City Regulations applicable to Zone 1

(11) materially decrease the value of any land in Zone 1;

(12) materially reduce, limit the availability of or delay the amount or timing of tax increment or Mello-Roos Community Facilities District funding; or

(13) limit the Agency's ability to timely satisfy its obligations under any disposition and development agreement or owner participation agreement related to development within Zone 1 or the City's ability to timely satisfy its obligations under any cooperation agreement or tax allocation agreement related to development within Zone 1.

Nothing in this Redevelopment Plan or other applicable Plan Documents shall be deemed to limit any City Agency's or the Agency's ability to comply with the California Environmental Quality Act ("**CEQA**") or the CRL.

Nothing in this section shall limit the authority of the Agency or any City Agency to exercise its discretion under the Public Health and Safety Exception or to make changes under the Federal or State Law Exception, as described in Section 4.3.1(b) (Protection of Public Health and Safety).

The City Municipal Code (excluding the Planning Code with the exception of conditions for cannabis-related uses specified in Section 202.2 thereof (as may be amended or superseded)) and related regulations (as such Code Sections and regulations may be amended from time to time consistent with this Redevelopment Plan) establishing a permitting program for Cannabis-Related Uses are Permitted New City Regulations applicable to and enforceable against Cannabis-Related Uses within the Project Area.

The City's Municipal Code and related regulations establishing a permitting program for Short-Term Rentals (as such Code Sections and regulations may be amended from time to time, consistent with this Redevelopment Plan) are Permitted New City Regulations applicable to and enforceable against Short-Term Rentals within the Project Area.

(d) *New Construction Requirements.* In addition to the Public Health and Safety Exception and the Federal or State Law Exception, the City may change construction requirements for Infrastructure and other Improvements ("**New Construction Requirements**") if the changes: (i) would not materially increase costs or accelerate the payment of costs of developing the Project Area consistent with this Redevelopment Plan; (ii) are imposed by the Board of Supervisors on a Citywide Basis; and (iii) would not: (a) materially adversely affect Net Available Increment; (b) delay development; (c) materially limit or restrict the availability of Infrastructure; or (d) impose limits or controls on the timing, phasing, or sequencing of development permitted under this Redevelopment Plan. In addition, from and after the 10th anniversary of the issuance of the first Building Permit for a project within Zone 1 of Project Area B of the Project Area, the City may impose New Construction Requirements in response to technological advances in construction if the New Construction Requirements: (1) would materially decrease the City's operation and maintenance costs and would not materially interfere with the uses, heights, density, and intensity of development described in the Plan Documents; (2) will apply on a Citywide Basis for similar land uses; (3) do not conflict with the Mitigation Measures (provided, this requirement may be satisfied with an exemption for specific Mitigation Measures as needed); and (4) do not increase by more than twenty percent (20%) the unit cost of any single component that is the subject of the New Construction Requirement.

4.3.2 Cooperation Agreement

The Agency will enter into a Cooperation Agreement with the Planning Department defining the roles and responsibilities for the provision of project entitlements and the administration of, development controls, and implementation of mitigation measures within Zone 1 of the Project Area. The Cooperation Agreement will specify the respective roles of the Agency and the Planning Department in reviewing development proposals and otherwise administering the development controls, with the objective of facilitating the development process and furthering the goals of this Redevelopment Plan and the Candlestick Point Design for Development. Amendments to the Candlestick Point Design for Development will be approved by the Agency Commission and the Planning Commission.

4.3.3 Interagency Cooperation Agreement

The Agency and the City are entering into an Interagency Cooperation Agreement defining the roles and responsibilities for the design and installation of infrastructure, and implementation of mitigation measures within Zone 1 of the Project Area. The Interagency Cooperation Agreement will outline the responsibilities of city departments and agencies regarding the design, approval, installation and maintenance of public infrastructure in Zone 1.

4.3.4 Type, Size, Height and Use of Buildings in Zone 1

The Redevelopment Plan, the General Plan, and the Candlestick Point Design for Development establish the development controls authorized for Zone 1 of the Project Area. The Candlestick Point Design for Development provides specific limitations to the height and other dimensions of new buildings, standards for development of new buildings, as well as design guidelines directing the architectural character of future development.

The Planning Commission and the Agency Commission may adopt amendments to the Candlestick Point Design for Development to better achieve the goals and objectives of this Redevelopment Plan, subject to Section 4.3.1 above.

4.3.5 Limitation on the Number of Buildings

The number of buildings within the Zone 1 of the Project Area may not exceed approximately 450 buildings.

4.3.6 Limitation on the Number of Dwelling Units

~~The current number of Dwelling Units in Zone 1 is 237.~~ The maximum number of Dwelling Units in Zone 1 of the Project Area is approximately 7,850 units~~. In the event the 49ers elect to relocate somewhere other than the Hunters Point Shipyard, up to 1,625 of these Dwelling Units planned for Zone 1 may be transferred to Hunters Point Shipyard. The total combined number of~~, provided that the total Dwelling Units ~~in~~constructed within both Zone 1 of the Project Area and the Hunters Point Shipyard Redevelopment Plan Area may not exceed ~~12,100, which includes a maximum of 10,500 units in Zone 1 and Hunters Point Shipyard Phase 2 and a previously approved 1,600 units in Hunters Point Shipyard Phase 1.~~12,100 Dwelling Units without Commission approval (including attendant environmental review).

4.3.7 Limitation on Type, Size and Height of Buildings

The size and type of buildings may be as permitted in the Applicable City Regulations~~. Approximately~~, which is approximately 1,185,000 square feet of non-residential development, including approximately 760,000 square feet of retail and entertainment space, 50,000 square feet of community services space, 150,000 square feet of office space, 150,000 square feet of hotel and hotel related uses, and ~~a~~ 10,000 seat ~~arena/performance/event space will be allowed in Zone 1.~~ (75,000 square feet) film arts/performance/event space.

The Commission may approve, without amendment to this Plan but subject to any necessary environmental review, adjustment of the foregoing square footages over time (except of community services space), including conversion to other non-residential uses allowed by this Plan, provided the total square footage of non-residential uses within Zone 1 of the Project Area does not materially exceed 1,185,500 square feet (except as provided below).

The Commission may approve (with any necessary environmental review) the transfer of up to 118,500 square feet of research and development/office use from the Hunters Point Shipyard Project Area to those portions of Zone 1 of the Bayview Hunters Point Project Area where such use is a Principal Use, without further amendment to this Redevelopment Plan.

Accessory parking facilities for these uses are not included as part of these limitations.

The maximum building heights within Zone 1 is 420 feet. The Agency may impose additional height limits, building size and location restrictions, and other development controls within the Candlestick Point Design for Development, subject to Section 4.3.1 above.

4.3.8 Parking

Parking will be permitted and required as described in the permitted land use section and as further regulated in the Candlestick Point Design for Development. In Zone 1, parking is generally required to be in an enclosed garage, not visible from the street or right-of-way, and accessory to an established residential or commercial use. Stand-alone parking use is not permitted at full build-out. However, it is understood that through phasing of the project, parking may be available before the completion of the use to which it is accessory, and may be on temporary outdoor lots.

4.3.9 Land Coverage

Land coverage will be determined by the application of the Candlestick Point Design for Development for density, parking, and open space.

4.3.10 Signs

In Zone 1, with the exception of temporary marketing and sales signs pertaining to developments within Zone 1 (which will be permitted), permanent or temporary billboards (excluding kiosks, streetscape commercial signage, and street furniture-related commercial signage), are prohibited within all Land Use Districts and are prohibited in any park or street area. Permanent signage for residential, commercial and open space development is subject to the development controls and guidelines of the Candlestick Point Design for Development. The Agency Commission shall review for consistency with the objectives of this Redevelopment Plan any proposed signage not permitted by the Candlestick Point Design for Development and any signage master plan.

4.3.11 Review of Planning Applications, Architectural and Landscape Plans

In evaluating plans, the Agency will use the standards set forth in the Candlestick Point Design for Development, which establishes design criteria for specific parcels to ensure an attractive and harmonious urban design. Development proposals will be evaluated pursuant to the Agency's Design Review and Document Approval Procedure (DRDAP) as attached to any disposition and development agreement to ensure they achieve the objectives of this Plan and are consistent with the Candlestick Point Design for Development.

4.3.12 Off-Site Improvements

The Agency may require a landowner or development project sponsor to install infrastructure, roadways, street trees, parks and other landscaping, or other improvements on property other than the site that is the subject of the sale, disposal, lease, or owner participation agreement. Such improvements shall be designed in conformity with approved open space, streetscape, or infrastructure plans and other applicable design guidelines.

The tax increment resources from Zone 1 of this Redevelopment Plan may provide for development of a stadium at Hunters Point Shipyard in order to free up the site of the existing Candlestick Point, thus facilitating regional retail and entertainment uses adjacent to Highway 101 and the integrated development of Candlestick Point and Hunters Point Shipyard. In order to accommodate vehicle traffic and transit serving the various uses planned for the Project Area, this Redevelopment Plan also provides for street, lighting, utility, and related improvements to the portion of Harney Way located to the southwest of the Zone 1 boundary of the Project Area, Bus Rapid Transit facilities along Geneva Avenue and at the Bayshore Caltrain Station, portions of the costs related to the Highway 101/Harney/Geneva freeway interchange, portions of Palou Avenue east of Third Street located outside the Project Area, and improvements to the Pennsylvania/25th Street intersection north of the Project Area.

4.3.13 Variance by Agency

The owner or developer of any property in Zone 1 may make a written request for a variance that states fully the grounds of the application and the facts pertaining thereto. Upon receipt of a complete application, the Agency may conduct its own further investigation and, after consultation with the PAC and the Planning Department, the Agency Commission may, in its sole discretion at a duly noticed public hearing, grant a variance from this Redevelopment Plan or the Candlestick Point Design for Development under the following circumstances:

- Due to unique physical constraints or other extraordinary circumstances applicable to the property, the enforcement of development regulations without a variance would otherwise result in practical difficulties for development and create undue hardship for the property owner or developer or constitute an unreasonable limitation beyond the intent of this Redevelopment Plan; and

- The granting of a variance would be in harmony with the goals of this Redevelopment Plan and the Candlestick Point Design for Development, and will not be materially detrimental to the public welfare or materially injurious to neighboring property or improvements in the vicinity.

In granting a variance, the Agency will specify the character and extent thereof, and also prescribe conditions necessary to secure the goals of this Redevelopment Plan and the Candlestick Point Design for Development. The Agency's determination to grant or deny a variance will be final and will not be appealable to the Planning Department. In no instance will any variance be granted that will substantially change the allowable land uses of this Plan.

4.3.14 Nonconforming Uses

The Agency will provide for the reasonable continuance, modifications, and/or termination of non-conforming uses and non-complying structures whose use or structure does not comply with this Redevelopment Plan or the Candlestick Point Design for Development, provided that such use is generally compatible with the development and uses authorized by this Redevelopment Plan and the Candlestick Point Design for Development. The Agency may authorize additions, alterations, reconstruction, rehabilitation, or changes in use through uses or structures that do not conform to the provisions of this Redevelopment Plan, subject to the Agency's determination that

the additions, alterations, reconstruction, rehabilitation, or changes in use will not impede the orderly development of Zone 1 of this Redevelopment Plan and promote compatibility of uses, eliminate blighting conditions and effectuate the purposes, goals, and objectives of this Redevelopment Plan.

4.3.15 Development Fees and Exactions

The following provisions will apply to all property in Zone 1 except parcels used for the development of affordable housing by Agency-sponsored entities. Development Fees and Exactions shall apply to the Project in the manner described below. Except as provided in this section and except as required by the Mitigation Measures, the School Facilities Impact Fee, the Child-Care Requirements, and the Art Requirement shall be the only Development Fees and Exactions that apply to the Zone 1 for the duration of this Redevelopment Plan. Water Capacity Charges and Wastewater Capacity Charges are Administrative Fees and not Development Fees and Exactions, and shall apply in the Project Area.

The School Facilities Impact Fee shall apply for the duration of this Redevelopment Plan, shall be administered as required by State law, and shall be increased for the duration of this Redevelopment Plan in accordance with State law, but only to the extent permitted by State law.

The Art Requirement shall apply for the duration of this Redevelopment Plan and requires that any new office building in excess of 25,000 square feet constructed within the Project Area include one-half of one percent (0.5%) of the hard costs of initial construction (excluding costs of infrastructure and tenant improvements) (the "**Art Fee Amount**") for the installation and maintenance of works of art in the public realm within Zone ~~1.~~1 or within the Hunters Point Shipyard Redevelopment Project Area. In the event that public spaces are not available at the time the Art Requirement is due, then the Art Fee Amount shall be paid to a fund administered by the Agency to be used for public art within the Zone ~~1.~~1 or within the Hunters Point Shipyard Redevelopment Project Area. The public realm within which art may be installed so as to comply with the Art Requirement includes: any areas on the site of the building and clearly visible from the public sidewalk or open space feature, on the site of any open space feature, or in any adjacent public property. The type and location of artwork proposed shall be reviewed by the Executive Director for consistency with the Candlestick Point Design for Development and other Plan Documents.

The Child-Care Requirements shall apply for the duration of this Redevelopment Plan only to all commercial development over 50,000 square feet per Planning Code Section 314, as it existed on the 2010 Plan Amendment Date (attached and incorporated hereto as Attachment E). The Child-Care Requirements will be administered by the Agency to provide for these public benefits within Zone ~~1.~~1 or within the Hunters Point Shipyard Redevelopment Project Area.

The Child-Care Requirements provide for compliance either by constructing Child-Care Facilities or, alternatively, payment of an in-lieu fee. For the duration of this Redevelopment Plan, development within the Zone 1 shall not be subject to any change to the provisions of the Child-Care Requirements that permit compliance through the construction of Child-Care facilities. In addition, no new in lieu fee or increase in the existing in lieu fee related to the Child-Care Requirement shall apply to the Project Area for twelve (12) years following the date the first

Building Permit is issued for a project in Zone 1 of Project Area B of the Project Area and, thereafter, will only be applicable if the new or increased in lieu fee relating to Child-Care Requirements is: (i) not increased at a rate greater than the annual increase in the Consumer Price Index commencing at the end of the 12-year period during which the fee has been frozen as described above; (ii) generally applicable on a Citywide Basis to similar land uses; and (iii) not redundant of a fee, dedication, program, requirement, or facility described in the Plan Documents or in any applicable disposition and development agreement related to development within Zone 1.

Notwithstanding the foregoing, new or increased Development Fees and Exactions may be imposed to the extent required under the Public Health and Safety Exception and the Federal or State Law Exception.

The parcels on Assessor Blocks 4917, 4918, 4934, and 4935 shall be subject to all fees and exactions under the City Planning Code in effect from time to time, except as otherwise provided pursuant to an Owner Participation Agreement or Development Disposition Agreement, if the Agency determines that the public benefits under an Owner Participation Agreement exceed those that would otherwise be obtained through imposition of the City Planning Code fees and exactions.

4.3.16 Office Development Limitations

On November 8, 2016, voters enacted Proposition O, which exempts Zone 1 of this Redevelopment Plan from the office development limits set forth in Planning Code Sections 320 – 325. Planning Code Sections 320 – 325 (Proposition M) shall apply to office development in Zone 2 of this Redevelopment Plan and Planning Code Section 324.1 shall apply to office development in Zone 1 of this Redevelopment Plan. Accordingly, the cap on the annual amount of office development permitted in the City shall apply in Zone 2 but not in Zone 1 of this Redevelopment Plan.

By Resolution No. 18102 (Attachment G), the Planning Commission adopted findings pursuant to Planning Code Section 321(b)(1) that the 150,000 square feet of office development contemplated in Zone 1 of this Redevelopment Plan in particular promotes the public welfare, convenience and necessity, and in so doing considered the criteria of Planning Code Section 321(b)(3)(A)-(G). Proposition O states in part that "No project authorization or allocation shall be required for any Development on the Subject Property [Candlestick Point and Hunter's Shipyard Phase 2)]. However, Development on the Subject Property that would require a project authorization or allocation but for this Section 324.1 shall be treated for all purposes as if it had been granted approval of a project authorization or allocation." Proposition O (2016) supersedes, as to Zone 1 of this Redevelopment Plan, any portion of Resolution No. 18102 (Attachment G) that would require an office authorization or allocation, compliance with Planning Code sections 320-325, or Planning Commission review or approval of office developments.

Proposition O did not exempt Zone 2 of the Project Area from the requirements of Proposition M (Sections 320-325). The permitted land uses and standards of development for Zone 2 are described in Section 5.

4.3.17 Shadow on Recreation and Park Property

Section 295 of the Planning Code (Proposition K) shall apply to development in the Project Area in the form in which Section 295 was in effect as of the 2010 Plan Amendment Date (attached hereto as Attachment F). Section 295 (Proposition K) shall not continue to apply to development in the Project Area in the event it is repealed by legislation or voter initiative.

5.0 REDEVELOPMENT PLAN FOR ZONE 2 OF THE PROJECT AREA

This Redevelopment Plan designates Zones 1 and 2 of the Project Area as shown on Map 2 within the Bayview Hunters Point Redevelopment Project Area B. The Agency's Redevelopment Plan for the elimination of blight, increased affordable housing and economic development in Zone 2 are set forth below. To the extent that the Agency has delegated land use authority in Zone 2 to the Planning Department by a Delegation Agreement then in effect, references below to actions or determinations by the Agency may be undertaken by the Planning Department or Planning Commission. The Agency's Redevelopment Plan for the elimination of blight, increased affordable housing and economic development in Zone 1 is described in Section 4.

5.1 Existing Conditions in Zone 2 of the Project Area

Zone 2 of the Project Area is a mixed residential, industrial and commercial area that has suffered from severe economic decline for many years with the closure of the Hunters Point Naval Shipyard, the shrinking of heavy and light industrial bases, and the lingering effects of long-term environmental pollution. The resulting difficulty of rehabilitating residential and commercial areas have resulted in the prolonged use of obsolete and inadequate structures; nearly vacant and abandoned commercial and industrial buildings; obsolete and inadequate public facilities; and some privately-owned, deteriorating dwellings. Zone 2 of the Project Area is characterized by dilapidated buildings of inadequate construction, unfit and unsafe for occupancy; deteriorating streets and public utilities of inadequate construction; a general absence of usable open and recreation space; conflicts between industrial and residential land uses and deficient public facilities. These conditions constitute a substandard living environment and have a detrimental effect on the neighborhoods within and surrounding Zone 2 of the Project Area.

5.2 Land Uses Permitted in Zone 2 of the Project Area

5.2.1 Permitted Land Uses in Zone 2

All real property in Zone 2 of the Project Area is hereby made subject to the controls and requirements of this Redevelopment Plan, which incorporates the Planning Code and Zoning Maps as its land use controls. No real property or real property interest may be developed, rehabilitated, or otherwise changed after the 2010 Plan Amendment Date, except in conformance

with the provisions of this Redevelopment Plan, as amended from time to time, and the Planning Code and Zoning Maps, as amended from time to time, to the extent not contrary to this Redevelopment Plan.

The generalized land uses for Zone 2 of the Project Area are shown on Map 5, are generally illustrative and based on the Generalized Land Use Plan in the Bayview Hunters Point Area Plan of the General Plan. The descriptions below generally illustrate the land uses of Zone 2 of the Project Area, but property owners and others should refer directly to the Planning Code and its Zoning Maps for applicable standards.

5.2.2 Residential

The generalized residential areas consist of residential uses and some compatible local-serving retail and services. The primary land use is residential units ranging from single family homes to multi-family developments of a moderate scale. Related uses also include local-serving businesses, family Child-Care Facilities, small professional offices, home occupations, and recreation facilities.

5.2.3 Mixed Use – Neighborhood Commercial

The generalized mixed use area consists of small and moderate scale retail and commercial operations on the ground floor along the major commercial streets of the area with residential units or office uses on the upper floors. The mixed use area allows on the ground floor local-serving businesses, restaurants, financial institutions, small offices, catering establishments, household or business repair, interior decorating shops, graphics reproduction, child care, religious institutions, ATMs, and parking. On the upper floors, land uses may include small scale offices, second floor retail operations, and residential units.

5.2.4 Light Industrial

The generalized light industrial areas consist of businesses and facilities requiring some separation from residential areas due to their generation of truck traffic, noise, and odors. The land uses taking place in these areas are primarily industrial in nature and include manufacturing, repair shops, automotive services, warehouses, wholesale showrooms, industrial research laboratories, open storage, transportation and distribution facilities, food production and distribution, graphic design and reproduction, arts facilities, entertainment venues, vocational job training and related commercial operations. Office and retail uses are permitted but primarily as accessory uses to the industrial operations.

5.2.5 Buffer Zones

The generalized buffer zone areas are intended to provide a transition from industrial uses to residential neighborhoods. The land uses in the buffer zone are small scale light industrial activities that create limited external impacts (such as noise, traffic, or odor), commercial operations, arts facilities, vocational training and, where appropriate, limited accessory residential units.

5.2.6 Public Facility

The generalized public facility areas consist of land other than housing sites or open space, owned by a government agency or other public or semi-public entity and in some form of public or semi-public use. The principal uses in this area include fire station, police stations, public schools, community college facilities, water treatment facilities, sports stadiums, cultural facilities and public transportation facilities.

5.2.7 Public Rights-of-Way

The existing street layout is illustrated on Map 2. Streets and alleys may be widened, narrowed, altered, realigned, abandoned, depressed or closed as necessary for proper redevelopment of Zone 2 of the Project Area. Additional public streets, alleys, rights-of-way and easements, including above and below-ground railroad easements and rights of way, may be created in Zone 2 of the Project Area as needed for development and circulation. Any modifications must conform to the General Plan and the Planning Code, as amended from time to time in the future, unless amendments to the General Plan or the Planning Code are contrary to the provisions of this Redevelopment Plan.

5.3 Standards for Development in Zone 2 of the Project Area

To achieve the objectives of this Redevelopment Plan in Zone 2 of the Project Area, the use and development of land shall be in accordance with the Planning Code and the General Plan. References in this Section to the Planning Code and the General Plan mean the Planning Code and the General Plan, as amended from time to time, to the extent that the amendments are not contrary to the provisions of this Redevelopment Plan.

5.3.1 Delegation Agreement

The Agency and Planning Department have entered into a Delegation Agreement delegating to the Planning Department the administration of development controls within Zone 2 of the Project Area. The Delegation Agreement specifies the respective roles of the Agency and the Planning Department in reviewing development proposals and otherwise administering the development controls, with the objective of facilitating the development process and furthering the goals of this Redevelopment Plan. For projects requiring Agency Action wherein the Agency does not delegate its land use jurisdiction, appeals of permits, variances, and final action on environmental review under the California Environmental Quality Act will be to the Board of Supervisors or to the Board of Appeals; these appeals shall be consistent with the procedures of the City's Charter and Ordinances pertaining to appeals from decisions of the Planning Commission and Planning Department. The Agency and City will provide for the cost of implementing the Delegation Agreement in the Agency's or Planning Department's annual budget.

5.3.2 Type, Size, Height and Use of Buildings in Zone 2

The General Plan and the Planning Code identify the land uses and other development controls authorized in Zone 2 of the Project Area. The Planning Commission and the Board of

Supervisors may adopt amendments to the General Plan and the Planning Code to better achieve the goals and objectives of this Redevelopment Plan. In the event the General Plan, Planning Code or any other applicable ordinance is amended or supplemented with regard to any land use or development control in Zone 2 of the Project Area, the land use provisions and development controls of this Redevelopment Plan will be automatically modified accordingly without the need for any formal plan amendment process unless those amendments or supplements are contrary to the provisions of this Redevelopment Plan. Prospective property developers should refer directly to the Planning Code for applicable standards, as well as to the remainder of this Redevelopment Plan and Related Plan Documents; provided however that to the extent that the inclusionary housing requirements in Section 315 of the Planning Code are inconsistent with this Redevelopment Plan, this Redevelopment Plan amends and takes precedence over Section 315 of the Planning Code. Thus, developers in Project Area B are required to comply with the inclusionary housing standards in this Redevelopment Plan.

5.3.3 Limitation on the Number of Buildings

The number of buildings within the Zone 2 of the Project Area may not exceed approximately 4,000.

5.3.4 Number of Dwelling Units

The number of Dwelling Units presently within Zone 2 of the Project Area is currently approximately 5,510 and will be approximately 9,300 under this Redevelopment Plan.

5.3.5 Parking

Parking spaces may be provided as permitted in the Planning Code. The Agency will encourage joint use of parking spaces as may be permitted under the Planning Code to the extent that such joint use will adequately serve the needs of each user.

5.3.6 Land Coverage

Land coverage shall be determined by the application of the Planning Code for density, parking, and open space.

5.3.7 Signs

Signs in Zone 2 of the Project Area shall be designed and constructed in conformance with the Planning Code. In addition, signs shall be complementary to elements in the total environment.

5.3.8 Review of Planning Applications, Architectural and Landscape Plans

In evaluating the plans, the Agency will use the standards set forth in the Planning Code and any applicable approved City design guidelines. Particular emphasis will be given to the visual relationship to adjoining development and to the view of the development from public rights-of-way.

In the disposition of land, the Agency may establish design criteria for specific parcels to ensure an attractive and harmonious urban design and may implement these criteria with appropriate provisions in the disposition documents. Development proposals will be evaluated as to the manner in which they achieve the objectives of this Redevelopment Plan.

5.3.9 Off-Site Improvements

The Agency may require a land owner, at his/her own expense, to install street trees, landscaping, paving, or other improvements on property other than the site that is the subject of the sale, lease, or owner participation agreement. Such improvements shall be designed in conformity with approved streetscape plans and/or applicable design guidelines.

5.3.10 Variance by Agency

If a development project in Zone 2 involves Agency Action, then, in its sole discretion, the Agency may grant a variance from this Redevelopment Plan or the Planning Code.

The owner or developer of any property in Zone 2 may make a written request for a variance that states fully the grounds of the application and the facts pertaining thereto. Upon receipt of a complete application, the Agency may conduct its own further investigation and, after consultation with the PAC and the Planning Department, the Agency Commission may, at a duly noticed public hearing, grant a variance from this Redevelopment Plan or the Planning Code under the following circumstances:

- Due to unique physical constraints or other extraordinary circumstances applicable to the property, the enforcement of development regulations without a variance would otherwise result in practical difficulties for development and create undue hardship for the property owner or developer or constitute an unreasonable limitation beyond the intent of this Redevelopment Plan; and

- The granting of a variance would be in harmony with the goals of this Redevelopment Plan and the Planning Code, and would not be materially detrimental to the public welfare or materially injurious to neighboring property or improvements in the vicinity.

In granting a variance, the Agency will specify the character and extent thereof, and also prescribe conditions necessary to secure the goals of this Redevelopment Plan and the Planning Code.

5.3.11 Variance by Planning Department

If a development project is in Zone 2 of the Project Area and does not involve Agency Action, then any request for a variance will be reviewed by the Planning Department, in its sole discretion, using the guidelines and procedures established by the Planning Department. The Planning Department's determination to grant or deny a variance is not appealable to the Agency.

5.4 Economic Development Program for Zone 2 of the Project Area

5.4.1 Proposed Economic Development Programs

The Agency may develop the following economic programs within each of the Economic Development Activity Nodes in conjunction with and with the assistance of the PAC:

- Façade improvement program;
- Brownfield cleaning assistance;
- Assistance with the development of key catalyst commercial sites;
- Provision of small business improvement assistance;
- Assistance with marketing and promotional activities for local business groups;
- Creating local business retention programs;
- Development of cultural facilities;
- Rehabilitation of historic structures;
- Planning for innovative parking strategies in the Third Street corridor;
- Providing support for job training programs; and
- Enforcing the Agency's and/or City's local hiring and equal opportunity programs, where appropriate.

5.4.2 Economic Development Activity Nodes

The Agency shall encourage the promotion of policies and land use decisions that provide job-training, employment and business opportunities to local residents with a focus on economic development efforts within the seven Activity Nodes of Project Area B described in Section 1.4.7. The Agency may implement Activity Node development programs for all or part of each Activity Node. The Agency may also pursue economic development efforts outside of Zone 2 of the Project Area where these efforts are determined to be necessary to effect the elimination of blighting conditions within Zone 2 of the Project Area; and where they comply with the CRL, including, Section 33445.1. The design of each Economic Development Activity Node will facilitate and support the Agency's efforts under its Affordable Housing Program.

6.0 DEFINITIONS

Following are definitions for certain words and terms used in this Redevelopment Plan. All words used in the present tense include the future. All words in the plural number include the singular number and all words in the singular number include the plural number, unless the natural construction of the wording indicates otherwise. The word "shall" is mandatory and not directory; and the term "may not" is prohibitory and not permissive. The words "including," "such as," or words of similar import when following any general term may not be construed to limit the general term to the specific terms that follow, whether or not language of non-limitation is used; rather, these terms will be deemed to refer to all other terms that could reasonably fall within the broadest possible scope of the term.

2010 Plan Amendment Date means the date on which Ordinance No. 210-10 adopting amendments to this Redevelopment Plan, approved on August 3, 2010, became effective.

2017 Plan Amendment Date means the date on which Ordinance No. 121-17 adopting amendments to this Plan, approved on June ~~13,~~22, 2017, became effective.

2018 Plan Amendment Date means the date on which Ordinance No. _____ adopting amendments to this Plan, approved on _____, became effective.

Accessory Use means uses that are related to and subservient to another use, and serve that use only.

Administrative Fee means any fee charged by any City Agency or the Agency in effect on a Citywide Basis, including fees associated with Article 31, at the time of submission for the processing of any application for building or other permits, subdivision maps, or other City or Agency regulatory actions or approvals for any development in the Project Area.

Adult Entertainment means a use that includes any of the following: adult bookstore, adult theater, and encounter studio, as defined by Section 1072.1 of the San Francisco Police Code.

Affordable Housing Program means the Agency's activities to construct, rehabilitate, and preserve housing that is permanently affordable to low- and moderate-income households. The basis for the Affordable Housing Program can be found in the Framework Housing Program adopted by the PAC on September 20, 2004 and the Below ~~—~~ Market Rate Housing Plan formulated in 2010 for Zone 1 of the Project Area, as amended from time to time.

Agency Action means the Agency's funding, acquisition, disposition, or development of property through a Disposition and Development Agreement (DDA), Owner Participation Agreement (OPA), loan agreement, grant agreement, or other transactional or funding documents between a property owner or developer and the Agency.

Agency Commission means the Commission for the Redevelopment Agency of the City and County of San Francisco.

Amusement Enterprise means enterprises such as billiard halls, bowling alleys, skating rinks, and similar uses when conducted within a completely enclosed building.

Animal Services means an animal care use that provides medical care and/or boarding services for animals.

Area Median Income or **AMI** means area median income as determined by the United States Department of Housing and Urban Development for the San Francisco area, adjusted for actual household size, but not adjusted for high income area. If data from HUD specific to the Metro Fair Market Rent Area that includes San Francisco are unavailable, AMI may be calculated by the Mayor's Office of Housing using other publicly available and credible data, adjusted for Household Size.

Arts Education means schools of any of the following for professionals, credentialed individuals or amateurs: dance, music, dramatic art, film, video, graphic art, painting, drawing, sculpture, small-scale glass works, ceramics, textiles, woodworking, photography, custom-made jewelry or apparel, and other visual, performance, industrial and product-design and sound arts and craft.

Art Production means commercial arts and art-related business service uses including, but not limited to, recording and editing services, small-scale film and video developing and printing; titling; video and film libraries; special effects production; fashion and photo stylists; production, sale and rental of theatrical wardrobes; and studio property production and rental companies. Arts spaces may include studios, workshops, galleries, museums, archives and small theaters, and other similar spaces customarily used principally for production and post-production of graphic art, painting, drawing, sculpture, small-scale glass works, ceramics, textiles, woodworking, photography, custom-made jewelry or apparel and other visual, performance and sound arts and craft.

Automotive Sale means a retail use that provides on-site vehicle sales whether conducted within a building or on an open lot.

Automotive Repair means a retail automotive service use that provides any of the following automotive repair services, whether outdoors or in an enclosed building: minor auto repair, engine repair, rebuilding, or installation of power train components, reconditioning of badly worn or damaged motor vehicles, collision service, or full body paint spraying.

Bar means a principal retail use not located in a Restaurant that provides on-site alcoholic beverage sales for drinking on the premises, including bars serving beer, wine and/or liquor to the customer where no person under twenty one (21) years of age is admitted (with Alcoholic Beverage Control [ABC] license 42, 48, or 61) and drinking establishments serving liquor (with ABC license 47 or 49) in conjunction with other uses that admit minors, such as theaters, and other entertainment. Restaurants with ABC licenses are not considered bars under this definition.

Bayview Hunters Point Survey Area C means the India Basin portion of the original South Bayshore Survey Area designated in 2006 to remain an area for consideration for amendment into Project Area B after an additional community planning process.

Board of Supervisors means the Board of Supervisors of the City and County of San Francisco, California.

Bicycle Storage means: (a) Class 1 Bicycle Parking Space(s), that are facilities that protect the entire bicycle, its components and accessories against theft and against inclement weather, including wind-driven rain. Examples of this type of facility include (1) lockers, (2) check-in facilities, (3) monitored parking, (4) restricted access parking, and (5) personal storage; (b) Class 2 Bicycle Parking Space(s), that include bicycle racks that permit the locking of the bicycle frame and at least one wheel to the rack and, that support the bicycle in a stable position without damage to wheels, frame or components.

Building Construction Codes means the City's (or if applicable, the Port's) Building Code, Electrical Code, Mechanical Code and Plumbing Code and any construction requirements in the Housing Code and the Fire Code.

Business Occupant Re-Entry Policy means a document approved by the Agency Commission in relation to this Redevelopment Plan that establishes, to the extent required by State or Federal law, how the extension of reasonable preferences to business occupants will be implemented within the Project Area. For Zone 2, such document was adopted by Resolution No. 34-2006 dated March 7, 2006. The Agency may elect to rely on this document with respect to Zone 1 or may elect to promulgate a new Business Occupant Reentry Policy specific to Zone 1.

Candlestick Point Design for Development means the Candlestick Point Design for Development document, that sets development standards and design guidelines for Zone 1 of the

Project Area (the Candlestick Point Sub-Area) as shown on Map 2, including the Candlestick Point Activity Node that may be amended from time to time consistent with its provisions.

Candlestick Point Sub-Area means that portion of the Bayview Area Plan within the San Francisco General Plan that corresponds to Zone 1 of the Project Area, consisting of the within the Candlestick Activity Node and the Alice Griffith Project.

Cannabis-Related Use means any use that is required to obtain a permit, and has obtained such permit, from the San Francisco Office of Cannabis (or its successor). For the avoidance of doubt, a Cannabis-Related Use is any category of Use otherwise permitted herein that cultivates, manufactures, distributes, tests, sells, delivers or in any other way uses cannabis or cannabis-derived materials, including for legal adult use or medical use.

Certificate of Preference Holders means persons who have rights under the Agency's Certificate of Preference Program, as amended by Resolution No. 57-2008 (adopted on June 3, 2008 and effective Oct. 1, 2008).

Child-Care Facility means a use that provides less than 24-hour care for children by licensed personnel and that meets all the requirements of the State and other authorities for such a facility.

Child-Care Requirements means the requirements set forth in City Planning Code Section 314, as it exists on the 2010 Plan Amendment Date (and attached hereto as Attachment E).

City Agency means, individually or collectively as the context requires, all departments, agencies, boards, commissions and bureaus of the City with subdivision or other permit, entitlement or approval authority or jurisdiction over any portion of the Project Area, including but not limited to the Port Authority, Department of Public Works, the Public Utilities Commission, the Planning Commission, the Municipal Transportation Agency, the Building Inspection Commission, the Public Health Commission, the Fire Commission and the Police Commission, or any successor public agency designated by or under law.

City Regulations means ordinances, resolutions, initiatives, rules, regulations, and other official City and Agency policies applicable to and governing the overall design, construction, fees, use or other aspects of development within Zone 1. City Regulations includes City municipal codes, the General Plan, Building Construction Codes, and all ordinances, rules, regulations, and official policies adopted to implement those City Regulations, except to the extent such regulations are Administrative Fees.

Citywide Basis means all privately-owned property within (a) the City's jurisdictional limits or (b) any designated use classification or use district of the City so long as (1) any such use

classification or use district includes a substantial amount of affected private property other than affected private property within the Project Area, (2) the use classification or use district includes all private property that receives the general or special benefits of, or causes the burdens that occasion the need for, the New City Regulation, Development Fees and Exactions, or New Construction Requirements, and (3) the cost of compliance with the New City Regulation, Development Fees and Exactions, or New Construction Requirements applicable to the same type of use in the Project Area (or portion thereof) does not exceed the proportional benefits to, or the proportional burdens caused by private development of that type of use in, the Project Area (or portion thereof).

Commercial Storage means a commercial use that stores, within an enclosed building, household goods, contractors' equipment, building materials or goods or materials used by other businesses at other locations and that may include self-storage facilities for members of the public. The prohibition of this use in Zone 1 includes the storage of waste, salvaged materials, automobiles, inflammable or highly combustible materials, and wholesale goods or commodities.

Commercial Wireless Transmitting Facility means equipment for the transmission, reception, or relay of radio, television, or other electronic signals, and may include towers, antennae, and related equipment.

Community Garden means land gardened collectively by a group of people.

Community Redevelopment Law or **CRL** means the Community Redevelopment Law of the State of California (Health & Safety Code Sections 33000 *et seq.*).

Community Use means a publicly- or privately-owned use that provides public services to the community, whether conducted within a building or on an open lot. This use may include , by way of example and not limitation, museums, post offices, public libraries, police or fire stations, transit and transportation facilities, utility installations, building-integrated sustainable energy generation facilities, neighborhood-serving community recycling centers, and wireless transmission facilities.

Concept Plan means the Bayview Hunters Point Community Revitalization Concept Plan adopted by the PAC on November 13, 2000, as amended from time to time.

Conceptual Framework Plan means the Conceptual Framework Plan for the Integrated Development of Hunters Point Shipyard Phase 2 and Candlestick Point, endorsed by Board Resolution No. 264-07.

Consumer Price Index means the All Items Consumer Price Index for All Urban Consumers in the San Francisco-Oakland-San Jose Metropolitan Statistical Area published by the Bureau of Labor Statistics of the United States Department of Labor.

Cooperation Agreement means an agreement between the Agency and the Planning Department that defines how the two agencies will administer the entitlement process in Zone 1 of the Project Area.

Delegation Agreement means an agreement between the Agency and the Planning Department that defines how the two agencies will administer the entitlement process in Zone 2 of the Project Area.

Development Fees and Exactions means a monetary or other exaction including in-kind contributions, other than a tax or special assessment or Administrative Fee, that is charged by the Agency or any City Agency in connection with any permit, approval, agreement or entitlement or any requirement for the provision of land for construction of public facilities or Infrastructure or any requirement to provide or contribute to any public amenity or services. Development Fees and Exactions does not include Building Construction Codes in effect from time to time and generally applicable on a Citywide Basis to similar land uses.

District Heating and Cooling Facility means a plant with hot water (or steam) and chilled water distributed from the district plant to individual buildings via a pipe distribution network located under the streets.

Dry-Cleaning Facility means dry-cleaning establishment, including pressing and other miscellaneous processing of clothes.

Dwelling Units means a residential use that consists of a suite of one or more rooms and includes sleeping, bathing, cooking, and eating facilities.

Effective Date means the date the ordinance passed by the Board of Supervisors approving this Redevelopment Plan (Ordinance No. 113-06) became effective.

Elementary School means an institution that provides K-8 education and that may be either public or private.

Executive Director means the Executive Director of the Agency.

General Plan means the General Plan for the City and County of San Francisco.

Grocery Store means a retail use of medium or large scale providing sales of food, produce, prepared food, beverages, toiletries, pharmaceutical products and services, and households items to the general public. This includes neighborhood-serving stores, supermarkets, festival market places, or other large format tenants providing primarily food sales up.

Group Housing means a residential use that provides lodging or both meals and lodging without individual cooking facilities. Group Housing may include housing specifically designed for and occupied by seniors, students or disabled residents.

Historic Survey means a building-by-building survey of properties containing structures over fifty (50) years of age utilizing survey methods outlined by State Office of Historic Preservation.

Home Office means the accessory use of a dwelling for office purposes, provided that the principal user of such office resides in that dwelling.

Hotel means a use that provides overnight accommodations including guest rooms or suites and ancillary services to serve hotel guests. Hotels shall be designed to include all lobbies, offices and internal circulation to guest rooms and suites within and integral to the same enclosed building or buildings as the guest rooms or suites.

Housing Authority means the San Francisco Housing Authority.

Implementation Plan means a plan adopted periodically by the Agency Commission relating to the implementation of goals and objectives within this Redevelopment Plan, in accordance with the requirements of the CRL.

India Basin Shoreline Area means BVHP Survey Area C.

India Basin Sub-area Plan means a proposed sub-area plan for the Bayview Hunters Point applicable for BVHP Survey Area C.

Interagency Cooperation Agreement means an agreement between the Agency and the City to facilitate the design, approval, operation and maintenance of public infrastructure to be built to serve Zone 1 of the Project Area.

Light Industrial means a non-retail use that provides for the fabrication or production of goods, by hand or machinery, for distribution to retailers or wholesalers for resale off the premises, primarily involving the assembly, packaging, repairing, or processing of previously prepared materials.

Limited Equity Program means the Agency's program for first-time homebuyers, which provides for-sale housing to income-qualified households at an affordable price and maintains initial affordability levels at each resale.

Live-Work Units means a structure or portion of a structure combining a residential living space for a household or group of persons with an integrated work space principally used by one or more of the residents of that unit.

Mayor means the current Mayor for the City and County of San Francisco.

~~**Medical Cannabis Dispensary** means a use as is defined by Section 3301(f) of the San Francisco Health Code.~~

Mitigation Measures means those mitigation measures from the Candlestick Point/Hunters Point Shipyard Phase 2 Project EIR imposed as conditions of approval of the amendments to this Redevelopment Plan as set forth in Resolution No. 347-10, as amended or modified from time to time consistent with CEQA.

Motor Vehicle Tow Service means a service use that provides vehicle towing service, including accessory vehicle storage, when all tow trucks used and vehicles towed by the use are parked or stored on the premises.

Neighborhood Retail Sales and Services means a commercial use that provides goods and/or services directly to the customer, whose primary clientele is customers who live or work nearby and who can access the establishment directly from the street on a walk-in basis. This use may provide goods and/or services to the business community, provided that it also serves the general public. This use would include those that sell, for example, groceries, personal toiletries, magazines, smaller scale comparison shopping; personal services such as laundromats, health clubs, formula retail outlets, hair or nail salons; and uses designed to attract customers from the surrounding neighborhood. Retail uses can also include outdoor activity areas, open air sales areas, and walk-up facilities (such as ATMs or window service) related to the retail sale or service use and need not be granted separate approvals for such features.

New City Regulations means both City Regulations adopted after the 2010 Plan Amendment Date or a change in Existing City Regulations, including any amendment to this Redevelopment Plan or the Plan Documents, effective after the 2010 Plan Amendment Date.

Nighttime Entertainment means entertainment activities such as dance halls, discotheques, nightclubs, and similar evening-oriented entertainment activities generally involving amplified music, either live or recorded, as well as restaurants and bars, and other venues or spaces used for different uses during the day that present such activities. It excludes Adult Entertainment.

Non-Retail Sales and Services means a commercial or office use that provides goods and/or services primarily to other businesses rather than to the general public and that may include, by way of example and not limitation, wholesale sales; sale, rental, installation, servicing and/or repair of business goods and equipment.

Nonconforming Use means a use that existed lawfully as of the 2010 Plan Amendment Date and that fails to conform to one or more of the use limitations in this Redevelopment Plan and/or the Planning Code then applicable for the Project Area in which the property is located.

Office means a use within a structure or portion thereof intended or primarily suitable for occupancy by persons or entities that perform, provide for their own benefit, or provide to others at that location services including, the following: professional; medical; banking; insurance; management; consulting; technical; sales; and design; and the non-accessory office functions of manufacturing and warehousing businesses; multimedia, software development, web design, electronic commerce, and information technology; administrative services; and professional services. This use does not include retail uses; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; or wholesale shipping, receiving and storage.

Open Space means space that is retained primarily in an unimproved, natural state. Open Space may be used for passive recreational activities, such as hiking and picnicking, and may include facilities related to such passive recreational uses.

Owner Participation Agreement or **OPA** means a binding agreement between a property owner and the Agency by which the participant agrees to rehabilitate, develop, use and maintain the property in conformance with this Redevelopment Plan.

Owner Participation Rules means the rules for property owner participation in redevelopment activities consistent with the provisions of this Redevelopment Plan within the Project Area, approved by the Agency Commission by Resolution No. 34-2006 dated March 7, 2006, as may be amended from time to time.

Parking means the storage of vehicles accessory to a principle or secondary residential or commercial use. Such storage can be in the form of independently accessible parking spaces, non-independently accessible parking spaces including those accessed on parking lifts or through the use of valet. Parking spaces need not be on the same lot or block to the use it serves.

Parks means publicly owned open space improved with either active recreational amenities such as playing fields and sporting courts and/or passive recreational amenities such as trails, picnic areas, and small outdoor performance spaces

Performance Arts means a use that includes performance, exhibition, rehearsal, production, or post-production of any of the following: dance, music, dramatic art, film, video, and other visual, performance and sound arts and craft.

Permanently Affordable means in compliance with the statutorily required minimum affordability periods as set forth in the California Redevelopment Law.

Plan Documents means any Business Occupant Re-Entry Policy, Delegation Agreement(s) (as to Zone 2) Implementation Plan, Design for Development documents, Relocation Plan and Owner Participation Rules.

Planning Code means the Planning Code and Zoning Maps of the City and County of San Francisco.

Planning Commission means the Planning Commission of the City and County of San Francisco, California.

Planning Department means the Planning Department of the City and County of San Francisco.

Post-Secondary Institutions means a use that is certified by the Western Association of Schools and Colleges that provides post-secondary educational services such as a school, college or university.

Priority Policies means the eight priority policies stated in Section 101.1, Master Plan Consistency and Implementation, of the City's Planning Code.

Project Area means Project Area B, consisting of Zone 1 and Zone 2, within the boundaries of the Bayview Hunters Point Redevelopment Project Area.

Project Area A means the area delineated in Map 1. The legal description is contained in Attachment A hereto.

Project Area B means the area delineated in Map 2 and includes Area B Parcel One, and Area B Parcel Two. The legal description is contained in Attachment B hereto. Project Area B is further delineated for the purpose of redevelopment implementation into Zone and Zone 2. Zone 1, shown in Map 2, is the Candlestick Point Sub-Area, which includes the Candlestick Point Activity Node and Alice Griffith Project. Zone 2 includes the remainder of Project Area B.

Project Area Committee or **PAC** means the elected community body that advises the Agency on the preparation of this Redevelopment Plan and supporting documents.

Public Recreation means privately-owned recreational areas that are open to the general public. This use may include may include hiking trails, playgrounds, public parks, sports fields, community gardens, golf courses, marinas, and tennis courts as well as accessory uses such as maintenance facilities, parking, and concession areas.

Public Trust means collectively the common law public trust for commerce, navigation and fisheries and the statutory trust imposed by the Granting Act.

Real Property means land, including land under water and waterfront property; buildings, structures, fixtures, and improvements on the land; any property appurtenant to or used in connection with the land; every estate, interest, privilege, easement, franchise, and right in land, including rights-of-way, terms for years, and liens, charges, or encumbrances by way of judgment, mortgage, or otherwise and the indebtedness secured by such liens.

Recreational Facility means a use that provides social, fraternal, counseling, athletic or other recreational gathering services to the community.

Redevelopment Plan means this Redevelopment Plan for the Bayview Hunters Point Project Area, formerly known as the Hunters Point Redevelopment Project Area.

Regional Retail Sales and Services means a commercial use that provides goods and/or services directly to the customer, whose primary clientele is customers who live throughout the surrounding region and may include both small and large format tenants up to 120,000 square feet. This use would include those who sell apparel, electronics, furniture, durable goods, specialty

items, formula retail outlets, and other more expensive, and less frequently purchased items; beyond the surrounding neighborhood. Regional Retail sales and services can include counter and other walk-up facilities as well as adjacent outdoor activity areas accessory to such uses.

Religious Institution means a use that provides religious services to the community such as a church, temple or synagogue.

Relocation Plan means, as appropriate, either: 1) as to Zone 2, a document, approved by the Agency Commission by Resolution No. 34-2006 dated March 7, 2006 that establishes how the Agency and developers will assist persons, business concerns and others displaced from the Project Area by redevelopment activities of or assisted by the Agency in finding new locations in accordance with all applicable relocation statutes and regulations; or 2) as to as to the Alice Griffith Housing portion of Zone 1, a plan approved by the Agency Commission consistent with Section 2.1 of this Redevelopment Plan in connection with a disposition and development agreement for the Alice Griffith Housing site; and 3) as to all other portions of Zone 1 other than Alice Griffith Housing, either a plan adopted by the Agency Commission consistent with the requirements of applicable State or Federal law or, if no such plan is adopted, the document approved by Agency Commission Resolution No. 34-2006 described in subsection 1 above.

Residential Care Facility means medical use that provides lodging, board, and care for one day or more to persons in need of specialized aid by personnel licensed by the State but does not provide outpatient services.

Residential Use means a use that includes for sale and rental housing units, including Dwelling Units, Live/Work Units, and Group Housing

Restaurant means a full service or self service retail facility primarily for eating use that provides ready-to-eat food to customers for consumption on or off the premises, which may or may not provide seating, and that may include service of liquor under ABC licenses [those explicitly for any alcoholic service in association with a restaurant]. Food may be cooked or otherwise prepared on the premises.

School Facilities Impact Fee means the sum payable to the San Francisco Unified School District pursuant to Government Code Section 65995.

Secondary School means a use that provides grade 9-12 education and may be either public or private.

Short-Term Rental has the meaning established in Article 41A of the Administrative Code (as it may be amended from time to time), and, subject to compliance with regulations of the City's

Office of Short-Term Rentals (or its successor), is allowed within Residential uses unless otherwise prohibited by applicable private covenants or similar restrictions.

Standards for Development means, for Zone 2 of the Project Area, the standards set forth in the Planning Code. For Zone 1 of the Project Area (Candlestick Point Sub-Area), the Standards for Development are set forth in the Candlestick Point Design for Development Document.

State means the State of California.

State Historical Building Code or **SHBC** means the State Historical Building Code as set forth in Part 8 of Title 24 (Health & Safety Code §§ 18950 *et seq.*), which applies to all qualified historical buildings or structures, as defined in SHBC Section 18955. It provides building regulations and standards for the rehabilitation, preservation, restoration (including related reconstruction) or relocation of qualified historical buildings.

Supportive Housing means affordable housing developments with integrated services that are not required as a condition of occupancy and that serve high needs populations including but not limited to low income senior citizens, youth transitioning out of foster care, adults with developmental disabilities, individuals and families who are homeless or at risk of homelessness, and persons with AIDS.

Taxing Agencies means all public entities that have the authority to tax property within the Project Area, including the State, the City, BART, San Francisco Unified School District, City College of San Francisco, Bay Area Air Quality Management District and any district or other public corporation.

Use means the purpose for which land or a structure, or both, are designed, constructed, arranged or intended, or for which they are occupied or maintained, let or leased.

Vocational/Job Training Facility means a use that provides job training, and may also provide vocational counseling and job referrals. Vocational/Job Training Facilities that are oriented to clerical, administrative, or professional skill development and job placement (Clerical/Administrative) shall be a distinct use from facilities that are oriented to mechanical, light industrial, or trade-related skill development and job placement (Mechanical/Industrial).

Zone 1 means the Candlestick Point Activity Node of the Project Area, defined above, and illustrated in Map 2, subject to the additional entitlement provisions of Section 4 of this Redevelopment Plan. Zone 1 is the portion of the Project Area subject to Proposition G. All parcels within Zone 1 are listed in a separate table in Attachment D.

Zone 2 means the portion of the Project Area outside of Zone 1, which is not subject to Proposition G.

Attachment A - Legal Description Project Area A.

The Boundaries of Project Area A are indicated on Map 1, and are more particularly described as follows:

Beginning at the point of intersection of the northwesterly line of Mendell Street with a line drawn parallel with and perpendicularly distant 100 feet northeasterly from the northeasterly line of Innes Avenue; running thence southeasterly along the parallel line so drawn to the northwesterly line of Lane Street; thence northeasterly along the northwesterly line of Lane Street to its intersection with a line drawn parallel with and perpendicularly distant 100 feet southwesterly from the southwesterly line of Galvez Avenue; thence northwesterly along last said parallel line to the southeasterly line of Mendell Street; thence northeasterly along said southeasterly line of Mendell Street to a line drawn parallel with and perpendicularly distant 100 feet northeasterly from the northeasterly line of Galvez Avenue; thence southeasterly along last said parallel line to the northwesterly line of Keith Street to its intersection with the southwesterly line of Fairfax Avenue; thence southeasterly along the southwesterly line of Fairfax Avenue produced southeasterly to its intersection with the southeasterly line of Keith Street; thence northeasterly along said southeasterly line of Keith Street produced northeasterly to its intersection with the northeasterly line of Fairfax Avenue; thence along the northeasterly line of Fairfax Avenue the following courses and distances: southeasterly 300.836 feet; southeasterly along an arc of a curve to the right tangent to the preceding course, with a radius of 175.534 feet, a central angle of 32°20'31", a distance of 99.084 feet; southeasterly tangent to the preceding curve 34.487 feet; at a right angle southwesterly 9 feet; and southeasterly on the arc of a curve to the right, whose tangent deflects 90°00'00" to the left from the preceding course, with a radius of 221 feet, a central angle of 3°07'20", a distance of 12.043 feet to the southwesterly line of Fairfax Avenue; thence deflecting 144°32'9" to the right from the tangent to the preceding curve and running northwesterly along the southwesterly line of Fairfax Avenue 2.671 feet, thence continuing along the southwesterly line of Fairfax Avenue the following courses and distances: northwesterly along an arc of a curve to the left, tangent to the preceding course, with a radius of 100 feet, a central angle of 25°50'32", a distance of 45.103 feet; northwesterly along an arc of a reverse curve to the right, with a radius of 100 feet, a central angle of 25°50'32", a distance of 45.103 feet; and northwesterly tangent to the preceding curve 73.988 feet to a point on the southwesterly line of Fairfax Avenue distant thereon 265.220 feet southeasterly from the southeasterly line of Keith Street; thence leaving said southwesterly line of Fairfax Avenue south 62°19'13" west 43.370 feet; thence north 26°38'51" west 8.730 feet; thence north 81°55'51" west 127.710 feet; thence south 53°19'54" west 28.400 feet; thence south 10°40'51" east 83.580 feet; thence south 12°00'13" west 64.610 feet; thence south 25°° west 44.690 feet; thence south 31°41'18" west 69.610 feet, thence south 9°40'46" west 39.050 feet; thence south 10°04'18" east 55.080 feet; thence south 22°34'00" west 56.800 feet to the northeasterly line of Hudson Avenue; thence southeasterly along said northeasterly line of Hudson Avenue 76.020 feet; thence at a right angle southwesterly 180 feet; thence at a right angle southeasterly 207.573 feet; thence deflecting 70°43'48" to the right and running southerly 98.255 feet to a point on the former northwesterly line of Jennings Street, distant thereon 7.250 feet northeasterly from the northeasterly from the northeasterly line of Innes Avenue; thence southwesterly along said former northwesterly line of Jennings Street 47.250 feet to the center line of Innes Avenue; thence northwesterly along said center line of Innes Avenue 95.281 feet; thence

southeasterly along an arc of a curve to the right, whose tangent deflects 145°°42'16" to the left from the preceding course, with a radius of 828 feet, a central angle of 14°°13'16", a distance of 205.514 feet; thence southeasterly tangent to the preceding curve a distance of 160.232 feet; thence continuing southeasterly along an arc of a curve to the left, tangent to the preceding course, with a radius of 122 feet, a central angle of 48°°31'00", a distance of 103.307 feet; thence southeasterly tangent to the preceding curve a distance of 440 feet to the center line of Middle Point Road, formerly Ingalls Street; thence northeasterly along the center line of Middle Point Road to a point perpendicularly distant 100 feet southwesterly from southwesterly from the southwesterly line of Innes Avenue; thence southeasterly parallel with last said line of Innes Avenue to a point perpendicularly distant 225 feet northwesterly from the northwesterly line of Hawes Street; thence northeasterly parallel with said northwesterly line of Hawes Street 100 feet to the southwesterly line of Innes Avenue; thence southeasterly along said southwesterly line of Innes Avenue 289 feet to the southeasterly line of Hawes Street; thence at a right angle southwesterly along said southeasterly line of Hawes Street 100 feet; thence at right angle northwesterly to the center line of Hawes Street; thence southwesterly along the southwesterly extension of the center line of Hawes Street to a point distant thereon 442.823 feet northeasterly from the former northeasterly line of Newcomb Avenue; thence southeasterly along an arc of a curve concave southwesterly, having a radius of 74.50 feet (a radial line to said curve at last mentioned point bears North 25°°43'29" east), through a central angle of 8°°25'50", a distance of 10.962 feet: thence south 27°°47'39" west 171.95 feet; thence south 27°°20'36" east 290.700 feet; thence south 54°°28'21" east 371.245 feet to the center line of former Griffith Street; thence southwesterly along last said center line to the center line of former Newcomb Avenue; thence northwesterly along said center line of Newcomb Avenue to a point distant thereon 225 feet southeasterly from the former southeasterly line of Hawes Street; thence southwesterly parallel with said southeasterly line of Hawes Street to the northeasterly line of Lot 12, in Block 284, as said lot and block are shown on that certain map entitled, "Map of the Property of the South San Francisco Homestead and R.R. Association", filed April 15, 1867, in Book 2 "A" and " B" of Maps, at page 39, in the office of the Recorder of the City and County of San Francisco, State of California; thence southeasterly along the northeasterly line of Lot 12 to the southeasterly line of said lot; thence southwesterly along last said southeasterly line and its southwesterly extension to the southwesterly line of Oakdale Avenue; thence northwesterly along last said line of Oakdale Avenue to a point distant thereon 75 feet northwesterly from the northwesterly line of Ingalls Street; thence southwesterly at a right angle to said southwesterly line of Oakdale Avenue 30 feet; thence at a right angle northwesterly 25 feet; thence at a right angle southwesterly 70 feet to a point perpendicularly distant 100 feet northeasterly from the northeasterly line of Palou Avenue; thence northwesterly parallel with said northeasterly line of Palou Avenue to the southeasterly line of Jennings Street; thence at a right angle southwesterly along said southeasterly line of Jennings Street, 100 feet to the northeasterly line of Palou Avenue; thence northwesterly along said northeasterly line of Palou Avenue 89 feet, more or less, to a point distant thereon 25 feet northwesterly from the northwesterly line of Jennings Street; thence at a right angle northeasterly 100 feet; thence northwesterly parallel with said northeasterly line of Palou Avenue to a point perpendicularly distant 225 feet southeasterly from the southeasterly line of Keith Street; thence northeasterly parallel with last said line of Keith Street to the southwesterly line of Oakdale Avenue; thence northwesterly along said southwesterly line of Oakdale Avenue to a point distant thereon 150 feet southeasterly from said southeasterly line of Keith Street; thence northeasterly parallel with last said line of Keith Street to the northeasterly line of Oakdale Avenue; thence at a

right angle northwesterly along last said line of Oakdale Avenue to a point distant thereon 112.50 feet southeasterly from the southeasterly line of Keith Street; thence northeasterly parallel with said southeasterly line of Keith Street to a point perpendicularly distant 100 feet southwesterly from the southwesterly line of Newcomb Avenue; thence northwesterly parallel with said southwesterly line of Newcomb Avenue to a point perpendicular distant 75 feet southeasterly from the southeasterly line of Keith Street; thence northeasterly parallel with said southeasterly line of Keith Street to the southwesterly line of Newcomb Avenue; thence northwesterly along said southwesterly line of Newcomb Avenue and its northwesterly extension to its intersection with the northwesterly line of Keith Street; thence northeasterly along last said line of Keith Street to a point distant thereon 100 feet southwesterly from the former southwesterly line of McKinnon Avenue; thence northwesterly parallel with last said line of McKinnon Avenue to a point perpendicularly distant 200 feet southeasterly from the southeasterly line of Lane Street; thence northeasterly parallel with said southeasterly line of Lane Street to the southwesterly line of McKinnon Avenue; thence northwesterly along last said line of McKinnon Avenue and its northwesterly extension to its intersection with the northwesterly line of Lane Street; thence northeasterly along last said line of Lane Street to its intersection with the southwesterly line of La Salle Avenue; thence northwesterly along last said line of La Salle Avenue and its northwesterly extension to its intersection with the northwesterly line of Mendell Street; thence northeasterly along last said line of Mendell Street to the point of beginning.

Project Area A contains 137 acres. Project Area B (described in Attachment B) contains 1,361.5 acres. Total computed acreage for Project Area A and Project Area B contains 1,498.5 acres more or less.

Attachment B- Legal Description Project Area B.

The Boundaries of Project Area B are indicated Map 2, and are more particularly described as follows:

Parcel One

Beginning at the point of intersection of the northerly line of Cesar Chavez Street with the northeasterly line of San Bruno Avenue, said point being the southwest corner of Assessor's Block 4279; Thence southwesterly to the northeast corner of Assessor's Block 5509; Thence southerly along the easterly line of Assessor's Block 5509 to the most southerly corner of Assessor's Block 5509; Thence southerly to the most easterly corner of Assessor's Block 5510, said corner being on the westerly line of Bay Shore Boulevard; Thence southerly along the westerly line of Bay Shore Boulevard to the northerly line of Eve Street; Thence southerly to the intersection of the southerly line of Eve Street with the westerly line of Bay Shore Boulevard; Thence southerly along the westerly line of Bay Shore Boulevard to the northeast corner of lot 47, Assessor's Block 5533; Thence westerly along the northerly line of said lot 47 to the northwest corner of said lot 47, also being the most northerly corner of lot 48, Assessor's Block 5533; Thence southwesterly along the northwesterly line of said lot 48 to an angle point therein; Thence southwesterly along the northwesterly line of said lot 48 to the southwest corner of said lot 48; Thence southeasterly along the southwesterly line of said lot 48 to the northwesterly line of Bay Shore Boulevard; Thence southwesterly along the northwesterly line of Bay Shore Boulevard and its southwesterly prolongation to the intersection of the northwesterly line of Bay Shore Boulevard with the southwesterly line of Costa Street; Thence northwesterly along the southwesterly line of Costa Street to the northwest corner of lot 1, Assessor's Block 5573; Thence southwesterly along the northwesterly line of lot 1 and lot 5, Assessor's Block 5573 to the southwest corner of said lot 5; Thence southeasterly along the southwesterly line of said lot 5 to the northwesterly line of Bay Shore Boulevard; Thence southwesterly along the northwesterly line of Bay Shore Boulevard and its southwesterly prolongation to the intersection of the northwesterly line of Bay Shore Boulevard with the southwesterly line of Faith Street; Thence northwesterly along the southwesterly line of Faith Street to the northwest corner of lot 1, Assessor's Block 5576; Thence southwesterly along the northwesterly line of said lot 1 to the northeasterly line of Oakdale Avenue; Thence southeasterly along the northeasterly line of Oakdale Avenue to the northwesterly line of Bay Shore Boulevard; Thence southwesterly to the intersection of the northwesterly line of Bay Shore Boulevard with the southwesterly line of Oakdale Avenue; Thence northwesterly along the southwesterly line of Oakdale Avenue to the northwest corner of lot 1, Assessor's Block 5596; Thence southwesterly along the northwesterly line of said lot 1 to the southwest corner of said lot 1, also being the northwest corner of lot 43, Assessor's Block 5596; Thence southerly along the westerly line of said lot 43 to the intersection of the northwesterly and northeasterly lines of Cosgrove Street; Thence southwesterly along the northwesterly line of Cosgrove Street to the southwesterly line of Cosgrove Street; Thence southeasterly along the southwesterly line of Cosgrove Street to the northwesterly line of lot 53, Assessor's Block 5596; Thence southwesterly along the northwesterly line of lots 53, 54, 12, 14, 13, 15, 17D, 17B, 41, and 38, Assessor's Block 5596 to the northerly line of Cortland Avenue; Thence easterly along the northerly line of Cortland Avenue to the westerly line of Bay Shore Boulevard; Thence southerly along the westerly line of Bay Shore Boulevard and it southerly

prolongation to the southwesterly prolongation of the southeasterly line of Industrial Street; Thence northeasterly along said southwesterly prolongation and along the southeasterly line of Industrial Street to the southwesterly line of Shafter Avenue; Thence southeasterly along the southwesterly line of Shafter Avenue to the southwesterly prolongation of the northwesterly line of lot 1, Assessor's Block 5348; Thence northeasterly along said southwesterly prolongation to the northeasterly line of Shafter Avenue; Thence southeasterly along the northeasterly line of Shafter Avenue to the northwesterly line of Selby Street; Thence northeasterly along the northwesterly line of Selby Street to the northwesterly prolongation of the southwesterly line of lot 26, Assessor's Block 5347; Thence southeasterly along said northwesterly prolongation and along the southwesterly line of lots 26 through 31 and 46 through 48, Assessor's Block 5347 to the most southerly corner of said lot 48; Thence northeasterly along the southeasterly line of said lot 48 to the southwesterly line of Revere Avenue; Thence southeasterly along the southwesterly line of Revere Avenue to the southwesterly prolongation of the northwesterly line of Rankin Street; Thence northeasterly along said southwesterly prolongation and along the northwesterly line of Rankin Street to the northeasterly line of lot 2, Assessor's Block 5334; Thence northwesterly along the northeasterly line of lots 2 through 23, 51 and 50 to the southeasterly line of Selby Street; Thence northeasterly along the southeasterly line of Selby Street to the northeasterly line of Palou Avenue; Thence southeasterly along the northeasterly line of Palou Avenue to the northwesterly line of Rankin Street; Thence northeasterly along the northwesterly line of Rankin Street to the most easterly corner of lot 2, Assessor's Block 5318; Thence southeasterly at a right angle to the northwesterly line of Rankin Street to the southeasterly line of Rankin Street; Thence southwesterly along the southeasterly line of Rankin Street to the southwesterly line of lot 49, Assessor's Block 5319; Thence southeasterly along the southwesterly line of said lot 49 to the southeasterly line of said lot 49; Thence northeasterly along the southeasterly line of said lot 49 to the southwesterly line of lot 27, Assessor's Block 5319; Thence southeasterly along the southwesterly line of lots 27 through 47 and 1, Assessor's Block 5319 to the northwesterly line of Quint Street; Thence southeasterly to the intersection of the southeasterly line of Quint Street with the northeasterly line of Drummond Alley; Thence southeasterly along the northeasterly line of Drummond Alley and its southeasterly prolongation to the southeasterly line of Dunshee Street; Thence southwesterly along the southeasterly line of Dunshee Street and its southwesterly prolongation to the southwesterly line of Palou Avenue; Thence southeasterly along the southwesterly line Palou Avenue to the northwesterly line of Phelps Street; Thence southwesterly along the northwesterly line of Phelps Street and its southwesterly prolongation to the southwesterly line of Quesada Avenue; Thence southeasterly along the southwesterly line of Quesada Avenue to the southeasterly line of Quesada Avenue; Thence northeasterly along the southeasterly line of Quesada Avenue to the northeasterly line of Quesada Avenue, also being the southwesterly line of Assessor's Block 5328; Thence southeasterly along the southwesterly line of Assessor's Block 5328 to the northwesterly line of Newhall Street; Thence southwesterly along the northwesterly line of Newhall Street to the northwesterly prolongation of the southwesterly line of Quesada Avenue; Thence southeasterly along said northwesterly prolongation and along the southwesterly line of Quesada Avenue to the northwesterly line of lot 1, Assessor's Block 5338; Thence southwesterly along the northwesterly line of lots 1 and 2, Assessor's Block 5338 to the northeasterly line of lot 53, Assessor's Block 5338; Thence northwesterly along said northeasterly line of lot 53, Assessor's Block 5338, to the northeast corner of said lot 53; Thence southwesterly along the northwesterly line of lot 53 to an angle point therein; Thence northwesterly along the northwesterly line of lot 53, Assessor's Block 5338, a distance of 7.21

feet; Thence southwesterly along the northwesterly line of lot 53, Assessor's Block 5338, to the southwesterly line of lot 53; Thence southeasterly along the southwesterly line of lot 53, Assessor's Block 5338 to the northwesterly line of lot 5, Assessor's Block 5338; Thence southwesterly along the northwesterly line of lot 5, Assessor's Block 5338 to the northeasterly line of Revere Avenue; Thence southwesterly at a right angle to the northeasterly line of Revere Avenue to the southwesterly line of Revere Avenue; Thence southeasterly along the southwesterly line of Revere Avenue to the northwesterly line of lot 33, Assessor's Block 5343; Thence southwesterly along the northwesterly line of said lot 33 to the northeasterly line of Bay View Street; Thence southwesterly to the intersection of the southwesterly line of Bay View Street with the southeasterly line of Latona Street; Thence southeasterly along the southwesterly line of Bay View Street to the northwesterly line of lot 29, Assessor's Block 5358; Thence southwesterly along the northwesterly line of lots 29, 3, and 4, Assessor's Block 5358 to the southwesterly line of said lot 4; Thence southeasterly along the southwesterly line of said lot 4 to the northwesterly line of lot 5A, Assessor's Block 5358; Thence southwesterly along the northwesterly line of lot 5A and lot 27 to the northeasterly line of lot 8, all in Assessor's Block 5358; Thence northwesterly along the northeasterly line of said lot 8 to the northwesterly line of said lot 8; Thence southwesterly along the northwesterly line of lots 8 and 9, Assessor's Block 5358 to the southwesterly line of said lot 9; Thence southeasterly along the southwesterly line of said lot 9 to the northwesterly line of lot 11A, Assessor's Block 5358; Thence southwesterly along the northwesterly line of said lot 11A to the southwesterly line of said lot 11A; Thence southeasterly along the southwesterly line of said lot 11A to the northwesterly line of lot 12, Assessor's Block 5358; Thence southwesterly along the northwesterly line of said lot 12 to the northeasterly line of lot 13, Assessor's Block 5358; Thence northwesterly along the northeasterly line of said lot 13 to the northwesterly line of said lot 13; Thence southwesterly along the northwesterly line of said lot 13 to the southwesterly line of said lot 13; Thence southeasterly along the southwesterly line of said lot 13 to the northwesterly line of lot 14, Assessor's Block 5358; Thence southwesterly along the northwesterly line of said lot 14 to the northeasterly line of lot 15, Assessor's Block 5358; Thence northwesterly along the northeasterly line of said lot 15 to the southeasterly line of Latona Street; Thence southwesterly along the southeasterly line of Latona Street to the northeasterly line of Thornton Avenue; Thence southwesterly at a right angle to the northeasterly line of Thornton Avenue to the southwesterly line of Thornton Avenue; Thence northwesterly along the southwesterly line of Thornton Avenue to the southeasterly line of Lucy Street; Thence southwesterly along the southeasterly line of Lucy Street to the northeasterly line of Williams Avenue; Thence northwesterly along the northeasterly line of Williams Avenue to the northwesterly line of Reddy Street; Thence northeasterly along the northwesterly line of Reddy Street to the southwesterly line of Thornton Avenue; Thence northwesterly along the southwesterly line of Thornton Avenue to the southeasterly line of Diana Street; Thence southwesterly along the southeasterly line of Diana Street to the northeasterly line of Williams Avenue; Thence southwesterly at a right angle to the northeasterly line of Williams Avenue to the southwesterly line of Williams Avenue; Thence southeasterly along the southwesterly line of Williams Avenue to the westerly line of lot 4, Assessor's Block 5415; Thence southerly along the westerly line of said lot 4 to the southwesterly line of said lot 4; Thence southeasterly along the southwesterly line of said lot 4 to the westerly line of lot 1, Assessor's Block 5415; Thence southerly along the westerly line of said lot 1 to the northwesterly line of Mendell Street; Thence southwesterly along the northwesterly line of Mendell Street and its southwesterly prolongation to the westerly line of lot 5, Assessor's Block 5415; Thence southerly along the westerly line of said

lot 5 to the southeasterly prolongation of the northeasterly line of Egbert Avenue; Thence northwesterly along said southeasterly prolongation and along the northeasterly line of Egbert Avenue to the southeasterly line of Newhall Street; Thence northeasterly along the southeasterly line of Newhall Street and its northeasterly prolongation to the southeasterly prolongation of the northeasterly line of Carroll Avenue; Thence northwesterly along said southeasterly prolongation and along the northeasterly line of Carroll Avenue to an angle point therein; Thence southwesterly to the northwest corner of Assessor's Block 5434B; Thence southwesterly along the northwesterly line of Assessor's Block 5434B to the northeasterly line of Egbert Avenue; Thence southwesterly to the most northerly corner of Assessor's Block 5431A; Thence southwesterly along the northwesterly line of Assessor's Block 5431A to the northeasterly line of Fitzgerald Avenue; Thence northwesterly along the northeasterly line of Fitzgerald Avenue to the easterly line of Bay Shore Boulevard; Thence westerly at a right angle to the easterly line of Bay Shore Boulevard to the westerly line of Bay Shore Boulevard; Thence southerly along the westerly line of Bay Shore Boulevard to the southwesterly line of Paul Avenue; Thence southeasterly along the southwesterly line of Paul Avenue to the northwesterly line of lot 53, Assessor's Block 5461; Thence southwesterly along the northwesterly line of lots 53, 3 through 9, 51, 52, 14 through 24, all Assessor's Block 5461 to the northeasterly line of Salinas Avenue; Thence southwesterly to the intersection of the southwesterly line of Salinas Avenue with the southeasterly line of Keith Street; Thence southwesterly along the southeasterly line of Keith Street to the northeasterly line of Jamestown Avenue; Thence southwesterly to the intersection of the southwesterly line of Jamestown Avenue with the southeasterly line of Keith Street; Thence southeasterly along the southwesterly line of Jamestown Avenue to the northwesterly line of Third Street; Thence southwesterly along the northwesterly line of Third Street to the northeast corner of lot 1, Assessor's Block 5470; Thence westerly along the northerly line of lots 1 and 2, Assessor's Block 5470 to the northeasterly line of Key Avenue; Thence westerly to the intersection of the southwesterly line of Key Avenue with the southeasterly line of Keith Street; Thence southwesterly along the southeasterly line of Keith Street to the northeasterly line of Le Conte Avenue; Thence northwesterly to the intersection of the northwesterly line of Keith Street with the northeasterly line of Le Conte Avenue; Thence southwesterly to the intersection of the southwesterly line of Le Conte Avenue with the northwesterly line of Keith Street; Thence northwesterly along the southwesterly line of Le Conte Avenue and its northwesterly prolongation to the northerly prolongation of the easterly line of Bay Shore Boulevard; Thence southerly along said northerly prolongation and along the easterly line of Bay Shore Boulevard to the northwesterly line of Keith Street; Thence southerly to the intersection of the easterly line of Bay Shore Boulevard with the southeasterly line of Keith Street; Thence southerly along the easterly line of Bay Shore Boulevard to the southwesterly prolongation of the northwesterly line of Third Street; Thence easterly to the northwesterly prolongation of the northeasterly line of Meade Avenue; Thence southeasterly along said northwesterly prolongation and along the northeasterly line of Meade Avenue to the southeasterly line of lot 17, Assessor's Block 5016; Thence northeasterly along the southeasterly line of lot 17, 8, 18, and 10, all Assessor's Block 5016 to the northeasterly line of said lot 10; Thence northwesterly along the northeasterly line of said lot 10 to the southeasterly line of lot 10A, Assessor's Block 5016; Thence northeasterly along the southeasterly line of lots 10A, 11B and 11, all Assessor's Block 5016 to the southwesterly line of Le Conte Avenue; Thence northeasterly at a right angle to the southwesterly line of Le Conte Avenue to the northeasterly line of Le Conte Avenue; Thence northwesterly along the northeasterly line of Le Conte Avenue to the southeasterly line of lot 24, Assessor's Block 4995;

Thence northeasterly along the southeasterly line of said lot 24 to the southwesterly line of lot 25, Assessor's Block 4995; Thence southeasterly along the southwesterly line of said lot 25 to the southeasterly line of said lot 25; Thence northeasterly along the southeasterly line of lots 25 through 28 and lot 15, all Assessor's Block 4995 to the southwesterly line of Key Avenue; Thence southeasterly along the southwesterly line of Key Avenue to the southwesterly prolongation of the southeasterly line of lot 3, Assessor's Block 4994; Thence northeasterly along said southwesterly prolongation and along the southeasterly line of said lot 3 to an angle point therein; Thence southeasterly along said southeasterly line of said lot 3 to the northwesterly line of Jennings Street; Thence northeasterly along the northwesterly line of Jennings Street to the southwesterly line of Jamestown Avenue; Thence southeasterly to the intersection of the southwesterly line of Jamestown Avenue with the southeasterly line of Jennings Street; Thence southeasterly along the southwesterly line of Jamestown Avenue to the most northerly corner of lot 277, Assessor's Block 4991; Thence southwesterly and southeasterly along the northwesterly and southwesterly lines of said lot 277 to the most southerly corner of said lot 277; Thence southeasterly along the southwesterly line of lot 276, Assessor's Block 4991 to the northwesterly line of lot 6, Assessor's Block 4977; Thence southwesterly along the northwesterly line of said lot 6 to the southwesterly line of said lot 6; Thence southeasterly along the southwesterly line of said lot 6 and lot 8, Assessor's Block 4977 to the southeasterly line of said lot 8; Thence northeasterly along the southeasterly line of said lot 8 to the southwesterly line of lot 8, Assessor' Block 5023; Thence southeasterly along the southwesterly line of said lot 8 to the northwesterly line of Harney Way; Thence northeasterly along the northwesterly line of Harney Way to the southwesterly line of Jamestown Avenue; Thence southeasterly along the southwesterly line of Jamestown Avenue to the most easterly corner of lot 10, Assessor's Block 5023; Thence southwesterly along the southeasterly line of said lot 10 to the mean low-tide line of the San Francisco Bay Shoreline; Thence easterly, northwesterly, northeasterly, northwesterly, northeasterly and southeasterly meandering along said mean low-tide line to the point of intersection with the southeasterly line of Assessor's Block 4825; Thence northeasterly along the southeasterly line of Assessor's Blocks 4825, 4814 and 4805 and along the southeasterly line of Fitch Street to the northeasterly line of Palou Avenue; Thence northwesterly along the northeasterly line of Palou Avenue to the southeasterly line of Griffith Street; Thence northeasterly along the southeasterly line of Griffith Street to an angle point therein, said point being on the southeasterly prolongation of the southwesterly line of Oakdale Avenue; Thence northwesterly along the southeasterly line of Griffith Street to an angle point therein, said point being on the former centerline of Griffith Street; Thence northeasterly along the current southeasterly line of Griffith Street (formerly the centerline of Griffith Street) to the southeasterly prolongation of the southwesterly line of Navy Road; Thence northwesterly along said southeasterly prolongation and along the southwesterly line of Navy Road to the most northerly corner of lot 43, Assessor's Block 4700; Thence southwesterly along the northwesterly line of said lot 43 to an angle point therein; Thence southeasterly along said northwesterly line of said lot 43 to an angle point therein; Thence southwesterly along said northwesterly line of said lot 43 and its southwesterly prolongation to the southwesterly line of Oakdale Avenue; Thence northwesterly along the southwesterly line of Oakdale Avenue to the northwesterly line of Assessor's Block 4734; Thence southwesterly along the northwesterly line of Assessor's Block 4734 and its southwesterly prolongation to the southwesterly line of Palou Avenue; Thence southeasterly along the southwesterly line of Palou Avenue to the northwesterly line of Hawes Street; Thence southwesterly along the northwesterly line of Hawes Street to the northeasterly line of Shafter Avenue; Thence northwesterly along the northeasterly line of

Shafter Avenue to its intersection with the southeasterly line of Ingalls Street; Thence northwesterly to the intersection of the northeasterly line of Shafter Avenue with the northwesterly line of Ingalls Street; Thence southwesterly to the intersection of the northwesterly line of Ingalls Street with the southwesterly line of Shafter Avenue; Thence southwesterly along the northwesterly line of Ingalls Street to the northeasterly line of Thomas Avenue; Thence northwesterly along the northeasterly line of Thomas Avenue to the southeasterly line of Jennings Street; Thence northwesterly to the intersection of the northeasterly line of Thomas Avenue with the northwesterly line of Jennings Street; Thence southwesterly to the intersection of the northwesterly line of Jennings Street with the southwesterly line of Thomas Avenue; Thence southwesterly along the northwesterly line of Jennings Street to the northeasterly line of Underwood Avenue; Thence southwesterly to the intersection of the northwesterly line of Jennings Street with the southwesterly line of Underwood Avenue; Thence northwesterly along the southwesterly line of Underwood Avenue to the southeasterly line of Keith Street; Thence northwesterly to the intersection of the southwesterly line of Underwood Avenue with the northwesterly line of Keith Street; Thence northwesterly along the southwesterly line of Underwood Avenue to the southwesterly prolongation of the southeasterly line of lot 8, Assessor's Block 5361; Thence northeasterly along said southwesterly prolongation and along the southeasterly line of lot 8 and lot 25, Assessor's Block 5361 to the southwesterly line of Thomas Avenue; Thence northwesterly along the southwesterly line of Thomas Avenue to the southeasterly line of Lane Street; Thence northwesterly to the intersection of the southwesterly line of Thomas Avenue with the northwesterly line of Lane Street; Thence northwesterly along the southwesterly line of Thomas Avenue to the northwesterly line of lot 1, Assessor's Block 5362; Thence northeasterly at a right angle to the southwesterly line of Thomas Avenue to the northeasterly line of Thomas Avenue; Thence northwesterly along the northeasterly line of Thomas Avenue to the southeasterly line of lot 4, Assessor's Block 5359; Thence northeasterly along the southeasterly line of lots 4, 4A and 4B, all Assessor's Block 5359 to the northeasterly line of said lot 4B; Thence northwesterly along the northeasterly line of said lot 4B to the southeasterly line of lot 6, Assessor's Block 5359; Thence northeasterly along the southeasterly line of said lot 6 to the southwesterly line of Shafter Avenue; Thence northwesterly along the southwesterly line of Shafter Avenue to the southwesterly prolongation of the southeasterly line of lot 7, Assessor's Block 5342; Thence northeasterly along said southwesterly prolongation and along the southeasterly line of lot 7, 8 and 9A, Assessor's Block 5342 to the northeasterly line of said lot 9A; Thence northwesterly along the northeasterly line of said lot 9A to the southeasterly line of lot 10, Assessor's Block 5342; Thence northeasterly along the southeasterly line of said lot 10 to the southwesterly line of Revere Avenue; Thence northwesterly along the southwesterly line of Revere Avenue to the southwesterly prolongation of the southeasterly line of lot 7, Assessor's Block 5339; Thence northeasterly along said southwesterly prolongation and along the southeasterly line of lot 7, 7A, 8, 9, 10 and 11, all Assessor's Block 5339 to the southwesterly line of Quesada Avenue; Thence northeasterly to the most southerly corner of lot 28, Assessor's Block 5326, said corner being on the northeasterly line of Quesada Avenue; Thence northeasterly along the southeasterly line of said lot 28 to the northeasterly line of said lot 28; Thence northwesterly along the northeasterly line of said lot 28 to the southeasterly line of lot 11, Assessor's Block 5326; Thence northeasterly along the southeasterly line of lots 11 and 12, Assessor's Block 5326 to the southwesterly line of Palou Avenue; Thence southeasterly along the southwesterly line of Palou Avenue to the northwesterly line of Lane Street; Thence southeasterly to the intersection of the southwesterly line of Palou Avenue with the southeasterly line of Lane

Street; Thence northeasterly along the southeasterly line of Lane Street to the northeasterly line of Newcomb Avenue; Thence southeasterly along the northeasterly line of Newcomb Avenue to the southeasterly line of lot 13, Assessor's Block 5308; Thence northeasterly along the southeasterly line of lots 13 and 13C, Assessor's Block 5308 to the northeasterly line of said lot 13C; Thence northwesterly along the northeasterly line of said lot 13C to the southeasterly line of Lane Street; Thence northwesterly to the most easterly corner of lot 2, Assessor's Block 5307, said corner being on the northwesterly line of Lane Street; Thence northwesterly along the northeasterly line of lot 2 through lot 17C, Assessor's Block 5307 to the southeasterly line of Mendell Street; Thence northeasterly along the southeasterly line of Mendell Street to the southwesterly line of La Salle Avenue; Thence northwesterly to the intersection of the southwesterly line of La Salle Avenue with the northwesterly line of Mendell Street; Thence northeasterly along the northwesterly line of Mendell Street to the most easterly corner of lot 22, Assessor's Block 5259; Thence southeasterly to the most westerly corner of lot 15, Assessor's Block 5258, said corner being on the southeasterly line of Mendell Street; Thence southeasterly along the southwesterly line of lot 15, Assessor's Block 5258 to the southeasterly line of said lot 15; Thence northeasterly along the southeasterly line of said lot 15 to the southwesterly line of Hudson Avenue; Thence northeasterly to the most southerly corner of lot 11, Assessor's Block 5255, said corner being on the northeasterly line of Hudson Avenue; Thence northeasterly along the southeasterly line of lots 11, 11C, 11B and 11A, all Assessor's Block 5255 to the northeasterly line of said lot 11A; Thence northwesterly along the northeasterly line of said lot 11A to the southeasterly line of Mendell Street; Thence northwesterly to the most easterly corner of lot 2, Assessor's Block 5254, said corner being on the northwesterly line of Mendell Street; Thence northwesterly along the northeasterly line of lots 2 and 4, Assessor's Block 5254 to the northwesterly line of said lot 4; Thence southwesterly along the northwesterly line of said lot 4 to the northeasterly line of Hudson Avenue; Thence southwesterly to the most northerly corner lot 1A, Assessor's Block 5259, said corner being on the southwesterly line of Hudson Avenue; Thence southwesterly along the northwesterly line of lots 1A and 3, Assessor's Block 5259 to the northeasterly line of Innes Avenue; Thence northwesterly along the northeasterly line of Innes Avenue to the most southerly corner of lot 9B, Assessor's Block 5259; Thence northeasterly along the southeasterly line of lots 9B, 9A and 9C, Assessor's Block 5259 to the southwesterly line of lot 9D, Assessor's Block 5259; Thence southeasterly along the southwesterly line of said lot 9D to the southeasterly line of said lot 9D; Thence northeasterly along the southeasterly line of lots 9D, 10, 11, 23 and 24, all Assessor's Block 5259 to the southwesterly line of Hudson Avenue; Thence northeasterly at a right angle to the southwesterly line of Hudson Avenue to the northeasterly line of Hudson Avenue; Thence northwesterly along the northeasterly line of Hudson Avenue to the southeasterly line of Newhall Street; Thence southwesterly along the southeasterly line of Newhall Street to the southeasterly line of Third Street; Thence southwesterly along the southeasterly line of Third Street to the southwesterly line of Kirkwood Avenue; Thence northwesterly along the southwesterly line of Kirkwood Avenue to the southwesterly prolongation of the southeasterly line of lot 7, Assessor's Block 5279; Thence northeasterly along said southwesterly prolongation and along the southeasterly line of said lot 7 to the northeasterly line of said lot 7; Thence northwesterly along the northeasterly line of lots 7 through 12, 52, and 15 through 27, all Assessor's Block 5279 to the southeasterly line of Phelps Street; Thence northwesterly at a right angle to the southeasterly line of Phelps Street to the northwesterly line of Phelps Street; Thence northeasterly along the northwesterly line of Phelps Street to the northwesterly prolongation of the southwesterly line of lot 11, Assessor's Block 5235; Thence southeasterly along said northwesterly prolongation and

along the southwesterly line of said lot 11 and its southeasterly prolongation to the southeasterly line of Third Street; Thence northeasterly along the southeasterly line of Third Street to the southwesterly line of Burke Avenue; Thence northeasterly to the intersection of the northeasterly line of Burke Avenue with the easterly line of Third Street; Thence northerly along the easterly line of Third Street to the northwest corner of Assessor's Block 4502A; Thence easterly along the northerly line of Assessor's Block 4502A to its intersection with the mean low-tide line of the San Francisco Bay Shoreline; Thence northerly, westerly, northerly, southeasterly and easterly meandering along said mean low-tide line to its intersection with the easterly line of Illinois Street; Thence northerly along the easterly line of Illinois Street to the southerly line of Marin Street; Thence easterly along the southerly line of Marin Street to the easterly line of Marin Street; Thence northerly along the easterly line of Marin Street to the southeast corner of Assessor's Block 4358; Thence northerly along the easterly line of Assessor's Block 4358 to an angle point therein; Thence easterly along said easterly line of Assessor's Block 4358 to an angle point therein; Thence northerly along said easterly line of Assessor's Block 4358 to the southerly line of Cesar Chavez Street; Thence northerly at a right angle to the southerly line of Cesar Chavez Street to the northerly line of Cesar Chavez Street; Thence westerly along the northerly line of Cesar Chavez Street to the point of beginning.

EXCEPTING THEREFROM THE FOLLOWING PARCEL: Beginning at the point of intersection of the southeasterly prolongation of the southwesterly line of Oakdale Avenue with the northeasterly prolongation of the northwesterly line of Industrial Street; Thence southwesterly along said northeasterly prolongation and along the northwesterly line of Industrial Street and its southwesterly prolongation to its intersection with the southerly prolongation of the easterly line of Barneveld Avenue; Thence northerly and northeasterly along said southerly prolongation and along the easterly and southeasterly lines of Barneveld Avenue and its northeasterly prolongation to its point of intersection with the northwesterly prolongation of the southwesterly line of Oakdale Avenue; Thence southeasterly along said northwesterly prolongation and along the southwesterly line of Oakdale Avenue and its southeasterly prolongation to the point of beginning.

Parcel Two

All that real property in the City and County of San Francisco, State of California and described as follows:

Beginning at the point of intersection of the southeasterly line of Earl Street with the northeasterly line of Innes Avenue; Thence northwesterly along said northeasterly line of Innes Avenue to the southeasterly line of Hawes Street; Thence northeasterly along said line of Hawes Street to its intersection with the westerly line of Hunters Point Boulevard; Thence northerly along said line of Hunters Point Boulevard to its intersection with the northeasterly line of Hudson Avenue; Thence northwesterly along said line of Hudson Avenue and along the most northeasterly line of Assessor's Block 4647a to the southeasterly line of Assessor's Block 4624; Thence northeasterly along said southeasterly line of Assessor's Block 4624 to the easterly line of Assessor's Block 4624; Thence northerly along said easterly line to the northeasterly line of Assessor's Block 4624; Thence northwesterly along said northeasterly line to the easterly line of Middle Point Road; Thence continuing northwesterly along the northwesterly prolongation of the northeasterly line of Assessor's Block 4624 to the westerly line of Middle Point Road; Thence continuing northwesterly along the northeasterly line of Lot 9 in Assessor's Block 4624 to an angle point in said Lot 9; Thence northwesterly, westerly, southwesterly and southerly (20 Courses) along the northwesterly line of said Lot 9 to the northeasterly line of Lot 71, Assessor's Block 4700; Thence northwesterly along the northeasterly line of said Lot 71 to the northwesterly line of said Lot 71; Thence southwesterly along the northwesterly line of said Lot 71 to the southwesterly line of said Lot 71; Thence southerly and southeasterly (4 Courses) along the southwesterly line of said Lot 71 to the northwesterly line of Harbor Road; Thence southeasterly along the northeasterly line of Harbor Road to the northwesterly line of Ingalls Street; Thence northeasterly along the northwesterly line of Ingalls Street to the northwesterly prolongation of the southwesterly line of Assessor's Block 4652; Thence southeasterly along said northwesterly prolongation and along the southwesterly line of Assessor's Block 4652 to the southeasterly line of Assessor's Block 4652; Thence northeasterly along the southeasterly line of Assessor's Block 4652 to the southwesterly line of Innes Avenue; Thence southeasterly along the southwesterly line of Innes Avenue to the northwesterly line of Hawes Street; Thence southwesterly, southeasterly and southwesterly (3 Courses) along the northwesterly line of Hawes Street to the most northerly Corner of Lot 39, Assessor's Block 4700; Thence southwesterly along the northwesterly line of said Lot 39 and its southwesterly prolongation to the most northerly Corner of Lot 40, Assessor's Block 4700; Thence southwesterly along the northwesterly line of said Lot 40 to the most easterly Corner of said Lot 40; Thence southwesterly to the northwest Corner of Lot 41, Assessor's Block 4700; Thence southwesterly along the northwesterly line of said Lot 41 and its southwesterly prolongation to the most southerly Corner of Lot 79, Assessor's Block 4700; Thence northwesterly and northerly along the southerly line of said Lot 79 to the southeasterly line of Ingalls Street; Thence southwesterly along the southeasterly line of Ingalls Street to the southwesterly line of Assessor's Block 4700; Thence southeasterly along the southwesterly line of Assessor's Block 4700 (3 Courses) to the most westerly Corner of Lot 52, Assessor's Block 4700; Thence southeasterly along the southwesterly line of said Lot 52 to an angle point Therein; Thence northeasterly along the southwesterly line of said Lot 52 to an angle point Therein; Thence southeasterly along the southwesterly line of said Lot 52 to the southeasterly line of said Lot 52; Thence northeasterly along the southeasterly line of said Lot 52 to the southwesterly line of

Kirkwood Avenue; Thence southeasterly along the southwesterly line of Kirkwood Avenue to the northwesterly line of Earl Street; Thence southwesterly (5 Courses) along the northwesterly line of Earl Street to the northwesterly line of Assessor's Block 4591b; Thence southwesterly along the northwesterly line of Assessor's Block 4591b to the southwesterly line of Assessor's Block 4591b; Thence southeasterly along the southwesterly line of Assessor's Block 4591b to the southeasterly line of Assessor's Block 4591b; Thence northeasterly along the southeasterly line of Assessor's Block 4591b and along the southeasterly line of Donahue Street to an angle point in the southeasterly Boundary line of the "Inchon Village" Condominium Project (17 Cm 112-130); Thence northwesterly along said southeasterly Boundary line to the southeasterly line of Assessor's Block 4591b; Thence northeasterly along the southeasterly line of Assessor's Block 4591b and its northeasterly prolongation to the southwesterly Boundary line of the "Morgan Heights" Condominium Project (29 Cm 94-101); Thence northeasterly along the southeasterly Boundary line of said "Morgan Heights" Condominium Project to the northeasterly Boundary line of said "Morgan Heights" Condominium Project; Thence northwesterly along said northeasterly Boundary line to the southeasterly line of Earl Street; Thence northeasterly along said southeasterly line of Earl Street to the point of beginning.

Project Area A (described in Attachment A) contains 137 acres. Project Area B contains 1,361.5 acres and is comprised of Parcel One, that contains 1,267.3 acres, and Parcel Two, that contains 94.2 acres. Total computed acreage for Project Area A and Project Area B contains 1,498.5 acres more or less.

ATTACHMENT C: Authorized Public Improvements

- Public open spaces including parks, plazas, habitat restoration, sports facilities and playgrounds
- Facilities in parks such as tables, waste receptacles, signage, landscaping, market stalls and maintenance facilities;
- Public roadways and other walkways, roadways, lanes, and connectors
- Medians, curbs, bulb-outs, and gutters
- Sidewalks, street trees, landscaping, and street furnishings
- Street, sidewalk, and park lighting
- Traffic signals, control centers, street signage, and pavement striping
- Parking meters
- Potable water distribution and fire suppression facilities
- Reclaimed water facilities and irrigation distribution
- Sanitary sewer facilities and pump stations
- Storm drains, storm water sewer, treatment and conveyance facilities
- Natural gas, electric, telephone and telecommunication facilities
- Utilities and utility relocation
- MUNI light rail/bus/transit facilities, cantenary wires, communication facilities, transit stops and markings, poles, eyebolts, and substations as needed and related improvements
- Community centers and library facilities
- Public health centers and clinics
- Bridges, trails, and staircases
- Seawall upgrades, piers, railings, boating facilities and other shoreline improvements
- Retaining walls and permanent grading
- Public art installations and interpretive signage
- Improvements to existing roadways, streetscapes and utilities
- Improvements to historic buildings
- Erosion control features
- School facilities
- Off-site transportation improvements outside the Project Area including Harney Way right-of-way, Geneva Avenue Bus Rapid Transit facilities, Palou Avenue, the Highway 101/Harney/Geneva freeway interchange, and the signalization of the Pennsylvania/25th ramps.
- Off-site improvements to the football stadium pad and related infrastructure on Hunters Point Shipyard.
- Additional temporary, interim and/or permanent facilities and improvements to the foregoing

ATTACHMENT D: List of Blocks and Lots Within Zone 1 of Project Area B

(as of the effective date of the 2010 Plan Amendment Date)

Assessor's Blocks and Lots:

Block: 4884, all lots;
Block: 4917, all lots;
Block: 4918, all lots;
Block: 4934, all lots;
Block: 4935, all lots;
Block: 4956, Lots 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014;
Block: 4960, Lot 027,
Block 4977, Lot: 006;
Block: 4983, all lots,
Block: 4984, all lots;
Block: 4886, all lots;
~~Block: 4991, Lot: 276;~~
Block: 5000, Lot: 001;
Block: 5005, all lots.

ATTACHMENT E: Planning Code Section 314

SEC. 314. - CHILD-CARE REQUIREMENTS FOR OFFICE AND HOTEL DEVELOPMENT PROJECTS.

When the words "this Section" appear in Sections 314.1 through 314.8, they shall be construed to mean "Sections 314.1 through 314.8."

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.1. - DEFINITIONS.

The following definitions shall govern interpretation of this Section:

(a) "Child-care facility" shall mean a child day-care facility as defined in California Health and Safety Code Section 1596.750.

(b) "Child care provider" shall mean a provider as defined in California Health and Safety Code Section 1596.791.

(c) "Commission" shall mean the City Planning Commission.

(d) "DBI" shall mean the Department of Building Inspection.

(e) "Department" shall mean the Department of City Planning.

(f) "First certificate of occupancy" shall mean either a temporary certificate of occupancy or a Certificate of Final Completion and Occupancy, as defined in San Francisco Building Code Section 109, whichever is issued first.

(g) "Hotel" shall mean a building containing six or more guest rooms as defined in San Francisco Housing Code Section 401 intended or designed to be used, or which are used, rented, or hired out to be occupied, or which are occupied for sleeping purposes and dwelling purposes by guests, whether rent is paid in money, goods, or services, including motels as defined in San Francisco Housing Code Section 401.

(h) "Hotel use" shall mean space within a structure or portion thereof intended or primarily suitable for the operation of a hotel, including all office and other uses accessory to the renting of guest rooms, but excluding retail uses and office uses not accessory to the hotel use.

(i) "Household of low income" shall mean a household composed of one or more persons with a combined annual net income for all adult members which does not exceed the qualifying limit for a lower-income family of a size equivalent to the number of persons residing in such household, as set forth for the County of San Francisco in California Administrative Code Section 6932.

(j) "Household of moderate income" shall mean a household composed of one or more persons with a combined annual net income for all adult members which does not exceed the qualifying limit for a median-income family of a size equivalent to the number of persons residing in such household, as set forth for the County of San Francisco in California Administrative Code Section 6932.

(k) "Licensed child-care facility" shall mean a child-care facility which has been issued a valid license by the California Department of Social Ser-vices pursuant to California Health and Safety Code Sections 1596.80—1596.875, 1596.95—1597.09, or 1597.30—1597.61.

(l) "Net addition of gross square feet of hotel space" shall mean gross floor area as defined in Planning Code Section 102.9 to be occupied by, or primarily serving, hotel use, less the gross floor area in any structure demolished or rehabilitated as part of the proposed hotel development project space used primarily and continuously for office or hotel use and not accessory to any use other than office or hotel use for five years prior to Planning Commission approval of the hotel development project subject to this Section, or for the life of the structure demolished or rehabilitated, whichever is shorter.

(m) "Net addition of gross square feet of office space" shall mean gross floor area as defined in Planning Code Section 102.9 to be occupied by, or primarily serving, office use, less the gross floor area in any structure demolished or rehabilitated as part of the proposed office development project space used primarily and continuously for office or hotel use and not accessory to any use other than office or hotel use for five years prior to Planning Commission approval of the office development project subject to this Section, or for the life of the structure demolished or rehabilitated, whichever is shorter.

(n) "Nonprofit child-care provider" shall mean a child-care provider that is an organization organized and operated for nonprofit purposes within the provisions of California Revenue and Taxation Code Sections 23701—23710, inclusive, as demonstrated by a written determination from the California Franchise Tax Board exempting the organization from taxes under Revenue and Taxation Code Section 23701.

(o) "Nonprofit organization" shall mean an organization organized and operated for nonprofit purposes within the provisions of California Revenue and Taxation Code Sections 23701—23710, inclusive, as demonstrated by a written determination from the California Franchise Tax Board exempting the organization from taxes under Revenue and Taxation Code Section 23701.

(p) "Office development project" shall mean any new construction, addition, extension, conversion or enlargement, or combination thereof, of an existing structure which includes any gross square feet of office space.

(q) "Office use" shall mean space within a structure or portion thereof intended or primarily suitable for occupancy by persons or entities which perform, provide for their own benefit, or provide to others at that location services including, but not limited to, the following: Professional, banking, insurance, management, consulting, technical, sales and design, or the office functions of manufacturing and warehousing businesses, but excluding retail uses; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; wholesale shipping, receiving and storage; design showcases or any other space intended and primarily suitable for display of goods; and child-care facilities. This definition shall include all uses encompassed within the meaning of Planning Code Section 219.

(r) "Retail use" shall mean space within any structure or portion thereof intended or primarily suitable for occupancy by persons or entities which supply commodities to customers on the premises including, but not limited to, stores, shops, restaurants, bars, eating and drinking businesses, and the uses defined in Planning Code Sections 218 and 220 through 225, and also including all space accessory to such retail use.

(s) "Sponsor" shall mean an applicant seeking approval for construction of an office or hotel development project subject to this Section and such applicant's successors and assigns.

(Added by Ord. 411-85, App, 9/6/85; amended by Ord. 441-86, App. 11/13/86; Ord. 22-00, File No. 991877, App. 2/18/2000; Ord. 76-03, File No. 020592, App. 5/2/2003)

SEC. 314.2. - FINDINGS.

The Board hereby finds and declares as follows:

Large-scale office and hotel developments in the City and County of San Francisco (hereinafter "City") have attracted and continue to attract additional employees to the City, and there is a causal connection between such developments and the need for additional child-care facilities in the City, particularly child-care facilities affordable to households of low and moderate income.

Office and hotel uses in the City are benefitted by the availability of child care for persons employed in such offices and hotels close to their place of employment. However, the supply of child care in the City has not kept pace with the demand for child care created by these new employees. Due to this shortage of child care, employers will have difficulty in securing a labor force, and employees unable to find accessible and affordable quality child care will be forced either to work where such services are available outside of San Francisco, or leave the work force entirely, in some cases seeking public assistance to support their children. In either case, there will be a detrimental effect on San Francisco's economy and its quality of life.

Projections from the EIR for the Downtown Plan indicate that between 1984 and 2000 there will be a significant increase of nearly 100,000 jobs in the C-3 District under the

Downtown Plan. Most of that employment growth will occur in office and hotel work, which consist of a predominantly female work force.

According to the survey conducted of C-3 District workers in 1981, 65 percent of the work force was between the ages of 25—44. These are the prime childbearing years for women, and the prime fathering years for men. The survey also indicated that only 12 percent of the C-3 District jobs were part-time, leaving up to 88 percent of the positions occupied by full-time workers. All of these factors point to the inevitable increase in the number of working parents in the C-3 District and the concomitant increase in need for accessible, quality child-care.

Presently, there exists a scarcity of child care in the C-3 District and citywide for all income groups, but the scarcity is more acutely felt by households of low and moderate income. Hearings held on April 25, 1985 before the Human Services Committee of the San Francisco Board of Supervisors documented the scarcity of child care available in the C-3 District, the impediments to child-care program startup and expansion, the increase in the numbers of children needing care, and the acute shortage of supply throughout the Bay Area. The Board of Supervisors also takes legislative notice of the existing and projected shortage of child-care services in the City as documented by the Child-Care Information Kit prepared by the California Child-Care Resources and Referral Network located in San Francisco.

The scarcity of child care in the City is due in great part to large office and hotel development, both within the C-3 District and elsewhere in the City, which has attracted and will continue to attract additional employees and residents to the City. Some of the employees attracted to large office and hotel developments are competing with present residents for the few openings in child-care programs available in the City. Competition for child care generates the greatest pressure on households of low and moderate income. At the same time that large office and hotel development is generating an increased demand for child care, it is improbable that factors inhibiting increased supply of child care will be mitigated by the marketplace; hence, the supply of child care will become increasingly scarce.

The Master Plan encourages "continued growth of prime downtown office activities so long as undesirable consequences of such growth can be avoided" and requires that there be the provision of "adequate amenities for those who live, work and use downtown." In light of these provisions, the City should impose requirements on developers of office and hotel projects designed to mitigate the adverse effects of the expanded employment facilitated by such projects. To that end, the City Planning Commission is authorized to promote affirmatively the policies of the San Francisco Master Plan through the imposition of special child-care development or assessment requirements. It is desirable to impose the costs of the increased burden of providing child care necessitated by such office and hotel development projects directly upon the sponsors of new development generating the need. This is to be done through a requirement that the sponsor construct child-care facilities or pay a fee into a fund used to foster the expansion of and to ease access to affordable child care as a condition of the privilege of development.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.3. - APPLICATION.

(a) This Section shall apply to office and hotel development projects proposing the net addition of 50,000 or more gross square feet of office or hotel space.

(b) This Section shall not apply to:

(1) Any development project other than an office or hotel development project, including that portion of an office or hotel development project consisting of a retail use;

(2) That portion of an office or hotel development project located on property owned by the United States or any of its agencies;

(3) That portion of an office or hotel development project located on property owned by the State of California or any of its agencies, with the exception of such property not used exclusively for a governmental purpose;

(4) That portion of an office or hotel development project located on property under the jurisdiction of the Port of San Francisco or the San Francisco Redevelopment Agency where the application of this Section is prohibited by State or local law; and

(5) Any office or hotel development project approved by the Planning Commission prior to the effective date of this Section.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.4. - IMPOSITION OF CHILD CARE REQUIREMENT.

(a) (1) The Department or the Commission shall impose conditions on the approval of building or site permit applications for office or hotel development projects covered by this Section in order to mitigate the impact on the availability of child-care facilities which will be caused by the employees attracted to the proposed development project. The conditions shall require that the sponsor construct or provide a child-care facility on or near the site of the development project, either singly or in conjunction with the sponsors of other office or hotel development projects, or arrange with a nonprofit organization to provide a child-care facility at a location within the City, or pay an in-lieu fee to the City Treasurer which shall thereafter be used exclusively to foster the expansion of and ease access to child-care facilities affordable to households of low or moderate income.

(2) Prior to either the Department's or the Commission's approval of a building or site permit for a development project subject to this Section, the Department shall issue a notice complying with Planning Code Section 306.3 setting forth its initial

determination of the net addition of gross square feet of office or hotel space subject to this Section.

(3) Any person may appeal the initial determination by delivering an appeal in writing to the Department within 15 days of such notice. If the initial determination is not appealed within the time allotted, the initial determination shall become a final determination. If the initial determination is appealed, the Commission shall schedule a public hearing prior to the approval of the development project by the Commission or the Department to determine the net addition of gross square feet of office or hotel space subject to this Section. The public hearing may be scheduled separately or simultaneously with a hearing under City Planning Code Sections 139, 306.2, 309(h), 313.4, 315.3 or a Discretionary Review hearing under San Francisco Business and Tax Regulations Code Section 26. The Commission shall make a final determination of the net addition of gross square feet at the hearing.

(4) The final determination of the net addition of gross square feet of office or hotel space subject to this Section shall be set forth in the conditions of approval relating to the child-care requirement in any building or site permit application approved by the Department or the Commission. The Department shall notify the Treasurer of the final determination of the net addition of gross square feet of office or hotel space subject to this ordinance within 30 days of the date of the final determination. The Department shall notify the Treasurer and DBI that the development project is subject to this Section prior to the time the Department or the Commission approves the permit application.

(b) (1) The sponsor of a development project subject to this (1) Section may elect to provide a child-care facility on the premises of the development project for the life of the project to meet the requirements of this Section. The sponsor shall, prior to the issuance of the first certificate of occupancy by DBI for the development project, provide proof to the Treasurer and the Department that:

(A) A space on the premises of the development project has been provided to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease and an operating agreement between the sponsor and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Net add. gross sq. ft. off. or hotel space	***X .01 =***	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel of the development project is less than 300,000 square feet, the child-care facility may have a minimum gross floor area of 2,000 square feet or the area determined according to the above formula, whichever is greater; and

(D) A notice of special restriction has been recorded stating that the development project is subject to this Section and is in compliance herewith by providing a child-care facility on the premises.

(2) The sponsor of a development project subject to this Section in conjunction with the sponsors of one or more other development projects subject to this Section located within ½ mile of one another may elect to provide a single child-care facility on the premises of one of their development projects for the life of the project to meet the requirements of this Section. The sponsors shall, prior to the issuance of the first certificate of occupancy by DBI for any one of the development projects complying with this part, provide proof to the Treasurer and the Planning Department that:

(A) A space on the premises of one of their development projects has been provided to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease and an operating agreement between the sponsor in whose project the facility will be located and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Combined net add. gross sq. ft. office or hotel space of all participating dev. projects	***X .01 =***	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel space of all participating projects is less than 300,000 square feet, the child-care facility may have a minimum gross floor area of 2,000 square feet or the area determined according to the above formula, whichever is greater; and

(D) A written agreement binding each of the participating project sponsors guaranteeing that the child-care facility will be provided for the life of the development project in which it is located, or for as long as there is a demonstrated demand, as determined under Subsection (h) of this Section 314.4, has been executed and recorded in the chain of title of each participating building.

(3) The sponsor of a development project subject to this Section, either singly or in conjunction with the sponsors of one or more other development projects subject to this Section located within ½ mile of one another, may elect to provide a single child-care facility to be located within one mile of the development project(s) to meet the requirements of this Section. Subject to the discretion of the Department, the child-care facility shall be located so that it is reasonably accessible to public transportation or transportation provided by the sponsor(s). The sponsor(s) shall, prior to the issuance of the first certificate of occupancy by DBI for any development project complying with this part, provide proof to the Treasurer and the Planning Department that:

(A) A space has been provided to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease or sublease and an operating agreement between the sponsor(s) and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Combined net add. gross sq. ft. office or hotel space of all participating dev. projects	**x .01 =**	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel space of all participating projects is less than 300,000 square feet, the child-care facility may have a minimum gross floor area of 2,000 square feet or the area determined according to the above formula, whichever is greater; and

(D) A written agreement binding each of the participating project sponsors, with a term of 20 years from the date of issuance of the first certificate of occupancy for any development project complying with this part, guaranteeing that a child-care facility will be leased or subleased to one or more nonprofit child-care providers for as long as there is a demonstrated demand under Subsection (h) of this Section 314.4 has been executed and recorded in the chain of title of each participating building.

(4) The sponsor of a development project subject to this Section may elect to pay a fee in lieu of providing a child-care facility. The fee shall be computed as follows:

Net add. gross sq. ft. office or hotel space	***X $1.00 = Total Fee***

Upon payment of the fee in full to the Treasurer and upon request of the sponsor, the Treasurer shall issue a certification that the fee has been paid. The sponsor shall present such certification to the Department prior to the issuance by DBI of the first certificate of occupancy for the development project.

(5) The sponsor of a development project subject to this Section may elect to satisfy its child-care requirement by combining payment of an in-lieu fee to the Child Care Capital Fund with construction of a child-care facility on the premises or providing child-care facilities near the premises, either singly or in conjunction with other sponsors. The child-care facility to be constructed on-site or provided near-site under this election shall be subject to all of the requirements of whichever of Parts (b)(1), (2) and (3) of this Section 314.4 is applicable, and shall have a minimum floor area of 3,000 gross square feet. If the net addition of gross square feet of office or hotel space of all participating projects is less than 300,000 square feet, the minimum gross floor area of the facility shall be 2,000 square feet. The in-lieu fee to be paid under this election shall be subject to all of the requirements of Part (b)(4) of this Section 314.4 and shall be determined by the Commission according to the following formula:

Net. add. gross sq. ft. space - subject project	***[***	***Net. add. gross sq. ft. space <u>subject project</u> Net. add. gross sq. ft. space all participating projects***	***X***	***Sq. ft. child-care facility***	***X100***	***X$1.00***	***]***	***=***	***Total Fee for Subject Project***

(6) The sponsor of a development project subject to this Section may elect to satisfy its child-care requirement by entering into an arrangement pursuant to which a nonprofit organization will provide a child-care facility at a site within the City. The sponsor shall, prior to the issuance of the first certificate of occupancy by the Director of the Department of Building Inspection for the development project, provide proof to the Director of Planning that:

(A) A space for a child-care facility has been provided by the nonprofit organization, either for its own use if the organization will provide child-care services, or to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease or sublease and an operating agreement between the nonprofit organization and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Net add. gross sq. ft. office or hotel space	***X .01 =***	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel space is less than 300,000 square feet, the child-care facility may have a minimum gross floor of 2,000 square feet or the area determined according to the above formula, whichever is greater;

(D) The nonprofit organization has executed and recorded a binding written agreement, with a term of 20 years from the date of issuance of the first certificate of occupancy for the development project, pursuant to which the nonprofit organization guarantees that it will operate a child-care facility or it will lease or sublease a child-care facility to one or more nonprofit child-care providers for as long as there is a demonstrated need under Subsection (h) of this Section 314.4, and that it will comply with all of the requirements imposed on the nonprofit organization under this Paragraph (b)(6) and imposed on a sponsor under Subsections (g), (h) and (i) of Section 314.4.

(E) To support the provision of a child-care facility in accordance with the foregoing requirements, the sponsor has paid to the nonprofit organization a sum which equals or exceeds the amount of the in-lieu fee which would have been applicable to the project under Section 314.4(b)(4).

(F) The Department of Children, Youth and Their Families has determined that the proposed child-care facility will help meet the needs identified in the San Francisco Child Care Needs Assessment and will be consistent with the City Wide Child Care Plan; provided, however, that this Paragraph (F) shall not apply to any office or hotel development project approved by the Planning Commission prior to December 31, 1999.

Upon compliance with the requirements of this Part, the nonprofit organization shall enjoy all of the rights and be subject to all of the obligations of the sponsor, and the sponsor shall have no further rights or obligations under this Section.

(c) The Director of the Department of Building Inspections shall provide notice in writing to the Director of Planning at least five business days prior to issuing the first certificate of occupancy for any development project subject to this Section. If the Director of Planning notifies the Director of the Department of Building Inspections within such time that the sponsor has not complied with the provisions of this Section, the Director of the Department of Building Inspections shall deny any and all certificates of occupancy. If the Director of Planning notifies the Director of the Department of Building Inspections that the sponsor has complied with this Section or fails to respond within five business days, a certificate of occupancy shall not be disapproved pursuant to this Section. Any failure of the Director of the Department of Building Inspections or the Director of Planning to give any notice under this Subsection shall not relieve a sponsor from compliance with this Section.

(d) In the event that the Department or the Commission takes action affecting any development project subject to this Section and such action is thereafter modified, superseded, vacated, or reversed by the Department or the Commission, Board of Appeals,

the Board of Supervisors, or by court action, the permit application for such office development project shall remanded to the Department or Commission within 60 days following the date on which such action is final to determine whether the proposed project has been changed in a manner which affects the area of the child-care facility or the amount of the in-lieu fee to be provided under this Section 314.4 and, if so, the Department or the Commission shall revise the child-care requirement imposed on the permit application in compliance with this Section, and shall promptly notify the Treasurer and DBI of that revision.

(e) The sponsor shall supply all information to the Treasurer, the Department, and the Commission necessary to make a determination as to the applicability of this Section and the number of gross square feet of office or hotel space subject to this Section.

(f) Within nine months of the effective date of this Section, the Commission shall, after public notice and a hearing pursuant to Charter Section 4.104, adopt rules and regulations by which compliance with this Subsection shall be determined.

(g) In the event that a sponsor elects to satisfy its child-care requirement under Section 314(b)(1), (2), (3) or (5) by providing an on-site or near-site child-care facility, the sponsor shall submit a report to the Department in January of each year for the life of the child-care facility. The report shall have attached thereto a copy of the license issued by the California Department of Social Services permitting operation of the child-care facility, and shall state:

(1) The address of the child-care facility;

(2) The name and address of the child-care provider operating the facility;

(3) The size of the center in terms of floor area;

(4) The capacity of the child-care facility in terms of the maximum number of children for which the facility is authorized to care under the license;

(5) The number and ages of children cared for at the facility during the previous year; and

(6) The fees charged parents for use of the facility during the previous year.

(h) In the event that a sponsor elects to satisfy its child-care requirement under Paragraphs 314.4 (b)(1), (2), (3) or (5) by providing an on-site or near-site child-care facility, or under Paragraph 314.4(b)(6) by agreement with a non-profit organization, the sponsor, or in the case of a facility created pursuant to Paragraph 314.4(b)(6) the non-profit organization, may apply to the Department to eliminate the facility or to reduce the floor area of the facility in any amount, providing, however, that the gross floor area of a reduced facility is at least 2,000 square feet. The Department shall schedule a public hearing on any such application before the Commission and provide notice pursuant to City Planning Code Section 306.3(a) at least two months prior to the hearing. The application may be granted only where the sponsor has demonstrated that there is insufficient demand for the amount of floor area then devoted to the on-site or near-site child-care facility. The actual reduction in floor area or elimination of the child-care facility shall not be permitted in any case until

six months after the application is granted. Such application may be made only five years or more after the issuance of the first certificate of occupancy for the project. Prior to the reduction in floor area or elimination of the child care facility, the sponsor shall pay an in-lieu fee to the City's Treasurer to be computed as follows:

(20 - No. of years since issuance of first *certificate of occupancy)* 20	**X**	**Net reduction gross sq. ft. child-care facility**	**=$100 X**	**Total Fee**

Upon payment of the fee in full to the Treasurer and upon request of the sponsor, the Treasurer shall issue a certification that the fee has been paid. The sponsor shall present such certification to the Director prior to the reduction in the floor area or elimination of the child care facility.

(i) The child care provider operating any child care facility pursuant to Sections 314.4(b)(1), (2), (3) or (5) shall reserve at least 10 percent of the maximum capacity of the child care facility as determined by the license for the facility issued by the California Department of Social Services to be affordable to children of households of low income. The Department shall adopt rules and regulations to determine the rates to be charged to such households at the same time and following the procedures for the adoption of rules and regulations under Section 314.5.

(j) The fee required by this ordinance is due and payable to the Treasurer prior to issuance of the first certificate of occupancy for the office development project. Except in the case of a reduction in space of the child care facility pursuant to Subsection (h), if the fee remains unpaid following issuance of the certificate, any amount due shall accrue interest at the rate of one and one-half percent per month, or fraction thereof, from the date of issuance of the certificate until the date of final payment. Where the amount due is as a result of a reduction in space of the child care facility pursuant to subsection (h), such interest shall accrue from the date on which the available space is reduced until the date of final payment.

(k) In the event that a development project for which an in-lieu fee imposed under this Section has been fully paid is demolished or converted to a use or uses not subject to this ordinance prior to the expiration of its estimated useful life, the City shall refund to the sponsor a portion of the amount of an in-lieu fee paid. The portion of the fee refunded shall be determined on a pro rata basis according to the ratio of the remaining useful life of the project at the time of demolition or conversion in relation to its total useful life. For purposes of this ordinance, the useful life of a development project shall be 50 years.

(l) A sponsor's failure to pay the fee imposed pursuant to (1) this Section shall constitute cause for the City to record a lien against the development project in the sum of the in-lieu fee required under this ordinance, as adjusted under this Section.

(2) If, for any reason, the fee imposed pursuant to this ordinance remains unpaid following issuance of the certificate, the Treasurer shall initiate proceedings in accordance with the procedures set forth in Article XX of

Chapter 10, of the San Francisco Administrative Code to make the entire unpaid balance of the fee, including interest, a lien against all parcels used for the development project. The Treasurer shall send all notices required by that Article to the owner of the property as well as the sponsor. The Treasurer shall also prepare a preliminary report notifying the sponsor of a hearing to confirm such report by the Board of Supervisors at least 10 days before the date of the hearing. The report to the sponsor shall contain the sponsor's name, a description of the sponsor's development project, a description of the parcels of real property to be encumbered as set forth in the Assessor's Map Books for the current year, a description of the alleged violation of this ordinance, and shall fix a time, date, and place for hearing. The Treasurer shall cause this report to be mailed to the sponsor and each owner of record of the parcels of real property subject to lien. Except for the release of lien recording fee authorized by Administrative Code Section 10.237, all sums collected by the Tax Collector pursuant to this ordinance shall be held in trust by the Treasurer and deposited in the Child Care Capital Fund established in Section 314.5.

(3) Any notice required to be given to a sponsor or owner shall be sufficiently given or served upon the sponsor or owner for all purposes hereunder if personally served upon the sponsor or owner or if deposited, postage prepaid, in a post office letterbox addressed in the name of the sponsor or owner at the official address of the sponsor or owner maintained by the Tax Collector for the mailing of tax bills or, if no such address is available, to the sponsor at the address of the development project, and to the applicant for the site or building permit at the address on the permit application.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86; Ord. 409-87, App. 10/9/87; Ord. 22-00, File No. 991877, App. 2/18/2000; Ord. 76-03, File No. 020592, App. 5/2/2003)

SEC. 314.5. - CHILD CARE CAPITAL FUND.

There is hereby established a separate fund set aside for a special purpose called the Child Care Capital Fund ("Fund"). All monies contributed pursuant to the provisions of this Section, and all other monies from the City's General Fund or from contributions from third parties designated for the fund shall be deposited in the fund. For a period of three years from the date of final adoption of this ordinance, no more than 25 percent of the money deposited in the fund shall be paid to providers operating child care facilities subject to Sections 314.4(b)(1), (2), (3) and (5) to reduce the cost of providing affordable child care services to children from households of low income as required in Section 314.4(i). The remaining monies deposited in the fund during such three-year period, and all monies in the fund following expiration of such three-year period, shall be used solely to increase and/or improve the supply of child care facilities affordable to households of low and moderate income; except that monies from the fund shall be used by the Director to

fund in a timely manner a nexus study to demonstrate the relationship between commercial development projects and child care demand as described in San Francisco Planning Code Section 314.4. In the event that no child care facility is in operation under Sections 314.4(b)(1), (2), (3) or (5) during such three-year period, the maximum of 25 percent of the fund reserved for households of low income shall be spent solely to increase and/or improve the supply of child care facilities affordable to households of low and moderate income. The fund shall be administered by the Director, who shall adopt rules and regulations governing the disposition of the fund which are consistent with this Section. Such rules and regulations shall be subject to approval by resolution of the Board of Supervisors.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86; Ord. 409-87, App. 10/9/87; Ord. 263-98, App. 8/21/98; Ord. 76-03, File No. 020592, App. 5/2/2003)

SEC. 314.6. - PARTIAL INVALIDITY AND SEVERABILITY.

If any provision of this Section, or its application to any development project or to any geographical area of the City, is held invalid, the remainder of the Section, or the application of such provision to other office or hotel development projects or to any other geographical areas of the City, shall not be affected thereby.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.7. - ANNUAL EVALUATION.

Commencing one year after the effective date of this Section and each year thereafter, the Director shall report to the Commission at a public hearing and to the Planning, Housing and Development Committee of the Board of Supervisors at a separate public hearing, on the status of compliance with this Section and the efficacy of this Section in mitigating the City's shortage of child care facilities generated by the office and hotel development projects subject to this Section. Five years after the effective date of this Section, the Commission shall review the formulae set forth in Section 314.4. In such report, the Director shall recommend any changes in the formulae.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.8. - DECREASE IN CHILD CARE FORMULAE AFTER STUDY.

If the Commission determines after review of an empirical study that the formulae set forth in Section 314.4 impose a greater requirement for child care facilities than is necessary to provide child care for the number of employees attracted to office and hotel development projects subject to this Section, the Commission shall, within three years of making such determination, refund that portion of any fee paid or permit a reduction of the space dedicated for child care by a sponsor consistent with the conclusions of such study.

The Commission shall adjust any sponsor's requirement and the formulae set forth in Section 314.4 so that the amount of the exaction is set at the level necessary to provide child care for the employees attracted to office and hotel development projects subject to this Section.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

ATTACHMENT F: Planning Code Section 295

SEC. 295 — HEIGHT RESTRICTIONS ON STRUCTURES SHADOWING PROPERTY UNDER THE JURISDICTION OF THE RECREATION AND PARK COMMISSION.

(a) No building permit authorizing the construction of any structure that will cast any shade or shadow upon any property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission may be issued except upon prior action of the City Planning Commission pursuant to the provisions of this Section; provided, however, that the provisions of this Section shall not apply to building permits authorizing:

(1) Structures which do not exceed 40 feet in height;

(2) Structures which cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission only during the first hour after sunrise and/or the last hour before sunset;

(3) Structures to be constructed on property under the jurisdiction of the Recreation and Park Commission for recreational and park-related purposes;

(4) Structures of the same height and in the same location as structures in place on June 6, 1984;

(5) Projects for which a building permit application has been filed and either (i) a public hearing has been held prior to March 5, 1984 on a draft environmental impact report published by the Department of City Planning, or (ii) a Negative Declaration has been published by the Department of City Planning prior to July 3, 1984;

(6) Projects for which a building permit application and an application for environmental evaluation have been filed prior to March 5, 1984 and which involve physical integration of new construction with rehabilitation of a building designated as historic either by the San Francisco Board of Supervisors as a historical landmark or by the State Historic Preservation Officer as a State Historic Landmark, or placed by the United States Department of the Interior on the National Register of Historic Places and which are located on sites that, but for separation by a street or alley, are adjacent to such historic building.

(b) The City Planning Commission shall conduct a hearing and shall disapprove the issuance of any building permit governed by the provisions of this Section if it finds that the proposed project will have any adverse impact on the use of the property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant. The City Planning Commission shall not make the determination required by the provisions of this Subsection until the general manager of the Recreation and Park Department in consultation with the Recreation and Park

Commission has had an opportunity to review and comment to the City Planning Commission upon the proposed project.

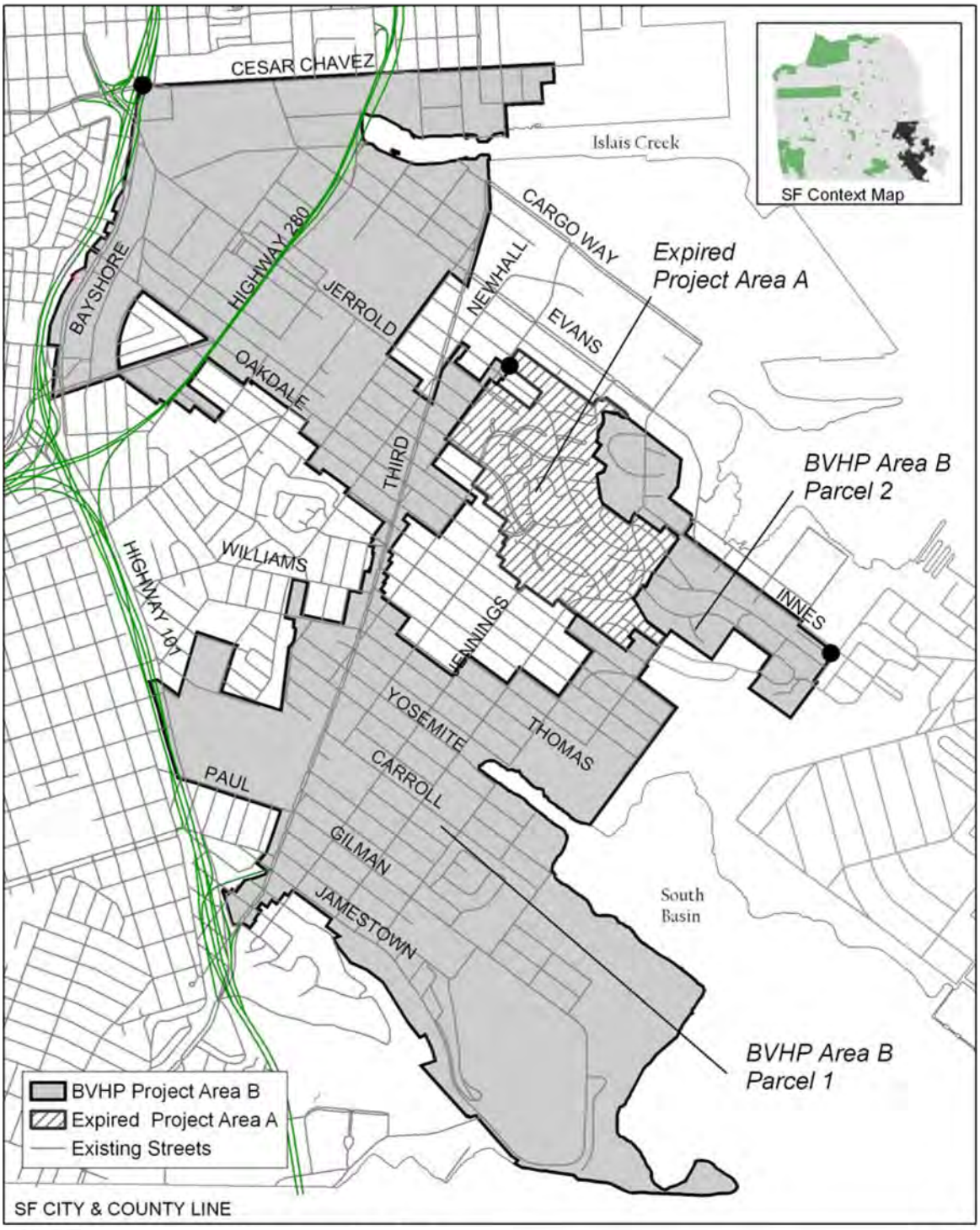
(c) The City Planning Commission and the Recreation and Park Commission, after a joint meeting, shall adopt criteria for the implementation of the provisions of this Section.

(d) The Zoning Administrator shall determine which applications for building permits propose structures which will cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission. As used in this Section, "property designated for acquisition by the Recreation and Park Commission" shall mean property which a majority of each of the Recreation and Park Commission and the City Planning Commission, meeting jointly, with the concurrence of the Board of Supervisors, have recommended for acquisition from the Open Space Acquisition and Park Renovation Fund, which property is to be placed under the jurisdiction of the Recreation and Park Commission.

(Added Ord. 62-85, App. 1/31/1985)

Attachment G - Planning Commission Resolution 18102

Attachment H - Proposition O (2016)



Map 1: Project Area Boundary Map

Bayview Hunters Point Redevelopment Plan
Office of Community Investment and Infrastructure
2018

1,000 500 0 1,000 Feet

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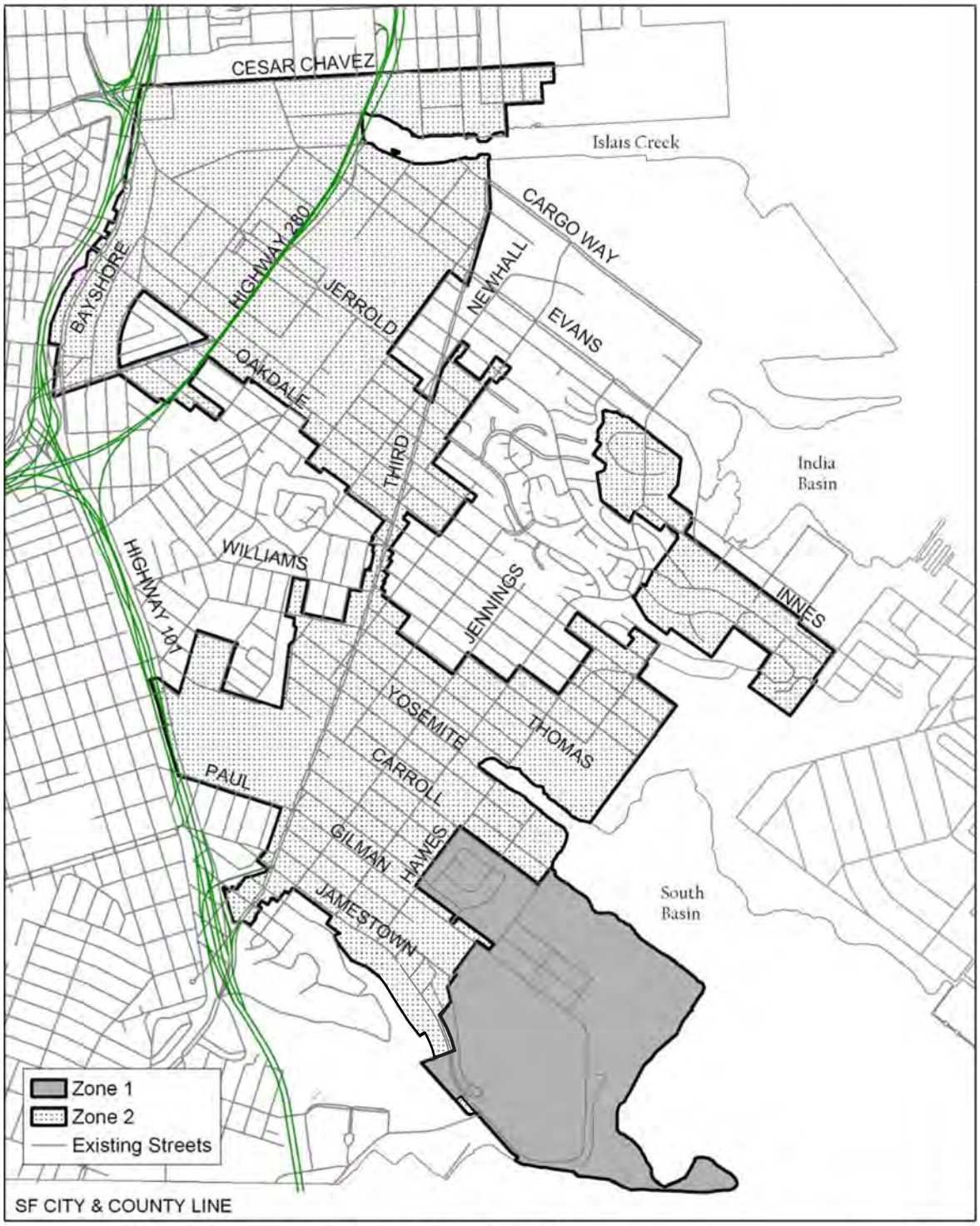

Map 2: Project Area B Redevelopment Zones Map

Bayview Hunters Point Redevelopment Plan
Office of Community Investment and Infrastructure
2018

1,000 500 0 1,000 Feet

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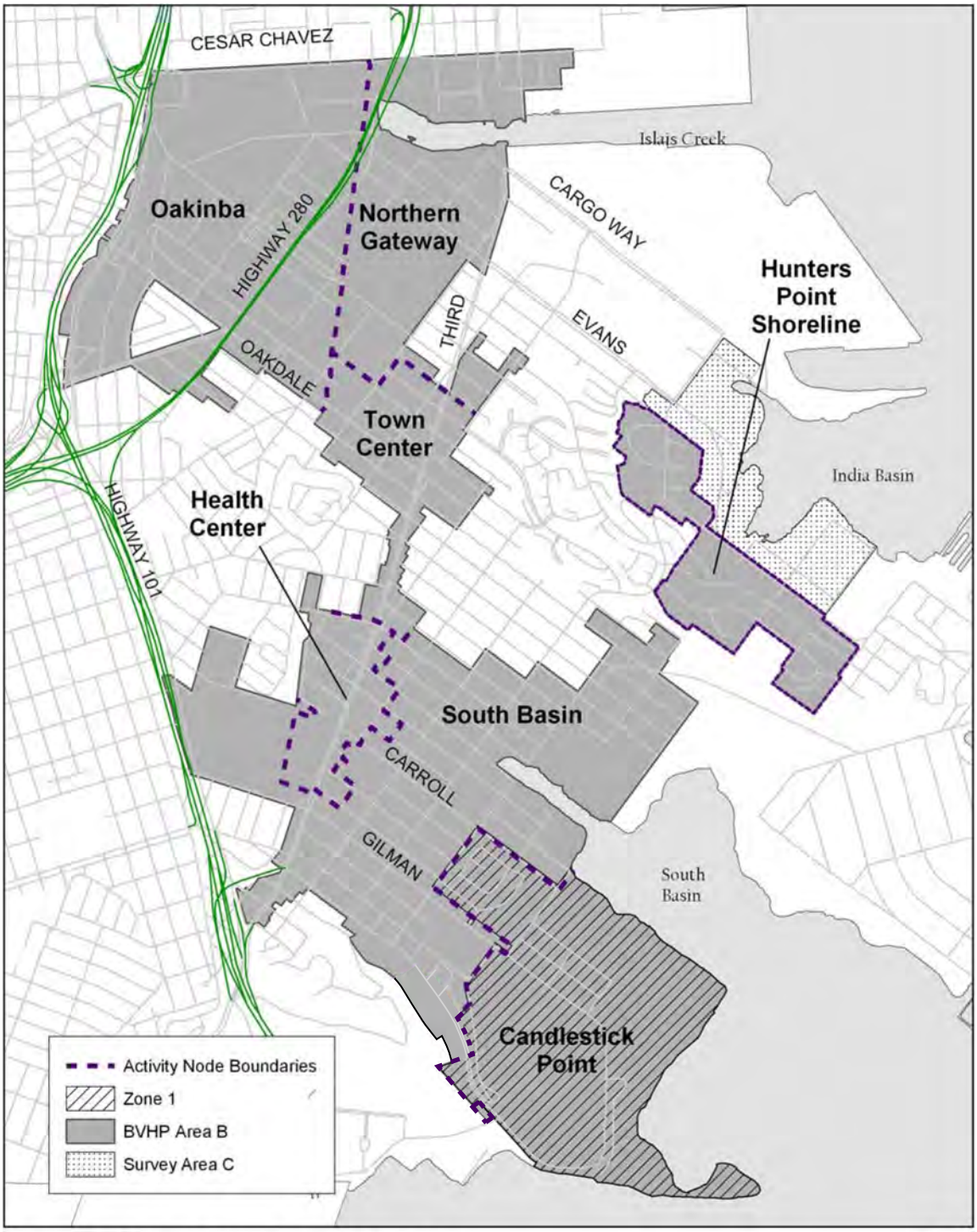

Map 3: Area B Activity Nodes

Bayview Hunters Point Redevelopment Plan
Office of Community Investment and Infrastructure
2018

1,000 500 0 1,000 Feet

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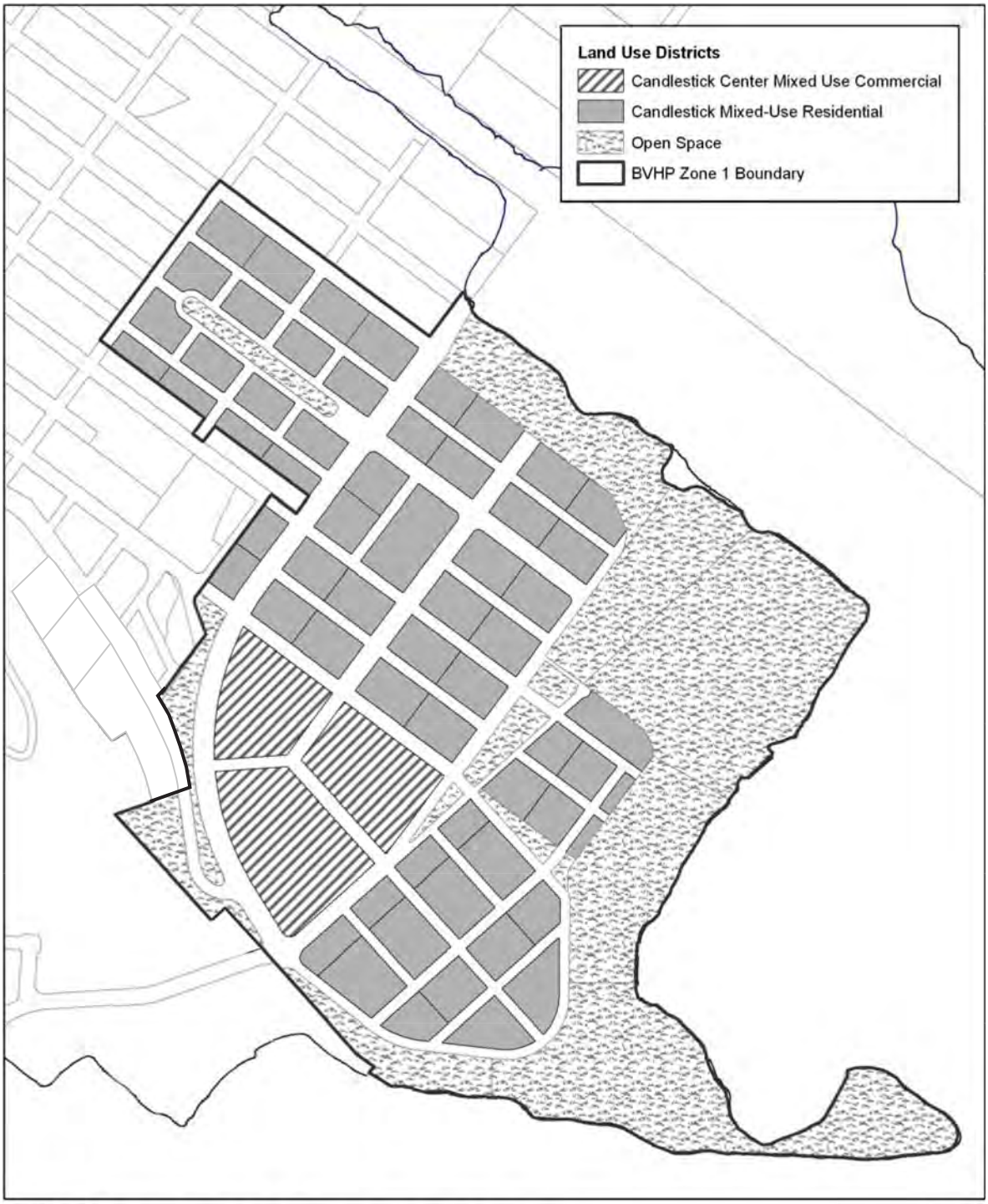

Map 4: Zone 1 Land Use Districts

Bayview Hunters Point Redevelopment Plan
Office of Community Investment and Infrastructure
2018

600 300 0 600 Feet

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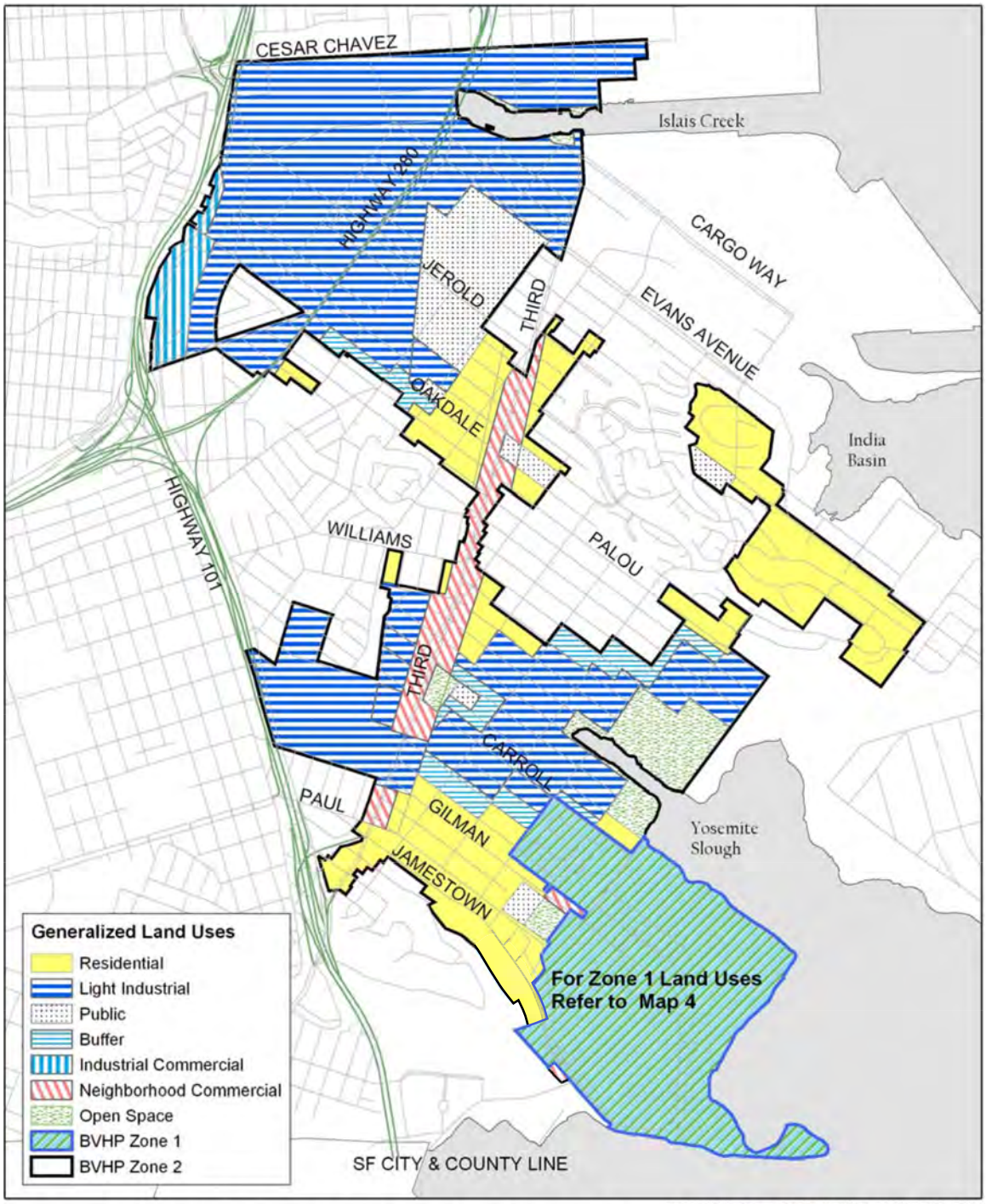

Map 5 Area B - Zone 2 Generalized Land Use Map *

* Based on General Plan BVHP Area Plan Figure 4

1,000 500 0 1,000 Feet

Bayview Hunters Point Redevelopment Plan
Office of Community Investment and Infrastructure
2018

Document comparison by Workshare 9.5 on Tuesday, April 10, 2018 11:19:16 AM

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HUNTERS POINT SHIPYARD
REDEVELOPMENT PLAN

JULY 14, 1997
Amended August 3, 2010
Amended June ~~__~~22, 2017
Amended _____, 2018

SUCCESSOR AGENCY TO THE SAN FRANCISCO REDEVELOPMENT AGENCY
~~August 3, 2010~~
_____, 2018

REDEVELOPMENT PLAN
for the

HUNTERS POINT SHIPYARD
PROJECT AREA

HUNTERS POINT SHIPYARD REDEVELOPMENT PROJECT

REDEVELOPMENT PLAN

C O N T E N T S

Exhibits:

Map 1: Boundary Map

Map 2: Land Use Districts Map

Map 2A: Private Infrastructure

Map 3: Existing Buildings

~~Maps~~Map 4~~A, 4B and 4C~~: Street ~~Plans~~ Plan

Attachments:

Attachment A: Legal Description of the Project Area

Attachment B: Authorized Public Improvements

Attachment C: Planning Code Section 314

Attachment D: Planning Code Section 295

Attachment E: Planning Commission Resolution 18102

Attachment F: Proposition O (2016)

HUNTERS POINT SHIPYARD REDEVELOPMENT PROJECT

REDEVELOPMENT PLAN

This Redevelopment Plan (this "**Plan**") for the Hunters Point Shipyard Redevelopment Project Area (the "**Project Area**") consists of the following text, maps and attachments: (a) the maps are: Map 1: Boundary Map; Map 2: Land Use Districts Map; Map 2a: Private Infrastructure; Map 3: Existing Buildings; and ~~Maps~~Map 4~~A, 4B and 4C~~: Street ~~Plans~~Plan; and (b) the attachments are: Attachment A: Legal Description of the Project Area; Attachment B: List of Public Improvements; Attachment C: Planning Code Section 314; Attachment D: Planning Code Section 295; ~~and~~ Attachment E: Planning Commission Resolution 18102 (subject to Section II.D.5 below), and Attachment F: Proposition O.

This Plan was adopted on July 14, 1997 (Ordinance No. 285-97) and amended on August 3, 2010 (Ordinance No. 211-~~10, and~~10), on June 22, 2017 (Ordinance No. 122-17), and on _____, 2018 (Ordinance No. _____). This Plan was prepared in accordance with the California Community Redevelopment Law (as amended from time to time, the "**CRL**") and pursuant to Chapter 4.5 therein, which governs the redevelopment of closed military bases. During the preparation of this Plan, the Redevelopment Agency of the City and County of San Francisco (the "**Agency**") consulted with the Mayor's Hunters Point Shipyard Citizens Advisory Committee (the "**CAC**"), the San Francisco Planning Commission, and with other departments and offices of the City and County of San Francisco (the "**City**"). This Plan conforms with the General Plan of the City insofar as the General Plan applies to the Project. Any development within the jurisdiction of the Bay Conservation and Development Commission shall conform to the San Francisco Bay Plan.

The proposed redevelopment of the Project Area as described in this Plan is consistent with the San Francisco General Plan, the Bayview Hunters Point Area Plan, and the Hunters Point Shipyard Sub-Area Plan as ~~adopted and amended by the Planning Commission on June 3, 2010,~~of the 2018 Plan Amendment Date, and is in conformity with the eight Priority Policies of Section 101.1 of the San Francisco Planning Code (the "**Planning Code**").

This Plan sets forth the objectives and the basic land use controls within which specific redevelopment activities in the Project Area will be pursued. It is consistent with provisions of the CRL in effect at the date of adoption of this Plan and as of the ~~2017~~2018 Plan Amendment Date.

I. DESCRIPTION OF PROJECT

A. Project Boundaries

The boundaries of the Project Area are indicated on Map 1: Boundary Map and the legal description of the Project Area is provided in Attachment A: Legal Description of the Project Area. The Project Area consists of Real Property within the City and County of San Francisco, State of California.

B. The Citizens Advisory Committee Planning Guidelines - A Statement of General Principles

The planning process for the reuse of the Project Area is complex, involving the Mayor's Hunters Point Shipyard Citizens Advisory Committee and a host of citizen groups and government agencies. The planning process establishes the roles of these various entities, as well as the timeframe during which certain actions must occur. The process began in earnest

in 1993 when the CAC convened to formulate goals and preferred uses for the Shipyard site. The CAC adopted a set of planning guidelines to frame their ideas for the development and reintegration of the Shipyard into the social, economic and physical fabric of Bayview Hunters Point and the City of San Francisco at an intensive conference and public workshop that they sponsored in February 1994. The CAC guidelines represent a strong group consensus and the CAC feels that they should set the tone for the renewal of the Project Area. These planning guidelines are outlined below:

1. Create Jobs for Economic Vitality

   Encourage land uses that will foster employment, business and entrepreneurial opportunities, cultural and other public benefits for residents of San Francisco. South Bayshore residents and businesses should be given priority. Legislative and administrative regulation mandating preference to South Bayshore residents and businesses in the course of the environmental remediation, redevelopment and reuse of the property should be used to facilitate this objective. Existing training and educational programs will be supported and new programs created as needed.

2. Support Existing Businesses and Artists' Community

   New uses should be compatible with existing South Bayshore businesses, Shipyard businesses and artists, and other sectors of San Francisco's economy. Maintain the large community of artists and artisans on the Shipyard, providing for their need for flexible low-cost space, while accommodating the full diversity of arts and culture in the South Bayshore community. Expand the scope of activities to accommodate the full range of arts and culture.

3. Create Appropriate Mix of New Businesses

   Encourage diversity with a mix of large, medium and small businesses to generate revenues for the City's general fund and stimulate the economy of the South Bayshore community. Diversify San Francisco's economic base by restoring its industrial sector with uses based on futuristic technologies tied to regional, national and international markets and economics. Target industries and businesses with a likelihood for long-term growth, such as multimedia, biotech and video-film.

4. Balance Development and Environmental Conservation

   Balance development with reclamation of the natural ecology of the southeast waterfront with targeted uses that are environmentally appropriate for the San Francisco Bay. Use the toxic cleanup process to develop training, employment and business opportunities consistent with Guideline #1.

5. Facilitate Appropriate Immediate Access

   Incorporate an action program to enable immediate access to existing Shipyard facilities, giving preference to South Bayshore businesses and organizations. Transitional uses in the Shipyard should be consistent with, and not deter, long-term development of the Shipyard in accordance with these Master Plan Guidelines.

6. Integrate Land Uses

Integrate new uses at the Shipyard into current plans for the Bayview area. Plan for the integration of passive and active open space, affordable housing, transportation and traffic circulation, while minimizing land use conflicts between housing and industry.

7. Acknowledge History

   Include uses that acknowledge the history of the original Native American inhabitants of the Hunters Point area and historic relationship of Bayview Hunters Point's African-American community to the Shipyard.

C. Existing Conditions

The Project Area is characterized by conditions of blight. Physical conditions include buildings in which it is unsafe or unhealthy for persons to live or work, and the existence of factors that prevent or substantially hinder the economically viable reuse of buildings and areas. Economic conditions include depreciated or stagnant property values, properties containing hazardous wastes, abnormally high business vacancies, abandoned buildings, and excessive vacant lots within an area formerly used as a military base.

D. Summary of Proposed Actions

The Agency, in accordance with and pursuant to applicable Federal and State laws as well as those local laws that are applicable pursuant to this Plan, will remedy, or cause to be remedied, the conditions causing blight presently existing in the Project Area by some or all of the following measures:

1. Rehabilitation, alteration, modernization, general improvement or any combination thereof (hereinafter called "**rehabilitation**") of certain existing structures.

2. Acquisition of real property by purchase, gift, devise, exchange, condemnation, lease, or any other lawful means.

3. Relocation of certain commercial and industrial occupants presently located in structures that may be subject to acquisition or rehabilitation.

4. Demolition, removal, or clearance of certain existing buildings structures, and improvements.

5. Installation, construction, or reconstruction of streets, utilities, and other public improvements or facilities.

6. Disposition of all land acquired by the Agency for reuse in accordance with this Plan, the Hunters Point Shipyard Phase 1 Design for Development, the Hunters Point Shipyard Phase 2 Design for Development, and such additional conditions as may be established by the Agency in any manner authorized by law in order to carry out the purposes of redevelopment.

7. Formulation and administration of rules governing reasonable preference to owners or tenants of business, or other types of real property who are displaced from the Project Area to reenter the Project Area.

II. PROJECT PLAN

A. Objectives

The objectives of the actions proposed by this Plan are to:

1. Foster employment, business, and entrepreneurial opportunities in the rehabilitation, construction, operations, and maintenance of facilities in the Project Area.

2. Stimulate and attract private investments, thereby improving the City's economic health, tax base, and employment opportunities.

3. Provide for the development of economically vibrant and environmentally sound districts for mixed use; cultural, educational and arts activities; research, industrial and training activities; and housing.

4. Provide for the development of mixed-income housing:

   - With regard to this objective, the project-wide aggregate income-mix goal includes that at least 15% of the housing be affordable to persons and families of low or moderate income.

   - The term "persons and families of low or moderate income" has the same meaning as defined in Section 50093 of the California Health and Safety Code.

5. Provide public parks, open space, and other community facilities.

6. Administer lands granted to the Agency by the State of California consistent with the Public Trust and reconfigure those lands in a manner that enhances their value for Public Trust purposes, in accordance with Chapter 203 of the Statutes of 2009 (as amended from time to time, the "Granting Act").

7. Retain, improve, and re-use historic structures, where feasible, as part of a program to feature the history of people, buildings, and uses at the Shipyard.

8. Provide for infrastructure improvements, including: streets and transportation facilities; open space and recreation areas; and utilities for water, sewer, gas, and electricity.

9. Remove conditions of blight in the form of buildings, site improvements, and infrastructure systems that are substandard and serve as impediments to land development.

10. Encourage use of the most cost-effective, energy efficient, and environmentally sustainable development techniques feasible.

11. Retain those existing viable industries and businesses currently located in the Project Area.

12. ~~Provide the opportunity to build a state-of-the-art sport facility.~~Position the Project Area at the vanguard of technology development and production as

well as associated labor markets. Accommodate new, emerging, and unforeseen uses not specifically identified herein.

13. Provide sufficient flexibility in the development of real property within the Project Area to respond readily and appropriately to market conditions and innovations.

14. Provide opportunities and support for privately owned "eco-district" utility infrastructure that helps achieve community and ecological priorities within the Project Area.

B. Land Uses

Map 1: Boundary Map, Map 2: Land Use Districts Map, Map 2a: Private Infrastructure; Map 3: Existing Buildings, and ~~Maps~~Map 4~~A, 4B and 4C~~: Street ~~Plans illustrate~~Plan illustrates the location of the Project Area boundaries, existing buildings, major streets in the Project Area and land uses permitted in the Project Area.

1. Land Use Districts

The Project Area consists of several mixed -use districts (each referred to as a "**District**" or "**Land Use District**") as shown on Map 2: Land Use Districts Map. The map shows the general boundaries of the Districts; precise boundaries of the Districts are to be interpreted in light of the objectives of this Plan at the time specific parcels are subdivided in accordance with City and State subdivision laws.

Allowable land uses within each District will be all those that are consistent with the character of the District as described in this Plan. The specific uses identified below and on Map 2 for each District illustrate the appropriate scope and nature of permitted uses.

Principal Uses. Within each District, "**Principal Uses**" shall be allowed as of right.

Secondary Uses. Within each District, **"Secondary Uses**" shall be allowed through the determination of the Agency Commission or its designee, provided that such use: (a) generally conforms with the redevelopment objectives of this Plan, the objectives of the District as set forth in this Plan and applicable Hunters Point Shipyard Design for Development (Phase 1 or Phase 2); (b) is compatible with the District's Principal Uses, nearby public facilities, and broader community; (c) is consistent with the Mitigation Measures and appropriately mitigates any adverse impacts; and (d) does not at the proposed size and location materially impede the planned uses and development of the District or Project Area. The Agency Commission or its designee may place conditions on the Secondary Use as necessary to make the findings in clauses (a) through (d) above.

Non-Designated Uses. Uses that are proposed but are not specifically defined herein ("**Non-Designated Uses**") may be classified by the Executive Director as Principal Uses, Secondary Uses, Temporary Uses, Interim Uses, or Prohibited Uses. The Executive Director or his or her designee may allow a Non-Designated Use as a Principal Use subject to approval by the Agency Commission, provided the Executive Director or his or her designee finds that such Non-Designated Use: (a) is consistent with the other Principal Uses allowed in the applicable District; (b) is consistent with the objectives for the applicable District; (c) generally conforms with the applicable Hunters Point Shipyard Design for Development (Phase 1 or Phase 2); and (d) is consistent with the Mitigation Measures and appropriately mitigates any adverse impacts.

For Temporary or Interim Uses, the Executive Director shall in addition make the findings required for such uses as set forth in Sections C.1 and C.2 below.

In the event the Executive Director determines that a Non-Designated Use should be evaluated as a potential Secondary Use rather than a Principal Use, the Executive Director shall require that the proposed use be considered by the Agency Commission pursuant to the Secondary Use process set forth above.

Prohibited Uses. Within most Districts, certain land uses are expressly prohibited in order to maintain the intended character of the District, avoid conflicts of land uses, or maintain public welfare in response to specific conditions of the District ("**Prohibited Uses**"). The following uses will be Prohibited Uses in all Districts within the Project Area: ~~Medical Cannabis Clubs;~~ Mortuary; and Adult Entertainment uses.

Provisions Applicable Generally.

Certain lands within the Project Area are or may be subject to the Public Trust. The Public Trust doctrine limits the uses that are permitted on Public Trust lands. A Principal Use or Secondary Use shall be permitted on Public Trust land only to the extent the use is permitted under the Public Trust and is consistent with the Agency's management of those lands on behalf of the State for Public Trust purposes. Thus, even though a particular use or uses may be shown as a permitted Principal Use or Secondary Use within the Project Area, that use or uses may nevertheless not be permitted on lands subject to the Public Trust within the Project Area.

In all cases below, the height, bulk, setback, parking and open space requirements will be established in the Hunters Point Shipyard Phase 1 Design for Development and Hunters Point Shipyard Phase 2 Design for Development~~.~~, provided that development thereunder shall not exceed the limits established in Section II.D.4.

Parking is a permitted Accessory Use to every Principal Use and Secondary Use permitted in each Land Use District. The design and location of parking is controlled by the applicable Design for Development.

Infrastructure elements that are required to provide access, utilities, and public services to the development described in this Section II.B ~~shall be allowed as Principal Uses~~, as described in or consistent with the Infrastructure Plan for the Hunters Point Shipyard Phase 2-Candlestick Point Project, are permitted provided they are consistent with the Mitigation Measures and subject to the Candlestick Point/Hunters Point Shipyard Phase 2 EIR (including any subsequent analysis).

Additional ~~infrastructure elements such as decentralized wastewater treatment facilities, automated trash centralized collection facilities, and district heating and cooling facilities that serve the Project Area will be subject to the Candlestick Point/Hunters Point Shipyard Phase 2 EIR, the Mitigation Measures, and the Infrastructure Plan for the Hunters Point Shipyard Phase 2-Candlestick Point Project (as amended from time to time, the "**Infrastructure Plan**"). Decentralized wastewater treatment facilities shall be permitted as a Secondary Use in the Shipyard North Residential District, Shipyard Research & Development District and Shipyard South Multi-Use District. Automated trash centralized collection facilities shall be permitted as a Secondary Use in all Districts except in the Shipyard Shoreline Open Space District. District Heating and Cooling Facilities shall be permitted as a Secondary Use in all Districts except in the Shipyard Shoreline Open Space District.~~ "eco-district" and other privately owned utility infrastructure is encouraged in the Project Area, provided such infrastructure does not conflict with elements identified in the

Infrastructure Plan, and is consistent with the Mitigation Measures and the Candlestick Point/Hunters Point Shipyard Phase 2 EIR (including any subsequent analysis), each as determined by the Executive Director. Such infrastructure (including components thereof) is encouraged, but not required, to be located within future public or private rights of way, and such infrastructure (including components thereof) is permitted as follows under this Plan (but remain subject to review under other applicable Plan Documents and City review). Privately owned utility infrastructure includes individual stand-alone structures as well as Accessory infrastructure components listed below. Individual structures are permitted as specifically identified in Sections II.B.2-B.7, below, or otherwise as Secondary Uses throughout Phase 2 of the Project area. Accessory infrastructure components (those constructed together with otherwise permitted Uses) are permitted under this Plan (but remain subject to review for consistency with other applicable Plan Documents, including the applicable Design for Development). Such Accessory infrastructure components include:

- District Heating and Cooling Facility, including central energy plant (CEPs), water return and supply distribution system components, and water-to-air and water-to-water heat exchanger including components thereof (but excluding Geothermal Borefields, which are individual structures permitted as discussed above)
- Battery Storage System (including distribution system components thereof)
- Rooftop solar photovoltaic (PV) system (including components thereof)
- Recycled water collection, treatment and distribution system components
- Telecommunications/Fiber System and components
- Automated trash collection system and components
- Stormwater collection and treatment system (including Stormwater BMPs and other components thereof)
- Other Accessory infrastructure facilities and components that, as determined by the Executive Director, do not conflict with the objectives of the Plan, the Plan Documents or other applicable laws and regulations.

2. Hunters Point Hill Residential District

Objectives for this District: This District will accommodate residential uses with lower densities than the surrounding portion of the Project Area, given its hilltop and hillside position. Complementary neighborhood-serving commercial uses will be allowed, but are expected to be less prevalent than in the flatter ~~Shipyard~~ North ~~Residential~~Shoreline District, which sits below this District. This District will include Hillpoint Park, a regional Park that will be impressed with the Public Trust and will include recreational and sports uses, special view areas with framed views of the Shipyard and the Bay beyond, public art, terraced sitting areas that take advantage of hilltop and hillside topography and stunning views of the Bay, and public access for visitors, residents, and employees in surrounding Districts.

(a) *Principal Uses:* The following Uses are Principal Uses in this Land Use District:

Residential Uses:

- Dwelling Units
- Live/Work Units
- Supportive Housing
- Home Office

Retail Sales and Services Uses:

- Neighborhood Retail Sales and Services
- Commercial Wireless Transmitting Facilities

Parks and Recreation Uses:
- Parks
- Open Space
- Public Recreation
- ~~Public Restrooms~~

(b) *Prohibited Uses*: ~~All~~Cannabis-Related Uses and all other uses that are incompatible with the Principal Uses shall be Prohibited Uses in this Land Use District.

3. ~~Shipyard~~ North ~~Residential~~Shoreline District

Objectives for this District: This District will accommodate a waterfront-oriented residential neighborhood with higher densities and a greater range of housing types than those on the adjacent hillside. The principal land use is Dwelling Units ranging from townhomes to multi-family high-rise residential apartment or condominium towers. Related uses also include local-serving businesses, family child care services, small professional offices, and recreation facilities. Parks in this District may include a range of uses such as basketball, volleyball, tennis courts, children's playgrounds, restrooms, and concessionaires. They may also include picnic/barbecue areas, pathways, and shade shelters. The Parks in this District may also include open air marketplace uses.

(a) *Principal Uses*: The following Uses are Principal Uses in this Land Use District:

Residential Uses:
- Dwelling Units
- Live/Work Units
- Group Housing
- Supportive Housing
- Home Office

Institutional Uses:
- Residential Care Facility
- Child-Care Facility
- Elementary School
- Post-Secondary Institution
- Religious Institution

Retail Sales and Services Uses:
- Neighborhood Retail Sales and Services (up to 10,000 sq. ft. per tenant)
- Restaurants
- Bars
- Dry Cleaning Facility ~~(excluding those with on-site dry cleaning plant)~~
- Health clubs, fitness, gymnasium, or exercise facilities
- Commercial Wireless Transmitting Facilities

Civic, Arts & Entertainment Uses:
- Community Use
- Recreational Facility
- Arts Education

- Art Production

Parks and Recreation Uses:

- Parks
- Public Recreation
- Open Space
- ~~Public restrooms~~
- Open air marketplaces

(b) *Secondary Uses:* The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in Section II.B.1 are met:

Institutional Uses:

- Secondary School
- ~~Post-Secondary Institution~~
- Vocational/Job Training Facility

Retail Sales and Services Uses:

- Neighborhood Retail Sales and Services (over 10,000 sq. ft. per tenant)
- Nighttime Entertainment
- Maker Space

Office Uses~~:~~

- ~~Office~~

Civic, Arts & Entertainment Uses:

- Performance Arts
- ~~Nighttime Entertainment~~
- Amusement Enterprise

(c) *Prohibited Uses:* The following Uses are Prohibited Uses in this Land Use District:

- Drive-through facilities
- Automotive Repair and service stations
- ~~Dry Cleaning Facility (with on-site dry cleaning plant)~~Cannabis-Related Uses

4. ~~Shipyard~~ Village Center ~~Cultural~~ District

Objectives for this District: This District will accommodate a mixed-use community with a range of housing types, retail uses, and cultural and educational facilities designed to comprise a village that will serve the community in the surrounding Districts. Neighborhood-serving retail uses are proposed to be located on the ground floors along major commercial streets of the area with residential uses or office uses on the upper floors. This District will provide space dedicated for artists and arts-related uses as well as community-serving retail, business, service, and office uses. The arts-related, recreational, and grocery store uses in this District are intended to attract visitors from areas beyond the Project Area.

(a) *Principal Uses:* The following Uses are Principal Uses in this Land Use District:

Residential Uses:

- Dwelling Units
- Live/Work Units
- Group Housing
- Supportive Housing
- Home Office

Institutional Uses:

- Residential Care Facility
- Child-Care Facility
- Elementary School
- Secondary School
- Post-Secondary Institutions
- Religious Institution
- Vocational/Job Training Facility

Retail Sales & Services Uses:

- Neighborhood Retail Sales and Services
- Restaurants
- Bars
- ~~Physical~~Health clubs, fitness, gymnasium, or exercise facilities
- Nighttime Entertainment
- Grocery Store (up to 60,000 sq. ft.)
- Dry Cleaning Facility ~~(excluding those with on-site dry-cleaning plant)~~
- Commercial Wireless Transmitting Facilities
- Maker Space

Office Uses:

- Office
- ~~Meeting rooms~~
- Conference facilities/meeting rooms

~~-~~Hotel Uses

Civic, Arts & Entertainment Uses:

- Community Use
- Recreational Facility
- Performance Arts
- Arts Education
- Art Production
- ~~Nighttime Entertainment~~
- Amusement Enterprise

Parks and Recreation Uses:

- Parks
- Public Recreation
- ~~Picnic and barbeque facilities~~
- Open air marketplace
- ~~Information kiosks and shade structures~~
- Open Space

(b) *Secondary Uses:* The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in this Section II.B.1 are met:

Retail Sales & Services Uses:

- Grocery Store (between 60,000 and 80,000 sq. ft.)
- Animal Services
- Medical Services

Office and Industrial Uses:

- Light Industrial (not including uses that include chemical processing of materials or heavy machinery use)
- ~~Health services~~
- Industrial kitchen
- Internet Service Exchange

(c) *Prohibited Uses:* The following Uses are Prohibited Uses in this Land Use District:

- Drive-through facilities
- ~~Automobile repair~~Automotive Repair and service stations
- ~~Dry Cleaning Facility with on-site dry cleaning plants~~

5. ~~Shipyard Research & Development~~Wharf District

Objectives for this District: This District will provide a diverse array of commercial and institutional operations for new research and development firms in a dynamic urban campus. This District will allow an integration of various uses suitable for evolving market conditions and for an innovative business or institutional environment ranging from office to laboratory activities including light industrial and manufacturing operations. It will also support ~~neighborhood commercial and community~~

~~uses~~Neighborhood Retail Sales and Services and Community Uses to complement the research and development uses.

For Laboratory, Life Science, Light Industrial, and Green Technology Uses within this District, any Use containing a facility that emits regulated toxic air contaminants must show that the facility does not exceed the risk thresholds identified in the Mitigation Measures.

(a) *Principal Uses:* The following Uses are Principal Uses in this Land Use District:

Office & Industrial Uses:

- Office
- Light Industrial
- Life Science
- Laboratory
- Green Technology
- ~~Commercial Wireless Transmitting Facilities~~
- Transportation and transit service facilities

Multi-media and Digital Arts Uses:

- Motion picture production
- Animation studios
- Printing and publishing
- Education and classroom facilities
- Galleries and exhibit space
- Recording studios
- Artist and artisan studios

Hotel Uses

Institutional Uses:

- Religious Institution
- Vocational/Job Training Facility
- ~~Fire station~~
- Child-Care ~~Facilities~~Facility (subject to Section II.B.8)

Retail Sales and Services Uses:

- Neighborhood Retail Sales and Services (up to ~~10,000~~12,000 sq. ft. per tenant)
- Regional Retail Sales and Services
- Non-Retail Sales and Services
- Animal Services
- Restaurants
- Bars
- Health clubs, fitness, gymnasium, or exercise facilities
- Nighttime Entertainment
- Dry Cleaning Facility ~~(including those with on-site dry cleaning plant)~~
- Commercial Wireless Transmitting Facilities
- Grocery Store
- Maker Space

Residential Uses:

Residential Uses in this District ~~shall not exceed 440 units and~~ shall be allowed only in the blocks of the District that are adjacent to either Fisher Avenue or Drydock 4 (These blocks are indicated on Map 2). The following Residential Uses are Principal Uses in this Land Use District:

- Dwelling Units
- Live/Work Units
- Group Housing
- Supportive Housing
- Home Office

Civic, Arts & Entertainment Uses:

- Community Use
- Recreational Facility
- Arts Education
- Art Production

Parks and Recreation Uses:

- Parks
- Public Recreation
- Open ~~space~~Space
- Marina-related facilities

Within the Wharf District, any Laboratory, Life Science, Light Industrial, and/or Green Technology Use containing a facility that emits regulated toxic air contaminants must show that the facility does not exceed the risk thresholds identified in the Mitigation Measures. In addition, no Laboratory, Life Science, Light Industrial and/or Green Technology Uses containing a facility that emits regulated toxic air contaminants shall be permitted within three hundred fifty (350) feet of any Child-Care Facility, Elementary or Secondary School, or Residential Use in the Wharf District.

(b) *Secondary Uses:* The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in Section II.B.1 are met:

Institutional Uses:

- Post-Secondary Institutions

Retail Sales and Services Uses:

- Neighborhood Retail Sales and Services (over ~~10,000~~12,000 sq. ft. per tenant)
- Automotive Repair and Service station

Office and Industrial Uses:

- Enclosed processing of raw materials for production
- Small boat repair facilities and workshop areas
- Automotive storage
- ~~Automotive Repair~~
- Commercial Storage
- Internet Service Exchange

(c) *Prohibited Uses:* The following Uses are Prohibited Uses in this Land Use District:

- Dwelling Units (except in the area described above and shown on Map 2)
- Elementary ~~and~~ School
- Secondary ~~Schools~~School
- Drive-through facilities

6. ~~Shipyard South Multi-Use~~Warehouse District

Objectives for this District. This District will ~~provide a space for a state of the art professional sports stadium, related uses, and regional-serving athletic facilities. This District will also~~ include research and development, office, and light industrial uses similar in scale and character to those in the adjacent ~~Shipyard Research & Development District. If the stadium is developed, retail uses would complement the stadium use and could include stadium-related and community-serving commercial and retail uses. If the stadium is not developed, this~~Wharf District. This District would include a mix of uses including neighborhood-serving retail, business, research and

development and office uses comparable in scale and intensity to, and complementary of, those in the adjacent ~~Hunters Point Shipyard Research & Development~~Wharf District, and potentially, Child-Care, Elementary and Secondary Schools and residential units ~~at densities similar to those planned in the Shipyard North Residential District,~~ (subject to Section II.B.~~8.~~8).

(a) *Principal Uses:* The following Uses are Principal Uses in this Land Use District:

~~Athletic and Recreational Facilities Uses:~~
- ~~National Football League stadium~~
- ~~Professional sports team training facilities~~
- ~~Ticket sales and special event staging, including concerts and performances~~
- ~~Regional athletic and recreation facilities~~
- ~~Ancillary buildings for recreation, facility programming, and maintenance~~
- ~~Parks, plazas and open space~~
- ~~Public restrooms~~

Office & Industrial Uses:
- Office
- Light Industrial
- Life Science
- Laboratory
- Green Technology
- Non-Retail Sales and Services

Hotel Uses

Multi-media and Digital Arts Uses:
- Motion picture production
- Animation studios
- Printing and publishing
- Education and classroom facilities
- Galleries and exhibit space
- Recording studios
- Artist and artisan studios

Institutional Uses:
- Religious Institution
- Vocational/Job Training Facility

Retail Sales and Services Uses:
- Neighborhood Retail Sales and Services
- ~~Non-~~Regional Retail Sales and Services
- Animal Services
- Restaurants
- Bars
- Health clubs, fitness, gymnasium, or exercise facilities
- Nighttime Entertainment
- Dry Cleaning ~~Facilities (including those with on-site dry cleaning plant)~~Facility
- Commercial Wireless Transmitting Facilities

- Grocery Store
- Maker Space

Civic, Arts and Entertainment Uses:

- Community Use
- Recreational Facility
- Arts Education
- Art Production
- Amusement Enterprise
- Performance Arts

Infrastructure/Utility Uses

- Recycled Water Treatment Facility*
- Geothermal Borefields for vertical-bore geothermal heating exchange system*
- Internet Service Exchange

* As located consistent with Private Infrastructure Map 2a (except that Geothermal Borefields may not be located beneath property to be provided to the Agency for use as affordable housing without approval by the Agency Commission in its sole discretion).

~~If a new 49ers stadium is not developed in this District, all of the Principal Uses identified above would be allowed as Principal Uses in this District except for: (1) Dry Cleaning Facilities, which would become a Secondary Use; and (2) the National Football League stadium and directly related uses. In addition, the~~The following Uses would be Principal Uses in this Land Use District, subject to a finding adopted by the Agency Commission that these uses are not subject to any applicable Environmental Restriction described in Section II.B.8.

Residential Uses:

- Dwelling Units
- Live/Work Units
- Group Housing
- Supportive Housing
- Home Office

Institutional Uses~~:~~

- Child-Care Facility
- Elementary School
- Secondary School
- Post-Secondary Institutions

Parks and Recreation Uses:

- Parks
- Public Recreation
- Open Space
- Marina-related facilities

Within the ~~Shipyard South Multi-Use~~Warehouse District, any Laboratory, Life Science, Light Industrial, and/or Green Technology Use containing a facility that emits regulated toxic air contaminants must show that the facility does not exceed the risk thresholds identified in the Mitigation Measures. In addition, ~~in the event both Residential Uses and Laboratory, Life Science, Light Industrial, and/or Green Technology Uses are developed,~~ no Laboratory, Life Science, Light Industrial and/or Green Technology Uses containing a facility that emits regulated toxic air contaminants shall be permitted within three hundred fifty (350) feet of any Child-Care Facility, Elementary or Secondary School, or Residential Use ~~south of Crisp Road~~ in the ~~Shipyard South Multi-Use~~Warehouse District.

(b) *Secondary Uses:*

The following Uses are permitted in this Land Use District if the criteria for Secondary Uses set forth in Section II.B.1 are met:

- Commercial Storage
- Drive-through facilities
- Automotive Repair and service station
- ~~Post-Secondary School~~

(c) *Prohibited Uses:* The following Uses are Prohibited Uses in this Land Use District:

- Large scale chemical handling and stationary emission sources within two hundred (200) feet of existing or planned residential uses or primary school facilities.

7. ~~Shipyard Shoreline~~Parks and Open Space District

Objectives for this District This District will provide public recreation access to the San Francisco Bay waterfront along the eastern and southern waterfront of the Shipyard, consistent with the Public Trust, including regional serving open spaces, viewing area of the water and historic Shipyard facilities, the San Francisco Bay Trail, and restorative habitat areas. Recreational sports facilities will be limited to areas not subject to the Public Trust. Only Principal Uses will be permitted in this District.

(a) *Principal Uses:* The following Uses are Principal Uses in this Land Use District:

- Parks
- Open Space
- ~~Passive recreation~~ Public Recreation
- ~~Plazas and promenades~~ Open-air marketplace
- Recreational Facility
- ~~Museums~~Museum and environmental education centers
- ~~Wetlands restoration~~
- ~~Park maintenance facilities~~
- Commercial recreational uses serving visitors to the waterfront
- Small boat marina, watercraft launches and ancillary boating facilities
- ~~Visitor parking~~
- Retail uses in existing, rehabilitated historic buildings
- Community Use
- Performance Arts
- Geothermal Borefields for vertical-bore geothermal heating exchange system (located consistent with Private Infrastructure Map 2a)

In areas not subject to the Public Trust, the full range of Uses allowed in Parks, open air marketplaces, and similar active recreational Uses shall be allowed in addition to the Permitted Uses listed above.

8. Environmental Restrictions

As of the ~~2010~~2018 Plan Amendment Date, the Navy has issued Final Records of Decisions for Parcels B, C, D-1, E, E-2, UC-1, UC-2, UC-3 & G selecting environmental remedies that will impose land use and activity restrictions on these parcels in the Project Area and is expected to issue additional Records of Decisions selecting environmental remedies that will impose land use and activity restrictions applicable to other locations. Such land use and activity restrictions are referred to in this Plan as "**Environmental Restrictions**". Notwithstanding any other provision of this Plan, the Uses allowed by this Plan are subject to any applicable Environmental Restrictions contained in quitclaim deeds from the United States Navy or in other enforceable restrictions imposed on the property through the environmental cleanup process under the Federal Facilities Agreement executed by the United States Navy, United States Environmental Protection Agency, California Department of Toxic Substances Control, and San Francisco Bay Area Regional Water Quality Control Board (the "**Regulating Agencies**") unless and until such Environmental Restrictions are waived or removed by the appropriate Regulating Agencies.

C. Temporary and Interim Uses

Pending the ultimate development of land consistent with the land use program, certain interim and temporary uses are authorized as follows:

1. Temporary Uses

"**Temporary Uses**" are short-term, transitory uses that may be proposed either prior to or following development of land within a Land Use District consistent with this Plan. The Executive Director or his or her designee may allow Temporary Uses for such period of time as he or she determines to be reasonable provided the Executive Director or his or her designee finds that such Temporary Use is consistent with the objectives of the this Plan and the applicable Hunters Point Shipyard Design for Development (Phase 1 or Phase 2). Permissible Temporary Uses include:

- Booth for charitable, patriotic or welfare purposes
- Exhibition, celebration, festival, circus or neighborhood carnival
- Open air sales of agriculturally-produced seasonal decorations, including Christmas trees and Halloween pumpkins
- Convention staging
- Parking (either primary or accessory to other uses)
- Truck parking and loading accessory to the uses listed above
- Other Temporary Uses that do not conflict with the objectives of the Plan, the Plan Documents, and the Public Trust, where applicable.

2. Interim Uses

"**Interim Uses**" are uses proposed during the time prior to or concurrent with development of land within a Land Use District consistent with this Plan. Interim Uses may be authorized in all areas not subject to the Public Trust for an initial time period to be determined by the Executive Director, upon a determination by the Executive Director that the authorized uses will not impede the orderly development of the Project Area as contemplated in this Plan. Where approved, Interim Uses will be permitted for a defined period of time not to exceed five (5) years. Permissible Interim Uses include:

- Rental or sales office incidental to a new development, provided that it is located in the development or a temporary structure
- Structures and uses incidental to environmental cleanup and staging
- Temporary structures and uses incidental to the demolition or construction of a structure, building, infrastructure, group of buildings, or open space, including construction staging of materials and equipment
- Commercial Storage
- Parking (either primary or accessory to other uses)
- Truck parking and loading accessory to the uses above
- Other Interim Uses that do not impede the orderly development of the Project Area as contemplated in this Plan, as determined by the Executive Director

Interim Uses of areas subject to the Public Trust shall be authorized only if the authorized uses are determined to be consistent with, necessary and convenient for,

or incidental or ancillary to, the purposes of the Public Trust, or if the following criteria are met:

- There are no immediate trust-related needs for the property,
- The proposed lease for the use prohibits construction of new structure or improvements that, as a practical matter, could prevent or inhibit the property from being converted to a permissible trust use if necessary,
- The proposed lease for the use provides that the Agency has the right to terminate the lease in favor of trust uses as trust needs arise, and
- The proposed use of the leased property would not interfere with commerce, navigation, fisheries, or any other existing trust use or purpose.

Extensions of the above approval periods may be authorized by the Executive Director in increments of up to five (5) year periods, subject to the same determinations as required for the initial period.

~~**3. Interim Stadium Parking**~~

~~Interim parking associated with the future stadium is permitted subject to the requirements of the Public Trust in Chapter 203 of the Statutes of 2009.~~

D. Standards for Development

This Plan and the other Plan Documents, including the Hunters Point Shipyard Phase 1 Design for Development and Hunters Point Shipyard Phase 2 Design for Development, establish the standards for development in the Project Area and supersede the San Francisco Planning Code in its entirety, except as otherwise expressly provided herein. The only sections of the Planning Code that shall apply, pursuant to the provisions of this Plan, are: (a) Sections 101.1, ~~295~~295, and 314, as such sections are in effect as of the 2010 Plan Amendment Date; (b) as to Phase 1 of the Project Area only, Sections 320-325 as such sections are in effect as of the 2010 Plan Amendment Date; ~~and~~ (c) as to Phase 2 of the Project Area only, Section 324.1 as that section is in effect as of the 2017 Plan Amendment Date; and (d) as to Phase 2 of the Project, Section 202.2 as provided in Section II.D.1(c) below. Both the Agency Commission and the Planning Commission must approve any amendment to the Hunters Point Phase 1 Design for Development or the Hunters Point Phase 2 Design for Development.

1. Applicability of City Regulations; City's Duty to Protect Public Health and Safety

(a) *General*. Regardless of any future action by the City or the Agency, whether by ordinance, resolution, initiative or otherwise, the rules, regulations, and official policies applicable to and governing the overall design, construction, fees, use or other aspect of development of the Project Area will be (i) this Plan and the other Plan Documents, (ii) to the extent not inconsistent therewith or not superseded by this Plan, the Existing City Regulations (including all provisions of the Building Construction Codes, which are not inconsistent with or superseded by this Plan), (iii) New City Regulations to the extent permitted in this Plan; (iv) new or changed Development Fees and Exactions to the extent permitted under Section II.D.6 of this Plan; (v) any disposition and development agreement or owner participation agreement related to development in the Project Area; and (vi) the Mitigation Measures (collectively, the "**Applicable City Regulations**").

(b) *Protection of Public Health and Safety; Federal or State Law*. Notwithstanding any other provision of this Plan to the contrary, the Agency and any City Agency having jurisdiction shall exercise its sole discretion under this Plan and the applicable Plan

Documents in a manner that is consistent with the public health and safety and shall at all times retain their respective authority to take any action that is necessary to protect the physical health and safety of the public (the "**Public Health and Safety Exception**") or to comply with changes in Federal or State law, including applicable Federal and State regulations (the "**Federal or State Law Exception**"), including the authority to condition or deny a permit, approval, agreement or other entitlement or to adopt a New City Regulation, but subject, in all events, to any rights to terminate between an owner or developer and the Agency as set forth in either the Plan Documents or any disposition and development agreement or owner participation agreement related to development within the Project Area. Except for emergency measures, any City Agency or the Agency, as the case may be, will meet and confer with the owner of the affected Real Property and/or any affected party under any disposition and development agreement or owner participation agreement related to development within the Project Area in advance of the adoption of any New City Regulations or New Construction Requirements to the extent feasible.

(c) *Permitted New City Regulations*. The City Agencies and the Agency reserve the right to impose any New City Regulations (except for the Planning Code sections superseded by this Plan) provided that (i) they are imposed on a Citywide Basis and (ii) they do not conflict with the development permitted or contemplated within the Project Area by this Plan, the Plan Documents or any disposition and development agreement or owner participation agreement related to development within the Project Area or any portion of such development (unless such conflict is waived by the owners and developers of affected property). As used in this paragraph (c), a New City Regulation "conflicts with the development permitted or contemplated" if it would change the aforementioned development regulations to:

(1) limit or reduce the density or intensity of development, or otherwise require any reduction in the square footage or number of proposed buildings (including number of Dwelling Units) or other improvements;

(2) limit or reduce the height or bulk of development within the Project Area, or any part thereof, or of individual proposed buildings or other improvements;

(3) materially change, restrict, or condition any land uses, including permitted or conditional uses, of development within the Project Area;

(4) materially limit or control the rate, timing, phasing, or sequencing of approval, development, or construction (including demolition);

(5) require the issuance of additional land use-related permits or approvals by the City or the Agency;

(6) materially limit or control the availability of public utilities, services or facilities or any privileges or rights to public utilities, services or facilities for the Project Area, including but not limited to water rights, water connections, sewage capacity rights and sewer connections;

(7) control or limit commercial or residential rents or purchase prices (excluding property owned or controlled by the Agency or the City during the period of Agency or City ownership and only to the extent such controls or limits would not survive transfer to a successive owner);

(8) materially limit the processing or procuring of applications and approvals for any subsequent City or Agency approvals;

(9) subject to Section II.D.6, impose any new Development Fees and Exactions or expand or increase Development Fees and Exactions;

(10) subject to Section II.D.1(d) (New Construction Requirements), materially increase the cost of construction or maintenance of all or any development contemplated or permitted in the Project Area or of compliance with any provision of this Plan, the Plan Documents, any disposition and development agreement or owner participation agreement related to development within the Project Area or Existing City Regulations;

(11) materially decrease the value of any land in the Project Area;

(12) materially reduce, limit the availability of or delay the amount or timing of tax increment or Mello-Roos Community Facilities District funding; or

(13) limit the Agency's ability to timely satisfy its obligations under any disposition and development agreement or owner participation agreement related to development within the Project Area or the City's ability to timely satisfy its obligations under any cooperation agreement or tax allocation agreement related to development within the Project Area.

Nothing in this Plan or other applicable Plan Documents shall be deemed to limit any City Agency's or the Agency's ability to comply with the California Environmental Quality Act ("**CEQA**") or the CRL.

Nothing in this section shall limit the authority of the Agency or any City Agency to exercise its discretion under the Public Health and Safety Exception, or to make changes under the Federal or State Law Exception, as described in Section II.D.1.b (Protection of Public Health and Safety).

The City Municipal Code (excluding the Planning Code with the exception of conditions for cannabis-related uses specified in Section 202.2 thereof (as may be amended or superseded)) and related regulations (as such Code Sections and regulations may be amended from time to time consistent with this Plan) establishing a permitting program for Cannabis-Related Uses are Permitted New City Regulations applicable to and enforceable against Cannabis-Related Uses within the Project Area.

The City's Municipal Code and related regulations establishing a permitting program for Short-Term Rentals (as such Code Sections and regulations may be amended from time to time consistent with this Plan) are Permitted New City Regulations applicable to and enforceable against Short-Term Rentals within the Project Area.

(d) *New Construction Requirements*. In addition to the Public Health and Safety Exception and the Federal or State Law Exception, the City may change construction requirements for Infrastructure and other Improvements ("**New Construction Requirements**") if the changes: (i) would not materially increase costs or accelerate the payment of costs of developing the Project Area consistent with this Plan; (ii) are imposed by the Board of Supervisors on a Citywide Basis; and (iii) would not: (a) materially adversely affect Net Available Increment: (b) delay development; (c) materially limit or restrict the availability of Infrastructure; or (d) impose limits or controls on the timing, phasing, or sequencing of development permitted under this Plan. In addition, from and after the 10th anniversary of the issuance of the first Building Permit for a project in Phase 2 of the Project Area (as shown on Map 2), the City may impose New Construction Requirements in response to

technological advances in construction if the New Construction Requirements: (1) would materially decrease the City's operation and maintenance costs and would not materially interfere with the uses, heights, density, and intensity of development described in the Plan Documents; (2) will apply on a Citywide Basis for similar land uses; (3) do not conflict with the Mitigation Measures (provided, this requirement may be satisfied with an exemption for specific Mitigation Measures as needed); and (4) do not increase by more than twenty percent (20%) the unit cost of any single component that is the subject of the New Construction Requirement.

2. Limitation on the Number of Buildings

The number of buildings in the Project Area may not exceed 1,125.

3. Limitation on the Number of Dwelling Units

~~There are currently no~~The maximum number of Dwelling Units in the Project Area~~. If the 49ers relocate to the Shipyard, the maximum number of Dwelling Units in the Project Area will be approximately 4,250. If the 49ers elect not to relocate to the Shipyard, the maximum number of Dwelling Units in the Project Area will be approximately 5,875. The total combined number of~~ is approximately 5,875, provided that the total Dwelling Units ~~in~~constructed within both the Project Area and Zone 1 of the Bayview Hunters Point Redevelopment Plan Area ~~(which comprises Candlestick Point) may not exceed 12,100, which includes a maximum of 10,500 units in Zone 1 of the Bayview Hunters Point Redevelopment Project Area and Hunters Point Shipyard Phase 2 as well as a previously approved 1,600 units in Hunters Point Shipyard Phase 1.~~may not exceed 12,100 Dwelling Units without Commission approval (including attendant environmental review).

4. Limitation on Type, Size and Height of Buildings

The size and type of buildings constructed in the Project Area may be as permitted in the Plan, Plan Documents, and Applicable City Regulations~~. Approximately 125,000~~, which is approximately 5,501,000 square feet of ~~retail space,~~non-residential development, including approximately 255,000 square feet of artists space, 50,000 square feet of community ~~uses, 2,500,000~~use space,[†] 401,000 square feet of retail space (including up to 100,000 square feet of Regional Retail) [‡], 120,000 square feet of hotel and hotel related use space, 410,000 square feet of institutional use space, and 4,265,000 square feet of research and development and office space~~, and a 69,000 seat National Football League stadium will be allowed~~.

The Commission may approve, without amendment to this Plan but subject to any necessary environmental review, adjustment of the foregoing square footages over time (except for artists or community use space), including conversion to other non-residential uses allowed by this Plan, provided the total square footage of non-residential uses within Phase 2 of the Project Area does not materially exceed 5,501,000 square feet.

[†] In addition to 52,000 square feet of Community Uses already identified within Phase 1 of the Plan Area.

[‡] In addition to 9,000 square feet of Neighborhood Retail Uses already identified within Phase 1 of the Plan Area.

In ~~the event the stadium is not built in the Project Area, between 500,000 and 2,500,000 additional square feet of research and development and office uses may be developed, depending upon whether Dwelling Units are shifted to the Project Area pursuant to Section II.D.3.~~ addition, to the extent the Bayview Hunters Point Redevelopment Plan allows for a transfer of non-residential-use square footage from the Hunters Point Shipyard Project Area to commercially-zoned areas of the Bayview Hunters Point Project Area, the foregoing limitations shall be commensurately reduced upon such transfer.

Accessory parking facilities for these uses, and infrastructure components Accessory to the foregoing, are not included as part of or subject to these square footage limitations.

The maximum building heights within the Project Area will be prescribed in the Hunters Point Shipyard Phase 1 Design for Development and the Hunters Point Shipyard Phase 2 Design for Development. No building may exceed 370 feet in height. Other size limitations for buildings are set in the Hunters Point Shipyard Phase 1 Design for Development and the Hunters Point Shipyard Phase 2 Design for Development by development controls including block patterns, bulk controls, prescribed setbacks, and open space requirements. Height and other size limitations shall maintain and protect view corridors from Hillpoint ~~park~~Park so that visitors can enjoy substantial vistas of San Francisco Bay, consistent with the requirements of the Granting Act for exchanging the park and adjacent hillside open space into the Public Trust.

5. Office Development Limitations

On November 8, 2016, voters enacted Proposition O (Planning Code Section 324.1), which exempts Phase 2 of the Project Area from the office development limits set forth in Planning Code Sections 320-325. Planning Code Sections 320 ~~—~~= 325 (Proposition M) shall apply to office development in Phase 1 of the Project Area, and Planning Code Section 324.1 shall apply to office development in Phase 2 of the Project Area. Accordingly, the cap on the annual amount of office development permitted in the City shall apply to Phase 1 but not Phase 2 of the Project Area.

By Resolution No. 18102, the Planning Commission adopted findings pursuant to Planning Code Section 321(b)(1) that the up to 5,000,000 square feet of office development contemplated in this Plan in particular promotes the public welfare, convenience and necessity, and in so doing considered the criteria of Planning Code Section 321(b)(3)(A)-(G). Proposition O states in part that "No project authorization or allocation shall be required for any Development on the Subject Property [Candlestick Point and Hunter's Shipyard Phase 2]. However, Development on the Subject Property that would require a project authorization or allocation but for this Section 324.1 shall be treated for all purposes as if it had been granted approval of a project authorization or allocation." Proposition O (2016) ~~supersede~~supersedes, as to Phase 2 of the Project Area, any part of Resolution No. 18102 (Attachment E) that would require an office authorization or allocation, compliance with Planning Code sections 320-325, or Planning Commission review or approval of office developments .

6. Development Fees and Exactions

The following provisions will apply to all property in the Project Area except parcels used for the development of affordable housing by Agency-sponsored entities. Development Fees and Exactions shall apply to the Project in the manner described below. Except as provided in this section and except as required by the Mitigation Measures, the School Facilities Impact Fee, the Child-Care Requirements, and the Art Requirement shall be the only Development Fees and Exactions that apply to the Project Area for the duration of this Plan. Water Capacity Charges and Wastewater Capacity Charges are Administrative Fees and not Development Fees and Exactions, and shall apply in the Project Area.

The School Facilities Impact Fee shall apply for the duration of this Plan, shall be administered as required by State law, and shall be increased for the duration of this Plan in accordance with State law but only to the extent permitted by State law.

The Art Requirement shall apply for the duration of this Plan and requires that any new office building in excess of 25,000 square feet constructed within the Project Area include one-half of one percent (0.5%) of the hard costs of initial construction (excluding costs of infrastructure and tenant improvements) (the "**Art Fee Amount**") for the installation and maintenance of works of art in the public realm within the Project Area or within Zone 1 of the Bayview Hunters Point Redevelopment Project Area. In the event that public spaces are not available at the time the Art Requirement is due, then the Art Fee Amount shall be paid to a fund administered by the Agency to be used for public art within the Project Area or within Zone 1 of the Bayview Hunters Point Redevelopment Project Area. The public realm within which art may be installed so as to comply with the Art Requirement includes: any areas on the site of the building and clearly visible from the public sidewalk or open space feature, on the site of any open space feature, or in any adjacent public property. The type and location of artwork proposed shall be reviewed by the Executive Director for consistency with the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development and other Plan Documents.

The Child-Care Requirements shall apply for the duration of this Plan only to all commercial development over 50,000 square feet per Planning Code Section 314, as it existed on the 2010 Plan Amendment Date (attached and incorporated hereto as Attachment C). The Child-Care Requirements will be administered by the Agency to provide for these public benefits within the Project Area or within Zone 1 of the Bayview Hunters Point Redevelopment Project Area.

The Child-Care Requirements provide for compliance either by constructing Child-Care Facilities or, alternatively, payment of an in-lieu fee. For the duration of this Plan, development within the Project Area shall not be subject to any change to the provisions of the Child-Care Requirements that permit compliance through the construction of Child-Care Facilities. In addition, no new in lieu fee or increase in the existing in lieu fee related to the Child-Care Requirement shall apply to the Project Area for twelve (12) years following the date the first Building Permit is issued for a project in Phase 2 of the Project Area (as shown in Map 2) and, thereafter, will only be applicable if the new or increased in lieu fee relating to Child-Care Requirements is: (i) not increased at a rate greater than the annual increase in the Consumer Price Index commencing at the end of the 12-year period during which the fee has been frozen as described above; (ii) generally applicable on a Citywide Basis to similar land uses; and (iii) not redundant of a fee, dedication, program, requirement, or facility described in the Plan Documents or in any

applicable disposition and development agreement related to development within the Project Area.

Notwithstanding the foregoing, new or increased Development Fees and Exactions may be imposed to the extent required under the Public Health and Safety Exception and the Federal or State Law Exception.

7. Shadow on Recreation and Park Property

Section 295 of the Planning Code (Proposition K) shall apply to development in the Project Area in the form in which Section 295 was in effect as of the 2010 Plan Amendment Date (and as attached hereto as Attachment D). Section 295 (Proposition K) shall not continue to apply to development in the Project Area in the event it is repealed by legislation or voter initiative.

E. Retention-Rehabilitation

Existing buildings in the Project Area, as of the 2010 Plan Amendment Date, are identified by the Navy's building numbers, on Map 3: Existing Buildings.

1. Historic buildings and other facilities proposed for retention, rehabilitation or adaptive reuse include:

   Buildings 101,140, 204, 205, 207, ~~208,~~ and ~~813~~208; and

   Dry Docks 2, 3, and 4.

2. Four additional buildings identified as historic; Buildings 211, 224, 231 and 253 will be further evaluated for retention, preservation and reuse.

F. Density Bonus

Under State law, the Agency may grant, as a form of local public subsidy, residential density bonuses. These bonuses, if granted, shall insure that additional low- or moderate-income Dwelling Units will actually be produced within the Project Area. In Hunters Point Shipyard Phase 1 (consisting of the Hunters Point Hill Residential District), the Agency will grant such bonuses only after a developer has demonstrated to the Agency's satisfaction that the developer has utilized its best effort to provide such low- or moderate-income Dwelling Units. Hunters Point Shipyard Phase 2 consists of all Land Use Districts other than the Hunters Point Hill Residential District. A density bonus is not proposed to increase the total maximum number of residential units in Phase 2 above those levels described in Section II.D.3.

G. Streets Plan

The Street Plan for the Hunters Point Shipyard Project Area is identified on ~~Maps~~Map 4~~A, 4B and 4C~~: Street ~~Plans~~Plan, which ~~indicate~~indicates generally the public rights-of-way. The categories of streets include the following:

1. Primary Arterial
2. Retail Street

3. Boulevard Park Street
4. Local Street

The Project Area's street pattern contributes to the establishment of its fundamental land use patterns, and in doing so, becomes an integral element of the overall urban design for the Project. It is, however, recognized that there is a need for some degree of adaptability and flexibility in locating and configuring some of the Project's local streets and alleys at the time of actual physical development. Accordingly, the alignment and classification of these streets are subject to adjustment by the Agency and the City at the time of detailed engineering studies. ~~Additionally, this Plan provides three street maps of the Project Area to accommodate the alternative land uses permitted in the Shipyard South Multi-Use District.~~

Certain streets in the Project Area will be impressed with the Public Trust. These streets will provide key vehicular, bicycle and pedestrian access ways to the waterfront, providing a connection between the various parts of the waterfront, and between the waterfront and other Public Trust lands within the Project Area.

In order to accommodate vehicle traffic and transit serving the various uses planned for the Project Area, this Plan also provides for street, lighting, utility, and related improvements to Innes Avenue and Hunters Point Boulevard, outside the northwestern boundary of the Project Area.

III. PROJECT PROPOSALS

A. Rehabilitation and New Development

All new development and all rehabilitation of existing structures must conform to this Plan, and to all applicable Federal and State laws and to those local laws that are applicable pursuant to this Plan.

1. Utilities: Stormwater detention, stormwater treatment, and similar facilities may include above-ground features such as bioswales and channels. New permanent utility lines must be placed underground. Above ground pump stations control rooms and sub-stations are permitted however their visual impact must be minimized per requirements either the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development, as appropriate. Temporary utility poles and wires may be installed during the project build out.

2. Signage: With the exception of temporary marketing and sales signs pertaining to developments within the Project Area (which will be permitted), permanent or temporary billboards (excluding kiosks, streetscape commercial signage, and street furniture-related commercial signage), are prohibited within all Land Use Districts ~~except the Shipyard South Multi-Use District and are prohibited in~~(including any park or street area). Permanent signage for residential, commercial and open space development is subject to the development controls and guidelines of either the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development, as appropriate. The Agency Commission shall review for consistency with the objectives of this Plan any proposed signage not permitted by the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development, as appropriate and any signage master plan.

3. Development Project: Plans for rehabilitation and new development shall be submitted to the Agency for architectural review and approval, consistent with the Agency's Design Review and Document Approval Process (DRDAP) for the Project Area or as attached to

any disposition and development agreement related to development within the Project Area.

4. Agency Sponsored Improvements: To the extent now or hereafter permitted by law, the Agency may pay for, develop, or construct any building, facility, element of infrastructure, structure or other improvement either within or outside the Project Area, for itself or for any public body or entity, provided that such building, facility, element of infrastructure, structure or other improvement would be of benefit to the Project Area and conform to the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development, as appropriate.

B. Owner and Tenant Preference

Persons who are either owners or tenants of businesses, or other types of real property within the Project Area being displaced by rehabilitation, Agency property acquisition, or other Agency action occasioned by the implementation of this Plan will be afforded certain preferences. The Agency shall extend preferences to such persons in order that they may re-enter the redeveloped Project Area. The Agency will adopt a business relocation program to implement these preferences. Participants in this program necessarily will be subject to and limited by the requirements of this Plan.

C. Acquisition of Real Property

Any real property located within the Project Area may be acquired by the Agency by purchase, gift, devise, exchange, lease, or any other lawful method. The Agency is authorized to acquire structures without acquiring the land upon which those structures are located. The Agency is also authorized to acquire any other interest in real property less than full fee title.

D. Acquisition of Personal Property

Where necessary in the execution of this Plan, the Agency is authorized to acquire personal property in the Project Area by any lawful means except eminent domain.

E. Property Management

During such time as any property in the Project Area is owned or leased by the Agency, such property will be under the management and control of the Agency and may be leased or subleased.

F. Payment of Taxes

The Agency may in any year during which it owns property in the Project Area pay directly to the City or any district, including a school district or other public corporation for whose benefit a tax would have been levied upon such property had it not been exempt, an amount of money in lieu of taxes.

A proportionate share of any amount of money paid by the Agency to the City will be disbursed by the City to any school district with territory located within the Project Area in the City. "**Proportionate share**" means the ratio of the school district tax rate that is included in the total tax rate of the City to the total tax rate of the City.

The Agency may also pay to any taxing agency with territory located within a project area other than the community that has adopted the Project, any amount of money that in the Agency's

determination is appropriate to alleviate any financial burden or detriment caused to any taxing agency by this Plan.

G. Relocation

The Agency will provide relocation assistance and benefits as required under applicable Federal and State law. A review of the current Project Area indicates that there are no persons currently residing therein. Accordingly, relocation activities would relate solely to businesses.

To the extent required under applicable State or Federal law, the Agency shall: (1) assist or cause to be assisted all eligible persons displaced by redevelopment activities undertaken or assisted by the Agency in finding new locations in accordance with applicable law, and where possible, shall relocate businesses to a location of similar size within the Project Area; and (2) make or cause to be made relocation payments to eligible persons displaced by redevelopment activities undertaken or assisted by the Agency as may be required by applicable State or Federal law. The Agency may make such other payments as it determines to be appropriate and for which funds are available.

Pursuant to Section 33339.5 of the California Health and Safety Code, the Agency shall extend reasonable preferences to persons who are engaged in business within the Project Area to reenter in business within the redeveloped Project Area, if they otherwise meet the requirements of this Plan. In order to extend reasonable preferences to businesses to reenter into business within the redeveloped Project Area, the Agency has promulgated, by Agency Resolution No. 93097, rules for the Business Occupant Re-Entry Program within the redeveloped Project Area.

H. Demolition and Clearance

The Agency is authorized to demolish and clear buildings, structures, and other improvements from real property owned by the Agency in the Project Area as necessary to carry out the purposes of this Plan.

I. Public Improvements and Public Facilities

The Agency is authorized to install and construct or to cause to be installed and constructed the public improvements, public facilities, and public utilities, on any parcel within or outside the Project Area, appropriate or necessary to carry out this Plan. Such public improvements and public facilities are described in Attachment B, Authorized Public Improvements.

J. Preparation of Building Sites

The Agency is authorized to prepare or cause to be prepared as building sites any real property in the Project Area owned or leased by the Agency.

K. Disposition of Real Property

For the purpose of this Plan, the Agency is authorized to sell, lease, sublease, exchange, subdivide, transfer, assign, pledge, encumber by mortgage or deed of trust, or otherwise dispose of any interest of real property, except to the extent prohibited by the Granting Act.

Any real or personal property acquired by the Agency in the Project Area will be sold or leased for development in accordance with this Plan and for consideration. However, the Agency may convey real property to the City or to any other public body with or without consideration.

Property containing buildings or structures rehabilitated by the Agency will be offered for resale within one year after completion of rehabilitation or an annual report concerning such property will be published by the Agency as required by law.

The Agency will reserve such powers and controls in the disposition and development documents as may be necessary to prevent transfer, retention, or use of property for speculative purposes and to insure that development is carried out pursuant to this Plan.

All purchasers or lessees of property will be obligated to use the property for the purposes designated in this Plan, to begin and complete development of the property within a period of time that the Agency fixes as reasonable, and to comply with other conditions that the Agency deems necessary to carry out the purposes of this Plan.

L. Disposition and Development Documents

To provide adequate safeguards to ensure that the provisions of this Plan will be carried out and to prevent the recurrence of blight, all real property sold, leased, or otherwise conveyed by the Agency will be made subject to the provisions of this Plan by lease, deed, contract, agreement, declaration of restrictions, or other means. Where appropriate, as determined by the Agency, such documents or portions thereof will be recorded in the Office of the Recorder of the County of San Francisco.

The leases, deeds, contracts, agreements, and declarations of restrictions may contain restrictions, covenants running with the land, rights of reverter, powers of termination, conditions subsequent, equitable servitudes, or any other provision necessary to carry out this Plan.

All property in the Project Area sold, leased or conveyed by the Agency will be made subject by appropriate documents to the restriction that there will be no discrimination or segregation on any basis listed in subdivision (a) or (d) of Section 12955 of the California Government Code, as those bases are defined in Sections 12926, 12926.1, subdivision (m) and paragraph (1) of subdivision (p) of Section 12955, and Section 12955.2 of the California Government Code, or on the basis of race, color, creed, religion, national origin or ancestry, sexual orientation, gender, identity, marital or domestic partner status, age, or disability, in the sale, lease, sublease, transfer, use, occupancy, tenure, or enjoyment of property in the Project Area. In addition, such property will be made subject to the restriction that all deeds, leases, or contracts for the sale, lease, sublease, or other transfer of land in the Project Area shall contain such nondiscrimination and non-segregation clauses as are required by law and this Plan.

M. Disposition of Personal Property

For the purposes of this Plan, the Agency is authorized to sell, lease, exchange, transfer, assign, pledge, encumber, or otherwise dispose of personal property that has been acquired by the Agency.

N. Replacement Housing

Whenever Dwelling Units housing persons and families of low or moderate income are destroyed or removed from the low- and moderate-income housing market as part of this redevelopment project, the Agency shall, within four (4) years of such destruction or removal, rehabilitate, develop or construct, or cause to be rehabilitated, developed or constructed, for rental or sale to persons and families of low or moderate income an equal number of replacement Dwelling Units at affordable rents within the Project Area or within the territorial jurisdiction of the Agency.

O. Redeveloper's Obligations

In order to provide adequate safeguards that the process of redevelopment will be carried out pursuant to this Plan, agreements for the disposition of land by the Agency shall include provisions recognizing and requiring that:

1. The purchase of land is for redevelopment and not for speculation and reserving to the Agency such powers and controls as may be necessary to prevent transfer, retention or use of the property for speculative purposes.

2. The land shall be built upon and/or improved in conformity with the development standards of this Plan and any applicable Agency regulations, the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development, and the Declaration of Restrictions.

3. All developers and owner participants shall submit phasing plans, schematic architectural plans, site and landscape plans and final plans including landscaping and sign plans, and specifications of the improvements proposed to be constructed on the land for architectural review and approval by the Agency in order to ensure that development and construction will be carried out in a manner that will effectuate the purposes of this Plan. To the extent required in disposition and development agreements or agreements with owner participants, as a part of such plans and specifications, developers and, if required by the Agency, owner participants shall submit time schedules for the commencement and completion of such improvements. All such plans and schedules shall be submitted to the extent required by, and within the time specified in, the respective agreements with such developers and owner participants.

4. By and for the contracting parties, their heirs, executors, administrators, and assigns, there may be no discrimination against or segregation of any person or group of persons on any basis listed in subdivision (a) or (d) of Section 12955 of the California Government Code, as those bases are defined in Sections 12926, 12926.1, subdivision (m) and paragraph (1) of subdivision (p) of Section 12955, and Section 12955.2 of the California Government Code, or on the basis of race, color, religion, national origin, gender, sexual orientation, gender identity, marital or domestic partner status, age, disability, or ancestry in the sale, lease, sublease, transfer, use, occupancy, tenure, or enjoyment of the premises therein described, nor may the contracting parties, or any person claiming under or through them establish or permit such practice or practices of discrimination or segregation with reference to the selection, location, number, use, or occupancy of tenants, lessees, subleases, or vendees in the premises described. All deeds, leases or contracts for the sale, lease, sublease, or other transfer of any land shall contain the nondiscrimination and non-segregation clauses specified in the CRL (Section 33436 of the California Health and Safety Code) and this Plan.

IV. METHODS FOR PROJECT FINANCING

A. General

Upon adoption of this Plan by the Board of Supervisors, the Agency is authorized to finance projects consistent with this Plan with assistance from the United States Government, including the Department of Housing and Urban Development (HUD), the Department of Defense (Office of Economic Adjustment) as well as from other Federal programs, from the State, from the City, from Agency bonds, and from other available sources.

The Agency is hereby authorized to issue bonds, obtain advances, borrow funds and create indebtedness in carrying out this Plan. The principal and interest of such advances, funds, and indebtedness may be repaid from any funds that may appropriately be available to the Agency.

Any other loans, grants, or financial assistance from the United States, or any other public or private sources will also be utilized, if available.

B. Tax Allocation

Taxes, if any, levied upon the taxable property in the Project Area each year by or for the benefit of the State, the City, any district, or other public corporation, after the Effective Date, shall be divided as follows, in accordance with the CRL (Section 33670 of the Health and Safety Code):

> (a) That portion of the taxes that would be produced by the rate upon which the taxes levied each year by or for each of the Taxing Agencies upon the total sum of the assessed value of the taxable property in the redevelopment project as shown upon the assessment roll used in connection with the taxation of such property by such taxing agency, last equalized prior to the effective date of such ordinance, shall be allocated to and when collected shall be paid into the funds of the respective Taxing Agencies as taxes by or for said Taxing Agencies on all other property are paid (for the purpose of allocating taxes levied by or for any taxing agency or agencies that did not include the territory in a redevelopment project on the effective date of such ordinance but to which such territory has been annexed or otherwise included after such effective date, the assessment roll of the county last equalized on the effective date of said ordinance shall be used in determining the assessed valuation of the taxable property in the project on said effective date); and
>
> (b) That portion of the levied taxes each year in excess of that amount shall be allocated to and when collected shall be paid into a special fund of the redevelopment agency to pay the principal of and interest on loans, moneys advanced to, or indebtedness (whether funded, refunded, assumed or otherwise) incurred by the redevelopment agency to finance or refinance, in whole or in part, the redevelopment project. Unless and until the total assessed valuation of the taxable property in a redevelopment project exceeds the total assessed value of the taxable property in that project as shown by the last equalized assessment roll referred to in paragraph (a) hereof, all of the taxes levied and collected upon the taxable property in the redevelopment project shall be paid to the respective Taxing Agencies. When the loans, advances, and indebtedness, if any, and interest thereon, have been paid, all moneys thereafter received from taxes upon the taxable property in the redevelopment project shall be paid to the respective Taxing Agencies as taxes on all other property are paid."

Not less than twenty percent (20%) of all taxes that are allocated to the Agency pursuant to Health and Safety Code Section 33670 and Section IV.B.(b) of this Plan shall be used by the Agency for the purposes of increasing, improving and preserving the community's supply of low- and moderate-income housing available at affordable housing cost, as defined by Section 50052.5 of the California Health and Safety Code, to persons and families of low or moderate income, as defined in Section 50093, to lower income households, as defined in Section 50079.5, and to very low income households, as defined in Section 50105.

In the proceedings for the advance of moneys, making loans or the incurring of any indebtedness (whether funded, refunded, assumed or otherwise) by the Agency to finance or refinance, in whole or in part, the Hunters Point Shipyard Redevelopment Project, the portion of taxes set forth in the CRL and the California Constitution (as the same may exist on the date of the making of said advances or loans or the incurring of indebtedness) as available to the Agency for such purposes may be irrevocably pledged for the payment of the principal of and interest on such loans, advances, or indebtedness.

It is anticipated that the amount of taxes to be produced by the method described in Subsections (a) and (b) above may be sufficient to support a bond(s) issue in the range of $900 million. In addition, it may become necessary and appropriate to issue bonds to be partially repaid from taxes allocated pursuant to Subsections (a) and (b) above. Therefore, the amount of bonded indebtedness that can be outstanding at any one time from the issuance of bonds to be repaid in whole or in part from the allocation of taxes pursuant to Section 33670 of the California Health and Safety Code will be limited to $900 million. In order to adequately fund the repayment of such bonds (including principal, interest, and issuance cost), the number of dollars of taxes that may be divided and allocated to the Agency pursuant to Section 33670 of the California Health and Safety Code will be limited to $4.2 billion.

No loans, advances, or indebtedness to finance the redevelopment project in whole or in part and to be repaid from the allocation of taxes pursuant to Section 33670 of the California Health and Safety Code may be established or incurred by the Agency twenty (20) years after the Agency begins collecting substantial tax increment funds in the Project Area, meaning a total allocation of tax increment funds exceeding $100,000.

The Agency may not pay indebtedness or receive property taxes pursuant to Section 33670 of the California Health and Safety Code forty five (45) years after the Agency begins collecting substantial tax increment funds in the Project Area; meaning a total allocation of tax increment funds exceeding one hundred thousand dollars ($100,000).

Bond issues, the principal and interest of which the Agency proposes to pay with tax allocations under Health and Safety Code 33670, are subject to Board of Supervisors approvals, as are all bond issues of the Agency; where the Agency proposes to utilize tax allocations for other than repaying principal and interest on bond issues or other existing indebtedness, the Agency shall prepare, for the approval of the Board of Supervisors, an annual Project Work Program, which program shall outline in detail the activities to be undertaken by the Agency, the loans and/or advances to be received and/or the indebtedness to be incurred.

V. ACTIONS BY THE CITY

The City, by the adoption of this Plan, agrees to aid and cooperate with the Agency in carrying out this Plan and shall take any further action necessary to ensure the continued fulfillment of the various objectives and purposes of this Plan and to prevent the recurrence or spread in the Project Area of conditions causing blight. Such actions include the following:

A. Prior to termination of this Plan, revision of zoning within the Project Area (to be effective as of this Plan expiration date) to conform to the land uses authorized by this Plan and the development standards and design guidelines set forth in the Hunters Point Shipyard

Design for Development documents, as they have been amended from time to time as of the expiration date of this Plan.

B. Institution and completion of proceedings necessary for changes and improvements in publicly-owned utilities within or affecting the Project Area.

C. Performance of the above and of all other functions and services relating to public health, safety, and physical development normally rendered in accordance with a schedule that will permit the redevelopment of the Project Area to be commenced and carried to completion without unnecessary delays.

D. Referral will be made to the Agency prior to approval by the City of each building permit application in the Project Area. No building permit will be issued unless it conforms to this Plan.

E. The City is authorized, but not obligated to provide funds to ensure the completion of the Project as a whole in accordance with this Plan.

F. The City shall review, consider, and approve, without unnecessary delay, tentative subdivision maps and parcel maps as necessary to develop the Project Area, provided maps and public infrastructure agreements are found to be consistent with the objectives of this Plan, approved environmental mitigations, and the development standards and design guidelines set forth in the Hunters Point Shipyard Phase 1 Design for Development and Hunters Point Shipyard Phase 2 Design for Development.

G. The undertaking and completing of any other proceedings necessary to carry out the Project.

In order to facilitate the implementation of this Plan, the City and the Agency have entered into Interagency Cooperation Agreements (each, an "**ICA**"). Each ICA is intended to provide the framework for cooperation among various City Agencies and the Agency in accordance with this Plan, the other applicable Plan Documents and disposition and development agreements entered into in accordance with this Plan with respect to the review and approval of development authorizations in the Project Area and, where appropriate, to facilitate cooperation of the City Agencies in issuance of those permits, approvals, agreements and entitlements at each applicable stage of development. The City shall perform all of its obligations under each ICA.

VI. PROCEDURE FOR AMENDMENT

This Plan may be amended by means of the procedure established in Section 33450-33458 of the California Health and Safety Code, or by any other procedure hereafter established by law.

VII. PROCEDURE FOR VARIANCE

The owner or developer of any property in the Project Area may make a written request for a variance that states fully the grounds of the application and the facts pertaining thereto. Upon receipt of a complete application, the Agency may conduct its own further investigation and the Agency Commission may, in its sole discretion at a duly noticed public hearing, grant a variance from the development controls in this Plan and either the Hunters Point Shipyard Phase 1 or Phase 2 Design for Development, as appropriate, under the following circumstances:

- Due to unique physical constraints or other extraordinary circumstances applicable to the property, the enforcement of development regulations without a variance would otherwise result in practical difficulties for development and create undue hardship for the property owner or developer or constitute an unreasonable limitation beyond the intent of this Plan; and

- The granting of a variance would be in harmony with the goals of this Plan, and will not be materially detrimental to the public welfare or materially injurious to neighboring property or improvements in the vicinity.

In granting a variance, the Agency will specify the character and extent thereof, and also prescribe conditions necessary to secure the goals of this Plan and the Design for Development.

The Agency's determination to grant or deny a variance will be final and will not be appealable to the Planning Department. In no instance will any variance be granted that will substantially change the allowable land uses of this Plan. Procedures for the evaluation of Secondary Uses are described above in Section II.B.1.

In addition, for certain development controls specified in the Phase 2 Design for Development, the Executive Director may approve deviations (minor modifications no greater than ten percent of the numerical development control), in accordance with the standards and processes set forth therein.

VIII. DURATION OF PLAN

This Plan will be effective until thirty (30) years from the date the Controller of the City and County of San Francisco certifies, pursuant to Section 33492.9, as the final day of the first fiscal year in which one hundred thousand dollars ($100,000) or more of tax increment from the Project Area are paid to the Agency pursuant to Section 33675(d); provided, however, that the nondiscrimination and non-segregation provisions will continue in perpetuity. Any Declaration of Restrictions formulated pursuant to this Plan may contain provisions for the extension of such Declaration of Restrictions for successive periods. The Agency may receive property taxes pursuant to Section 33670 of the California Health and Safety Code for up to forty five (45) years after the Agency begins collecting substantial tax increment funds; meaning a total allocation of tax increment funds exceeding one hundred thousand dollars ($100,000).

IX. ENFORCEMENT OF PLAN

The provisions of this Plan and other documents formulated pursuant thereto may be enforced by the Agency in any manner authorized by law.

X. SEVERABILITY

If any provision, section, subsection, subdivision, sentence, clause or phrase of this Plan is for any reason held to be invalid or unconstitutional, such decision will not affect the validity of the remaining portion or portions of this Plan.

XI. DEFINITIONS

Following are definitions for certain words and terms used in this Plan. All words used in the present tense include the future. All words in the plural number include the singular number and all words in the singular number include the plural number, unless the natural

construction of the wording indicates otherwise. The word "shall" is mandatory and not directory; and the term "may not" is prohibitory and not permissive. The words "including", "such as" or words of similar import when following any general term may not be construed to limit the general term to the specific terms that follow, whether or not language of non-limitation is used; rather, these terms will be deemed to refer to all other terms that could reasonably fall within the broadest possible scope of the term.

2010 Plan Amendment Date means the date on which Ordinance No. 211-10 adopting amendments to this Plan, approved on August 3, 2010, became effective.

2017 Plan Amendment Date means the date on which Ordinance No. 122-17 adopting amendments to this Plan, approved on June ~~12,~~22, 2017, became effective.

2018 Plan Amendment Date means the date on which Ordinance No. _____ adopting amendments to this Plan, approved on _____, 2018, became effective.

Accessory Use means uses that are related to and subservient to another use, and serve that use only (with the exception of Parking, which may serve several lawfully permitted uses). For purposes of private infrastructure, accessory means utility systems and/or a component thereof, located within, on or beneath a lawful permitted Use on the same Assessor's lot.

Administrative Fee means any fee charged by any City Agency or the Agency in effect on a Citywide Basis, including fees associated with Article 31, at the time of submission for the processing of any application for building or other permits, subdivision maps, or other City or Agency regulatory actions or approvals for any development in the Project Area.

Adult Entertainment means a use that includes any of the following: adult bookstore, adult theater, and encounter studio, as defined by Section 1072.1 of the San Francisco Police Code.

Agency Commission means the Commission for the Redevelopment Agency of the City and County of San Francisco.

Amusement Enterprise means enterprises such as billiard halls, bowling alleys, skating rinks, and similar uses when conducted within a completely enclosed building.

Animal Services means an animal care use that provides medical care and/or boarding services for animals.

Arts Education means schools of any of the following for professionals, credentialed individuals, or amateurs: dance, music, dramatic art, film, video, graphic art, painting, drawing, sculpture, small-scale glass works, ceramics, textiles, woodworking, photography, custom-made jewelry or apparel, and other visual, performance, industrial and product-design and sound arts and craft.

Art Production means commercial arts and art-related business service uses including, but not limited to, recording and editing services, small-scale film and video developing and printing; titling; video and film libraries; special effects production; fashion and photo stylists; production, sale and rental of theatrical wardrobes; and studio property production and rental companies. Arts spaces may include studios, workshops, galleries, museums, archives and small theaters, and other similar spaces customarily used principally for production and post-production of graphic art, painting, drawing, sculpture, small-scale glass works, ceramics, textiles, woodworking, photography, custom-made jewelry or apparel and other visual, performance and sound arts and craft.

Automotive Repair means a retail automotive service use that provides any of the following automotive repair services, whether outdoors or in an enclosed building: minor auto repair, engine repair, rebuilding, or installation of power train components, reconditioning of badly worn or damaged motor vehicles, collision service, or full body paint spraying.

Bar means a principal retail use not located in a Restaurant that provides on-site alcoholic beverage sales for drinking on the premises, including bars serving beer, wine and/or liquor to the customer where no person under twenty one (21) years of age is admitted (with Alcoholic Beverage Control [ABC] license 42, 48, or 61) and drinking establishments serving liquor (with ABC license 47 or 49) in conjunction with other uses that admit minors, such as theaters, and other entertainment. Restaurants with ABC licenses are not considered bars under this definition.

Battery Storage System means a component of the utility electricity system which stores energy.

Board of Supervisors means the Board of Supervisors of the City and County of San Francisco, California.

Building Construction Codes means the City's (or if applicable, the Port's) Building Code, Electrical Code, Mechanical Code and Plumbing Code and any construction requirements in the Housing Code and the Fire Code.

Business Occupant Re-Entry Policy means a document approved by the Agency Commission in relation to this Plan that establishes, to the extent required by State or Federal law, how the extension of reasonable preferences to business occupants will be implemented within the Project Area.

Cannabis-Related Use means any Use that is required to obtain a permit, and has obtained such permit, from the San Francisco Office of Cannabis (or its successor). For the avoidance of doubt, a Cannabis-Related Use is any category of Use otherwise permitted herein that cultivates, manufactures, distributes, tests, sells, delivers or in any other way uses cannabis or cannabis-derived materials, including for legal adult use or medical use.

Child-Care Facility means a use that provides less than 24-hour care for children by licensed personnel and that meets all the requirements of the State and other authorities for such a facility.

Child-Care Requirements means the requirements set forth in City Planning Code Section 314, as it exists on the2010 Plan Amendment Date.

City Agency means, individually or collectively as the context requires, all departments, agencies, boards, commissions and bureaus of the City with subdivision or other permit, entitlement or approval authority or jurisdiction over any portion of the Project Area, including but not limited to the Port Authority, Department of Public Works, the Public Utilities Commission, the Planning Commission, the Municipal Transportation Agency, the Building Inspection Commission, the Public Health Commission, the Fire Commission and the Police Commission, or any successor public agency designated by or under law.

City Regulations means ordinances, resolutions, initiatives, rules, regulations, and other official City and Agency policies applicable to and governing the overall design, construction, fees, use or other aspects of development within the Project Area. City Regulations includes City municipal codes, the General Plan, Building Construction Codes, Subdivision Code, and all ordinances, rules, regulations and official policies adopted to implement those City Regulations, except to the extent such regulations are Administrative Fees.

Citywide Basis means all privately-owned property within (a) the City's jurisdictional limits or (b) any designated use classification or use district of the City so long as (1) any such use classification or use district includes a substantial amount of affected private property other than affected private property within the Project Area, (2) the use classification or use district includes all private property that receives the general or special benefits of, or causes the burdens that occasion the need for, the New City Regulation, Development Fees and Exactions, or New Construction Requirements, and (3) the cost of compliance with the New City Regulation, Development Fees and Exactions, or New Construction Requirements applicable to the same type of use in the Project Area (or portion thereof) does not exceed the proportional benefits to, or the proportional burdens caused by private development of that type of use in the Project Area (or portion thereof).

Commercial Storage means a commercial use that stores, within an enclosed building, household goods, contractors' equipment, building materials or goods or materials used by other businesses at other locations and that may include self-storage facilities for members of the public. Commercial storage does not include the storage of waste, salvaged materials, automobiles, inflammable or highly combustible materials, and wholesale goods or commodities.

Commercial Wireless Transmitting Facility means equipment for the transmission, reception, or relay of radio, television, or other electronic signals, and may include towers, antennae, and related equipment.

Community Use means a publicly or privately owned use that provides public services to the community, whether conducted within a building or on an open lot. This use may include, by way of example and not limitation, museums, post offices, public libraries, police or fire stations, transit and transportation facilities, utility installations, building-integrated sustainable energy generation facilities, neighborhood-serving community recycling centers, and wireless transmission facilities.

Consumer Price Index means the All Items Consumer Price Index for All Urban Consumers in the San Francisco-Oakland-San Jose Metropolitan Statistical Area published by the Bureau of Labor Statistics of the United States Department of Labor.

Declaration of Restrictions means a recorded declaration that provides notice that properties in the Project Area are subject to restrictions, reservations and covenants for the benefit of the Project Area and this Plan.

Development Fees and Exactions means a monetary or other exaction including in-kind contributions, other than a tax or special assessment or Administrative Fee, that is charged by the Agency or any City Agency in connection with any permit, approval, agreement or entitlement or any requirement for the provision of land for construction of public facilities or Infrastructure or any requirement to provide or contribute to any public amenity or services. Development Fees and Exactions does not include Building Construction Codes in effect from time to time and generally applicable on a Citywide Basis to similar land uses.

District Heating and Cooling Facility means a plant (including geothermal powered) with hot water (or steam) and chilled water distributed from the district plant to individual buildings via a pipe distribution network ~~located under the streets~~.

Dry-Cleaning Facility means dry-cleaning establishment, including pressing and other miscellaneous processing of clothes.

Dwelling Units means a residential use that consists of a suite of one or more rooms and includes sleeping, bathing, cooking, and eating facilities.

Effective Date means the date the ordinance passed by the Board of Supervisors approving this Plan (Ordinance No. 211-10) became effective.

Elementary School means an institution that provides K-8 education and that may be either public or private.

Executive Director means the Executive Director of the Agency.

Existing City Regulations means City Regulations as they are in effect on the 2010 Plan Amendment Date.

General Plan means the General Plan for the City and County of San Francisco.

Green Technology means a use or several uses that involves the research, development, and fabrication of innovative methods, materials, and technology to improve environmental quality, increase energy and/or resource efficiency, reduce greenhouse gas emissions, reduce waste and pollution, and increase resource sustainability. Green Technology uses may utilize office, laboratory, light manufacturing, or other types of use. Green technology can include office, laboratory, and light-manufacturing uses.

Grocery Store means a retail use of medium or large scale providing sales of food, produce, prepared food, beverages, toiletries, pharmaceutical products and services, and households items to the general public. This includes neighborhood-serving stores, supermarkets, festival market places, or other large format tenants providing primarily food sales up.

Group Housing means a residential use that provides lodging or both meals and lodging without individual cooking facilities. Group Housing may include housing specifically designed for and occupied by seniors, students or disabled residents.

Home Office means the accessory use of a dwelling for office purposes, provided that the principal user of such office resides in that dwelling.

Hotel means a use that provides overnight accommodations including guest rooms or suites and ancillary services to serve hotel guests. Hotels shall be designed to include all lobbies, offices and internal circulation to guest rooms and suites within and integral to the same enclosed building or buildings as the guest rooms or suites.

Hunters Point Shipyard Phase 1 Design for Development means the Design for Development document that sets development standards and design guidelines for Phase 1 of the Project, which consists of the Hunters Point Hill Residential District, as amended from time to time in accordance with its provisions.

Hunters Point Shipyard Phase 2 Design for Development means the Design for Development document that sets development standards and design guidelines for Phase 2 of the Project, which consists of all of the Project Area except for the Hunters Point Hill Residential District, as amended from time to time in accordance with its provisions.

Implementation Plan means a plan adopted periodically by the Agency Commission relating to the implementation of goals and objectives within this Plan, in accordance with the requirements of the CRL.

Internet Service Exchange means a use that provides a location for: switching equipment (whether wireline or wireless) that joins or connects customers, or subscribers to enable them to transmit data, voice, or video signals; one or more computer systems and related equipment used to build, maintain or process data, voice or video signals or provide other data processing services; or a group of network servers.

Institutional Use means Residential Care Facility, Child-Care Facility, Elementary School, Religious Institution, Secondary School, Post-Secondary Institution, or Vocational/Job Training Facility.

Laboratory means a use that provides for space within any structure intended or primarily suitable for scientific research. This includes industrial, chemical, and digital work stations for the purpose of design, developing, and testing product development. The space requirements of uses within this category include specialized facilities or built accommodations that distinguish the space from office uses and light industrial uses.

Life Science means a use that involves the integration of natural and engineering sciences and advanced biological techniques using organisms, cells, and parts thereof for products and services. Life Science uses may utilize office, laboratory, light manufacturing, or other types of uses.

Light Industrial means a non-retail use that provides for the fabrication or production of goods, by hand or machinery, for distribution to retailers or wholesalers for resale off the premises, primarily involving the assembly, packaging, repairing, or processing of previously prepared materials.

Live/Work Units means a structure or portion of a structure combining a residential living space for a household or group of persons with an integrated work space principally used by one or more of the residents of that unit. Work spaces uses in a Live/Work Unit must comply with the other non-residential uses allowed within the respective land use District.

~~**Medical Cannabis Dispensary** means a use as defined by Section 3301(f) of the San Francisco Health Code.~~

Maker Space means uses for contemporary forms of small-scale manufacturing, repair, and post-manufacturing activities. Maker space should typically include a retail component, and may include several other uses within a single space, including but not limited to, Light Industrial (for example, craft, industrial arts and design, robotics, woodwork, jewelry manufacture, clothing and apparel manufacture, and food and beverage production), office and research and development (e.g., digital technologies and electronics, 3D printing, graphic design), and Neighborhood Retail Sales and Services associated with the foregoing (e.g., food and beverage tasting and sale, arts and crafts sales, jewelry sales), among many others. For the purposes of size limitations established in Section II.D.4, Maker Space is considered Neighborhood Retail Sales and Service.

Mitigation Measures means those mitigation measures from the Candlestick Point/Hunters Point Shipyard Phase 2 Project EIR imposed as conditions of approval of the

amendments to this Plan as set forth in Resolution No. 347-2010, as amended or modified from time to time consistent with CEQA.

Neighborhood Retail Sales and Services means a commercial use that provides goods and/or services directly to the customer, whose primary clientele is customers who live or work nearby and who can access the establishment directly from the street on a walk-in basis. This use may provide goods and/or services to the business community, provided that it also serves the general public. This use would include those that sell, for example, groceries, personal toiletries, magazines, smaller scale comparison shopping; personal services such as laundromats, health clubs, formula retail outlets, hair or nail salons; medical services including, but not limited to, urgent care facilities and standalone emergency rooms, but excluding hospitals; and uses designed to attract customers from the surrounding neighborhood. Retail uses can also include outdoor activity areas, open air sales areas, and walk-up facilities (such as ATMs or window service) related to the retail sale or service use and need not be granted separate approvals for such features.

New City Regulations means both City Regulations adopted after the 2010 Plan Amendment Date or a change in Existing City Regulations, including any amendment to this Plan or the Plan Documents, effective after the 2010 Plan Amendment Date.

Nighttime Entertainment means entertainment activities such as dance halls, discotheques, nightclubs, and similar evening-oriented entertainment activities generally involving amplified music, either live or recorded, as well as restaurants and bars, and other venues or spaces used for different uses during the day that present such activities. It excludes Adult Entertainment.

Non-Retail Sales and Services means a commercial or office use that provides goods and/or services primarily to other businesses rather than to the general public and that may include by way of example and not limitation, wholesale sales, sale, rental, installation, servicing and/or repair of business goods and equipment.

Office means a use within a structure or portion thereof intended or primarily suitable for occupancy by persons or entities that perform, provide for their own benefit, or provide to others at that location services including the following: professional; medical; banking; insurance; management; consulting; technical; sales; and design; and the non-accessory office functions of manufacturing and warehousing businesses; multimedia and digital arts, software development, web design, electronic commerce, and information technology; administrative services; and professional services. This use does not include retail uses; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; or wholesale shipping, receiving and storage.

OPA Rules means rules established by the Agency Commission for property owner participation in redevelopment activities consistent with the provisions of this Plan within the Project Area and consistent with the CRL.

Open Space means space that is retained primarily in an unimproved, natural state. Open Space may be used for passive recreational activities, such as hiking and picnicking, and may include facilities related to such passive recreational uses.

Owner Participation Agreement or **OPA** means a binding agreement between a property owner and the Agency by which the participant agrees to rehabilitate, develop, use and maintain the property in conformance with this Plan.

Parking means the storage of vehicles ~~accessory~~Accessory to a ~~principle~~principal or secondary residential or commercial use. Such storage can be in the form of independently accessible parking spaces, non-independently accessible parking spaces including those accessed on parking lifts or through the use of valet. Parking spaces need not be on the same lot or block to the use it serves.

Parks means publicly owned, or privately owned and publicly accessible, open space improved with either active recreational amenities such as playing fields, sporting courts, and small performance spaces and/or passive recreational amenities such as trails, picnic areas, and fields.

Performance Arts means a use that includes performance, exhibition, rehearsal, production, or post-production of any of the following: dance, music, dramatic art, film, video, and other visual, performance and sound arts and craft.

Plan Documents means the Business Occupant Re-Entry Policy, Implementation Plan, Hunters Point Shipyard Phase 1 Design for Development, Hunters Point Shipyard Phase 2 Design for Development, Relocation Plan and OPA Rules.

Planning Commission means the Planning Commission of the City and County of San Francisco, California.

Planning Department means the Planning Department of the City and County of San Francisco.

Post-Secondary Institutions means a use that is certified by the Western Association of Schools and Colleges that provides post-secondary educational services such as a school, college or university.

Priority Policies means the eight priority policies stated in Section 101.1, Master Plan Consistency and Implementation, of the City's Planning Code.

Public Recreation means privately owned recreational areas that are open to the general public. This use may include may include hiking trails, playgrounds, public parks, sports

fields, community gardens, golf courses, marinas, and tennis courts as well as accessory uses such as maintenance facilities, parking, and concession areas.

Public Trust means collectively the common law public trust for commerce, navigation and fisheries and the statutory trust imposed by the Granting Act.

Real Property means land, including land under water and waterfront property; buildings, structures, fixtures, and improvements on the land; any property appurtenant to or used in connection with the land; every estate, interest, privilege, easement, franchise, and right in land, including rights-of-way, terms for years, and liens, charges, or encumbrances by way of judgment, mortgage, or otherwise and the indebtedness secured by such liens.

Recreational Facility means a use that provides social, fraternal, counseling, athletic or other recreational gathering services to the community.

Recycled Water Treatment Facility is a centralized facility for treating wastewater to be used for non-potable uses in the Project Area and that abides by odor control measures established in the Phase 2 Design for Development. Passive square footage (i.e., non-administrative office space) within such facility shall not be not included as part of or subject to square footage limitations in Section II.D.4.

Regional Retail Sales and Services means a commercial use that provides goods and/or services directly to the customer, whose primary clientele is customers who live throughout the surrounding region and may include both small and large format tenants up to 120,000 square feet. This use would include those who sell apparel, electronics, furniture, durable goods, specialty items, formula retail outlets, and other more expensive, and less frequently purchased items; beyond the surrounding neighborhood. Regional Retail sales and services can include counter and other walk-up facilities as well as adjacent outdoor activity areas accessory to such uses. Includes movie theaters and related or similar uses.

Religious Institution means a use that provides religious services to the community such as a church, temple or synagogue.

Relocation Plan means a document approved by the Agency Commission that establishes how the Agency and/or developers shall assist persons, business concerns and others displaced from the Project Area by redevelopment activities of or assisted by the Agency in finding new locations in accordance with applicable State and Federal law.

Residential Care Facility means medical use that provides lodging, board, and care for one day or more to persons in need of specialized aid by personnel licensed by the State but does not provide outpatient services.

Residential Use means a use that includes for sale and rental housing units, including Dwelling Units, Live/Work Units, and Group Housing

Restaurant means a full service or self service retail facility primarily for eating use that provides ready-to-eat food to customers for consumption on or off the premises, which may or may not provide seating, and that may include service of liquor under ABC licenses [those explicitly for any alcoholic service in association with a restaurant]. Food may be cooked or otherwise prepared on the premises.

School Facilities Impact Fee means the sum payable to the San Francisco Unified School District pursuant to Government Code Section 65995.

Short-Term Rental has the meaning established in Article 41A of the Administrative Code (as it may be amended from time to time), and, subject to compliance with regulations of the City's Office of Short-Term Rentals (or its successor), is allowed within Residential Uses unless otherwise prohibited by applicable private covenants or similar restrictions.

Secondary School means a use that provides grade 9-12 education and may be either public or private.

State means the State of California.

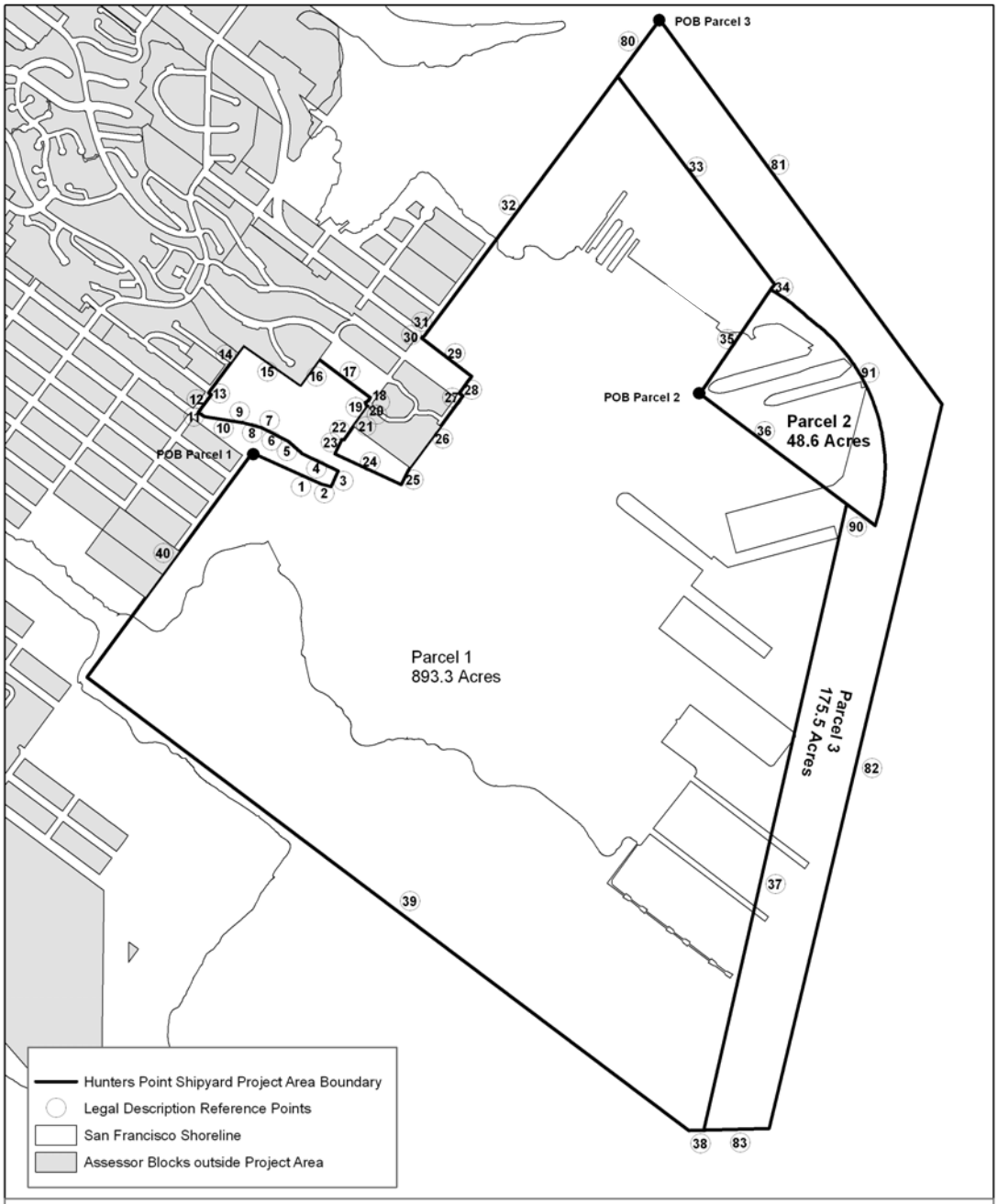
Stormwater Best Management Practice (BMP) means constructed facilities or measures to help protect receiving water quality and control stormwater quantity, also referred to as stormwater controls.

Supportive Housing means affordable housing developments with integrated services that are not required as a condition of occupancy and that serve high needs populations including but not limited to low income senior citizens, youth transitioning out of foster care, adults with developmental disabilities, individuals and families who are homeless or at risk of homelessness, and persons with AIDS.

Taxing Agencies means all public entities that have the authority to tax property within the Project Area, including the State, the City, BART, San Francisco Unified School District, City College of San Francisco, Bay Area Air Quality Management District and any district or other public corporation.

Telecommunication/Fiber System means equipment for the transmission, reception or relay of analogue, digital and optical fiber signals.

Use means the purpose for which land or a structure, or both, are designed, constructed, arranged or intended, or for which they are occupied or maintained, let or leased.



Map 1: Project Area Boundary Map

Hunters Point Shipyard Redevelopment Plan
Office of Community Investment and Infrastructure
2018

940 470 0 940 Feet

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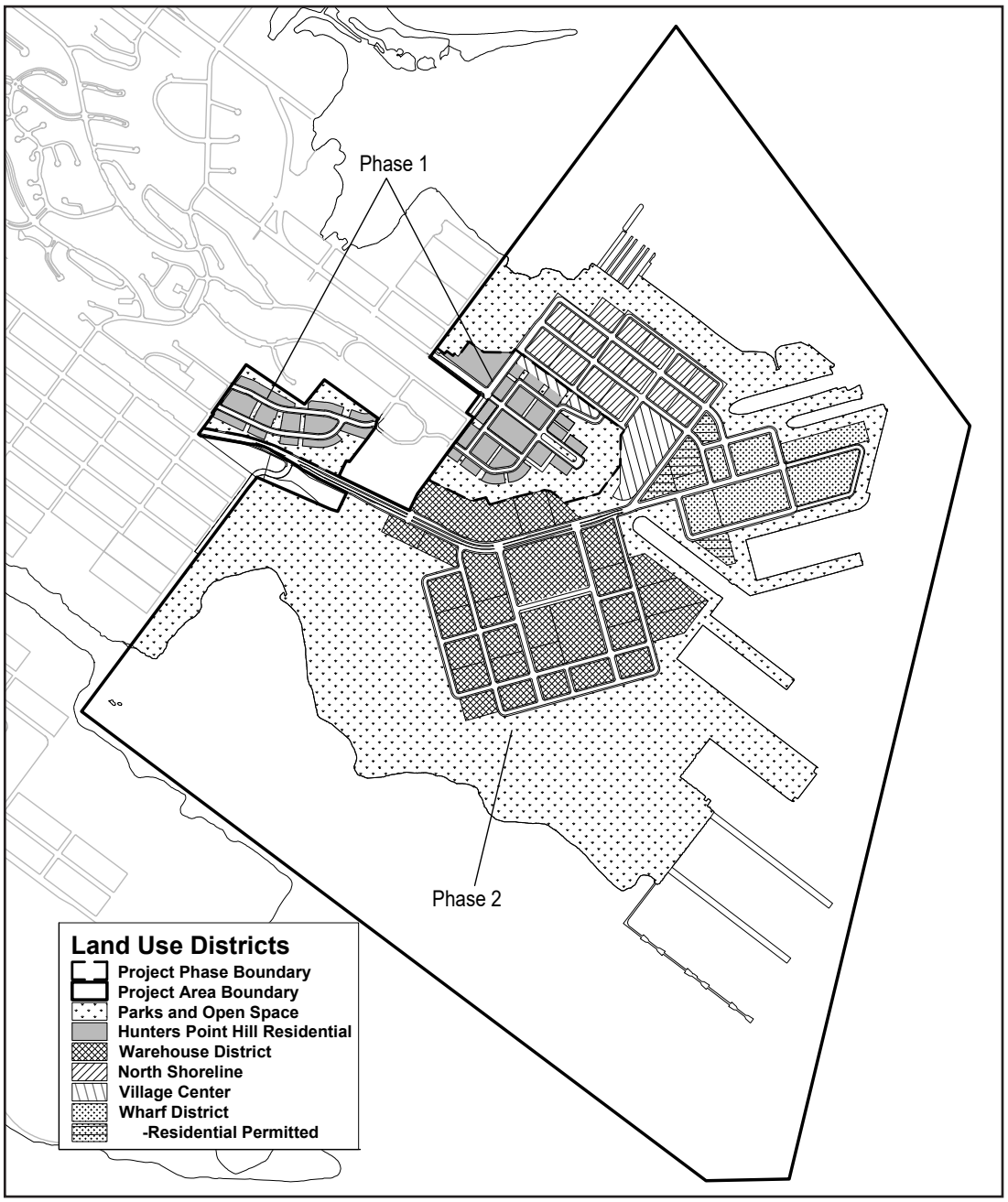

Map 2: Land Use Districts Map

Hunters Point Shipyard Redevelopment Plan
Office of Community Investment and Infrastructure
2018

1,000 500 0 1,000 Feet

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W E
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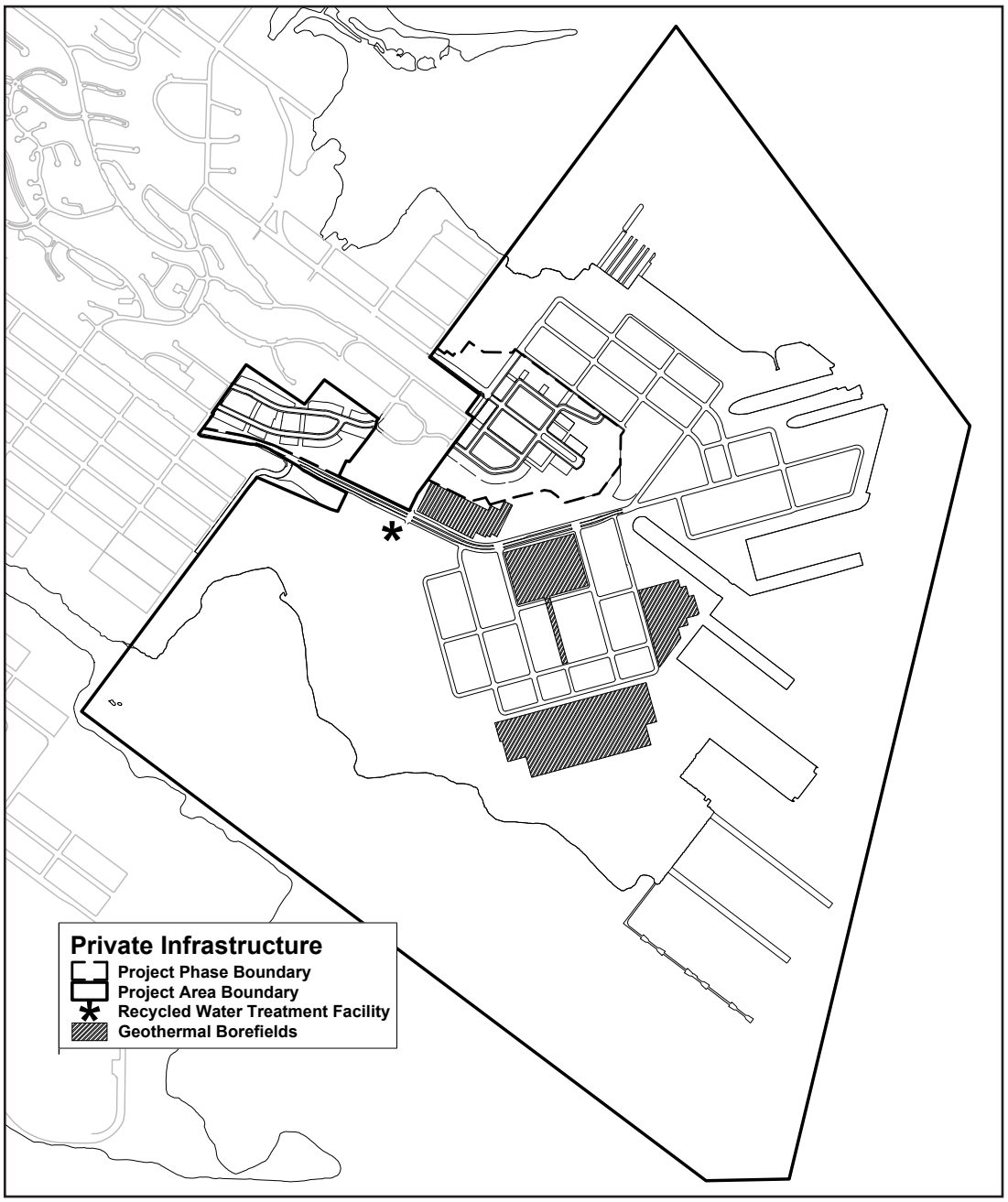

Map 2A: Private Infrastructure

Hunters Point Shipyard Redevelopment Plan
Office of Community Investment and Infrastructure
2018

1,000 500 0 1,000 Feet

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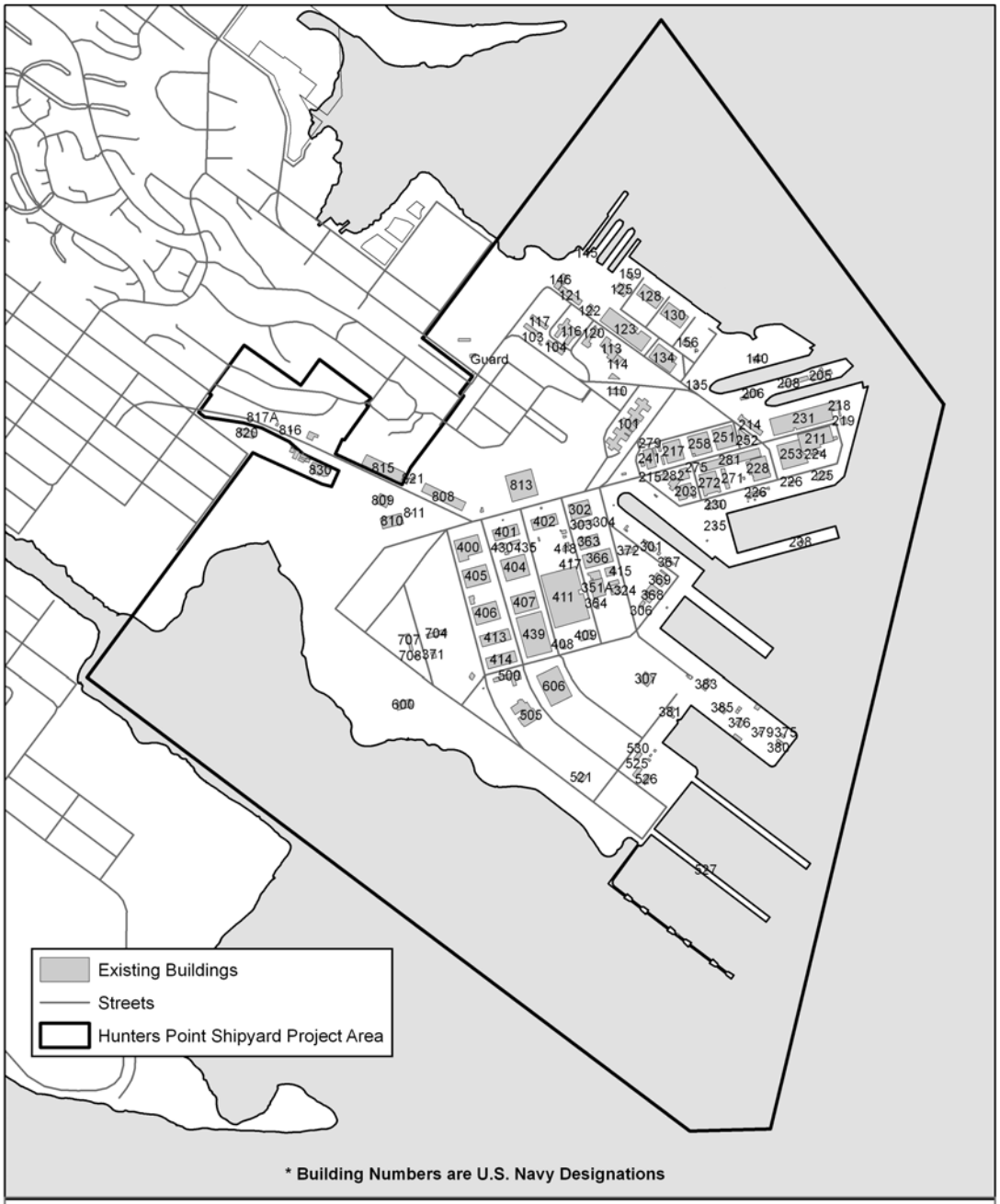
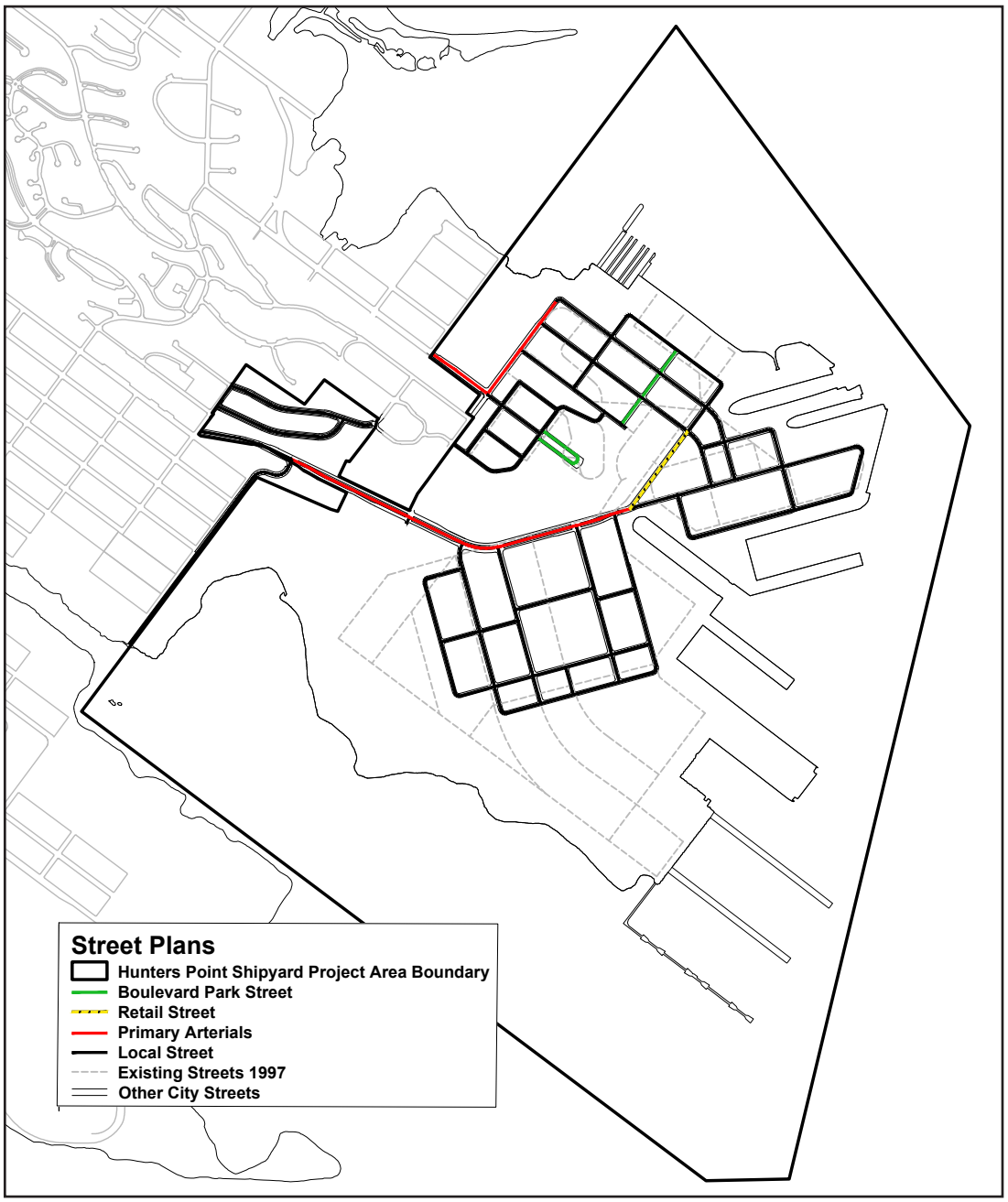


Map 3: Existing Buildings Map

Hunters Point Shipyard Redevelopment Plan
Office of Community Investment and Infrastructure
2018

500 0 1,000 Feet

N W E S



Map 4: Street Plans

Hunters Point Shipyard Redevelopment Plan
Office of Community Investment and Infrastructure
2018

1,000 500 0 1,000 Feet

N
W E
S

Vocational/Job Training Facility means a use that provides job training, and may also provide vocational counseling and job referrals and or office or light industrial activities for education purposes.

REDEVELOPMENT PLAN MAPS

Map 1: Boundary Map

Map 2: Land Use Districts Map

Map 2A: Private Infrastructure Map

Map 3: Existing Buildings

~~Maps~~Map 4~~A, 4B and 4C~~: Street Plans

Attachment A: Legal Description of the Project Area

The area consists of real property within the City and County of San Francisco, State of California, more particularly described as follows:

P A R C E L O N E

Beginning at the point of intersection of the southeasterly line of Fitch Street and the northeasterly line of Palou Avenue as said streets are shown upon the "Map of the property of the South San Francisco Homestead and Railroad Association", filed April 15, 1867, in Book 2, "A" and "B" of Maps, Page 39, in the County Recorder's Office of the City and County of San Francisco, said point having California Coordinate values: N.452,070.23 E.1,457,299.61 (Zone III); and and running thence from said Point of Beginning easterly, northerly and westerly along the following series of courses and distances:

#1	S.66°24'34"E.	774.37 feet;
#2	S.74°08'24"E.	68.77 feet;
#3	N.25°47'36"E.	177.17 feet;
#4	N.65°00'41"W.	377.67 feet;
#5	N.51°35'29"W.	202.50 feet;
#6	N.65°31'39"W	227.49 feet;
#7	N.67°43'50"W.	60.90 feet;
#8	N.69°21'07"W.	156.62 feet;
#9	N.74°41'13"W.	78.46 feet;
#10	N.79°19'57"W.	383.85 feet to the above referenced northeasterly line of Palou Avenue; thence along said northeasterly line
#11	N.53°17'47"W.	25.88 feet to the southeasterly line of Griffith Street; thence along said southeasterly line
#12	N.36°42'13"E.	200.00 feet to the southwesterly line of Oakdale Avenue; thence along said southwesterly line
#13	N.53°17'47"W.	32.00 feet to the centerline of Griffith Street; thence along said centerline
#14	N.36°42'13"E.	600.00 feet to the centerline of McKinnon Avenue; thence along said centerline
#15	S.53°17'47"E.	664.00 feet to the centerline of Fitch Street; thence along said centerline
#16	N.36°42'13"E.	319.20 feet to the northeasterly line of LaSalle Avenue; thence along said northeasterly line
#17	S.53°17'47"E.	632.06 feet to a point in the northwesterly
#18	line of Earl Street; thence southwesterly 69.24 feet along the arc of a curve to the right whose radial bearing is N.53°17'47"W. having a radius of 105.00 feet, through a central angle of 37°47'02"; thence southeasterly along the radial bearing produced	
#19	S.15°30'45"E.	50.00 feet to a point on a curve to the right

#20 having a radial bearing S.15°30’45”E. and having a radius of 20.00 feet, through a central angle of 48°28’07” and an arc distance of 16.92 feet, said point also being located on the centerline of Earl Street, thence along said centerline

#21 S.36°42’13”W. 398.94 feet; thence southerly, easterly and northerly the following series of courses and distances:

#22 N.64°12’01”W. 22.16 feet;

#23 S.24°37’25”W. 158.00 feet;

#24 S.64°12’01”E. 727.00 feet;

#25 N.25°47’59”E. 174.85 feet;

#26 N.36°42’13”E. 890.12 feet;

#27 N.53°17’47”W. 48.00 feet;

#28 N.36°42’13”E. 206.90 feet to the southwesterly line of Innes Avenue, thence along said southwesterly line

#29 N.53°17’47”W. 640.93 feet to the centerline of Earl Street; thence along said centerline

#30 N.36°42’13”E. 40.00 feet to the centerline of Innes Avenue; thence along said centerline

#31 S.53°17’47”E. 32.00 feet to the southeasterly line of Earl Street; thence along said southeasterly line

#32 N.36°42’13”E. 3,151.02 feet to the 1948 Bulkhead Line as shown on the map entitled “Real Estate Summary Map Navfac Drwg No. 1045757” on WestDiv, San Bruno, California; thence southeasterly along said 1948 Bulkhead Line

#33 S.35°56’38”E. 2,533.02 feet; thence leaving said Bulkhead line

#34 S.30°50’40”W. 50.69 feet to the most northerly point on the parcel of land described in the deed recorded in Volume 3677, Official Records of the City and County of San Francisco, at Page 349, thence southwesterly and southeasterly around said parcel of land

#35 S.36°42’09”W. 1,179.13 feet;

#36 S.53°17’47”E. 1,826.56 feet to the aforementioned 1948 Bulkhead Line; thence southwesterly along said 1948 Bulkhead Line

#37 S.12°07’46”W. 6,384.03 feet to a point on the County line dividing the County of San Mateo and the County of San Francisco; thence northwesterly along said County line

#38 N.88°54’38”W. 127.35 feet to the northeasterly line of Bancroft Avenue extended; thence along said northeasterly line extended

#39 N.53°17’47”W .7,483.89 feet to the southeasterly line of Fitch Street; thence along said southeasterly line

#40 N.36°42’13”E. 2,800.00 feet to the Point of Beginning of this description.

Containing 893.3 acres of land more or less.

P A R C E L T W O
(The original 48-acre more or less shipyard in the northeast corner of the Naval Base)

Beginning at a point on the northeasterly line of Evans Avenue extended, distant thereon 450 feet southeasterly from the southeasterly line of Boalt Street extended, as said streets are shown on the "map of the property of the South San Francisco Homestead and Railroad Association", filed April 15, 1867, in Book 2, "A" and "B" of maps, page 39, in the County Recorder's Office of the City and County of San Francisco; and running thence northeasterly on a line drawn parallel with said southeasterly line of Boalt Street

#35 N.36°42'09"E. 1,179.13 feet to a point on a curve to the right
#91 with a radius of 1,800 feet, whose center is a point on the northeasterly line of Galvez Avenue, distant thereon 250 feet southeasterly from the southeasterly line of Alvord Street extended, and the radial bearing to said centerpoint being S.21°45'52"W.; thence southeasterly, southerly, and southwesterly along said curve to the right with a radius of 1,800 feet through a central angle of 86°48'43", a distance of 2,727.28 feet to a point on the northeasterly line of Evans Avenue extended, said point having a radial bearing S.71°25'25"E. to the centerpoint of said curve; thence northwesterly along said line of Evans Avenue and the extension thereof the following two courses:
#90 N.53°17'47"W. 348.11 feet;
#36 N.53°17'47"W. 1,826.56 feet to the Point of Beginning

Containing 48.6 acres of land more or less.

P A R C E L T H R E E
(The strip of underwater land lying between the Pierhead and Bulkhead lines)

Beginning at the point of intersection of the direct extension northeasterly of the southeasterly line of Earl Street as shown on the map referenced in Parcel Two above, with the United States Pierhead Line as shown on the map entitled "Hunters Point Naval Shipyard, General Development Map. Key Map No. 1174922" on file at the Department of the Navy, Western Division, in San Bruno, California; thence southeasterly and southwesterly along said Pierhead Line the following courses and distances:

#81 S.35°56'38"E. 4,619.53 feet more or less;
#82 S.13°41'06"W. 7,542.33 feet more or less to the point of intersection with the line dividing the City and County of San Francisco and San Mateo County, thence northwesterly along said boundary line
#83 N.88°54'38"W. 543.06 feet more or less to the easterly line of Parcel One above described; thence northeasterly, easterly and northwesterly along the easterly and northeasterly lines of Parcels One and Two above described to the southeasterly line of Earl Street extended, thence northeasterly along the direct extension of the southeasterly line of Earl Street

#80 N.36°42’13”E. 838.14 feet more or less to the Point of Beginning.

Containing 175.5 acres of land more or less.

Notes:

1. Numbers (#’s) indicate course numbers as referenced on the Hunters Point Shipyard Redevelopment Project Area Boundary Map.
2. Bearings shown above are referenced to the California Coordinate System Zone III.

Attachment B: Authorized Public Improvements

- Public open spaces including parks, plazas, habitat restoration, sports facilities and playgrounds
- Facilities in parks such as tables, waste receptacles, signage, landscaping, market stalls and maintenance facilities
- Public roadways and other walkways, roadways, lanes, and connectors
- Medians, curbs, bulb-outs and gutters
- Sidewalks, street trees, landscaping, and street furnishings
- Street, sidewalk, street lights, and park lighting
- Traffic signals, control centers, street signage, and pavement striping
- Parking meters
- Potable water distribution and fire suppression facilities
- Reclaimed water facilities and irrigation distribution
- Sanitary sewer facilities and pump stations
- Storm drains, storm water sewer, treatment and conveyance facilities
- Natural gas, electric, telephone and telecommunication facilities
- Utilities and utility relocation
- MUNI light rail/bus/transit facilities, cantenary wires, communication facilities, transit stops and markings, poles, eyebolts and substations as needed and related improvements
- Arts facilities and community centers
- Bridges, trails, and staircases
- Seawall upgrades, small boat harbor, piers, railings, and other shoreline improvements
- Retaining walls, remediation caps, and permanent grading
- Public art installations and interpretive signage
- Education and job training centers
- Libraries
- Improvements to existing roadways, streetscapes and utilities
- Improvements to historic buildings
- Police and fire stations
- School facilities
- Erosion control features
- Street, lighting, utility, and related improvements to Innes Avenue and Hunters Point Boulevard outside the Project Area
- Any public improvements to be accepted by the City or the Agency (including, without limitation, distribution pipes for recycled water facility) in connection with any private sustainability infrastructure such as recycled water facilities, solar energy facilities, geothermal heating and cooling systems, and decentralized stormwater facilities.
- Additional temporary, interim and/or permanent facilities and improvements to the foregoing

Attachment C: Planning Code Section 314

SEC. 314. - CHILD-CARE REQUIREMENTS FOR OFFICE AND HOTEL DEVELOPMENT PROJECTS.

When the words "this Section" appear in Sections 314.1 through 314.8, they shall be construed to mean "Sections 314.1 through 314.8."

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.1. - DEFINITIONS.

The following definitions shall govern interpretation of this Section:

(a) "Child-care facility" shall mean a child day-care facility as defined in California Health and Safety Code Section 1596.750.

(b) "Child care provider" shall mean a provider as defined in California Health and Safety Code Section 1596.791.

(c) "Commission" shall mean the City Planning Commission.

(d) "DBI" shall mean the Department of Building Inspection.

(e) “Department" shall mean the Department of City Planning.

(f) "First certificate of occupancy" shall mean either a temporary certificate of occupancy or a Certificate of Final Completion and Occupancy, as defined in San Francisco Building Code Section 109, whichever is issued first.

(g) "Hotel" shall mean a building containing six or more guest rooms as defined in San Francisco Housing Code Section 401 intended or designed to be used, or which are used, rented, or hired out to be occupied, or which are occupied for sleeping purposes and dwelling purposes by guests, whether rent is paid in money, goods, or services, including motels as defined in San Francisco Housing Code Section 401.

(h) "Hotel use" shall mean space within a structure or portion thereof intended or primarily suitable for the operation of a hotel, including all office and other uses accessory to the renting of guest rooms, but excluding retail uses and office uses not accessory to the hotel use.

(i) "Household of low income" shall mean a household composed of one or more persons with a combined annual net income for all adult members which does not exceed the

qualifying limit for a lower-income family of a size equivalent to the number of persons residing in such household, as set forth for the County of San Francisco in California Administrative Code Section 6932.

(j) "Household of moderate income" shall mean a household composed of one or more persons with a combined annual net income for all adult members which does not exceed the qualifying limit for a median-income family of a size equivalent to the number of persons residing in such household, as set forth for the County of San Francisco in California Administrative Code Section 6932.

(k) "Licensed child-care facility" shall mean a child-care facility which has been issued a valid license by the California Department of Social Ser-vices pursuant to California Health and Safety Code Sections 1596.80—1596.875, 1596.95—1597.09, or 1597.30—1597.61.

(l) "Net addition of gross square feet of hotel space" shall mean gross floor area as defined in Planning Code Section 102.9 to be occupied by, or primarily serving, hotel use, less the gross floor area in any structure demolished or rehabilitated as part of the proposed hotel development project space used primarily and continuously for office or hotel use and not accessory to any use other than office or hotel use for five years prior to Planning Commission approval of the hotel development project subject to this Section, or for the life of the structure demolished or rehabilitated, whichever is shorter.

(m) "Net addition of gross square feet of office space" shall mean gross floor area as defined in Planning Code Section 102.9 to be occupied by, or primarily serving, office use, less the gross floor area in any structure demolished or rehabilitated as part of the proposed office development project space used primarily and continuously for office or hotel use and not accessory to any use other than office or hotel use for five years prior to Planning Commission approval of the office development project subject to this Section, or for the life of the structure demolished or rehabilitated, whichever is shorter.

(n) "Nonprofit child-care provider" shall mean a child-care provider that is an organization organized and operated for nonprofit purposes within the provisions of California Revenue and Taxation Code Sections 23701—23710, inclusive, as demonstrated by a written determination from the California Franchise Tax Board exempting the organization from taxes under Revenue and Taxation Code Section 23701.

(o) "Nonprofit organization" shall mean an organization organized and operated for nonprofit purposes within the provisions of California Revenue and Taxation Code Sections 23701—23710, inclusive, as demonstrated by a written determination from the California Franchise Tax Board exempting the organization from taxes under Revenue and Taxation Code Section 23701.

(p) "Office development project" shall mean any new construction, addition, extension, conversion or enlargement, or combination thereof, of an existing structure which includes any gross square feet of office space.

(q) "Office use" shall mean space within a structure or portion thereof intended or primarily suitable for occupancy by persons or entities which perform, provide for their own benefit, or provide to others at that location services including, but not limited to, the following: Professional, banking, insurance, management, consulting, technical, sales and design, or the office functions of manufacturing and warehousing businesses, but excluding retail uses; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; wholesale shipping, receiving and storage; design showcases or any other space intended and primarily suitable for display of goods; and child-care facilities. This definition shall include all uses encompassed within the meaning of Planning Code Section 219.

(r) "Retail use" shall mean space within any structure or portion thereof intended or primarily suitable for occupancy by persons or entities which supply commodities to customers on the premises including, but not limited to, stores, shops, restaurants, bars, eating and drinking businesses, and the uses defined in Planning Code Sections 218 and 220 through 225, and also including all space accessory to such retail use.

(s) "Sponsor" shall mean an applicant seeking approval for construction of an office or hotel development project subject to this Section and such applicant's successors and assigns.

(Added by Ord. 411-85, App, 9/6/85; amended by Ord. 441-86, App. 11/13/86; Ord. 22-00, File No. 991877, App. 2/18/2000; Ord. 76-03, File No. 020592, App. 5/2/2003)

SEC. 314.2. - FINDINGS.

The Board hereby finds and declares as follows:

Large-scale office and hotel developments in the City and County of San Francisco (hereinafter "City") have attracted and continue to attract additional employees to the City, and there is a causal connection between such developments and the need for additional child-care facilities in the City, particularly child-care facilities affordable to households of low and moderate income.

Office and hotel uses in the City are benefitted by the availability of child care for persons employed in such offices and hotels close to their place of employment. However, the supply of child care in the City has not kept pace with the demand for child care created by these new employees. Due to this shortage of child care, employers will have difficulty in securing a labor force, and employees unable to find accessible and affordable quality child care will be forced either to work where such services are available outside of San

Francisco, or leave the work force entirely, in some cases seeking public assistance to support their children. In either case, there will be a detrimental effect on San Francisco's economy and its quality of life.

Projections from the EIR for the Downtown Plan indicate that between 1984 and 2000 there will be a significant increase of nearly 100,000 jobs in the C-3 District under the Downtown Plan. Most of that employment growth will occur in office and hotel work, which consist of a predominantly female work force.

According to the survey conducted of C-3 District workers in 1981, 65 percent of the work force was between the ages of 25—44. These are the prime childbearing years for women, and the prime fathering years for men. The survey also indicated that only 12 percent of the C-3 District jobs were part-time, leaving up to 88 percent of the positions occupied by full-time workers. All of these factors point to the inevitable increase in the number of working parents in the C-3 District and the concomitant increase in need for accessible, quality child-care.

Presently, there exists a scarcity of child care in the C-3 District and citywide for all income groups, but the scarcity is more acutely felt by households of low and moderate income. Hearings held on April 25, 1985 before the Human Services Committee of the San Francisco Board of Supervisors documented the scarcity of child care available in the C-3 District, the impediments to child-care program startup and expansion, the increase in the numbers of children needing care, and the acute shortage of supply throughout the Bay Area. The Board of Supervisors also takes legislative notice of the existing and projected shortage of child-care services in the City as documented by the Child-Care Information Kit prepared by the California Child-Care Resources and Referral Network located in San Francisco.

The scarcity of child care in the City is due in great part to large office and hotel development, both within the C-3 District and elsewhere in the City, which has attracted and will continue to attract additional employees and residents to the City. Some of the employees attracted to large office and hotel developments are competing with present residents for the few openings in child-care programs available in the City. Competition for child care generates the greatest pressure on households of low and moderate income. At the same time that large office and hotel development is generating an increased demand for child care, it is improbable that factors inhibiting increased supply of child care will be mitigated by the marketplace; hence, the supply of child care will become increasingly scarce.

The Master Plan encourages "continued growth of prime downtown office activities so long as undesirable consequences of such growth can be avoided" and requires that there be the provision of "adequate amenities for those who live, work and use downtown." In light of these provisions, the City should impose requirements on developers of office and hotel projects designed to mitigate the adverse effects of the expanded employment facilitated by such projects. To that end, the City Planning Commission is authorized to promote affirmatively the policies of the San Francisco Master Plan through the imposition

of special child-care development or assessment requirements. It is desirable to impose the costs of the increased burden of providing child care necessitated by such office and hotel development projects directly upon the sponsors of new development generating the need. This is to be done through a requirement that the sponsor construct child-care facilities or pay a fee into a fund used to foster the expansion of and to ease access to affordable child care as a condition of the privilege of development.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.3. - APPLICATION.

(a) This Section shall apply to office and hotel development projects proposing the net addition of 50,000 or more gross square feet of office or hotel space.

(b) This Section shall not apply to:

(1) Any development project other than an office or hotel development project, including that portion of an office or hotel development project consisting of a retail use;

(2) That portion of an office or hotel development project located on property owned by the United States or any of its agencies;

(3) That portion of an office or hotel development project located on property owned by the State of California or any of its agencies, with the exception of such property not used exclusively for a governmental purpose;

(4) That portion of an office or hotel development project located on property under the jurisdiction of the Port of San Francisco or the San Francisco Redevelopment Agency where the application of this Section is prohibited by State or local law; and

(5) Any office or hotel development project approved by the Planning Commission prior to the effective date of this Section.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.4. - IMPOSITION OF CHILD CARE REQUIREMENT.

(a) (1) The Department or the Commission shall impose conditions on the approval of building or site permit applications for office or hotel development projects covered by this Section in order to mitigate the impact on the availability of child-care facilities which will be caused by the employees attracted to the proposed development project. The conditions shall require that the sponsor

construct or provide a child-care facility on or near the site of the development project, either singly or in conjunction with the sponsors of other office or hotel development projects, or arrange with a nonprofit organization to provide a child-care facility at a location within the City, or pay an in-lieu fee to the City Treasurer which shall thereafter be used exclusively to foster the expansion of and ease access to child-care facilities affordable to households of low or moderate income.

(2) Prior to either the Department's or the Commission's approval of a building or site permit for a development project subject to this Section, the Department shall issue a notice complying with Planning Code Section 306.3 setting forth its initial determination of the net addition of gross square feet of office or hotel space subject to this Section.

(3) Any person may appeal the initial determination by delivering an appeal in writing to the Department within 15 days of such notice. If the initial determination is not appealed within the time allotted, the initial determination shall become a final determination. If the initial determination is appealed, the Commission shall schedule a public hearing prior to the approval of the development project by the Commission or the Department to determine the net addition of gross square feet of office or hotel space subject to this Section. The public hearing may be scheduled separately or simultaneously with a hearing under City Planning Code Sections 139, 306.2, 309(h), 313.4, 315.3 or a Discretionary Review hearing under San Francisco Business and Tax Regulations Code Section 26. The Commission shall make a final determination of the net addition of gross square feet at the hearing.

(4) The final determination of the net addition of gross square feet of office or hotel space subject to this Section shall be set forth in the conditions of approval relating to the child-care requirement in any building or site permit application approved by the Department or the Commission. The Department shall notify the Treasurer of the final determination of the net addition of gross square feet of office or hotel space subject to this ordinance within 30 days of the date of the final determination. The Department shall notify the Treasurer and DBI that the development project is subject to this Section prior to the time the Department or the Commission approves the permit application.

(b) (1) The sponsor of a development project subject to this (1) Section may elect to provide a child-care facility on the premises of the development project for the life of the project to meet the requirements of this Section. The sponsor shall, prior to the issuance of the first certificate of occupancy by DBI for the development project, provide proof to the Treasurer and the Department that:

(A) A space on the premises of the development project has been provided to a nonprofit child-care provider without charge for rent,

utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease and an operating agreement between the sponsor and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Net add. gross sq. ft. off. or hotel space	***X .01 =***	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel of the development project is less than 300,000 square feet, the child-care facility may have a minimum gross floor area of 2,000 square feet or the area determined according to the above formula, whichever is greater; and

(D) A notice of special restriction has been recorded stating that the development project is subject to this Section and is in compliance herewith by providing a child-care facility on the premises.

(2) The sponsor of a development project subject to this Section in conjunction with the sponsors of one or more other development projects subject to this Section located within ½ mile of one another may elect to provide a single child-care facility on the premises of one of their development projects for the life of the project to meet the requirements of this Section. The sponsors shall, prior to the issuance of the first certificate of occupancy by DBI for any one of the development projects complying with this part, provide proof to the Treasurer and the Planning Department that:

(A) A space on the premises of one of their development projects has been provided to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease and an operating agreement between the sponsor in whose project the facility will be located and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Combined net add. gross sq. ft. office or hotel space of all participating dev. projects	***X .01 =***	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel space of all participating projects is less than 300,000 square feet, the child-care facility may have a minimum gross floor area of 2,000 square feet or the area determined according to the above formula, whichever is greater; and

(D) A written agreement binding each of the participating project sponsors guaranteeing that the child-care facility will be provided for the life of the development project in which it is located, or for as long as there is a demonstrated demand, as determined under Subsection (h) of this Section 314.4, has been executed and recorded in the chain of title of each participating building.

(3) The sponsor of a development project subject to this Section, either singly or in conjunction with the sponsors of one or more other development projects subject to this Section located within ½ mile of one another, may elect to provide a single child-care facility to be located within one mile of the development project(s) to meet the requirements of this Section. Subject to the discretion of the Department, the child-care facility shall be located so that it is reasonably accessible to public transportation or transportation provided by the sponsor(s). The sponsor(s) shall, prior to the issuance of the first certificate of occupancy by DBI for any development project complying with this part, provide proof to the Treasurer and the Planning Department that:

(A) A space has been provided to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease or sublease and an operating agreement between the sponsor(s) and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Combined net add. gross sq. ft. office or hotel space of all participating dev. projects	**x .01 =**	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel space of all participating projects is less than 300,000 square feet, the child-care facility may have a

minimum gross floor area of 2,000 square feet or the area determined according to the above formula, whichever is greater; and

(D) A written agreement binding each of the participating project sponsors, with a term of 20 years from the date of issuance of the first certificate of occupancy for any development project complying with this part, guaranteeing that a child-care facility will be leased or subleased to one or more nonprofit child-care providers for as long as there is a demonstrated demand under Subsection (h) of this Section 314.4 has been executed and recorded in the chain of title of each participating building.

(4) The sponsor of a development project subject to this Section may elect to pay a fee in lieu of providing a child-care facility. The fee shall be computed as follows:

Net add. gross sq. ft. office or hotel space	***X $1.00 = Total Fee***

Upon payment of the fee in full to the Treasurer and upon request of the sponsor, the Treasurer shall issue a certification that the fee has been paid. The sponsor shall present such certification to the Department prior to the issuance by DBI of the first certificate of occupancy for the development project.

(5) The sponsor of a development project subject to this Section may elect to satisfy its child-care requirement by combining payment of an in-lieu fee to the Child Care Capital Fund with construction of a child-care facility on the premises or providing child-care facilities near the premises, either singly or in conjunction with other sponsors. The child-care facility to be constructed on-site or provided near-site under this election shall be subject to all of the requirements of whichever of Parts (b)(1), (2) and (3) of this Section 314.4 is applicable, and shall have a minimum floor area of 3,000 gross square feet. If the net addition of gross square feet of office or hotel space of all participating projects is less than 300,000 square feet, the minimum gross floor area of the facility shall be 2,000 square feet. The in-lieu fee to be paid under this election shall be subject to all of the requirements of Part (b)(4) of this Section 314.4 and shall be determined by the Commission according to the following formula:

Net. add. gross sq. ft. space - subject project	***[***	***Net. add. gross sq. ft. space <u>subject project</u> Net. add. gross sq. ft. space all participating projects***	***X***	***Sq. ft. child-care facility***	***X100***	***X$1.00***	***]***	***=***	***Total Fee for Subject Project***

(6) The sponsor of a development project subject to this Section may elect to satisfy its child-care requirement by entering into an arrangement pursuant to which a

nonprofit organization will provide a child-care facility at a site within the City. The sponsor shall, prior to the issuance of the first certificate of occupancy by the Director of the Department of Building Inspection for the development project, provide proof to the Director of Planning that:

(A) A space for a child-care facility has been provided by the nonprofit organization, either for its own use if the organization will provide child-care services, or to a nonprofit child-care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature, as evidenced by a lease or sublease and an operating agreement between the nonprofit organization and the provider with minimum terms of three years;

(B) The child-care facility is a licensed child-care facility;

(C) The child-care facility has a minimum gross floor area of 3,000 square feet or an area determined according to the following formula, whichever is greater:

Net add. gross sq. ft. office or hotel space	***X .01 =***	***sq. ft. of child-care facility***

In the event that the net addition of gross square feet of office or hotel space is less than 300,000 square feet, the child-care facility may have a minimum gross floor of 2,000 square feet or the area determined according to the above formula, whichever is greater;

(D) The nonprofit organization has executed and recorded a binding written agreement, with a term of 20 years from the date of issuance of the first certificate of occupancy for the development project, pursuant to which the nonprofit organization guarantees that it will operate a child-care facility or it will lease or sublease a child-care facility to one or more nonprofit child-care providers for as long as there is a demonstrated need under Subsection (h) of this Section 314.4, and that it will comply with all of the requirements imposed on the nonprofit organization under this Paragraph (b)(6) and imposed on a sponsor under Subsections (g), (h) and (i) of Section 314.4.

(E) To support the provision of a child-care facility in accordance with the foregoing requirements, the sponsor has paid to the nonprofit organization a sum which equals or exceeds the amount of the in-lieu fee which would have been applicable to the project under Section 314.4(b)(4).

(F) The Department of Children, Youth and Their Families has determined that the proposed child-care facility will help meet the needs identified in the San Francisco Child Care Needs Assessment

and will be consistent with the City Wide Child Care Plan; provided, however, that this Paragraph (F) shall not apply to any office or hotel development project approved by the Planning Commission prior to December 31, 1999.

Upon compliance with the requirements of this Part, the nonprofit organization shall enjoy all of the rights and be subject to all of the obligations of the sponsor, and the sponsor shall have no further rights or obligations under this Section.

(c) The Director of the Department of Building Inspections shall provide notice in writing to the Director of Planning at least five business days prior to issuing the first certificate of occupancy for any development project subject to this Section. If the Director of Planning notifies the Director of the Department of Building Inspections within such time that the sponsor has not complied with the provisions of this Section, the Director of the Department of Building Inspections shall deny any and all certificates of occupancy. If the Director of Planning notifies the Director of the Department of Building Inspections that the sponsor has complied with this Section or fails to respond within five business days, a certificate of occupancy shall not be disapproved pursuant to this Section. Any failure of the Director of the Department of Building Inspections or the Director of Planning to give any notice under this Subsection shall not relieve a sponsor from compliance with this Section.

(d) In the event that the Department or the Commission takes action affecting any development project subject to this Section and such action is thereafter modified, superseded, vacated, or reversed by the Department or the Commission, Board of Appeals, the Board of Supervisors, or by court action, the permit application for such office development project shall remanded to the Department or Commission within 60 days following the date on which such action is final to determine whether the proposed project has been changed in a manner which affects the area of the child-care facility or the amount of the in-lieu fee to be provided under this Section 314.4 and, if so, the Department or the Commission shall revise the child-care requirement imposed on the permit application in compliance with this Section, and shall promptly notify the Treasurer and DBI of that revision.

(e) The sponsor shall supply all information to the Treasurer, the Department, and the Commission necessary to make a determination as to the applicability of this Section and the number of gross square feet of office or hotel space subject to this Section.

(f) Within nine months of the effective date of this Section, the Commission shall, after public notice and a hearing pursuant to Charter Section 4.104, adopt rules and regulations by which compliance with this Subsection shall be determined.

(g) In the event that a sponsor elects to satisfy its child-care requirement under Section 314(b)(1), (2), (3) or (5) by providing an on-site or near-site child-care facility, the sponsor shall submit a report to the Department in January of each year for the life of the child-care facility. The report shall have attached thereto a copy of the license issued by the California Department of Social Services permitting operation of the child-care facility, and shall state:

(1) The address of the child-care facility;

(2) The name and address of the child-care provider operating the facility;

(3) The size of the center in terms of floor area;

(4) The capacity of the child-care facility in terms of the maximum number of children for which the facility is authorized to care under the license;

(5) The number and ages of children cared for at the facility during the previous year; and

(6) The fees charged parents for use of the facility during the previous year.

(h) In the event that a sponsor elects to satisfy its child-care requirement under Paragraphs 314.4 (b)(1), (2), (3) or (5) by providing an on-site or near-site child-care facility, or under Paragraph 314.4(b)(6) by agreement with a non-profit organization, the sponsor, or in the case of a facility created pursuant to Paragraph 314.4(b)(6) the non-profit organization, may apply to the Department to eliminate the facility or to reduce the floor area of the facility in any amount, providing, however, that the gross floor area of a reduced facility is at least 2,000 square feet. The Department shall schedule a public hearing on any such application before the Commission and provide notice pursuant to City Planning Code Section 306.3(a) at least two months prior to the hearing. The application may be granted only where the sponsor has demonstrated that there is insufficient demand for the amount of floor area then devoted to the on-site or near-site child-care facility. The actual reduction in floor area or elimination of the child-care facility shall not be permitted in any case until six months after the application is granted. Such application may be made only five years or more after the issuance of the first certificate of occupancy for the project. Prior to the reduction in floor area or elimination of the child care facility, the sponsor shall pay an in-lieu fee to the City's Treasurer to be computed as follows:

(20 - No. of years since issuance of first *certificate of occupancy)* 20	**X**	**Net reduction gross sq. ft. child-care facility**	**=$100X**	**Total Fee**

Upon payment of the fee in full to the Treasurer and upon request of the sponsor, the Treasurer shall issue a certification that the fee has been paid. The sponsor shall present such certification to the Director prior to the reduction in the floor area or elimination of the child care facility.

(i) The child care provider operating any child care facility pursuant to Sections 314.4(b)(1), (2), (3) or (5) shall reserve at least 10 percent of the maximum capacity of the child care facility as determined by the license for the facility issued by the California Department of Social Services to be affordable to children of households of low income. The Department shall adopt rules and regulations to determine the rates to be charged to such households at the same time and following the procedures for the adoption of rules and regulations under Section 314.5.

(j) The fee required by this ordinance is due and payable to the Treasurer prior to issuance of the first certificate of occupancy for the office development project. Except in the case of a reduction in space of the child care facility pursuant to Subsection (h), if the fee remains unpaid following issuance of the certificate, any amount due shall accrue interest at the rate of one and one-half percent per month, or fraction thereof, from the date of issuance of the certificate until the date of final payment. Where the amount due is as a result of a reduction in space of the child care facility pursuant to subsection (h), such interest shall accrue from the date on which the available space is reduced until the date of final payment.

(k) In the event that a development project for which an in-lieu fee imposed under this Section has been fully paid is demolished or converted to a use or uses not subject to this ordinance prior to the expiration of its estimated useful life, the City shall refund to the sponsor a portion of the amount of an in-lieu fee paid. The portion of the fee refunded shall be determined on a pro rata basis according to the ratio of the remaining useful life of the project at the time of demolition or conversion in relation to its total useful life. For purposes of this ordinance, the useful life of a development project shall be 50 years.

(l) A sponsor's failure to pay the fee imposed pursuant to (1) this Section shall constitute cause for the City to record a lien against the development project in the sum of the in-lieu fee required under this ordinance, as adjusted under this Section.

(2) If, for any reason, the fee imposed pursuant to this ordinance remains unpaid following issuance of the certificate, the Treasurer shall initiate proceedings in accordance with the procedures set forth in Article XX of Chapter 10, of the San Francisco Administrative Code to make the entire unpaid balance of the fee, including interest, a lien against all parcels used for the development project. The Treasurer shall send all notices required by that Article to the owner of the property as well as the sponsor. The Treasurer shall also prepare a preliminary report notifying the sponsor of a hearing to confirm such report by the Board of Supervisors at least 10 days before the date of the hearing. The report to the sponsor shall contain the sponsor's name, a description of the sponsor's development project, a description of the parcels of real property to be encumbered as set forth in the Assessor's Map Books for the current year, a description of the alleged violation of this ordinance,

and shall fix a time, date, and place for hearing. The Treasurer shall cause this report to be mailed to the sponsor and each owner of record of the parcels of real property subject to lien. Except for the release of lien recording fee authorized by Administrative Code Section 10.237, all sums collected by the Tax Collector pursuant to this ordinance shall be held in trust by the Treasurer and deposited in the Child Care Capital Fund established in Section 314.5.

(3) Any notice required to be given to a sponsor or owner shall be sufficiently given or served upon the sponsor or owner for all purposes hereunder if personally served upon the sponsor or owner or if deposited, postage prepaid, in a post office letterbox addressed in the name of the sponsor or owner at the official address of the sponsor or owner maintained by the Tax Collector for the mailing of tax bills or, if no such address is available, to the sponsor at the address of the development project, and to the applicant for the site or building permit at the address on the permit application.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86; Ord. 409-87, App. 10/9/87; Ord. 22-00, File No. 991877, App. 2/18/2000; Ord. 76-03, File No. 020592, App. 5/2/2003)

SEC. 314.5. - CHILD CARE CAPITAL FUND.

There is hereby established a separate fund set aside for a special purpose called the Child Care Capital Fund ("Fund"). All monies contributed pursuant to the provisions of this Section, and all other monies from the City's General Fund or from contributions from third parties designated for the fund shall be deposited in the fund. For a period of three years from the date of final adoption of this ordinance, no more than 25 percent of the money deposited in the fund shall be paid to providers operating child care facilities subject to Sections 314.4(b)(1), (2), (3) and (5) to reduce the cost of providing affordable child care services to children from households of low income as required in Section 314.4(i). The remaining monies deposited in the fund during such three-year period, and all monies in the fund following expiration of such three-year period, shall be used solely to increase and/or improve the supply of child care facilities affordable to households of low and moderate income; except that monies from the fund shall be used by the Director to fund in a timely manner a nexus study to demonstrate the relationship between commercial development projects and child care demand as described in San Francisco Planning Code Section 314.4. In the event that no child care facility is in operation under Sections 314.4(b)(1), (2), (3) or (5) during such three-year period, the maximum of 25 percent of the fund reserved for households of low income shall be spent solely to increase and/or improve the supply of child care facilities affordable to households of low and moderate income. The fund shall be administered by the Director, who shall adopt rules and regulations governing the disposition of the fund which are consistent with this Section.

Such rules and regulations shall be subject to approval by resolution of the Board of Supervisors.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86; Ord. 409-87, App. 10/9/87; Ord. 263-98, App. 8/21/98; Ord. 76-03, File No. 020592, App. 5/2/2003)

SEC. 314.6. - PARTIAL INVALIDITY AND SEVERABILITY.

If any provision of this Section, or its application to any development project or to any geographical area of the City, is held invalid, the remainder of the Section, or the application of such provision to other office or hotel development projects or to any other geographical areas of the City, shall not be affected thereby.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.7. - ANNUAL EVALUATION.

Commencing one year after the effective date of this Section and each year thereafter, the Director shall report to the Commission at a public hearing and to the Planning, Housing and Development Committee of the Board of Supervisors at a separate public hearing, on the status of compliance with this Section and the efficacy of this Section in mitigating the City's shortage of child care facilities generated by the office and hotel development projects subject to this Section. Five years after the effective date of this Section, the Commission shall review the formulae set forth in Section 314.4. In such report, the Director shall recommend any changes in the formulae.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

SEC. 314.8. - DECREASE IN CHILD CARE FORMULAE AFTER STUDY.

If the Commission determines after review of an empirical study that the formulae set forth in Section 314.4 impose a greater requirement for child care facilities than is necessary to provide child care for the number of employees attracted to office and hotel development projects subject to this Section, the Commission shall, within three years of making such determination, refund that portion of any fee paid or permit a reduction of the space dedicated for child care by a sponsor consistent with the conclusions of such study. The Commission shall adjust any sponsor's requirement and the formulae set forth in Section 314.4 so that the amount of the exaction is set at the level necessary to provide child care for the employees attracted to office and hotel development projects subject to this Section.

(Added by Ord. 411-85, App. 9/6/85; amended by Ord. 441-86, App. 11/13/86)

Attachment D: Planning Code Section 295

SEC. 295 — HEIGHT RESTRICTIONS ON STRUCTURES SHADOWING PROPERTY UNDER THE JURISDICTION OF THE RECREATION AND PARK COMMISSION.

(a) No building permit authorizing the construction of any structure that will cast any shade or shadow upon any property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission may be issued except upon prior action of the City Planning Commission pursuant to the provisions of this Section; provided, however, that the provisions of this Section shall not apply to building permits authorizing:

(1) Structures which do not exceed 40 feet in height;

(2) Structures which cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission only during the first hour after sunrise and/or the last hour before sunset;

(3) Structures to be constructed on property under the jurisdiction of the Recreation and Park Commission for recreational and park-related purposes;

(4) Structures of the same height and in the same location as structures in place on June 6, 1984;

(5) Projects for which a building permit application has been filed and either (i) a public hearing has been held prior to March 5, 1984 on a draft environmental impact report published by the Department of City Planning, or (ii) a Negative Declaration has been published by the Department of City Planning prior to July 3, 1984;

(6) Projects for which a building permit application and an application for environmental evaluation have been filed prior to March 5, 1984 and which involve physical integration of new construction with rehabilitation of a building designated as historic either by the San Francisco Board of Supervisors as a historical landmark or by the State Historic Preservation Officer as a State Historic Landmark, or placed by the United States Department of the Interior on the National Register of Historic Places and which are located on sites that, but for separation by a street or alley, are adjacent to such historic building.

(b) The City Planning Commission shall conduct a hearing and shall disapprove the issuance of any building permit governed by the provisions of this Section if it finds

that the proposed project will have any adverse impact on the use of the property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant. The City Planning Commission shall not make the determination required by the provisions of this Subsection until the general manager of the Recreation and Park Department in consultation with the Recreation and Park Commission has had an opportunity to review and comment to the City Planning Commission upon the proposed project.

(c) The City Planning Commission and the Recreation and Park Commission, after a joint meeting, shall adopt criteria for the implementation of the provisions of this Section.

(d) The Zoning Administrator shall determine which applications for building permits propose structures which will cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission. As used in this Section, "property designated for acquisition by the Recreation and Park Commission" shall mean property which a majority of each of the Recreation and Park Commission and the City Planning Commission, meeting jointly, with the concurrence of the Board of Supervisors, have recommended for acquisition from the Open Space Acquisition and Park Renovation Fund, which property is to be placed under the jurisdiction of the Recreation and Park Commission.

(Added Ord. 62-85, App. 1/31/1985)

Attachment E: Planning Commission Resolution 18102

Attachment F: Proposition O (2016)

Document comparison by Workshare 9.5 on Tuesday, April 10, 2018 6:52:45 PM

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Deletions	201
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Moved to	0
Style change	0
Format changed	0
Total changes	536

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Planning Commission Motion No.

HEARING DATE: APRIL 26, 2018

Date:	April 12, 2018
Case Nos.:	2007.0946GPA-02 PCM-02 GPR CWP-02
Project:	Candlestick Point and Hunters Point Shipyard Phase II (see attached Map)
Zoning:	Jamestown Parcel at Candlestick Point: Existing: RH-2 / Candlestick Point Activity Node Special Use District / CP Height and Bulk District Proposed: RH-2 / 40-X Height and Bulk District Hunters Point Shipyard: HPS Use District / Hunters Point Shipyard SUD / HP Height and Bulk District
Block/Lot:	Jamestown Parcel at Candlestick Point: Block 4991 / Lot 276 Hunters Point Shipyard: Block 4591A / Lots 007, 079, 080, 081; Block 4591D / Lots 136 and 137
Recommendation:	**Approval**

ADOPTING A MOTION TO APPROVE AMENDMENTS TO THE CANDLESTICK POINT DESIGN FOR DEVELOPMENT DOCUMENT AND APPROVE A REVISED HUNTERS POINT SHIPYARD DESIGN FOR DEVELOPMENT DOCUMENT.

WHEREAS, In accordance with California Redevelopment Law, the Successor Agency to the San Francisco Redevelopment Agency (or the Office of Community Investment and Infrastructure or "OCII") is proposing to amend both the Bayview Hunters Point ("BVHP") Redevelopment Plan and the Hunters Point Shipyard ("HPS") Redevelopment Plan; and

In association with these Redevelopment Plan amendments, OCII is also proposing to amend the Design for Development Documents for Candlestick Point ("CP") and Hunters Point Shipyard ("HPS") as further described below.

The proposed amendments will facilitate the development of the Hunters Point Shipyard and Candlestick Point, as envisioned in the two respective Redevelopment Plans.

A primary objective of both the HPS Redevelopment Plan and the BVHP Redevelopment Plan is to create economic development, affordable housing, public parks and open space and other community benefits by development of the under-used lands within the two Redevelopment Plan project areas. In 2010, the City approved combining the planning and redevelopment of these two areas provides a more cohesive overall plan, including comprehensive public recreation and open space plans and integrated transportation plans, and improves opportunities to finance the development of affordable housing and

the public infrastructure necessary to expedite the revitalization of both areas. This project is referred to as Candlestick Point – Hunters Point Shipyard Phase 2 Project ("CP HPS2 Project" or "Project").

Approval actions in 2010 ("Original Approvals") included, but were not limited to, General Plan amendments including the creation of the Candlestick Point Sub-Area Plan and the Hunters Point Shipyard Area Plan, Planning Code amendments creating the Candlestick Point Activity Node Special Use District ("SUD") and the Hunters Point Shipyard Phase 2 SUD, amendments to the Bayview Hunters Point Redevelopment Plan and the Hunters Point Shipyard Redevelopment Plan and the adoption of Design for Development documents for both Candlestick and Hunters Point Shipyard.

More specifically, the Original Approvals included amendments to the BVHP Redevelopment Plan that divided the subject BVHP Project Area into Zone 1 and Zone 2. The Candlestick Point portion was designated as Zone 1, indicating that the Office of Community Investment and Infrastructure ("OCII") (previously the San Francisco Redevelopment Agency) would retain jurisdiction over land use and would be the approval body for development approvals pursuant to California Redevelopment Law. The rest of the BVHP Redevelopment Project Area was designated as Zone 2, indicating that the Planning Department would have jurisdiction over land use regulations, in accordance with a Delegation Agreement between the Planning Department and OCII. The Original Approvals also contemplated the construction of a football stadium at HPS.

Subsequent to the Original Approvals, a new stadium for the 49ers was constructed in Santa Clara, removing the need to accommodate a stadium as a part of the Project.

Subsequent to the Original Approvals, the voters of San Francisco approved Proposition O, the "Hunters Point Shipyard/Candlestick Point Jobs Stimulus Proposition", which established that office development under the Project would not be subject to the annual office cap regulated by Planning Code Sections 320 – 325.

As a result of these circumstantial changes, the Developer and OCII are pursuing refinements to the Project ("Project Refinements"). As a part of the Project Refinements, the BVHP Redevelopment Plan is proposed to be amended to remove the Jamestown Parcel from Zone 1 to clarify that it is not a part of the Project being implemented by the Developer under the DDA.

Similarly, as a part of the Project Refinements, the amendments to the HPS Redevelopment Plan are proposed to be revise the street grid and block pattern and land use designations and development caps, including in the area previously proposed for a new stadium (now referred to as the "Warehouse District").

The Design for Development ("D4D") documents for CP and HPS2 set forth specific standards and guidelines for the same breath of controls usually addressed in the Planning Code including but not limited to site coverage, building height and bulk, setbacks, building modulation and frontage, and open space. These D4D documents supersede the Planning Code for new development at CP and HPS. Both the respective Redevelopment Plans and the original Commission motion approving the D4Ds require Planning Commission approval for any D4D amendments.

OCII and the Developer are proposing conforming CP D4D amendments that would remove Chapter 7 regarding development of the Jamestown Parcel, and references to the Jamestown Parcel throughout, consistent with proposals to amend the BVHP Redevelopment Plan, the CP Activity Node SUD, and the CP Height and Bulk District.

OCII and the Developer are proposing a completely revised HPS2 D4D. The revisions include, but are not limited to: (1) removal the stadium; (2) reorganization of the open space with the introduction of a large central park ("The Green Room") and strengthening of Dry Dock 4 as major open space ("The Water Room"); (3) revision to the street grid and block pattern that more closely follow the existing block pattern, (4) revision to the height limits throughout with height reduced in some locations and increased in others, (5) clarification and strengthening of controls related to active uses, building modulation and articulation.

The San Francisco Redevelopment Agency ("Redevelopment Agency"), together with the San Francisco Planning Commission of the City and County of San Francisco ("Planning Commission") acting as lead agencies under the California Environmental Quality Act ("CEQA") (California Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations Sections 15000 et seq.), certified a Final Environmental Impact Report (hereinafter "FEIR") for the Candlestick Park-Hunters Point Shipyard Phase II Project ("Project") on June 3, 2010 by Motion No. 18096 and Resolution No. 58-2010, respectively. On July 14, 2010, the San Francisco Board of Supervisors affirmed the Planning Commission's certification of the FEIR (Motion No. M10-110). The FEIR analyzed a mixed used development, including a stadium use at the Hunters Point Shipyard and various project variants, including the development of up to 5,000,000 square feet of office, research and development space in lieu of a stadium.

On June 3, 2010, the Redevelopment Agency, by Resolution No. 59-2010 adopted findings pursuant to the California Environmental Quality Act, including a Mitigation Monitoring and Reporting Program ("MMRP") and a Statement of Overriding Considerations for the Project, and took various actions to approve the Project. On the same day, by Motion No. 18097 the Planning Commission also adopted findings pursuant to CEQA ("CEQA Findings") and took various approval actions related to the Project.

Since the certification of the FEIR the Planning Department, working with the Office of Community Investment and Infrastructure ("OCII", the successor agency to the San Francisco Redevelopment Agency), has issued several addenda to the FEIR to address project changes. The OCII has determined in Addendum No. 5 for the CP-HPS Phase 2 Project that the actions contemplated at this time related to modifications to the Project (the "Modified Project") will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effect that would alter the conclusions reached in the FEIR. A copy of Addendum No. 5 and supporting materials are in the Clerk of the Board of Supervisors File No. _____ and available on the Board's website, and the findings in Addendum No. 5 and supporting materials are incorporated herein by reference as though fully set forth.

On April 17, 2018, the Commission on Community Investment and Infrastructure ("CCII" or "Successor Agency Commission") adopted CCII Resolution No. XX-2018, by which the Successor Agency Commission determined that the analysis conducted and the conclusions reached in the FEIR as to the environmental effects of the Project, together with further analysis provided in Addendum No. 1, Addendum No. 4 and Addendum No. 5 to the FEIR, remain valid and can be relied upon for approval of the Modified Project in compliance with the CEQA.

As part of Resolution No. XX-2018, the CCII made findings regarding the modifications to 16 previously adopted mitigation measures as recommended in Addendum No. 5 and as further set forth in Resolution No XX-2018 and approved the modifications to the adopted mitigation measures. For two of

these mitigation measures, Mitigation Measure TR-16, Widen Harney Way, and UT-2, Auxiliary Water Supply System, the language reflects minor changes CCII previously approved based on Addendum No. 1 and Addendum No. 4 as reflected in CCII Resolutions Nos. 1-2014 and 13-2016. In addition, CCII Resolution No. 13-2016 approved modifications to Mitigation Measure TR-23.1, Maintain Proposed Headways of the 29 Sunset, to assure that transit travel times would be consistent with the FEIR analysis. A copy of Resolution No. XX-2018 and supporting materials, including without limitation Addendum No. 1 and Addendum No. 4, and copies of Resolution Nos. 1-2014 and 13-2016 are available under Case No. 2007.0946E, and are incorporated herein by reference as though fully set forth.

The Planning Commission has reviewed and considered the CEQA Findings, including the statement of overriding considerations that it previously adopted in Motion No. 18097, the findings in Addendum No. 5, the findings in CCII Resolution No. XX-2018, and the findings in CCII Resolutions Nos. 1-2014 and 13-2016 concerning amendments to adopted mitigation measures.

On April 26, 2018, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on the proposed Design for Development Documents Amendments and has considered the information included in the File for these Amendments, the staff reports and presentations, public testimony and written comments, as well as the information provided about the Project from other City departments.

NOW THEREFORE BE IT RESOLVED, That the Planning Commission finds that the actions contemplated by this Resolution are included in the actions identified in CCII Resolution XX-2018 for purposes of compliance with CEQA. The Planning Commission hereby adopts the additional CEQA Findings in CCII Resolution XX-2018 as its own, including approving the modifications to the 16 adopted mitigation measures recommended for modification in Addendum No. 5. Additionally, the Planning Commission approves the modifications previously approved by CCII to Mitigation Measures TR-16, TR-23.1, and UT-2 for the reasons set forth in CCII Resolution Nos. 1-2014 and 13-2016.

AND BE IT FURTHER RESOLVED, That Planning Commission does hereby approve the amending of the Candlestick Point Design for Development document, by removing Chapter 7, "Jamestown", and amending of text and graphics throughout by removing mention of the Jamestown Parcel.

AND BE IT FURTHER RESOLVED, That the Planning Commission does hereby approve the revised Hunters Point Design for Development document, attached to this Motion as Exhibit A and incorporated herein by reference.

I hereby certify that the foregoing Motion was ADOPTED by the San Francisco Planning Commission on April 26, 2018.

Jonas P. Ionin

Commission Secretary

AYES:

NOES:

ABSENT:

San Francisco | *California*

HUNTERS POINT SHIPYARD PHASE 2

DESIGN FOR DEVELOPMENT

APRIL 9, 2018

SAN FRANCISCO SHIPYARD · EST · 1870

ADOPTED _____ BY:

SAN FRANCISCO PLANNING COMMISSION
MOTION NO. _____

COMMISSION ON COMMUNITY INVESTMENT & INFRASTRUCTURE
RESOLUTION NO. _____

Table of Contents

4 Building Design Standards & Guidelines

5 Implementation

6 Appendix

1 INTRODUCTION

1 Introduction

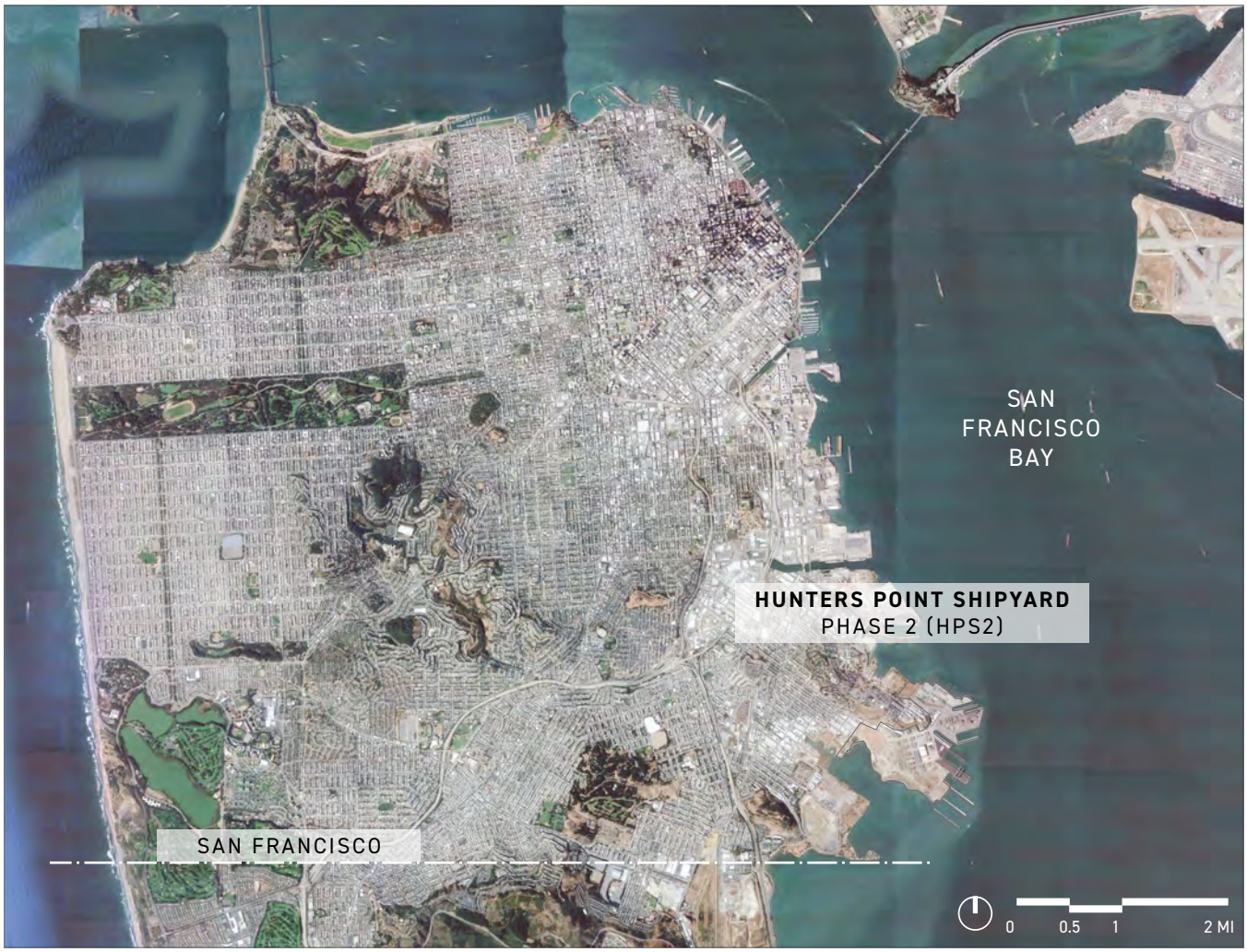

Figure 1.0a: HUNTERS POINT SHIPYARD PHASE 2 SITE LOCATION IN SAN FRANCISCO

1.1 Summary of Document

The 2018 Hunters Point Shipyard Phase 2 Design for Development document (D4D) establishes the design intent, standards, and guidelines that will govern Phase 2 of the Hunters Point Shipyard Redevelopment Project Area (HPS2). The amendment to the HPS2 Redevelopment Plan (Plan) establishes goals to: transform this approximately 421-acre site from a post-military site into thriving neighborhoods; support the construction of market-rate and affordable housing; expand public transit service; and create connections to parks, open spaces, and the waterfront. The Plan governs the land uses in HPS2 and allocates the maximum development square footage for each land use category permitted.

The D4D establishes standards and guidelines for development controls that implement the vision for HPS2 and provide an environment with opportunities for creative and innovative architectural expression. There are additional companion documents which govern different components of the HPS2 development. This D4D includes summaries from these companion documents for reference only—the summaries are not intended to be an exhaustive list of all the relevant content from these documents. This D4D supersedes the HPS2 D4D document approved in 2010.

Throughout this document, Hunters Point Shipyard Phase 1 will be referred to as HPS1 and Hunters Point Shipyard Phase 2 will be referred to as HPS2. While regulated independently, HPS2 is adjacent to HPS1. Hunters Point Shipyard, which includes HPS1 and HPS2, will be referred to as the "Shipyard." The master developer is responsible for the implementation of the Shipyard and Candlestick Point (CP). HPS1 and CP each have a separate D4D. *Figure 1.1a* highlights all three areas where the Office of Community Investment and Infrastructure (OCII) is the primary governing agency.

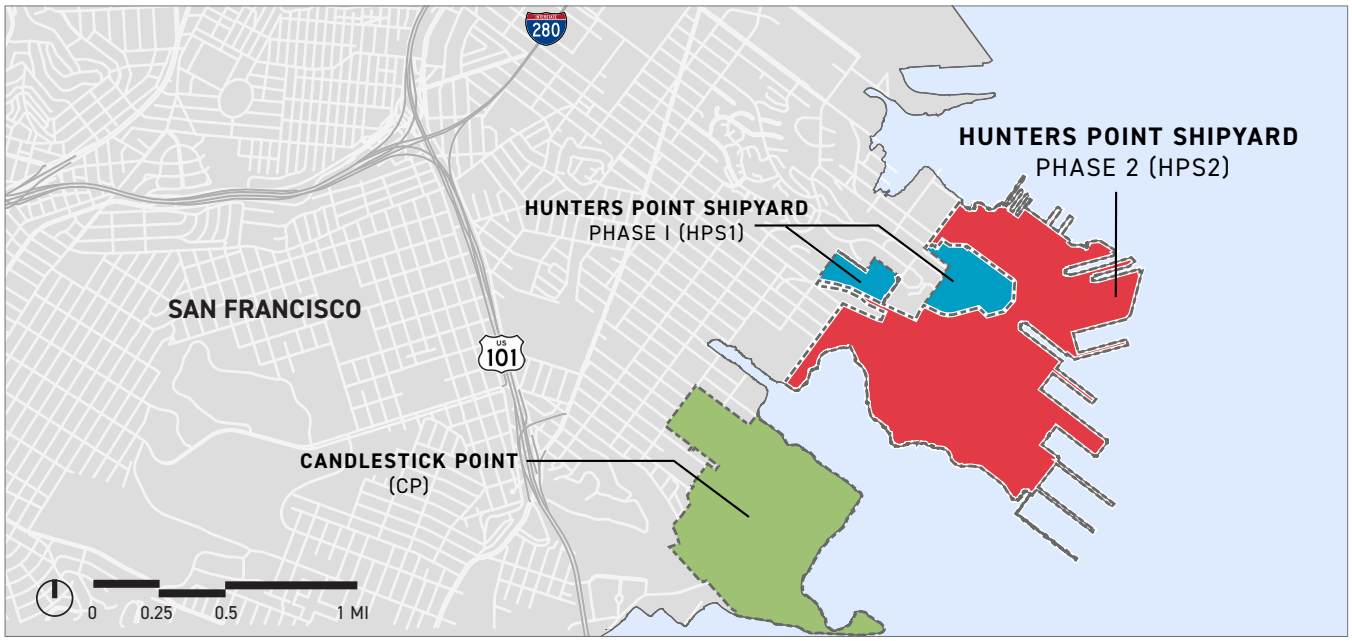

Figure 1.1a: HUNTERS POINT SHIPYARD AND CANDLESTICK POINT BOUNDARY

1.2 Companion Documents

Hunters Point Shipyard Redevelopment Plan: governs permitted land uses and maximum floor areas for each land use in HPS1 and HPS2.

Candlestick Point / Hunters Point Shipyard Phase 2 (CPHPS2) Disposition and Development Agreement (DDA): defines developer obligations to deliver certain infrastructure improvements and community benefits as part of the redevelopment of CP and HPS2.

CPHPS2 Final Environmental Impact Report (and Addenda): describes environmental impacts associated with the construction and operation of development at CP and HPS2, and outlines mitigation measures required of the developer to reduce those environmental impacts.

CPHPS2 Design Review and Document Approval Procedure (DRDAP): defines submittal requirements and the process for approving major and sub-phase applications, as well as Schematic and Design Development documents within CP and HPS2.

CPHPS2 Infrastructure Plan: describes all on-site and off-site infrastructure improvements including utilities and roadways to be constructed in CP and HPS2.

CPHPS2 Parks, Open Space, and Habitat Concept Plan: describes the concept plans for each of the parks and open space areas within CP and HPS2. These areas include the waterfront promenade, neighborhood parks, sports fields, recreational trails linking to the Bay Trail and Blue Greenway, and open spaces dedicated to the restoration of native habitats.

CPHPS2 Sustainability Plan: identifies sustainable design strategies to reduce energy and water demand, improve air quality, and reduce greenhouse gas emissions; defines transportation demand management to minimize auto dependence; and provides plans to enhance the natural environment.

CPHPS2 Transportation Plan: defines the Transit Operating Plan, Transportation Demand Management Program, designated bike routes, and street cross-sections along with parking and loading standards, bicycle facilities, and car-share requirements.

HPS2 Streetscape Master Plan: identifies landscaping, street furnishings, lighting, and paving standards for each neighborhood in HPS2.

HPS2 Signage Plan: defines design standards including color palette, fonts, and sign dimensions for wayfinding and directional signage within the public right-of-way within HPS2.

1.3 Document and Chapter Organization

This D4D opens with an overall vision for HPS2 and its unique districts.

The Design Intent, Standards and Guidelines regulate how this vision will be implemented.

The D4D document has six [6] chapters as follows:

1. **Introduction:** provides the purpose and overview of the D4D, identifies the D4D's relationship to companion documents, and describes the historical context of the Shipyard redevelopment.
2. **Vision:** illustrates the overall concept for HPS2 as well as the relationship between the Shipyard and adjoining communities, specifically in regard to design, character, and connections.
3. **Districts & Key Destinations:** defines the design vision and intent for each of the HPS2 neighborhoods, including urban form, interface and interaction with the public realm, and transportation.
4. **Building Design Standards & Guidelines:** defines the design principles and standards regulating the form and character of buildings, including height, massing, design, signage, and lighting.
5. **Implementation:** offers an overview of the procedures for permitting individual parcels, granting variances, and amending the D4D.
6. **Appendix:** provides definitions and the following site maps for reference to support this D4D: Topography, District and Development Blocks, Land Use, and Phasing.

1.3 Document and Chapter Organization

USER GUIDE

Section Number **Section Name** **Figures**

3.3 Wharf District

Urban Form

Echoing the Shipyard's Naval period, the Wharf District will become a center for employment, innovation and entrepreneurship. Primarily focused on research and development, the neighborhood may also include light industrial and manufacturing operations as well as residential and ground level commercial uses.

Commercial space will be located within new and restored character-enhancing structures that reflect the needs of the modern workplace. Adhering to the historic street pattern, buildings echo the scale and massing of those that preceded them, with commanding views north, east, and south across the Bay. The generous height and footprint sizes of existing and future buildings relate to the grand scale of the Shipyard.

Public Realm

The Shipyard's primary transit center is located along Spear Avenue, the central axis of the neighborhood. Connecting to the Caltrain Station and Candlestick Point, the transit center also accommodates buses, shuttles, and a future water taxi/ferry service arriving at Dry Dock 4.

The Wharf District offers a unique, accessible, and highly-prized waterfront. The Cultural Heritage Park along Dry Docks 2 and 3 houses a variety of historic buildings and structures dating from the early 1900's, while the Water Room, Dry Dock 4, and the grand stairway provide extraordinary bay views.

1. Building 231
2. Building 253

1

2

Figure 3.3a: WHARF DISTRICT

Shared Parking Structures / Utility
Existing Buildings
Priority Ground Floor Activation

1. Waterfront Office Example
2. Adaptive Reuse Example

1

2

Content **Image**

Standard Number and Title

Figures

4.1 Block Sizes and Mid-Block Breaks

4.1.1 Mid-Block Break Lot Divisions and Locations

INTENT

Mid-Block Breaks (MBBs) are intended to allow public access through private development blocks to promote connectivity and walkability and create a finer grain circulation system.

MBBs are regulated by the CPHPS2 Infrastructure Plan, Transportation Plan, and Streetscape Master Plan.

Mid-Block Break Specification Book will be provided per the DRDAP.

DEFINITIONS

"Mid-Block Breaks or MBBs"
A publicly accessible pedestrian, bicycle and/or vehicle lane way on private property as identified in *Figure 4.1.b*.

"Mid Block Break Width"
The mandatory Street Wall to Street Wall width for a MBB and associated Setback zones.

"EVA"
Emergency Vehicular Access.

"Street Wall"
The aggregate effects of the façades of buildings along a property line adjacent to a street or open space. The typical context for this term is in defining the public realm and framing or engaging the street.

"Block Sizes"
Block Sizes and legal parcels are defined in the Final Map. Approximate parcel dimensions are provided in *Figure 4.1b* and are subject to change. Block sizes may be legal parcels or may be part of a legal parcel.

STANDARDS

4.1.1 Mid-Block Break Lot Divisions and Locations

Mid-Block Break locations and widths shall be built as defined in *Figure 4.1a*. MBB Widths shall be used to define the location of the Street Wall. Street Wall to Street Wall dimensions shall not be greater or less than required MBB Width. Refer to *Figure 4.1a*.

MBB locations across blocks shall be aligned. The first developed MBB establishes the required centerline for subsequent MBB alignment. All required amenities including street trees, lighting, and seating shall occur within the MBB Parcel or the adjacent Setback Zones. Refer to *Figure 4.1b* and Section 4.27 Private Open Space - Mid-Block Breaks.

Figure 4.1a: MID-BLOCK BREAK LOT DIVISIONS

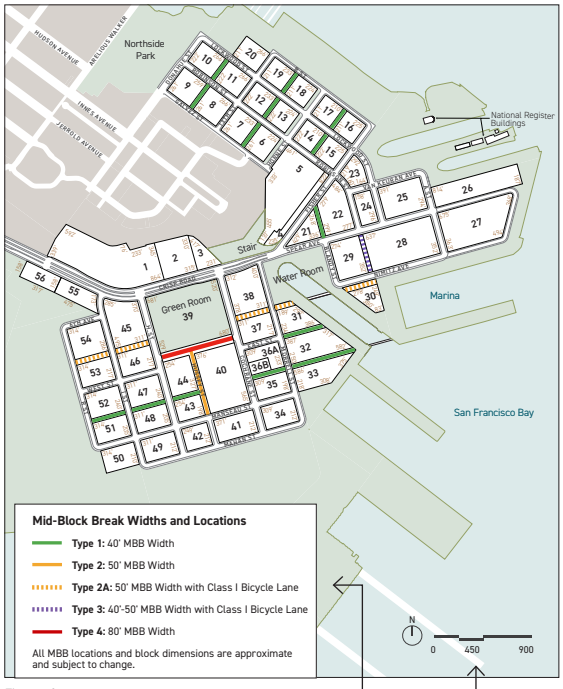

Figure 4.1b: MID-BLOCK BREAK WIDTHS AND LOCATIONS

Intent and Definitions | **Standards and Guidelines** | **Illustrative Graphics** | **Figure Number and Name** | **Figure Legend** | **Scale**

1.4 History

HPS2 occupies approximately 421 acres along the southeastern shoreline of San Francisco. The site has extensive waterfront land along the San Francisco Bay to the east and south, South Basin and Yosemite Slough to the west, and India Basin to the north. Hunters Point is relatively protected from the fog and harsh ocean winds that San Francisco is commonly known for. Nomadic Ohlone tribes and immigrant fishing communities have historically called this area home. The site later became a peripheral location within San Francisco, used as a commercial shipyard prior to being purchased and expanded by the US Navy coincident to WWII in the 1940's.

The original topography of the area has changed dramatically over time. Hunters Point Hill originally stretched a half mile into the bay, meeting the water's edge with steep banks. Large portions of the hill were later removed to fill in the end of the peninsula during the making of the Shipyard. Today, HPS2 is mainly characterized by flat topography as it meets the shoreline with constructed wharves, piers, dry docks, and low sea walls.

HPS2 will embrace a new future for the Shipyard by referencing the site's rich history through the design of the landscape and urban form.

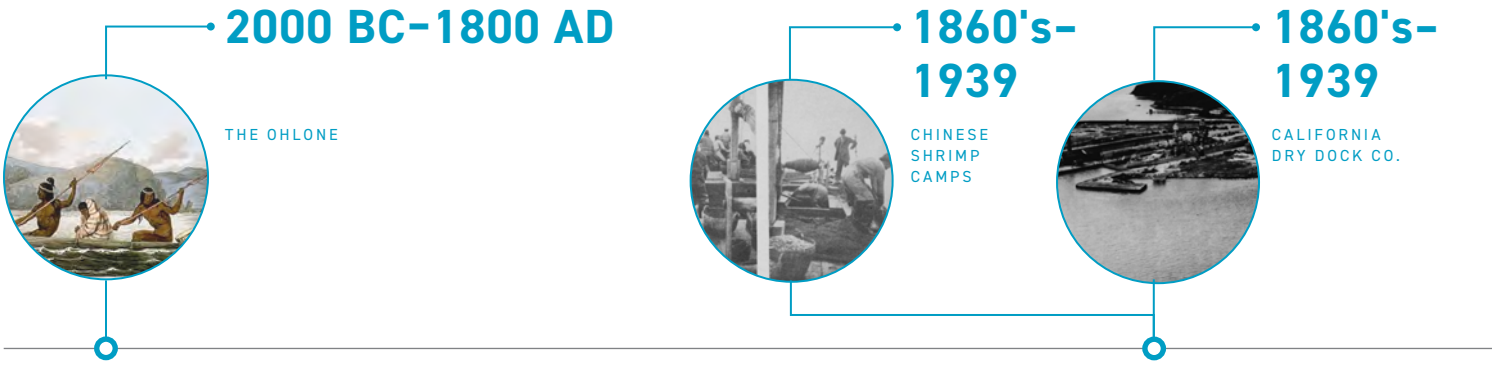

Figure 1.4a: PROJECT HISTORY AND TIMELINE

2000 BC–
1800 AD

The Ohlone

The Shipyard lies within the traditional territory of the indigenous Ohlone (Costanoan) people. Their habitation in close proximity to the San Francisco Bay provided access to clams, ocean and bay mussels, and oysters, which were important components of their diet. The Ohlone carved canoes out of balsa wood and used them to fish and hunt waterfowl and sea mammals. These canoes were also used for travel and trade across the bay waters and salt marshes.

For centuries, the waterfront has played an integral role in the lives of those who have inhabited this area. This powerful interaction between the sea and land will live on through the HPS2 development through waterfront open space promenades, activity areas, and view corridors.

1941–1974

NAVY EXPANSION

2010

HUNTERS POINT
PHASE 1
REDEVELOPMENT PLAN

2018

HUNTERS POINT
PHASE 2 D4D

1860's–1939

Chinese Shrimp Camps

Following the completion of the Transcontinental Railroad, Chinese immigrants who had previously made a living working on the railroad moved west and established shrimp camps. By the late 1860's they had fully developed the shrimping industry at Hunters Point using bag nets. As a result, a substantial amount of dried fish, abalone, abalone shells, and shrimp were exported to China.

Camps included a range of domestic and work-related structures associated with the shrimp industry. Most followed a similar layout, although this changed over time as population, technology, and social conditions altered. Typically, a camp consisted of several small shacks at the water's edge, a wharf, a processing area with boilers, drying grounds, storehouses, and living quarters. The amount of San Francisco fish and shrimp exported overseas led anglers of other ethnicities to petition the State to levy taxes on Chinese commercial fishing. In 1885 and 1886, six hundred Chinese were arrested for tax reasons. The Federal Government revived old trade laws and applied them to the dried fish and shrimp trade; Chinese vessels were seized and their captains fined.

The number of Chinese camps around the San Francisco Bay decreased from 50 in the 1880's to 26 in 1896. The 1900 US Census lists one Chinese fisherman at Hunters Point, but no evidence of large-scale fishing camps in the area. The State Legislature outlawed the bag net in 1910, and most of the shrimp fishermen abandoned the industry. A redesign of the bag net, which facilitated trolling for shrimp, was introduced in the 1920's. By the 1930's, the fishing villages were active once again. No fewer than twelve fishing camps were observed along Hunters Point shoreline.

In 1939, the San Francisco Health Department received a number of complaints surrounding the strong smell emitted by the fishing camps and responded by declaring them unsanitary and ordering several of the camps burned. Fishing activity also declined due to bay fill and pollution, as well as the Navy's move to Hunters Point in the 1940's.

1860's–1939

California Dry Dock Co.

Access to deep water at the Shipyard drove the nature of its early maritime activities. Small shipyards that had been crowded out of the waterfront closer to the City's center began operating in and adjacent to the Shipyard as early as the 1860's.

Dry Dock 1, completed in 1868, was well situated with deep water and close proximity to the thriving scow schooner boat yards at India Basin just north of the Shipyard. Most of the boats built and repaired during this time at Hunters Point were scow schooners (boats with a broad, shallow hull instead of a deep keel); two boat yards adjacent to the Shipyard in India Basin are known to have built junks (a boat with a flat bottom, no keel, and a very large rudder) for Chinese fishermen.

The dry dock facilities expanded in 1901-1903 with the completion of Dry Dock 2, Buildings 204 (Gate and Pump House) and 205 (Dry Dock No. 2 Pump House). At the time, it was the most modern dry dock on the San Francisco Bay. After the second dock was constructed, Navy ships came to the area for dry dock service. Dry Dock 3 replaced Dry Dock 1 in 1918 in response to the increase in Naval contracts, and Building 140 (Pump House) was constructed in conjunction with this phase of development. In 1939, the Navy purchased the dry docks and adjacent support buildings 207 (Latrine building) and 208 (Shop Service, Tool Room and Canteen Building).

The Hunters Point Commercial Dry Dock Historic District is listed on the National Register of Historic Places (see *Figure 4.24a.*). This Historic District comprises Dry Docks 2, 3, and 4, and Buildings 140, 204, 205, 207 & 208.

1941–
1974

Navy Expansion

The Navy took possession of the Shipyard on December 18, 1941, less than two weeks after the attack on Pearl Harbor. From this point forward, mobilization for WWII occurred rapidly at Hunters Point. As part of the expansion of the Shipyard, a major reclamation project was undertaken to construct Dry Dock Numbers 4, 5, 6, and 7 for docking submarines, destroyers and aircraft carriers. Between December 18, 1941 and September 2, 1945, 661 ships docked at Hunters Point.

Immediately following WWII, Operation Magic Carpet used the Shipyard for the return of US service personnel from overseas. The facility continued to serve as a docking area for Navy ships for repair, overhaul, maintenance, and conversion. Other functions were transferred to the facility, including Ship Salvage Base, 12th Naval District, and the Radiological Defense Laboratory set up along the southern waterfront. Beginning in the early 1950s, the Shipyard began to focus on submarine repair. It was in this capacity that the Shipyard provided support to the US Naval fleet during the Korean and Vietnam conflicts.

Among remnants of the maritime history at the Shipyard are some exceptional character-enhancing buildings and structures that may serve not only to recall the past, but to inform future uses and activities. Retaining and restoring these buildings and maintaining the Navy's historical street network are integral parts of the new development. Existing buildings serve as a relic of the scale and industrial function of the Shipyard. The historic street grid relates to these buildings. WWII Buildings 211, 224, 231, 253, 281, 411, 351, and 813 are being studied for possible retention and adaptive reuse and the iconic Regunning Crane will be retained. In addition, Buildings 101, 140, 204, 205, 207, and 208 will be retained.

1


2

1&2. ARCHIVAL IMAGES OF THE WORKING SHIPYARD

1974–
PRESENT

Post Military

In 1974, the Navy deactivated the Shipyard and leased the facility to private industry. In 1991, the Base Realignment and Closure Commission identified the Shipyard for closure. Over the next decade, the Navy and the City and County of San Francisco negotiated terms for the lease and subsequent transfer of the facility.

After decommissioning in 1974, the Shipyard was leased in 1976 to a private ship-repair company which sublet buildings to civilians including sculptor Jacques Terzian, a fabricator of found-object furniture and wall installations. Jacques' vision of transforming neglected buildings into affordable workspaces became reality in 1983 when a handful of artists began renting and renovating Shipyard studios. With co-developers Paula Terzian and David Terzian (Jacques' daughter and son), the Shipyard was soon home to 300 visual artists, musicians, and writers. Groups such as the Hunters Point Citizens Advisory Committee, the Shipyard Trust for the Arts and the Shipyard Artist Alliance have worked hard to maintain the vibrancy of this community of arts professionals.

The Bayview Hunters Point neighborhoods adjacent to the Shipyard are predominately home to communities of color that historically included many Shipyard workers and their families. These neighborhoods have had a higher rate of home ownership compared to other neighborhoods within San Francisco, but face a multitude of physical, economic, and social challenges. The US I-280 and CA 101 freeways physically isolate the Bayview neighborhood from the rest of the City. Closure of the Shipyard and de-industrialization of the district in the 1970s and 1980s increased unemployment and local poverty within the Bayview. Racial discrimination, pollution, substandard housing, and lack of investment in infrastructure have been notable and enduring challenges.

Revitalization of the historic Shipyard will create opportunities for housing, employment, open space, transit, and sustainable infrastructure that will complement the growth and resilience of Bayview Hunters Point.

3

3. ARCHIVAL IMAGES OF THE WORKING SHIPYARD

2 VISION

2 Vision

"I have great respect for the past.
If you don't know where you've come from,
you don't know where you're going. I have
respect for the past, but I'm a person of
the moment. I'm here, and I do my best
to be completely centered at the place I'm at,
then I go forward to the next place."

Maya Angelou

Sir David Adjaye selected these words to reflect the vision for Hunters Point Shipyard, which recognizes and respects the history of the place and its connection to the water, sensitively responds to present-day needs, and demonstrates optimism for the future by creating space for the as yet unimagined.

2.1 Project Vision

The San Francisco Shipyard offers a once-in-a-lifetime opportunity to reimagine part of the city at a scale and context rarely encountered. The thinking that informed this Design For Development document is animated by a sense of stewardship, borne out of a recognition of the fact that the built environment created here will endure for generations to come. The aim of this work is to inspire designers to transcend typical notions of standards and compliance so that they may interpret and implement the principles of good city-making and work in keeping with the vision of this document.

Buildings will come and go and be renovated and altered. Permanence lies in the way people experience the spaces between buildings—the human-scaled urban fabric. The vision for the project draws upon the unadulterated authenticity of the Shipyard, continues the legacy of human ingenuity at the site, and creates a model of city-making for San Francisco and the world. The site presents the potential to respond at an impactful scale to some of the Bay Area's most pressing issues, including access to housing, employment, and economic equality through a series of integrated-use districts that connect with the adjacent Bayview Hunters Point neighborhood. The master plan connects these integrated-use districts with abundant public open spaces, providing a diversity of housing types, and aspires to create sustainable infrastructure that will make the new buildings remarkably efficient.

The site encompasses histories beyond the legacy of the Shipyard. A large open space identified as the Green Room pays homage to Ohlone shell mounds, and interpretive signage will tell the story of the Chinese shrimp camps along the shoreline. The history of the site is connected to the ideals of the future by embracing the monumental scale of potential adaptive reuse buildings, reconciling them with what makes a San Francisco neighborhood distinct, and carrying those qualities through to the design standards for all buildings. Keeping the street grid intact allows for the potential adaptive reuse of a number of existing structures. These "seed buildings" continue an authentic connection with the past.

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3

4

1. Shipyard Existing Photo
2. Shipyard Historic Photo
3. Shipyard Existing Photo
4. Shipyard Future Development Example

Figure 2.1a: HPS2 ILLUSTRATIVE PLAN

2.1 Project Vision Cont'd

The master plan incorporates certain commonalities found in San Francisco neighborhoods and adapts them to the unique site of the Shipyard. A prominent Pedestrian Allée, open space connections, and view corridors to the water enhance the public realm, stitch the districts of the site together and create a variation in experience. Features such as the dry dock are revitalized to serve as public gathering spaces framed by structures that have potential for adaptive reuse, taller buildings with a strong street wall, limited setbacks, and vibrant ground floor programming. Active and transparent ground floor storefronts focus the energy of the pedestrian realm along identified streets. A material palette to enhance the experiential texture and patina that is specific to the history of craft at the site is identified along specific streets, view corridors, and within public open spaces, lending a subtle distinctiveness to each district.

The project endeavors to couple the Shipyard's heritage of big ambitions with the small scale granularity of day-to-day human experience of people who will live, work, play, and walk through the site. The Shipyard is envisioned as a place that celebrates the monumentality of its past achievements, including exultant expressions of human ingenuity, and it will continue to be recognizable as a destination for big ideas and bold ambitions, replete with the quality and character of other great San Francisco neighborhoods.

1. Waterfront Open Space Example
2. Ground Floor Dining Example

1

2

2.1 Porject Vision Cont'd

2.1.1 Embrace the Legacy, Authenticity, and Unique Character of the Shipyard

Situated on the southeastern edge of a city known for its topography, the Shipyard is a uniquely flat maritime landscape with a pronounced connection to the water and the horizon.

Draw Cues from the Scale and Craft of the Shipyard's Heritage Uses to Preserve the Unique Identity of the Site

- Retain the historic buildings and encourage the adaptive reuse of existing character-enhancing structures
- Construct new buildings that respond to the monumental scale of character-enhancing structures
- Incentivize architecture that evokes the legacy of craft and ingenuity at the Shipyard through Adaptive Reuse and Building Materials
- Incentivize adaptive reuse of the unique character-enhancing buildings at Block 28 and Block 40; these structures are of a monumental scale that express the history of the Shipyard. If these blocks are built anew, special requirements to achieve architectural excellence apply


1


2


3

1. Adaptive Reuse Example
2. New Building Example
3. Shipyard Existing Photo
4. Waterfront Open Space Example

Embrace the Maritime Character and Flat Topography of the Shipyard

- Preserve and reinforce views to the water through Building Heights and Setbacks
- Step down the height of buildings at the north and south perimeters of the site to emphasize the natural relationship with and proximity to the waterfront
- Reinforce the height and size of the buildings around the Water Room, Green Room, and Wharf District to meet and address the scale of the adjacent open spaces and water features
- Activate streets with ground floor uses along key corridors
- Activate the ground floor and provide variation in architectural expression along the Pedestrian Allée, which connects a variety of open spaces, residential, retail, and office uses

4

Build on the History of Human Ingenuity at the Site with Exemplary Measures of Large Scale Sustainability

- Aspire to provide state-of-the-art sustainability measures commensurate with the scale of the site which affords the opportunity to reduce its carbon footprint, lessen dependence on non-renewable energy, and significantly reduce water demand
- Create an "Eco-Grid" (subject to financial and regulatory feasibility and the Developer's discretion), which will provide opportunities to:
  - Pursue the implementation of sustainable, district-scale infrastructure
  - Develop a network of sustainable utility and data systems that will reduce impact of the Shipyard on the climate by leveraging the large scale of the site
  - Implement district solar energy generation, recyclable water facilities, and district-wide heating and cooling
  - Establish exemplary best practices for large scale sustainability and resiliency measures
- Leverage the roofs of buildings to accommodate renewable power
- Consider screening parking structure roofs with renewable power
- Allow district energy components within buildings

2.1 Porject Vision Cont'd

2.1.2 Create a Model for City-Making That Continues San Francisco's Legacy of Distinct Neighborhoods

San Francisco's distinctive neighborhoods are destinations for residents and global visitors alike. The integrated use districts of this site restore the Shipyard as an engine of economic activity, create space for artists and makers, and benefit the Bayview Hunters Point community. The Shipyard will be reinstated as an economic driver for San Francisco by attracting world-class anchor tenants and research and education institutions. Through its large scale, the project establishes a new, refined approach to workforce urban development.

1


2

Rebuild the Shipyard as a Cultural and Economic Engine for Bayview Hunters Point

- Generate new employment at the Shipyard
- Build community, civic, and institutional resources
- Provide program uses and services that benefit existing neighbors and new residents

Establish Residential Neighborhoods with a Variety of Housing Typologies to Create Diverse Urban Life and Active Streetscapes

- Establish a network of streets and mid-block breaks with active building frontages and proximity to a variety of public open spaces and retail
- Provide residential buildings at various scales and typologies, from multifamily to townhomes
- Design buildings to create an appropriate residential pedestrian street experience

Provide Retail Uses that Activate the Streetscape and Amenities that Build Community

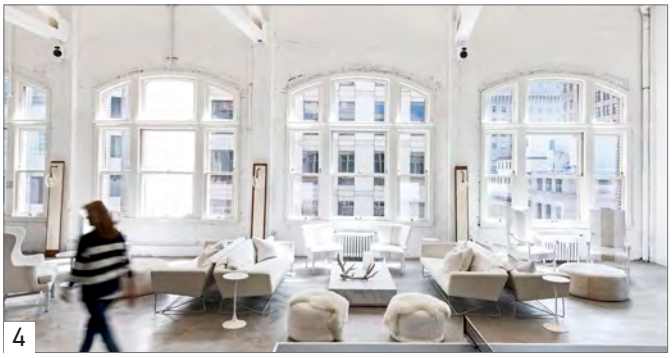
- Design buildings with ground floor activation and transparency to create vibrant, walkable streets
- Prioritize location of retail to focus activity along key streets and walkways
- Use retail and amenities to connect the districts, stimulate mobility, and create places for community gathering

Create Office and R&D Workplaces that Perpetuate San Francisco's Preeminence in the Global Innovation Economy

- Pursue adaptive reuse of select existing character-enhancing structures to create iconic architecture
- Construct new buildings that respond to the scale of existing structures and adjacent open spaces, particularly in the Warehouse and Wharf Districts
- Design large floor plate buildings that preserve flexibility, encourage innovation in workplace design, and attract world-class companies
- Design buildings with attention to architectural detail, quality of materials, and craftsmanship that honor the legacy of ingenuity at the Shipyard

Invigorate the Artistic Cultural District

- Retain Heritage Building 101 and complement it with a new artist studio building and plaza
- Locate active frontages for Artists and Makers along Fisher and Robinson Streets to encourage a vibrant cultural streetscape and destination



4

1. Residential Neighborhood Example
2. Residential Street Example
3. New Office Building Example
4. Office through Adaptive Reuse Example
5. Ground Floor Retail Example

3

5

3 DISTRICTS & FEATURES

3 Districts & Features

Figure 3.0a: DISTRICTS & FEATURES

Districts

The site will comprise four distinct districts. Each district shares the same guiding principles and development goals, but may differ in the character of the public realm, street typologies, building design, and predominant uses.

3.1 Warehouse District: Architectural diversity in scale and massing reflects the demands of the different uses that make up this District. Building designs celebrate monumentality by responding to the large scale of existing structures, as well as to large public open spaces found in the Green Room and Water Room. Buildings may become smaller in scale along the south waterfront, however, providing a more porous layout and allowing more visual connection from interior blocks to the water.

3.2 Village Center: The Village Center accommodates the resident artist community with new studios and gallery space, supplemented by retail, maker space, and other related uses. The new building complements the distinctive scale and rhythm of Building 101. The architecture is appropriately scaled for a traditional artist community, overlooking a plaza with outdoor workspaces and a display area.

3.3 Wharf District: Primarily focused on research and development, this neighborhood may also include makerspaces as well as ground-level commercial or residential uses. Adhering to the historic street pattern, dry docks, and piers, buildings echo the scale and massing of those that preceded them.

3.4 North Shoreline: Predominately residential, buildings range from low- to mid-rise and are domestic in style and scale. The network of streets make for a walkable neighborhood.

Key Destinations and Features

The following key features bring the districts together:

3.5 Green Room: An eight[8] acre urban park sits at the center of the Warehouse District. The park is a well-designed and highly-maintained urban landscape to engage individuals living and working at the Shipyard.

3.6 Water Room: The Water Room opens up to Dry Dock 4. It provides unobstructed views of the Bay and acts as a powerful urban node, linking the Hilltop and waterfront.

3.7 Pedestrian Allée: A generous 50-foot-wide Pedestrian Allée and East-West bike pathway through the Shipyard connects major public spaces such as the Water Room, Green Room, and the Waterfront. This avenue offers ever-changing experiences across open spaces and the built environment. This procession of environments is complemented with low-rise residential, mid-rise residential, ground floor retail, and offices.

3.8 Waterfront Open Spaces: The waterfront open spaces provide a number of different experiences, such as promenades for walking and bicycling, a marina, sports fields, and an ecological landscape for native habitats. A diversity of waterfront edge conditions provide a variety of experiences as well as access to the water. Some are hard edge conditions (sea walls, rip-rap, ecologically enhanced bulkheads) and others are soft edge conditions (marsh lands, vegetated slopes.)

3.1 Warehouse District

Urban Form

The Warehouse District is a vibrant mixed-use neighborhood centered around the Green Room. The Green Room may be complemented by two existing Navy buildings from the World War II era that frame its northern and southern edges and provide a sense of scale and character. New buildings fronting the Water Room and Green Room respond appropriately to the open spaces.

A thoughtful use of building materials, scale, and massing, provide architectural character, and visual interest, and shape the pedestrian realm. Priorities include creating strong street walls at Crisp Road, the Pedestrian Allée, and around the Green Room; activating the ground floor; and framing key view corridors.

Public Realm

The Pedestrian Allée and bike pathway connects large, naturally landscaped open spaces on the southwestern quadrant of the neighborhood with the Green Room, and continue to bridge Dry Dock 4 and the Wharf District.

The Warehouse District is bordered by the Water Room and grand waterfront open spaces that include acres of baseball and soccer fields, a marina, and large natural landscapes. The Bay Trail extends along the shoreline to provide visual and physical connections to the North Shoreline, the Yosemite Slough Bridge, and Candlestick Point.

Ground floor activation is prioritized in the buildings around the Green Room, the Water Room, and the Pedestrian Allée.

A wastewater treatment facility and a police and fire station are located in this district. The character-enhancing elements of these buildings have been considered in the writing of the D4D.

1. Building 813
2. Building 351
3. Building 411


1


2


3

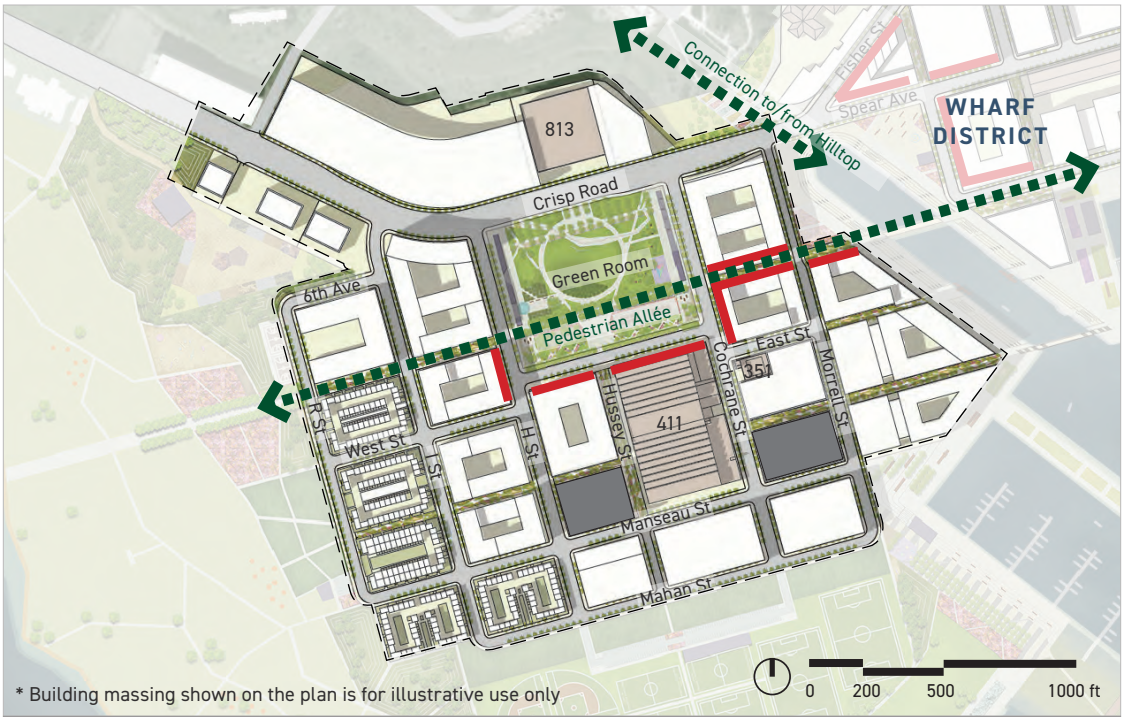
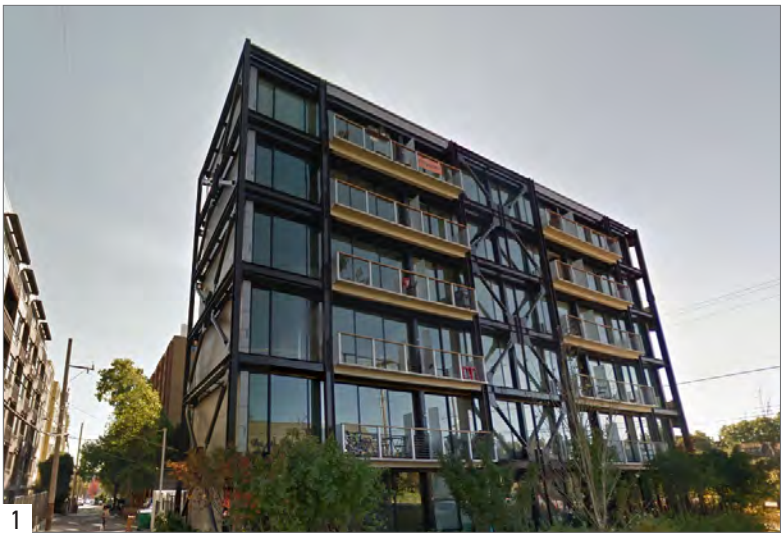


Figure 3.1a: WAREHOUSE DISTRICT



Shared Parking Structures/Utility
Existing Buildings
Priority Ground Floor Activation

1. Mid-Rise Residential Example
2. Open Space Example
3. Ground Floor Activation Example

3.2 Village Center

Urban Form

The Village Center is the creative and cultural hub of the Shipyard and the point of convergence for the other three Shipyard Districts. The Village Center builds on the history of a strong arts and maker community with new artist studios and gallery space supplemented by retail, storefront maker spaces, galleries, and other arts-related uses.

A new Shipyard Artist Studios building frames a plaza for outdoor work spaces and display of artwork. This new building complements the distinctive scale and rhythm of Heritage Building 101, which has been the home for a community of artists since the 1980's.

Public Realm

The nexus of Fischer and Robinson Streets is lined with artists' studios, galleries, and neighborhood retail. The plazas to the north and south of Building 101 provide the primary open space within the Village Center. The low horizontal lines of the Village Center are sharply distinguished from the hillside open space, which rises 85 feet from Fisher to Hilltop Park.

1. Building 101

1

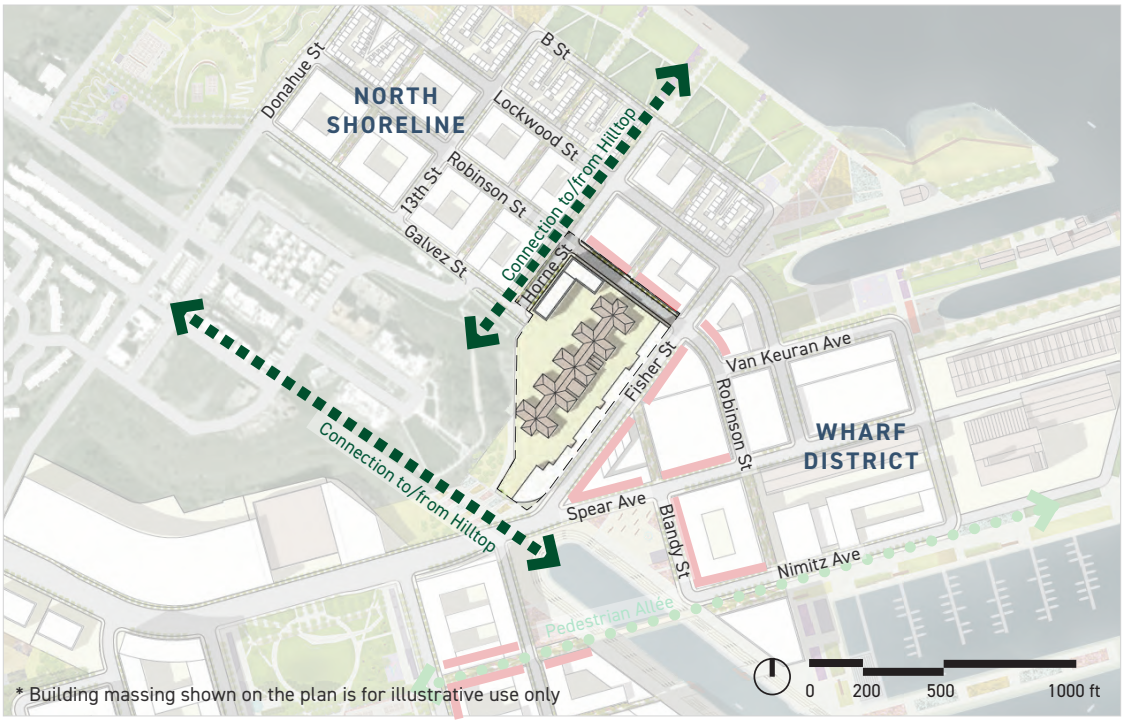
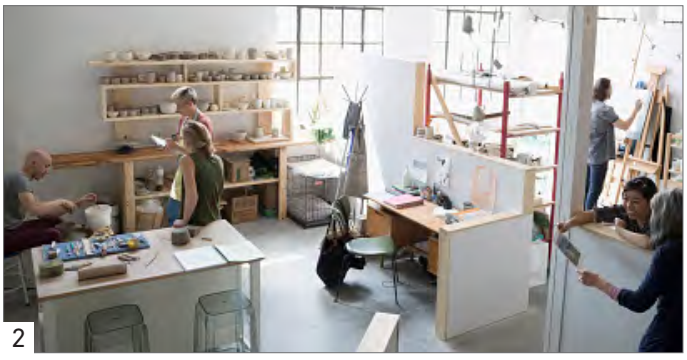


Figure 3.2a: VILLAGE CENTER

1



2

Building 101 (Artists' Studios)

1 & 2. Artists' Studios Examples
3. Maker Space Examples

3

3.3 Wharf District

Urban Form

Echoing the Shipyard's Naval period, the Wharf District will become a center for employment, innovation and entrepreneurship. Primarily focused on research and development, the neighborhood may also include light industrial and manufacturing operations as well as residential and ground level commercial uses.

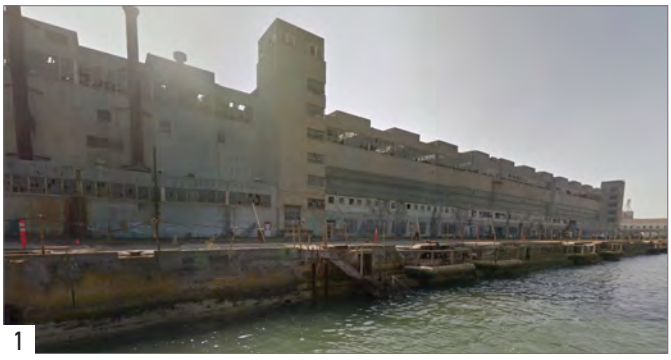
Commercial space will be located within new and restored character-enhancing structures that reflect the needs of the modern workplace. Adhering to the historic street pattern, buildings echo the scale and massing of those that preceded them, with commanding views north, east, and south across the Bay. The generous height and footprint sizes of existing and future buildings relate to the grand scale of the Shipyard.

Public Realm

The Shipyard's primary transit center is located along Spear Avenue, the central axis of the neighborhood. Connecting to the Caltrain Station and Candlestick Point, the transit center also accommodates buses, shuttles, and a future water taxi/ferry service arriving at Dry Dock 4.

The Wharf District offers a unique, accessible, and highly-prized waterfront. The Cultural Heritage Park along Dry Docks 2 and 3 houses a variety of historic buildings and structures dating from the early 1900's, while the Water Room, Dry Dock 4, and the grand stairway provide extraordinary bay views.

1. Building 231
2. Building 253



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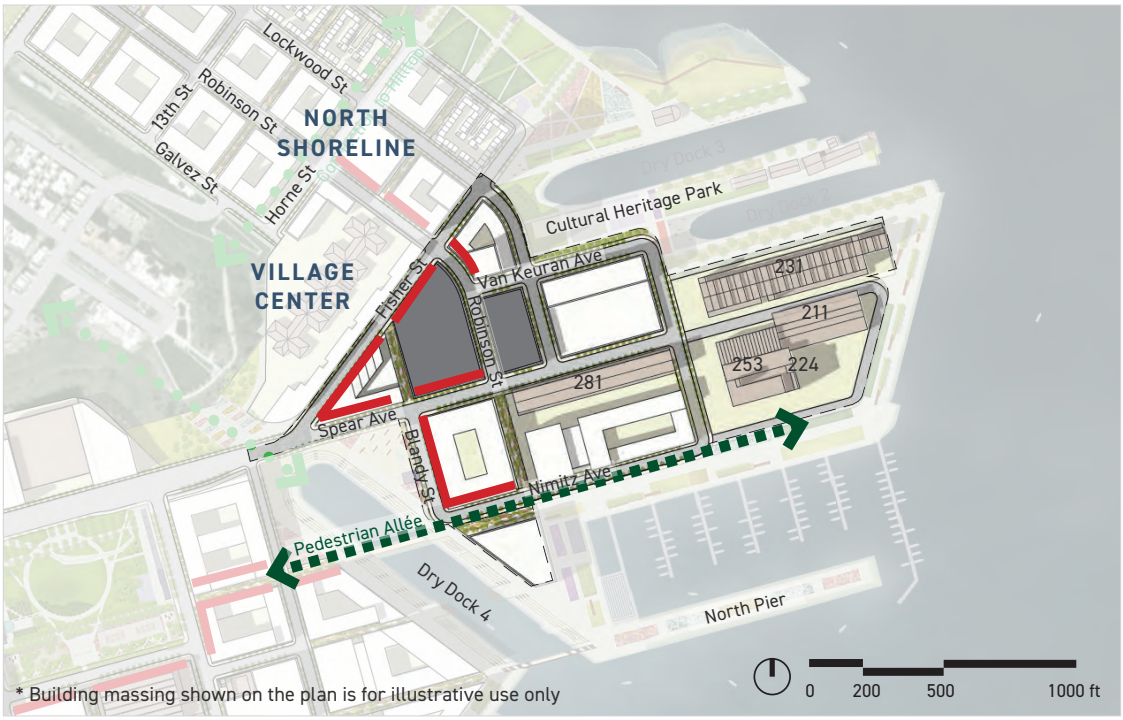


Figure 3.3a: WHARF DISTRICT

1. Waterfront Office Example
2. Adaptive Reuse Example


1


2

3.4 North Shoreline

Urban Form

Embracing its historic residential legacy, the North Shoreline is the residential heart of HPS2, providing a range of housing types in proximity to the waterfront. Primarily low-to mid-rise, buildings relate directly to adjacent public spaces and rights-of-way, stepping down in height towards the shoreline. Toward the waterfront, buildings may become smaller in scale and less dense in layout, which allows more visual connection from interior blocks to the water. The North Shoreline also includes neighborhood-serving retail and business services, childcare, and small professional offices near Fisher Street and Robinson Street. The iconic high-rise towers located on either side of Fisher Street define the skyline of the Shipyard.

Public Realm

Bicycle-oriented Robinson Street and transit-rich Lockwood Street draw residents from the site's northern gateway at Innes Avenue and Donahue Street into the Shipyard's neighborhood center. A generous setback is designed on Robinson Street and Lockwood Street to enhance the sense of a neighborhood gateway and to allow for private open spaces, stoops and transitions from the private to public realm.

The Waterfront Promenade along the northeastern edge of the neighborhood provides views across the water to downtown San Francisco. Northside Park, at the northern edge of the Shipyard, is a 13-acre area with passive and active open spaces serving both the residents of Shipyard North Shoreline District and the adjoining Hunters Hill and Indian Basin neighborhoods. Both building and park design provide connectivity while also respecting the privacy of residential dwellings adjoining the promenade.

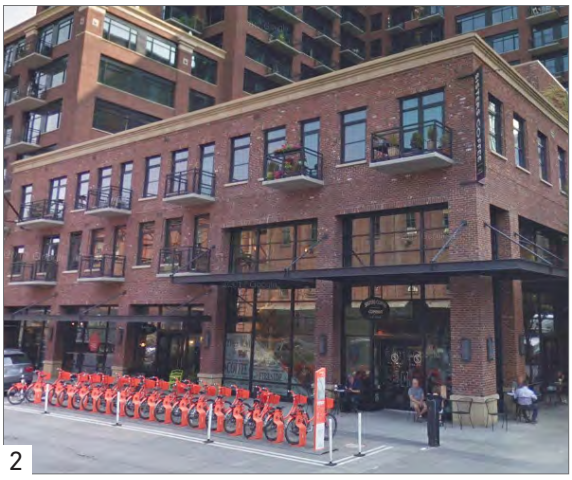
East-west streets, mid-block breaks, and private open spaces extend views to the parks and Waterfront Promenade. This promenade extends the Bay Trail's walking and bike routes into the neighborhood, via a series of paths connecting to neighborhood streets and allées. The broad, landscaped space along Horne Street connects the park into the neighborhood with manicured trees that preserve glimpses of the Bay.

Figure 3.4a: NORTH SHORELINE

Shared Parking Structures / Utility

Priority Ground Floor Activation

1. Residential Tower Example
2. Residential Mid-Rise Example



3.5 Green Room

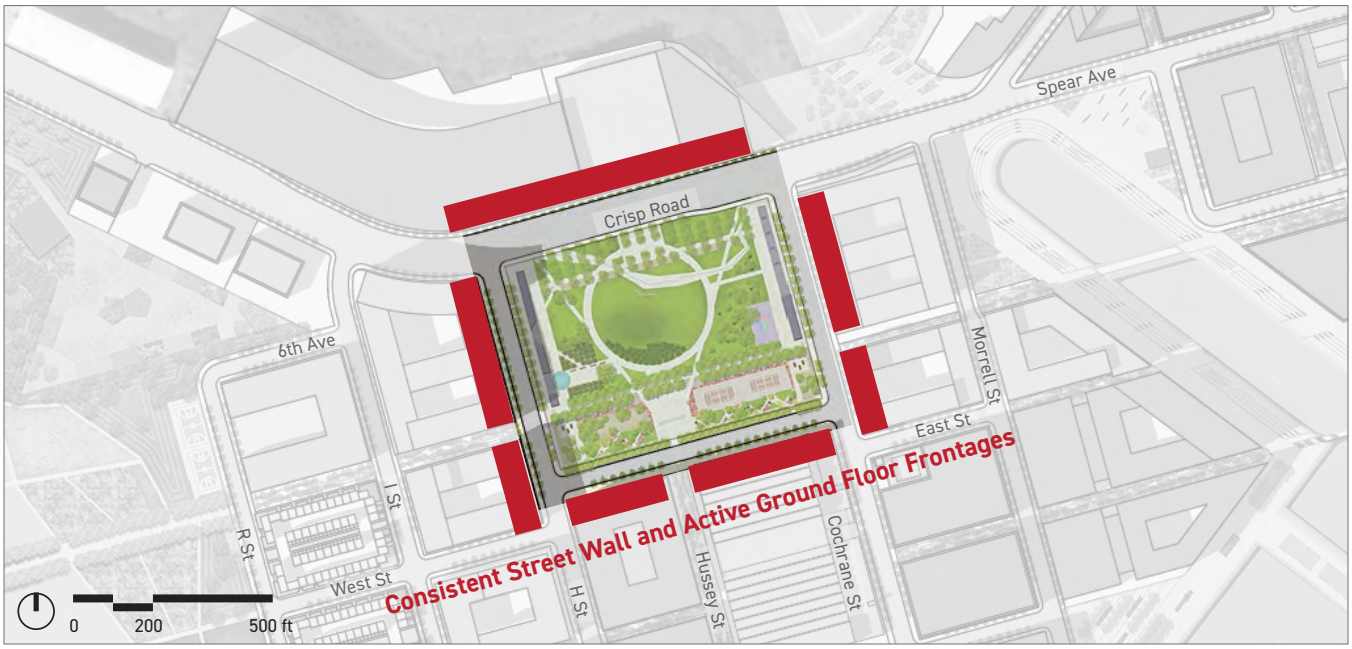


Figure 3.5a: KEY DESTINATIONS AND FEATURES - GREEN ROOM

- New buildings frame the Green Room to reinforce the historic legacy of large buildings through scale, massing, and consistent street walls.
- The district design represents and brings together multiple histories of the Shipyard with iconic adaptive reuse structures.
- One of two outdoor civic "rooms," the Green Room is situated at the heart of the Warehouse District. It is designed as a park with community programs, gatherings, and festivals.
- A pavilion dedicated to Maya Angelou offers a moment of quiet reflection.

1 & 2. Green Room Examples


1


2

3.6 Water Room

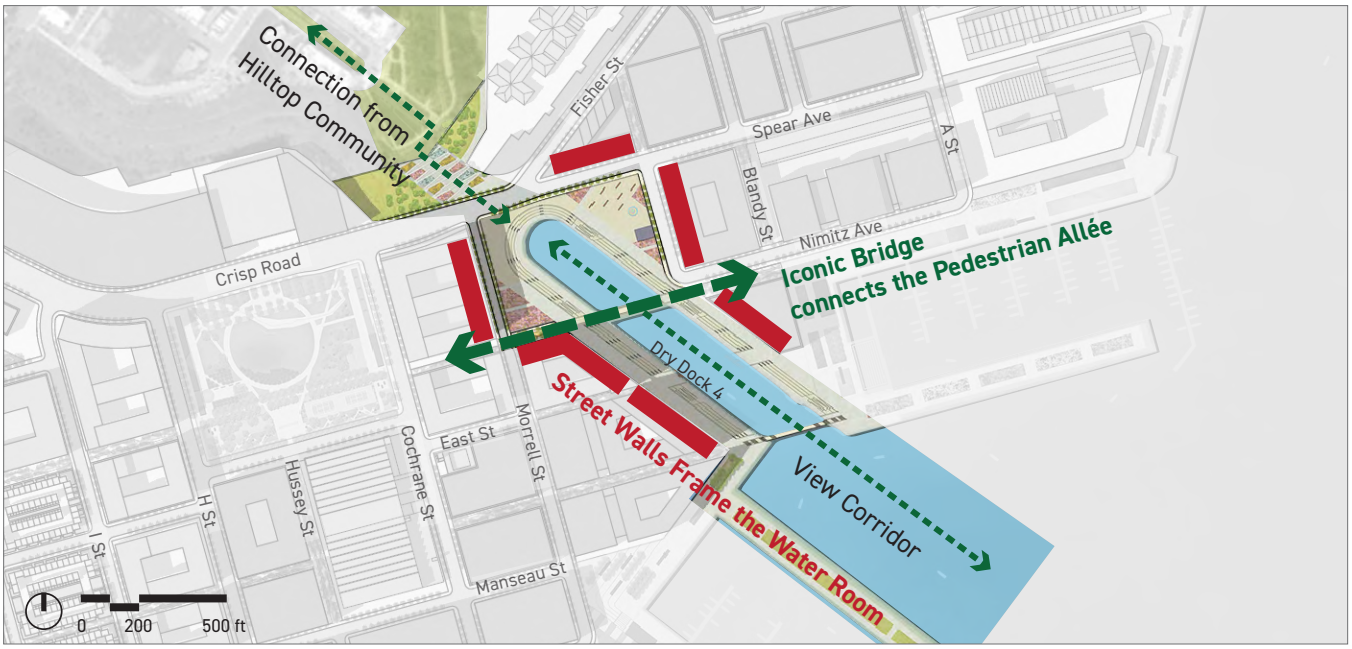


Figure 3.6a: KEY DESTINATIONS AND FEATURES - WATER ROOM

- Buildings around the Water Room are scaled and designed to create consistent street walls that frame this contemporary public space.
- The buildings create an unobstructed view corridor and frame a grand stair with generous access from the top of Hilltop Park down to the Waterfront.
- One of two outdoor civic "rooms," the Water Room is a four-acre civic square that weaves the most striking shoreline feature—Dry Dock 4—into the heart of the shipyard development.
- An iconic bridge connects the Pedestrian Allée.

1 & 2. Water Room Examples


1


2

3.7 Pedestrian Allée

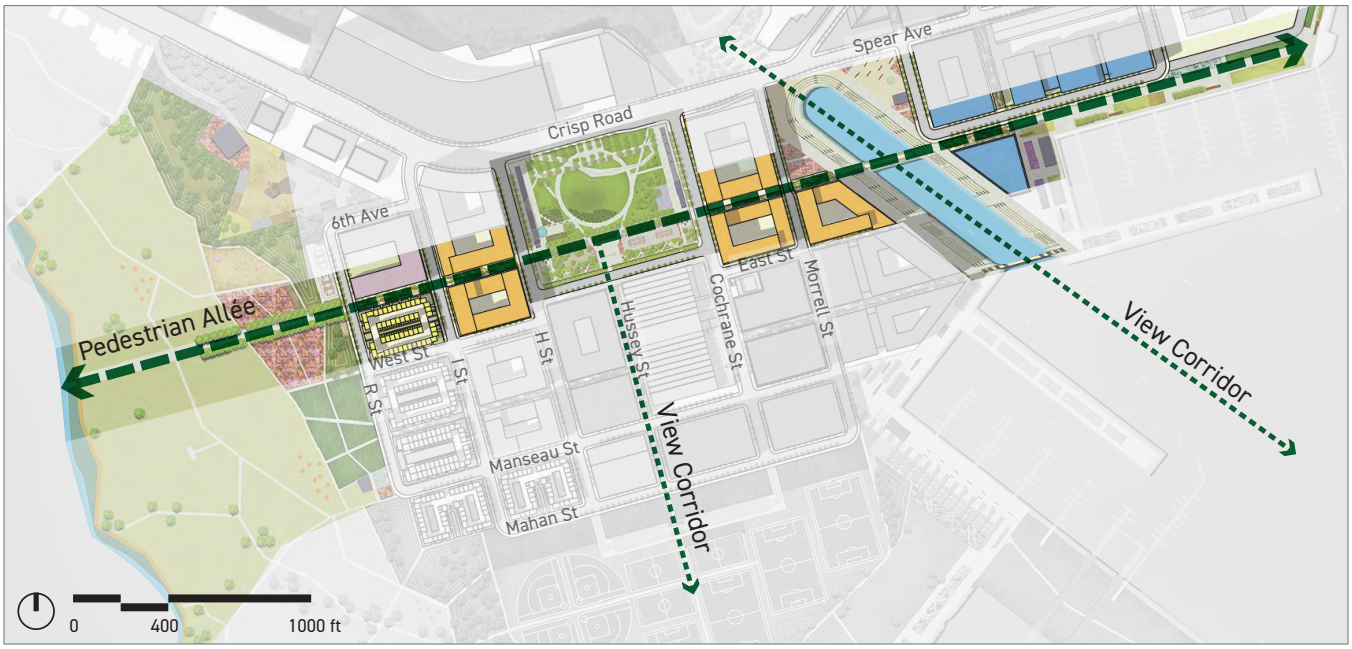


Figure 3.7a: KEY DESTINATIONS AND FEATURES - PEDESTRIAN ALLÉE

- Building Step Backs along the Mid-Block Breaks bring light to the corridor, while the consistent street walls define and frame view corridors.
- Ground Floor Activation at the base of the buildings and concentrated retail zones create a safe and exciting walking experience.
- The sequence of appropriately scaled open spaces—with a mix of low-rise residential, mid-rise residential, office and research buildings, and ground-floor activation—creates multiple experiences.
- A generous east-west pedestrian and bicycle path connects major public spaces such as the Water Room, the Green Room, Waterfront Open Spaces, and the Bay Trail.

1 & 2. Pedestrian Allée Examples


1


2

3.8 Waterfront Open Spaces

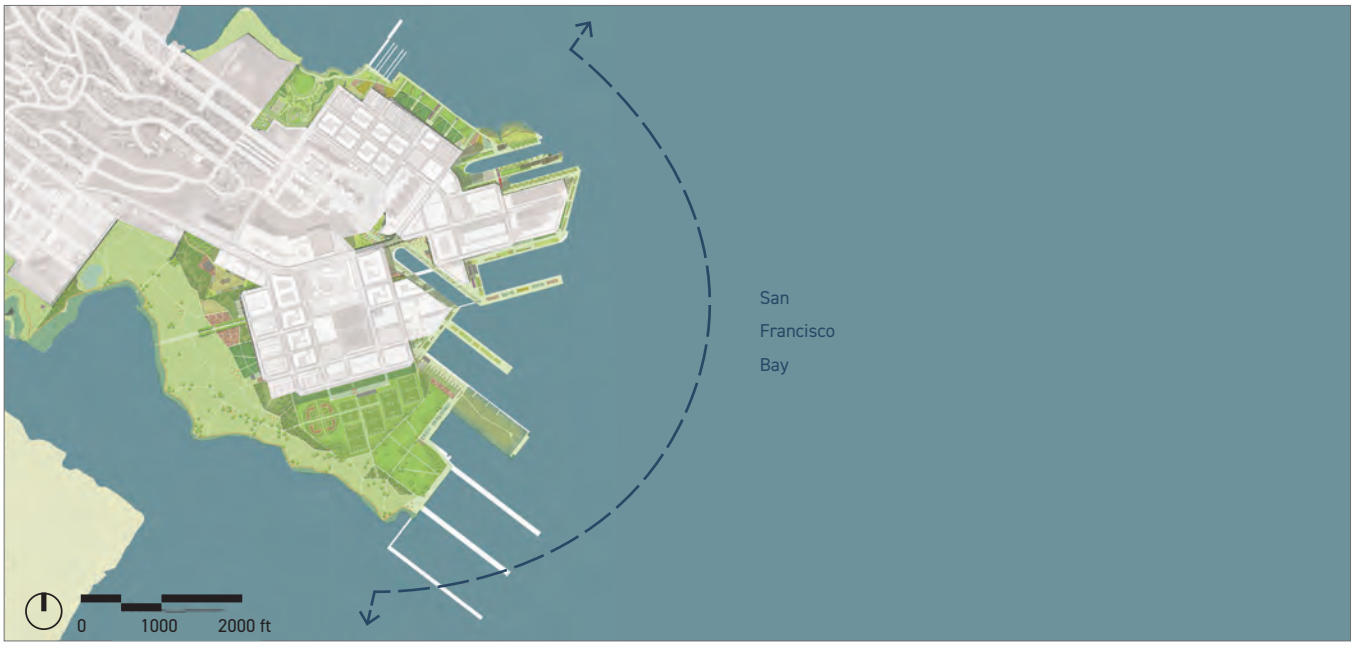


Figure 3.8a: KEY DESTINATIONS AND FEATURES - WATERFRONT OPEN SPACES

- Through bulk and massing, buildings in districts are scaled appropriately. Compared with the adjacent residential buildings to the north, buildings in the Wharf District increase in scale to emphasize the Dry Docks and Naval piers. Buildings may step down in height towards the northern and southern waterfront open spaces.
- Building parcels along the development perimeter provide access to the waterfront open spaces that host a number of diverse experiences such as promenades for walking, a marina where sailing can dispatch, thriving natural habitats, and a regional sports facility to draw people from across the region.

1 & 2. Waterfront Open Space Examples


1


2

4 DESIGN STANDARDS & GUIDELINES

4 Design Standards & Guidelines

The Design Standards and Guidelines provide regulatory controls that guide development to align with the HPS2 Vision. Controls consist of Intent, Definitions, Standards, and Guidelines. Certain controls include an Application section that outlines additional information including intent, definitions, and guidance on application of Standards.

Intent: Describes the principal goals, objectives and rationale of each Standard and/or Guideline; as well as alignment of specific features or provisions to the project vision, principles, design drivers and physical framework.

Standard: Mandatory, objective and quantifiable specifications or other requirements applicable to the Project.

Guideline: Mandatory specifications or requirements that are inherently qualitative and therefore require interpretation.

Application: Provides direction on implementation of Standards and Guidelines.

Standards and Guidelines function as a system of controls to shape development consistent with the City and community aspirations for an active, vibrant, livable and distinctive waterfront district. The Intent, Standards, and Guidelines are used to describe and delineate each of the four key development categories: Building Design, Private Open Space, Building Signage, and Building Lighting.

Refer to Chapter 6 for all Term Definitions.

Figure 4.0a: ANTICIPATED DEVELOPMENT MAP *Illustrative use only*

CHAPTER 4 TABLE OF CONTENTS

Building Design

Private Open Space

Signage

Lighting

Private Infrastructure

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4.1 Block Sizes and Mid-Block Breaks

4.1.1 Mid-Block Break Lot Divisions and Locations

INTENT

Mid-Block Breaks (MBBs) are intended to allow public access through private development blocks to promote connectivity and walkability and create a finer grain circulation system.

MBBs are regulated by the CPHPS2 Infrastructure Plan, Transportation Plan, and Streetscape Master Plan.

Mid-Block Break Specification Book will be provided per the DRDAP.

DEFINITIONS

"Mid-Block Breaks or MBBs"
A publicly accessible pedestrian, bicycle and/or vehicle lane way on private property as identified in *Figure 4.1.b*.

"Mid Block Break Width"
The mandatory Street Wall to Street Wall width for a MBB and associated Setback zones.

"EVA"
Emergency Vehicular Access.

"Street Wall"
The aggregate effects of the façades of buildings along a property line adjacent to a street or open space. The typical context for this term is in defining the public realm and framing or engaging the street.

"Block Sizes"
Block Sizes and legal parcels are defined in the Final Map. Approximate parcel dimensions are provided in *Figure 4.1b* and are subject to change. Block sizes may be legal parcels or may be part of a legal parcel.

STANDARDS

4.1.1 Mid-Block Break Lot Divisions and Locations

Mid-Block Break locations and widths shall be built as defined in *Figure 4.1a*. MBB Widths shall be used to define the location of the Street Wall. Street Wall to Street Wall dimensions shall not be greater or less than required MBB Width. Refer to *Figure 4.1a*.

MBB locations across blocks shall be aligned. The first developed MBB establishes the required centerline for subsequent MBB alignment. All required amenities including street trees, lighting, and seating shall occur within the MBB Parcel or the adjacent Setback Zones. Refer to *Figure 4.1b* and Section 4.27 Private Open Space - Mid-Block Breaks.

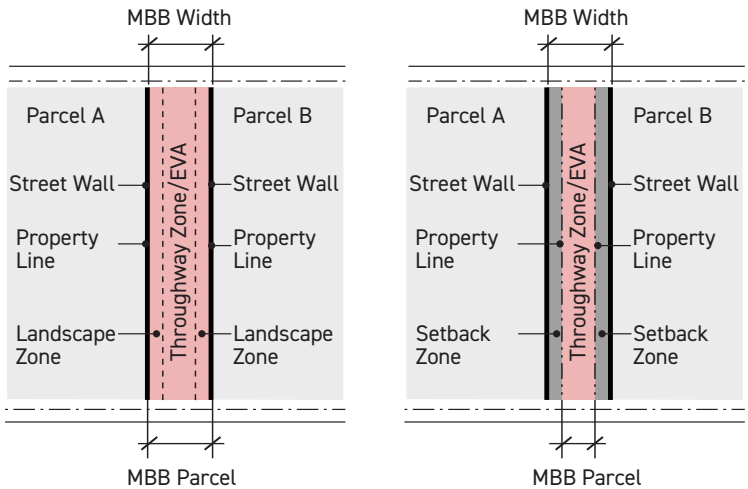

Figure 4.1a: MID-BLOCK BREAK LOT DIVISIONS

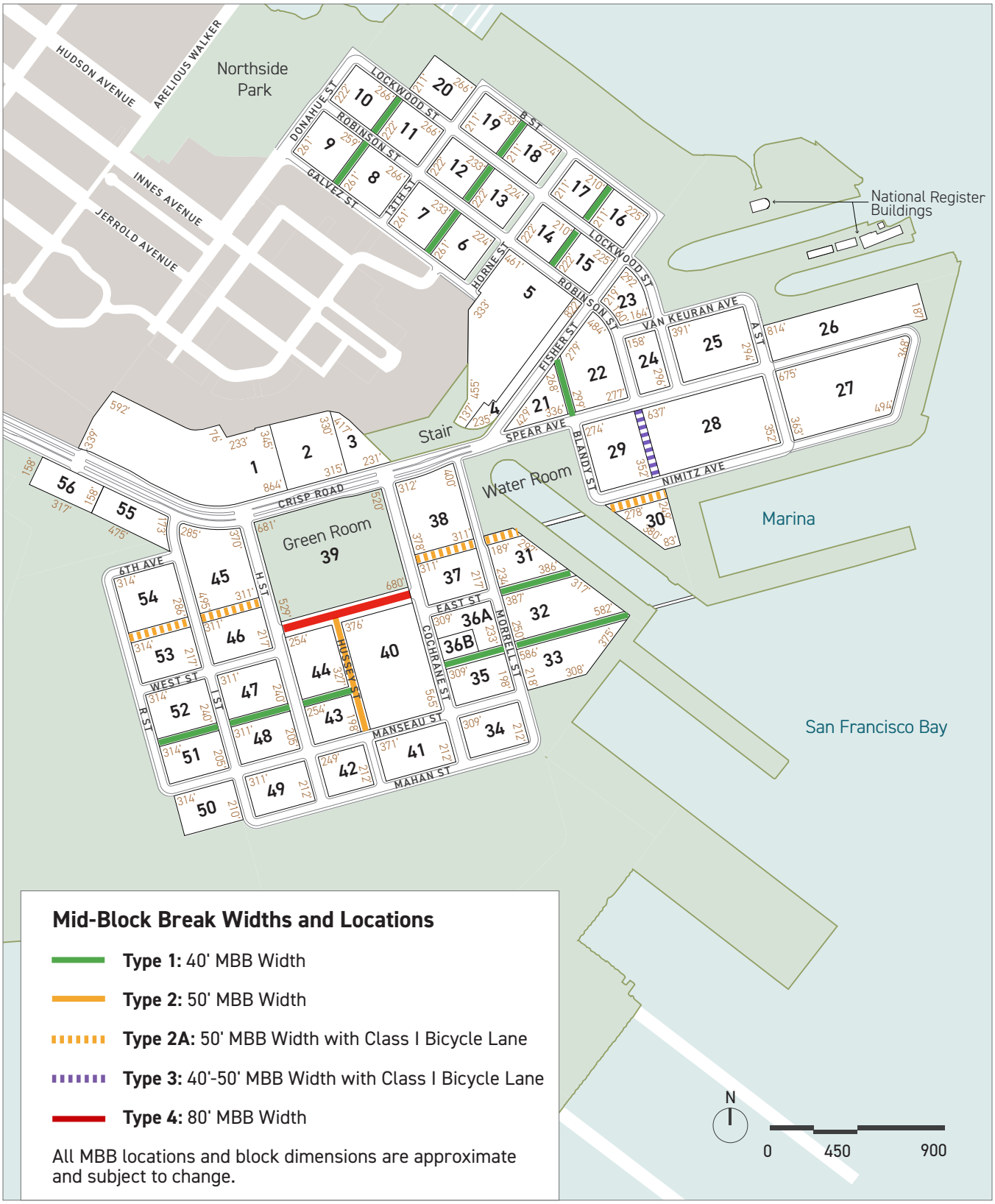

Figure 4.1b: MID-BLOCK BREAK WIDTHS AND LOCATIONS

4.1 Block Sizes and Mid-Block Breaks Cont'd

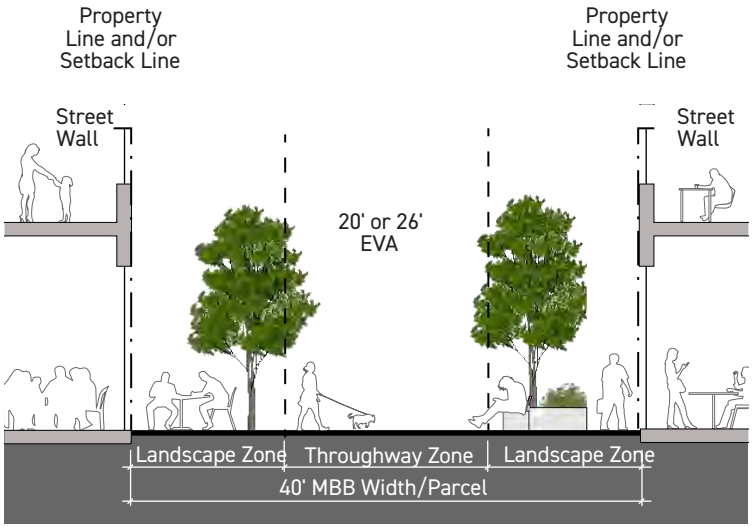

Figure 4.1c: TYPE 1 MID-BLOCK BREAK WIDTH (40') COMMERCIAL

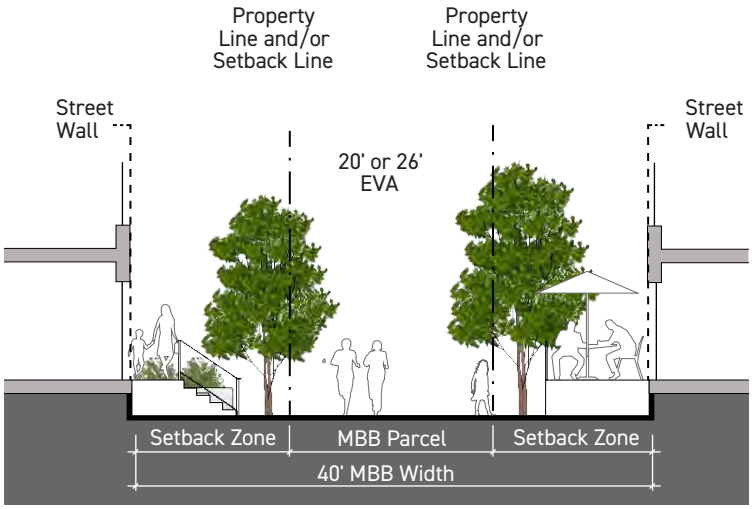

Figure 4.1d: TYPE 1 MID-BLOCK BREAK WIDTH (40') RESIDENTIAL

4.1 Block Sizes and Mid-Block Breaks Cont'd

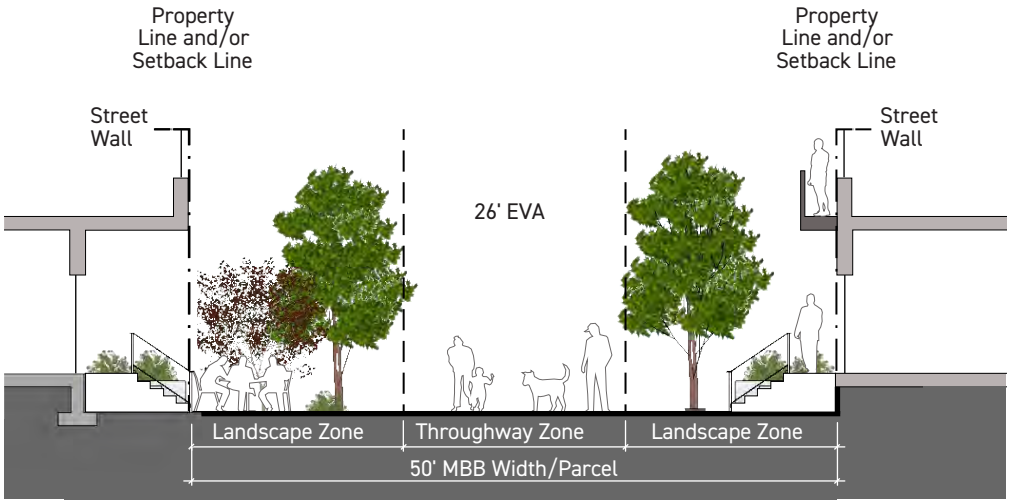

Figure 4.1e: TYPE 2 MID-BLOCK BREAK WIDTH (50')

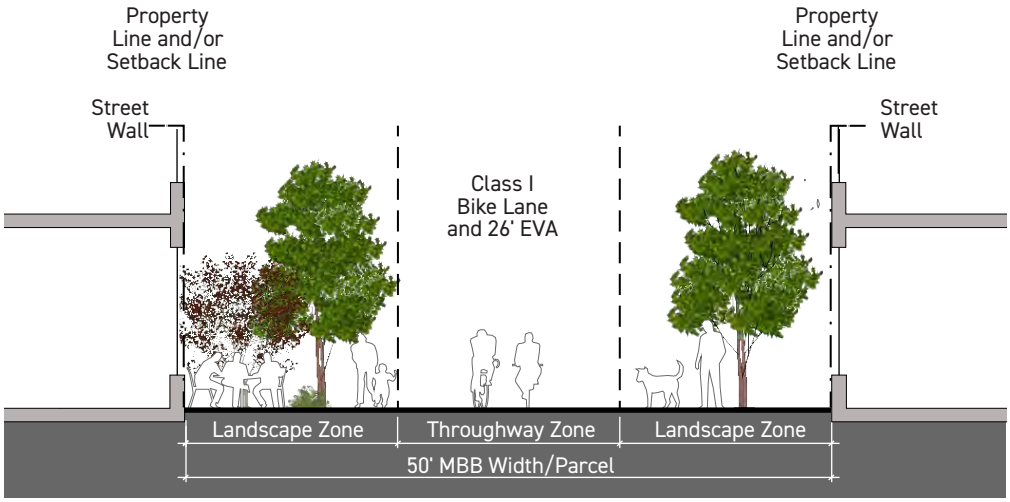

Figure 4.1f: TYPE 2A MID-BLOCK BREAK WIDTH (50') WITH CLASS I BICYCLE LANE

4.1 Block Sizes and Mid-Block Breaks Cont'd

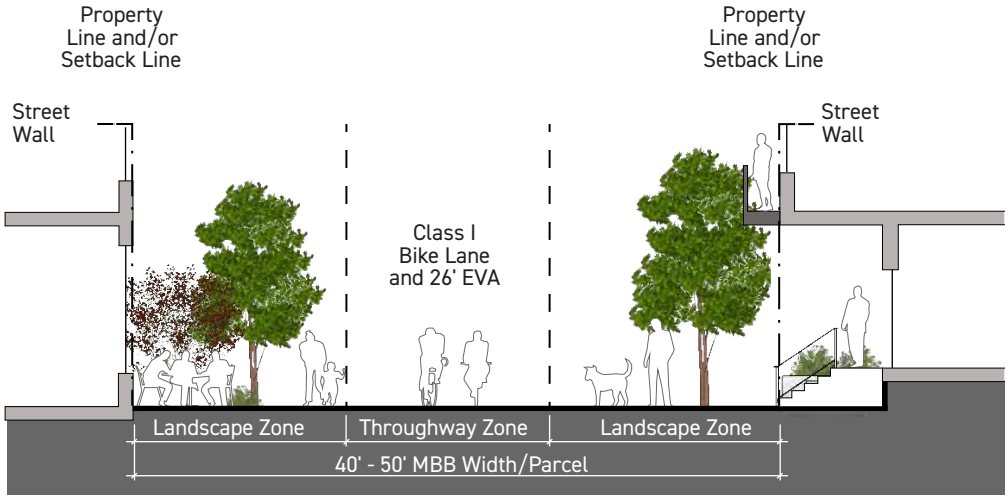

Figure 4.1g: TYPE 3 MID-BLOCK BREAK WIDTH (40' - 50') WITH CLASS I BICYCLE LANE

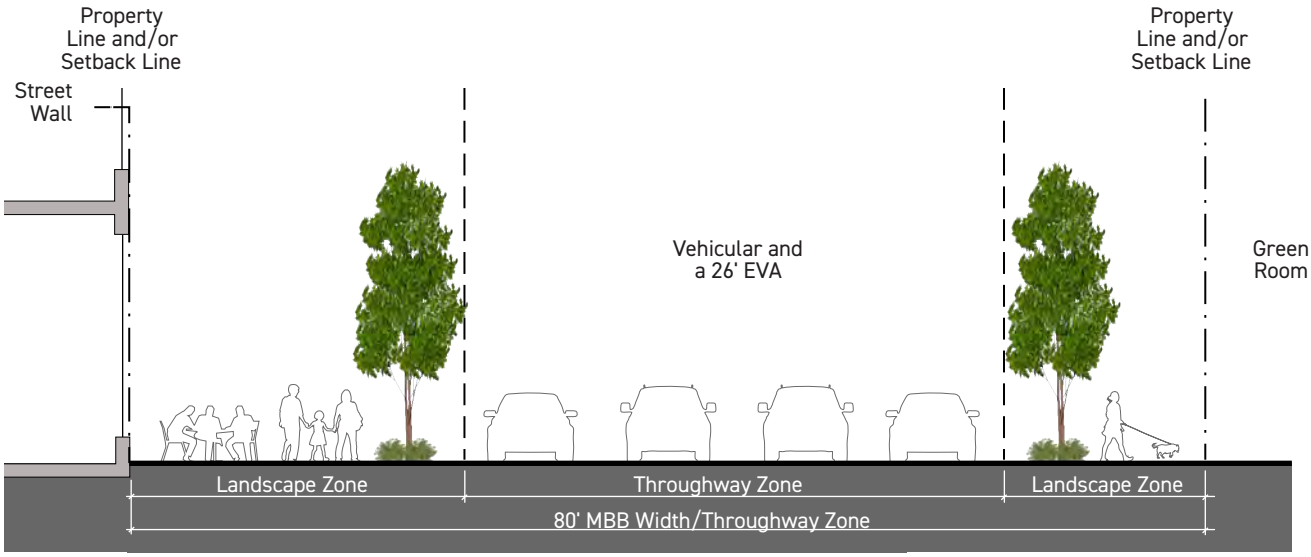

Figure 4.1h: TYPE 4 MID-BLOCK BREAK WIDTH (80')

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4.2 Building Setback

INTENT

Setback requirements provide a minimum and maximum range for Building Face locations and describe a relationship between the building and the public right-of-way for each building location.

Setback Zones 1 and 2 provide an urban Street Wall that frames the public realm and establishes a relationship for buildings fronting streets and public gathering spaces.

Setback Zones 3 through 6 provide spaces for transitions between the public and private realm, including but not limited to landscaping, stoops, and porches. These spaces increase the amount of privacy for ground floor residential units. Larger Setbacks on Robinson and Lockwood Streets, Zones 5 and 6, provide additional area for wider sidewalks, sidewalk seating, landscaping and stoops that will create a sense of arrival into the Shipyard from the neighborhoods to the north on these transportation corridors and bicycle routes.

DEFINITIONS

"Building Face"
A plane of the exterior wall of the building along a public right-of-way, open space, or other publicly accessible space. The term is typically used in the context of its relationship to an adjacent street or public area. Where a minimum Street Wall is required, the Building Face aligns with the maximum Setback.

DEFINITIONS

"Setback"
The required horizontal distance between the Building Face and a property line. See *Figure 4.2a*.

STANDARDS

4.2.1 Building Setback

The Building Face is required to be set back from a property line by a horizontal distance of no less than the minimum Setback and no greater than the maximum Setback as established by *Figure 4.2b*.

Setback requirements do not apply to existing buildings if retained or adaptively reused.

The Setback zone shall be used to create one or more of the following:

- Residential private open spaces (4.26)
- Building entries (4.12)
- Commercial open spaces
- Publicly accessible plazas
- Outdoor seating zones
- Walk-up windows for vending
- Stoops and unit entries (4.12 & 4.26)
- Fences (4.26)
- Stormwater treatment
- Below-grade parking structures (with adequate depth to meet landscape standards for setback area above)
- Screened utility areas (4.14)
- Landscape areas (4.27)
- Or similar
- Refer to Section 4.26 Private Open Space.

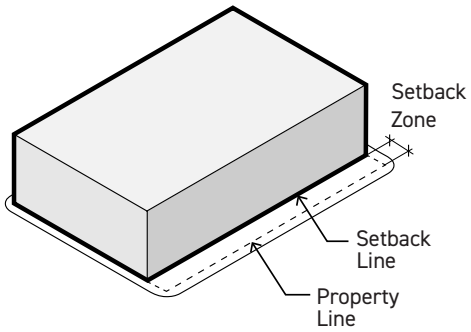


Figure 4.2a: BUILDING SETBACK

Allowable projections into the setback zone are controlled in Standard 4.10.1 Projections.

4.2.2 Mid-Block Break Setback

Setbacks along MBBs are subject to change depending on the final MBB property line location. Setback lines shall be set so that the Street Wall location is located at the MBB Width dimension required in Section 4.1 and *Figure 4.2b*.

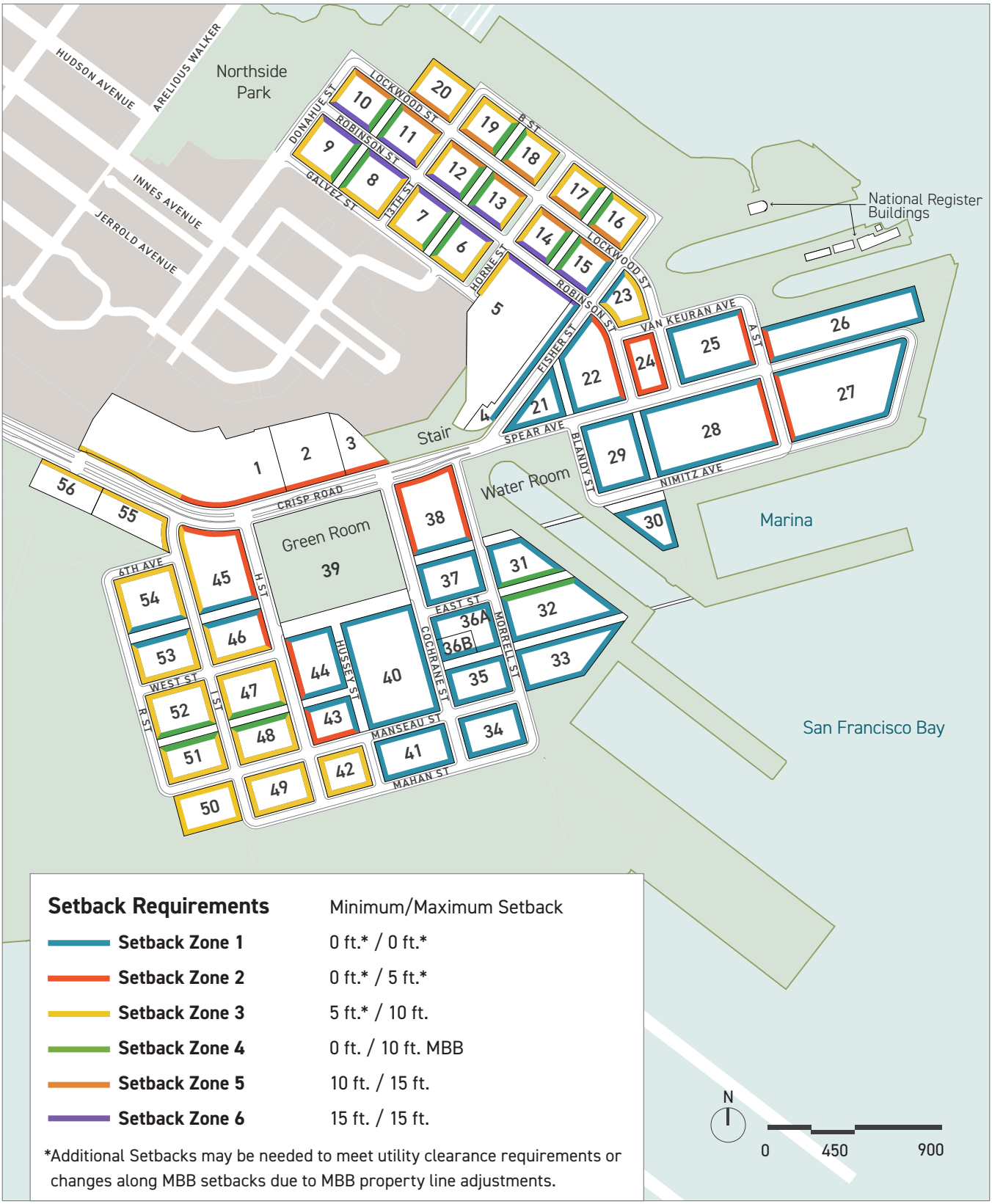


Figure 4.2b: SETBACK REQUIREMENTS

Figure 4.2c: VIEW LOOKING SOUTH *Massing study for illustrative purposes only.*

Figure 4.2d: VIEW LOOKING NORTH *Massing study for illustrative purposes only.*

4.3 Developable Area Coverage

4.3.1 Developable Area Coverage

INTENT

To regulate the Building Envelope by building lot coverage at various height thresholds in order to ensure that the overall bulk of buildings is at an appropriate scale.

DEFINITIONS

"Developable Area"
All land inside the legal property line, excluding Setbacks.

"Coverage"
The percentage of Floor Plate in relation to the Developable Area that is regulated at various height thresholds, as indicated in *Figure 4.3a and Figure 4.3b.*

"Floor Plate"
The Gross Floor Area for an individual floor level of a building.

"Gross Floor Area"
Definition provided in Chapter 6.

STANDARDS

4.3.1 Developable Area Coverage

Developable Area coverage by all habitable and non-habitable building area, including structured parking, is limited as indicated below:

Residential and Residential Mixed-Use Buildings:

Building Height (ft.)	Maximum Allowable Area (Gross sq. ft.)
0-40	100% of Developable Area
41-85	75% of Developable Area
86-120	30,000 sq. ft. maximum (block 45)
121+	12,500 sq. ft. maximum (blocks 15 and 23)

Non-Residential Buildings:

Building Height (ft.)	Maximum Allowable Area (Gross sq. ft.)
0-40	100% of Developable Area
41-95	90% of Developable Area
96-120	80% of Developable Area

For buildings over [120] ft. in height, additional tower design standards apply. Refer to 4.9 Tower Controls.

Shared Parking Structures are not subject to 4.3.1 Developable Area Coverage standard.

Buildings may span multiple parcels between Blocks 1, 2, and 3, Blocks 36A and 36B, and Blocks 55 and 56, respectively.

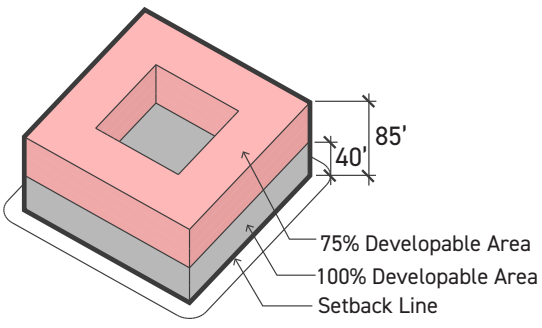


Figure 4.3a: DEVELOPABLE AREA COVERAGE RESIDENTIAL & RESIDENTIAL MIXED-USE BUILDINGS

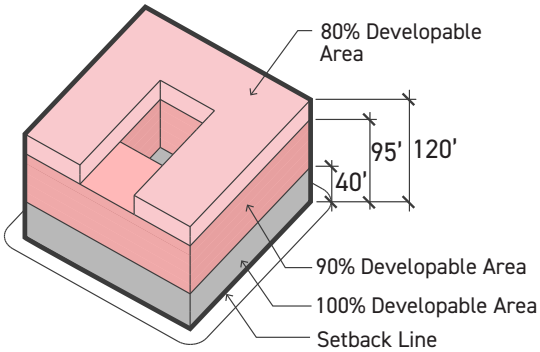


Figure 4.3b: DEVELOPABLE AREA COVERAGE NON-RESIDENTIAL BUILDINGS

4.4 Building Height

INTENT

Maximum Building Height, Street Wall, and Stepback requirements establish the building scale in each district. Taller buildings frame urban open spaces and define a skyline that steps down from the hillside towards the waterfront, optimizing views and facilitating the transition to the natural landscape. Stepbacks on the south side of residential and retail focused Mid-Block Breaks allow additional daylight to open space.

DEFINITIONS

"Stepback"
The distance that upper levels of a building may be inset from the primary Building Face.

"Implied Façade"
An Implied Façade is a Building Face that completes the apparent massing through vertical and horizontal architectural elements, such as the roof line, columns, angular shifts, or other elements, that maintain the visual continuity of the Street Wall.

STANDARDS

4.4.1 Building Height

Maximum height requirements are established for all development blocks, as illustrated in *Figure 4.4c*.

Building Height is measured from the highest corner at finished sidewalk grade to the average point on the finished roof in the case of a flat roof, and from the average height of the rise in the case of a pitched or stepped roof, or similarly sculpted roof form. See *Figure 4.4a*.

For parcels adjacent to streets with a slope greater than 5%, Building Height is determined by measuring at the mid-point of the building at the sidewalk grade adjacent to each street-fronting Building Face. The maximum height envelope may extend from one frontage up to a depth of half the distance to the opposite side of the block. Multiple frontages may be used to determine maximum Building Height envelope. See *Figure 4.4b*.

Towers shall be located within the Flexible Tower Zone, as shown in *Figure 4.4c*.

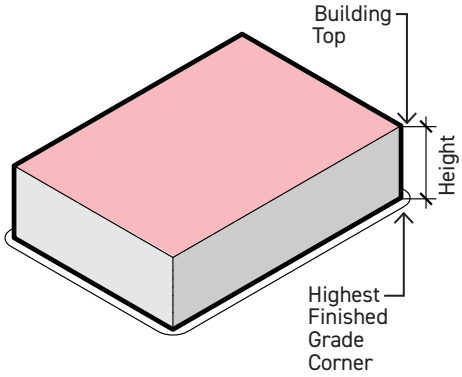


Figure 4.4a: BUILDING HEIGHT

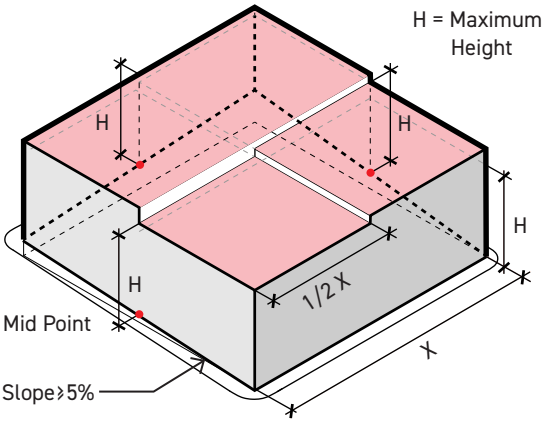


Figure 4.4b: BUILDING HEIGHT ON SLOPE

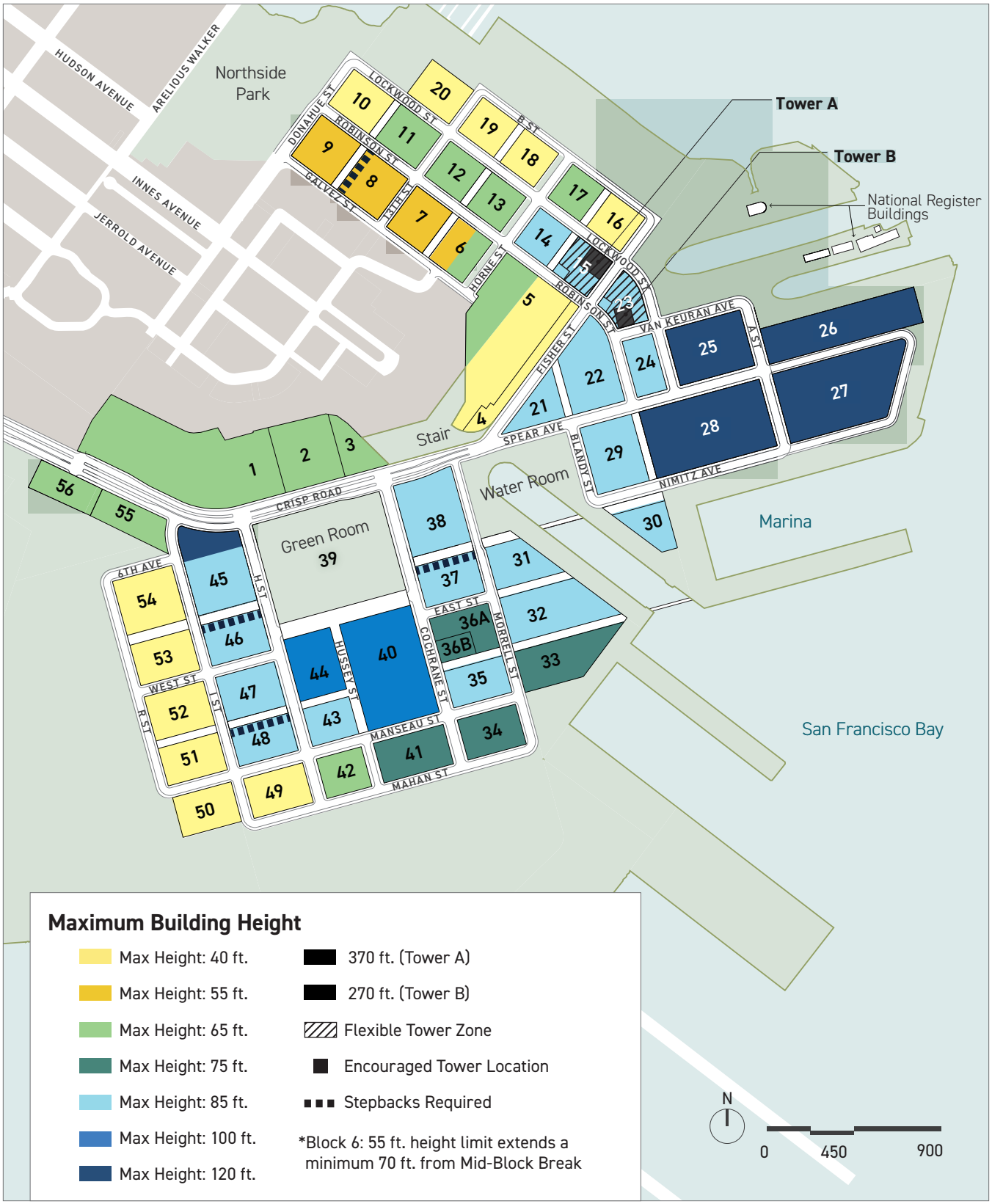


Figure 4.4c: MAXIMUM BUILDING HEIGHT

4.4 Building Height Cont'd

INTENT

To increase the amount of sunlight that reaches the ground plane of Mid-Block Breaks.

STANDARDS

4.4.2 Mid-Block Break Building Stepbacks

Stepbacks are required at designated locations as indicated in *Figure 4.4c*.

Stepbacks shall occur at a minimum of a 1:1.2 ratio above [45] ft. in building height. The first [70] ft. of building frontage perpendicular to H and Cochrane Streets are exempt. See *Figure 4.4d* and *Figure 4.4e*.

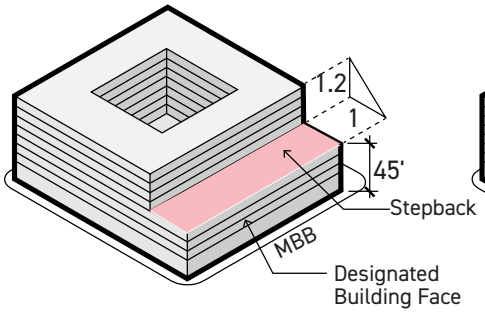


Figure 4.4d: BUILDING STEPBACK

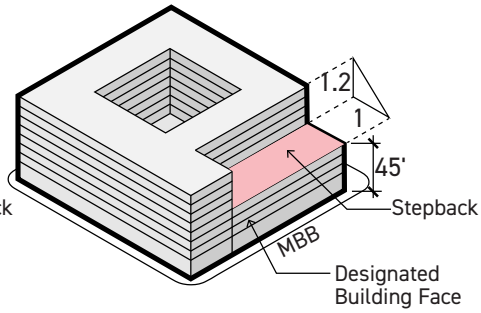


Figure 4.4e: BUILDING STEPBACK

INTENT

To define the type, number, height, and area of elements allowed to exceed the maximum Building Height.

STANDARDS

4.4.3 Building Height Exceptions

The following may extend up to [16] ft. above the maximum Building Height:

- Spires, towers, and other non-habitable architectural features
- Mechanical equipment and appurtenances necessary to the operation or maintenance of the building or structure itself, including chimneys, ventilators, plumbing vent stacks, cooling towers, water tanks, elevator, stair and mechanical penthouses, skylights, window-washing equipment and associated screens
- Sustainable building systems and roof-mounted equipment, such as solar collectors and wind turbines
- Habitable amenity spaces

4.4 Building Height Cont'd

4.4.4 Roof Area Building Height Exception

STANDARDS

Ventilators, vent stacks and mechanical exhaust systems for laboratory uses may extend above the maximum Building Height as necessary to the operation of the building only to the extent required by the corresponding codes. (i.e. building code, health code, etc.).

The screening of Roof-Mounted Equipment shall be stepped back from top of parapet at a ratio of 1:1.2 and no less than ten[10] ft. from the parapet or roof edge. See *Figure 4.4f.*

Parapets may extend up to four[4] ft. above the maximum Building Height.

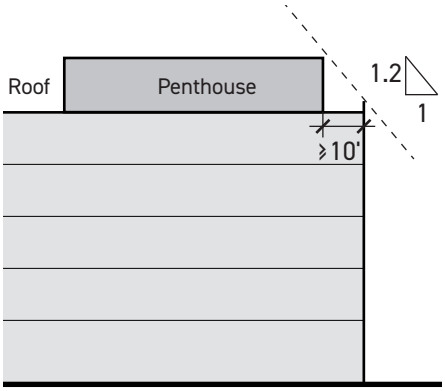


Figure 4.4f: PENTHOUSE STRUCTURE REQUIREMENTS

4.4.4 Roof Area Building Height Exception

The total square footage of enclosed area(s) within rooftop Screening and penthouses shall be no greater than 30% of the total roof area. See *Figure 4.4g.*

Enclosed habitable amenity spaces covering not more than [2,500] sq. ft. of the overall roof area and appurtenant to outdoor amenity spaces may extend up to [16] ft. above the maximum Building Height. See *Figure 4.4h.*

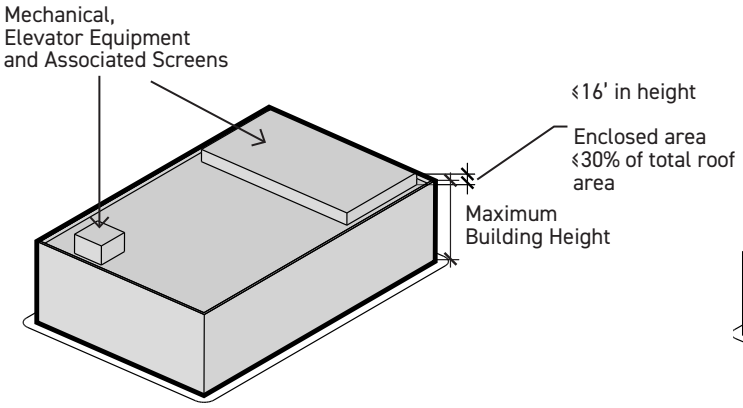


Figure 4.4g: BUILDING HEIGHT EXCEPTION

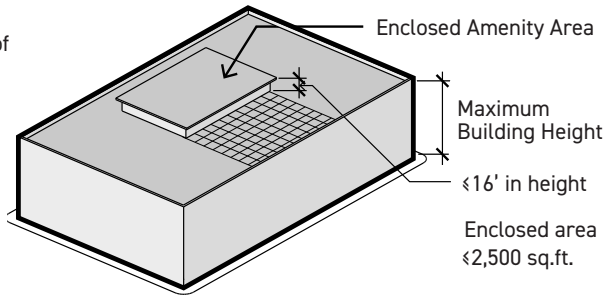


Figure 4.4h: BUILDING HEIGHT EXCEPTIONS ENCLOSED AMENITY AREA

4.4 Building Height Cont'd

INTENT

To create a strong Building Face that defines the public realm by ensuring a minimum amount of the Building Face is located at the setback line.

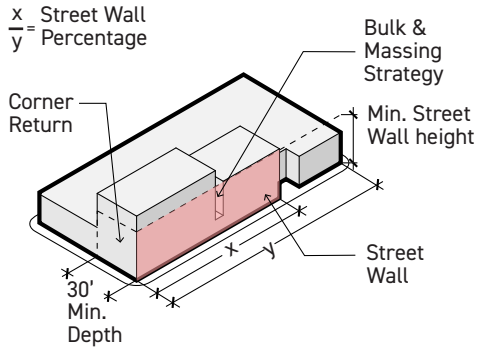


Figure 4.4i: STREET WALL

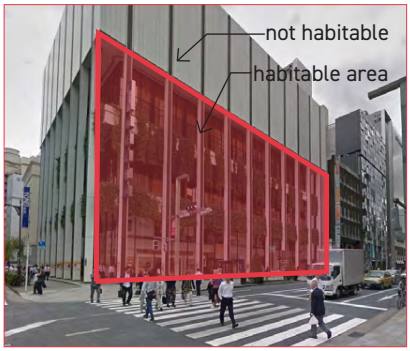


Figure 4.4j: IMPLIED FAÇADE

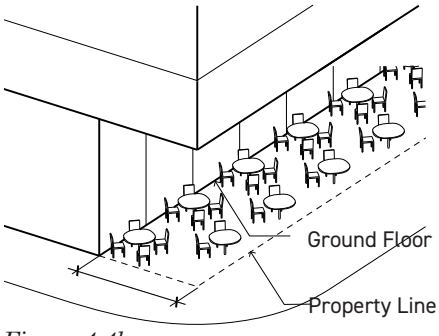


Figure 4.4k: COVERED OUTDOOR SEATING

STANDARDS

4.4.5 Street Wall

Minimum Street Wall heights and Street Wall percentage requirements are established by *Figure 4.4l.*

The Street Wall shall occur within an area bounded by the minimum and maximum Setbacks. The minimum height shall be maintained for a minimum depth of [30] ft. from the Street Wall. In the case of a corner where two different Street Wall heights adjoin, the higher of the two shall prevail for the required depth of [30] ft. Street Wall requirements are calculated independently for each Street Fronting Elevation. Refer to *Figure 4.4i.*

Bulk and Massing and Façade Composition strategies as defined in Section 4.6 and Section 4.7 that are used to meet the Standard requirement shall be counted toward the required Street Wall percentage.

4.4.6 Implied Façade

A required Street Wall may be achieved by an Implied Façade that complies with the height and percentage requirements of the Street Wall Standard. Height of the Street Wall shall be met by habitable building area. Refer to *Figure 4.4j.*

4.4.7 Street Wall Exceptions for Adaptive Reuse

Street Wall requirements do not apply to Adaptive Reuse buildings if retained.

4.4.8 Street Wall Exceptions for Recessed Areas

Street Wall Zones 1-A, 1-B and 2 permit covered outdoor areas at the ground floor, recessed from the Street Wall up to [15] ft. in depth, to allow for patio spaces, entrances, publicly accessible plazas, outdoor seating zones, and/or walk-up windows. The outdoor area shall be no greater than two Stories in height and the Street Wall shall be maintained for the Building above the recessed area. Such an outdoor area shall be immediately accessible by an entrance to the building. Refer to *Figure 4.4k.*

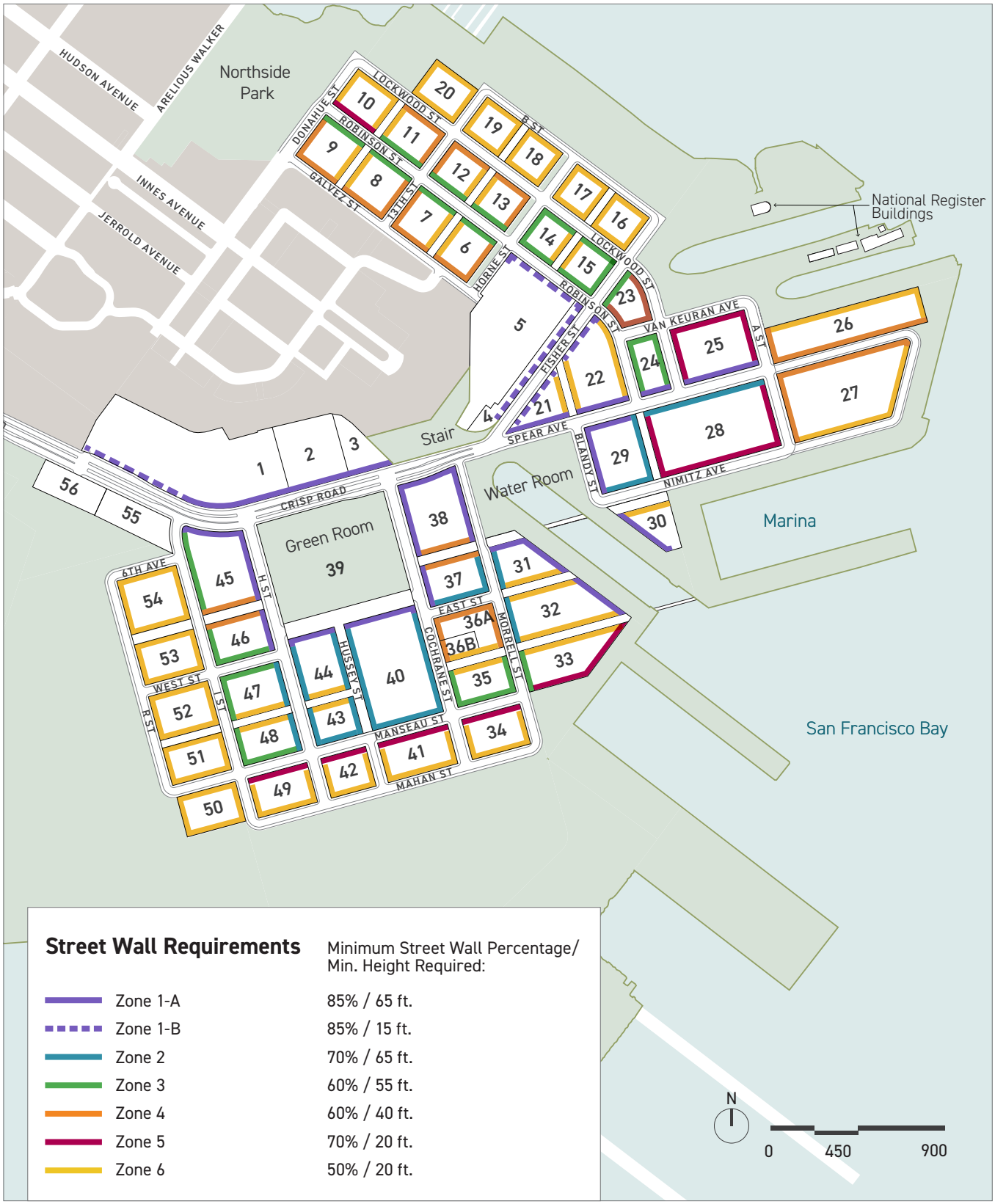


Figure 4.4l: STREET WALL REQUIREMENTS

Figure 4.4m: BUILDING SIZES: S, M, L, XL

4.5 Architectural Controls by Building Scale

INTENT

To determine which controls apply, refer to Flow Chart for "4.5A Architectural Controls by Building Scale Cont'd" (Page 68) which outlines a path to compliance for each building size category. The sections following the Flow Chart describe how Façade Composition, Bulk and Massing, Building and Public Realm Enhancements are regulated and applied.

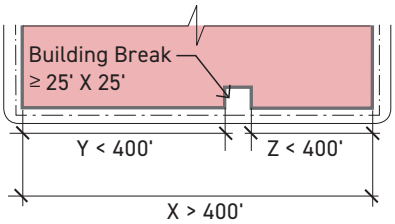


Figure 4.5a: FLOOR PLATE AREA AND MAXIMUM PLAN LENGTH

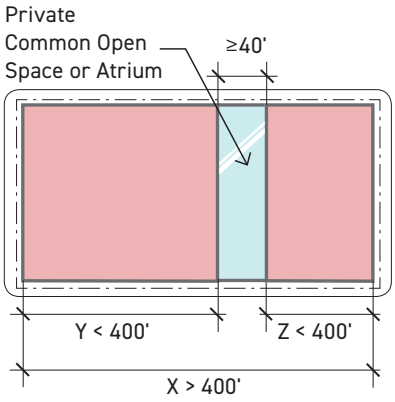


Figure 4.5b: MAXIMUM PLAN LENGTH

DEFINITIONS

"Maximum Plan Length"
The maximum linear dimension of a building measured in plan along a building elevation parallel to the immediately adjacent public right-of-way, MBB, or public open space.

"Street Fronting Elevation"
Building façades facing onto a public right-of-way, MBB, or public open space.

"Small Buildings" (S): Small Buildings include all buildings that have a Maximum Plan Length that is less than [150] ft. in length.

"Medium Buildings" (M): Medium Buildings include all buildings that have a Maximum Plan Length greater than [150] ft. in length along any facade and have a maximum Floor Plate less than [70,000] sq. ft.

"Large Buildings" (L): Large Buildings include all buildings with a maximum Floor Plate between [70,000] and [100,000] sq. ft.

"Extra Large Buildings" (XL): Extra Large Buildings include all buildings with a maximum Floor Plate greater than [100,000] sq. ft.

STANDARDS

4.5.1 Architectural Controls by Building Scale

Buildings have been grouped in four[4] categories: Small (S), Medium (M), Large (L) and Extra Large (XL). All buildings shall meet the Façade Composition Standards. In addition to Façade Composition Standards, Medium, Large and Extra Large buildings shall follow Bulk and Massing Standards and Building and Public Realm Enhancement Standards (see Flow Chart on page 68).

4.5.2 Maximum Plan Length

No Street Fronting Elevation shall have a Maximum Plan Length greater than [400] ft. without one[1] of the following: See *Figure 4.5a*.

- A building break that is at minimum [25] ft. by [25] ft. in dimension and extends from roof plane to sidewalk grade.
- A private common open space or Atrium that connects through to the opposite side of the block. Open space may include Skyways. Open space shall be at minimum [40] ft. wide in each dimension with a view to the sky. See *Figure 4.5b*.

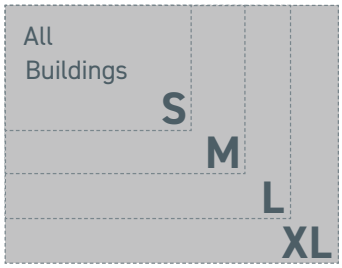
4.5A Architectural Controls by Building Scale Cont'd

FLOW CHART FOR ARCHITECTURAL CONTROLS

All Buildings shall meet the Façade Composition Standards. In addition to Façade Composition Standards, Medium, Large and Extra Large Buildings shall follow Bulk and Massing Standards and Building and Public Realm Enhancement Standards.

FC

4.6.1 Façade Composition

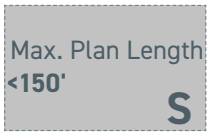


Apply two[2] Façade Compositions:
See Page 70

- **FC1** Façade Modulation
- **FC2** Façade Articulation
- **FC3** Fenestration
- **FC4** Material/Color

BM

4.7.1 Bulk and Massing



No Bulk and Massing Approaches or Building and Public Realm Enhancement Measures Required

Apply one[1] Bulk and Massing Approach:
See Page 81

- **BM1** Significant Breaks
- **BM2** Upper Floor Stepbacks
- **BM3** Façade Variation

BE/PE

4.8.1 Building and Public Realm Enhancements

Floor Plate:
<70,000 SF

M

Apply at least one[1] Building or Public Realm Enhancement Measure (BE/PE)

Floor Plate:
70,000-100,000 SF

L

Apply Option L1
Apply at least three[3] Building Enhancement Measures (BE)

or Option L2
Apply at least one[1] Building Enhancement Measure (BE)
Apply at least one[1] Public Realm Enhancement Measure (PE)

Floor Plate:
>100,000 SF

XL

Apply Option XL1
Apply at least four[4] Building Enhancement Measures (BE)

or Option XL2
Apply at least two[2] Building Enhancement Measures (BE)
Apply at least one[1] Public Realm Enhancement Measure (PE)

Building Enhancement Measures (BE):
See Page 88

- **BE1** Apply one[1] Additional Bulk and Massing Approach
- **BE2** Orient Private Courtyards and/or Atria onto a Public Right-of-Way or MBB
- **BE3** Visual and Physical Access to Interior Courtyard/Atrium
- **BE4** 24/7 Access to Open Space
- **BE5** Reduction in Floor Plate Area of Upper Floors
- **BE6** Expressive Entrance
- **BE7** Increased Transparency
- **BE8** Distinct Corner Architecture Feature
- **BE9** Roof Expression
- **BE10** Additional Active Entries
- **BE11** Additional Ground Floor Activation

Public Realm Enhancement Measures (PE):

- **PE1** Public Access through the Building
- **PE2** Public Access through Open Space Connections

4.6 FC Façade Composition

INTENT

To create character, distinction, and visual interest on the facades of all buildings.

DEFINITIONS

"Façade Composition"
Large scale facade geometry and smaller scale facade tectonics, including material selection and detailing.

"Street Fronting Elevation"
Building façades facing onto a public right-of-way, MBB, or public open space.

"Variations in Façade Composition"
Variations in Façade Composition create visual interest and avoid monotony. This can be achieved by using either two[2] different Facade Compositions or by using two [2] distinctly different designs of the same Facade Composition. In case of the latter, the two [2] designs must be recognizably different in expression.

STANDARDS

4.6.1 Façade Composition

Street Fronting Elevations of all buildings shall have a minimum of two [2] Façade Compositions. The same application shall not fulfill the requirement for more than one Façade Composition.

Choose two[2] Facade Compositions:

- **FC1** Façade Modulation
- **FC2** Façade Articulation
- **FC3** Fenestration
- **FC4** Material/Color

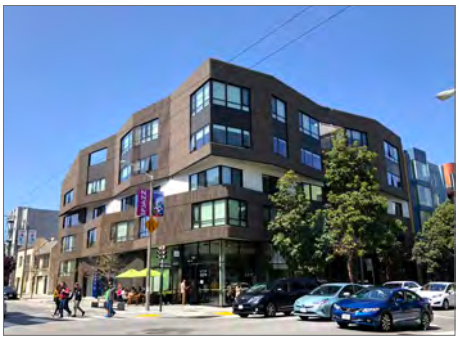


Figure 4.6a: BUILDING A

Example: Building A uses the following two[2] Facade Compositions:
See *Figure 4.6a*.

FC1 Façade Modulation:
Angular Shift and Horizontal Shift

FC3 Fenestration:
Punched Windows

Figure 4.6b: BUILDING B

Example: Building B uses the following two[2] Facade Compositions.
See *Figure 4.6b*.

FC2 Façade Articulation:
Sun Shading Devices

FC3 Fenestration:
Boxed Windows and Curtain Wall

4.6 FC Façade Composition Cont'd

4.6.2 Block to Block Variation

INTENT

To provide architectural variety and visual interest from Block to Block by demonstrating distinction between opposing Block faces and between Block faces adjacent to each other along a street, MBB, or other open space.

STANDARDS

4.6.2 Block to Block Variation

Buildings shall be distinct from one[1] Block Façade to adjacent Block Façade by incorporating variations in at least two[2] Façade Compositions. See *Figure 4.6c.*

Vary façade with two[2] Compositions:

- **FC1** Façade Modulation
- **FC2** Façade Articulation
- **FC3** Fenestration
- **FC4** Material/Color

Example: If Block A and Block B both use the same Façade Modulation (FC1) and Fenestration (FC3), then Block A and B shall be a distinct variation from one another in their Material/Color (FC4) and Façade Articulation (FC2). See *Figure 4.6c* and *Figure 4.6d.*

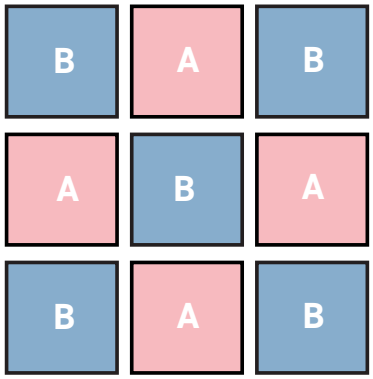


Figure 4.6c: BLOCK TO BLOCK VARIATION (ADJACENT BLOCK FAÇADES SHALL BE DISTINCT FROM BLOCK A)

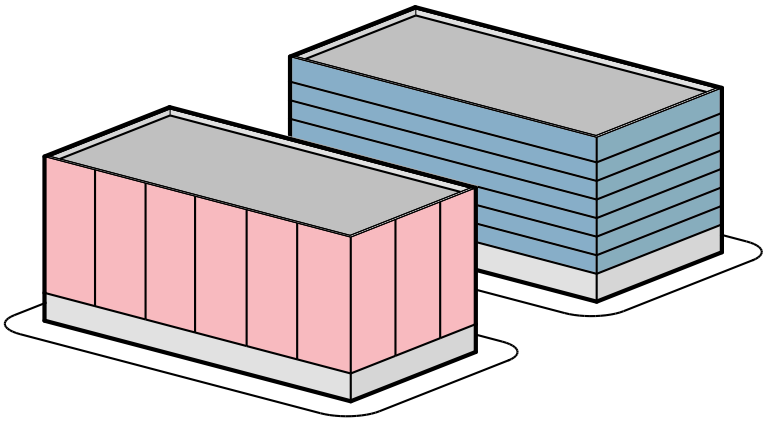


Figure 4.6d: BLOCK A (VERTICAL ARTICULATION AND MATERIAL COLOR) BLOCK B (HORIZONTAL ARTICULATION AND MATERIAL COLOR)

4.6 FC Façade Composition Cont'd

FC1 Façade Modulation Strategies

INTENT

To shape building massing and provide visual interest, scale, and rhythm to a building and/or building Façade.

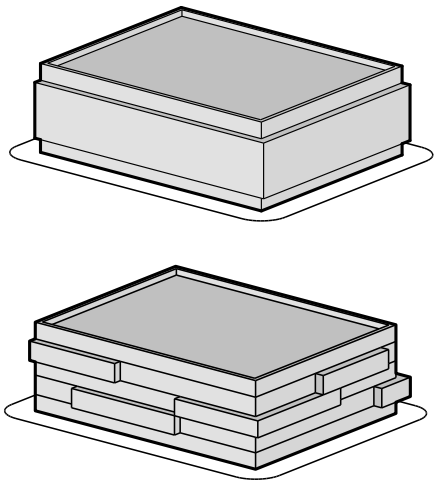


Figure 4.6e: HORIZONTAL SHIFT

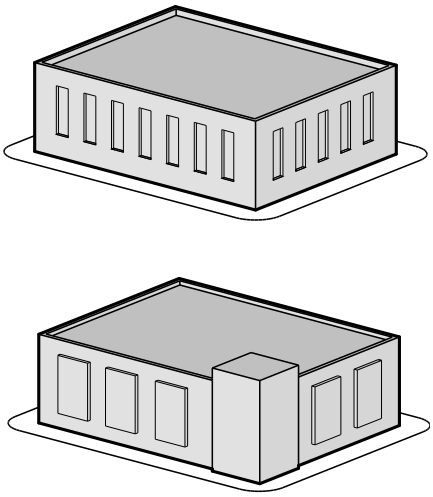


Figure 4.6f: VERTICAL SHIFT

APPLICATION

FC1 Façade Modulation

Façade Modulations shall include plan shifts in the Façades, expressions of building structure, Building Projections, and other strategies that provide visual interest and depth that is recognizable from a distance. Plan shifts and framing shall be a minimum of two [2] ft. in depth. The extent and scale of Facade Modulations shall be proportional to and in keeping with the scale of the entire building. Double skins and structural expressions that are character-defining features of the façade have no minimum depth requirements.

Changes in the Façade plane made for the application of the Façade Modulation may be used to create an Implied Façade.

MODULATION STRATEGIES

The following are a non-exhaustive list of Façade Modulation strategies:

"Horizontal Shift"
The Façade is defined by horizontal subdivisions which project forward or push back from each other. The horizontal subdivisions may, but need not be, determined by the location of the building floor slabs.
See *Figure 4.6e*.

"Vertical Shift"
The Façade is subdivided into "bays" that protrude or recess from a predetermined datum. These bays may be expressive of a programmatic or structural characteristic of the building. See *Figure 4.6f*.

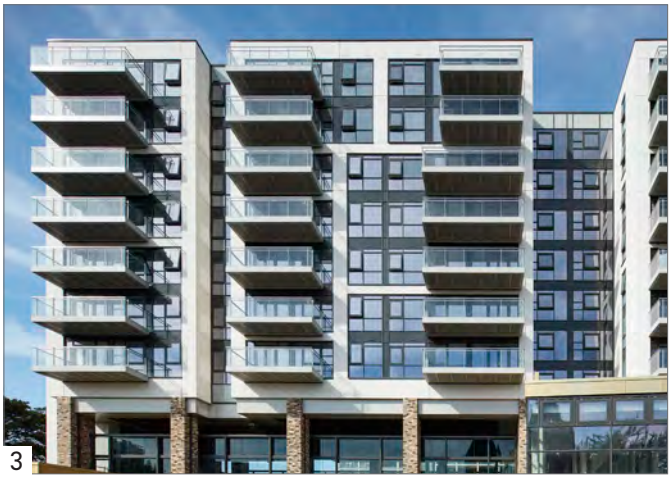
4.6 FC Façade Composition Cont'd

FC1 Façade Modulation Strategies

1

1. & 2. Horizontal Shift Example
3. 4. & 5. Vertical Shift Example

2



3

4

5

4.6 FC Façade Composition Cont'd

FC1 Façade Modulation

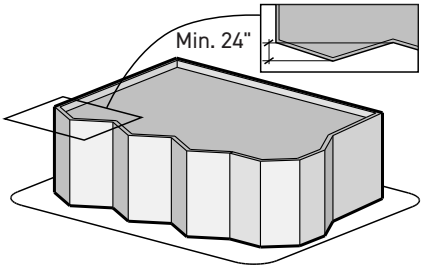


Figure 4.6g: ANGULAR SHIFT

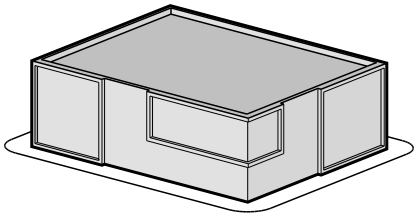


Figure 4.6h: FRAMING

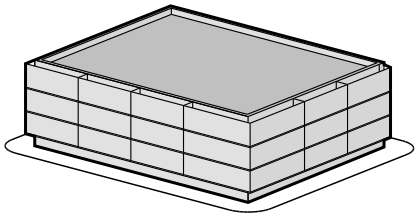


Figure 4.6i: DOUBLE SKIN

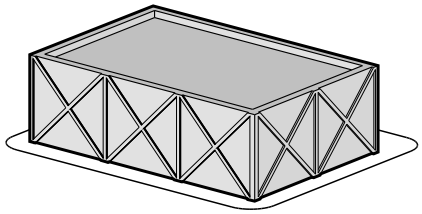


Figure 4.6j: STRUCTURAL EXPRESSION

MODULATION STRATEGIES

"Angular Shift"
A series of sloped or faceted surfaces along the façade. Angular shifts shall be minimum [24] in. in depth. See *Figure 4.6g*.

"Framing"
Elements of a Façade can be identified as modules through the use of a frame or framing element. A frame can be a continuous protrusion which follows some perimeter at the façade scale. See *Figure 4.6h*.

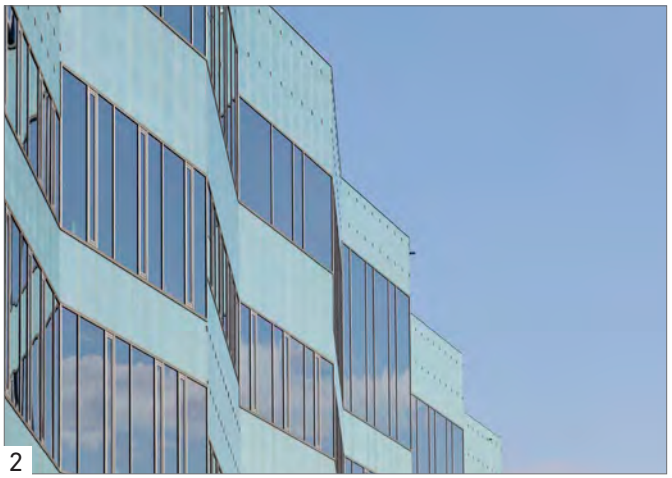
"Double Skin"
A Façade system created by a second enclosure, typically lighter and slightly translucent or perforated, outboard of the main exterior Building Envelope. A double skin may have operable components and is meant to add depth and intricacy by way of light and shadows along the Façade. See *Figure 4.6i*.

"Structural Expression"
Actual structural elements such as beams, columns, cross-bracing, or fastenings can naturally break up a building's Façade if made visible along a building's exterior. See *Figure 4.6j*.

4.6 FC Façade Composition Cont'd

FC1 Façade Modulation


1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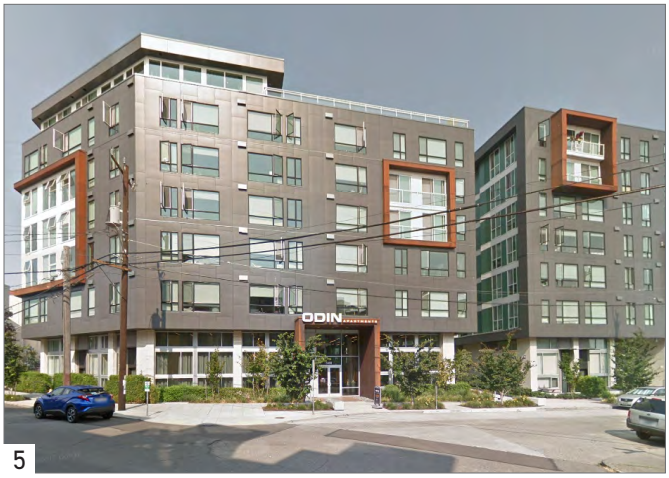


5

1. Double Skin Example
2. Angular Shift Example
3. Structural Expression Example
4. Angular Shift Example
5. Framing Example

4.6 FC Façade Composition Cont'd

FC2 Façade Articulation

INTENT

To create a cohesive Façade system. Facade Articulation strategies are intended to create visual interest, texture, and shadows, through the tectonics, materiality, and craft of the facade.

DEFINITION

"Façade Articulation"
Expressions of material properties, craft, treatment, pattern and/ or assembly that create visible shadows and/or texture across the Building Façade.

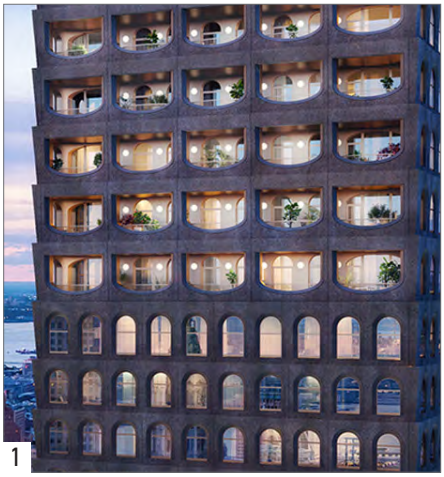
APPLICATION

FC2 Façade Articulation

Articulation can either emphasize distinct components of a Façade or create smooth, continuous transitions between elements to emphasize the "whole." A non-exhaustive list of strategies are listed below:

Articulation Strategies:

- Vertical Recesses
- Horizontal Extensions
- Architectural Fins
- Louvers
- Shading Devices
- Cornices
- Punched Openings
- Window Reveals
- Screening Devices
- Balconies
- Or Similar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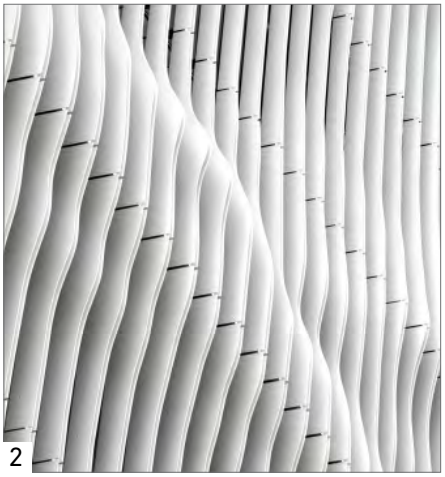
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1. Punched Openings Example
2. Architectural Fins Example
3. Balcony Example

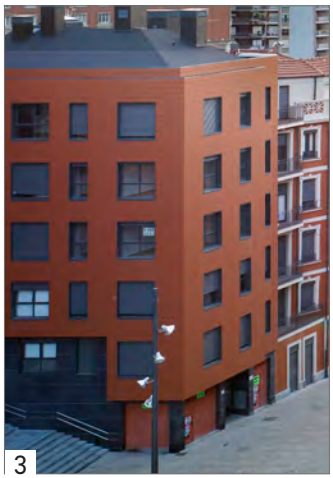
4.6 FC Façade Composition Cont'd

FC2 Façade Articulation


1

1. Vertical Recesses and Punched Openings Example
2. Architectural Fins and Louvers Example
3. Punched Openings Example
4. Balcony, Extensions and Recesses Example
5. Punched Openings Example
6. Shading Devices and Cornice Example


2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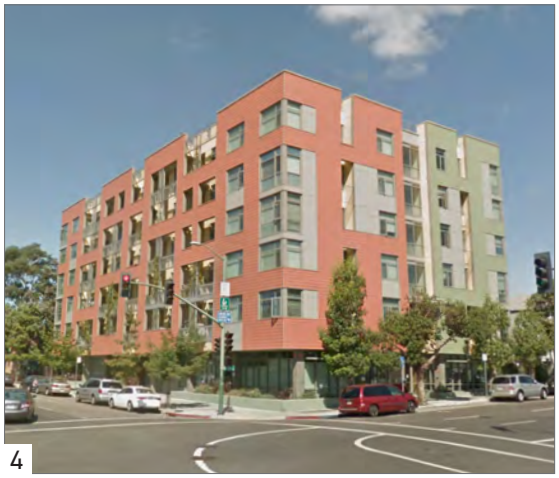
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4.6 FC Façade Composition Cont'd

FC3 Fenestration

INTENT

Building Fenestration strategies are Façade composition elements that contribute to the character of a building and the feel of the urban environment. These strategies modulate Daylight and potential for natural ventilation in buildings.

DEFINITION

"Fenestration"
The design, construction, or presence of openings in a building. Fenestration includes windows, doors, louvers, vents, wall panels, skylights, storefronts, curtain walls, and sloped systems.

APPLICATION

FC3 Fenestration

Fenestration strategies include a variety of techniques to bring Daylight into a building and help define the character of a building. Fenestration strategies include shape, size, pattern, rhythm, and location of façade apertures.

Successful fenestration strategies stand out as a central component or feature of a building's enclosure. Such strategies strengthen the expression of the building's architectural character. A non-exhaustive list of strategies are listed below:

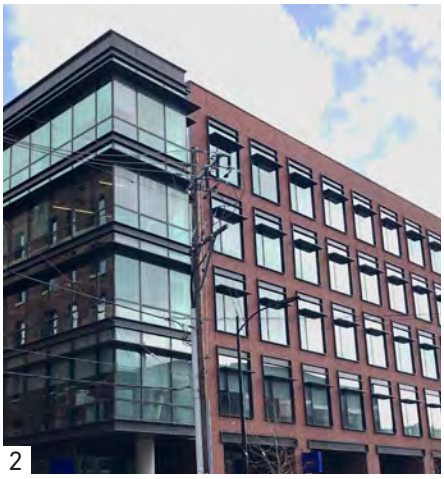
Fenestration Strategies:

- Glass Curtain Wall
- Punched Window
- Window Wall
- Double Skin
- Boxed Window
- Bay Window
- Glazed Atrium at the façade
- Or Similar

4.6 FC Façade Composition Cont'd

FC3 Fenestration


1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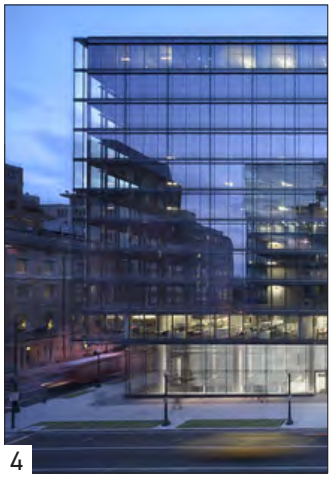
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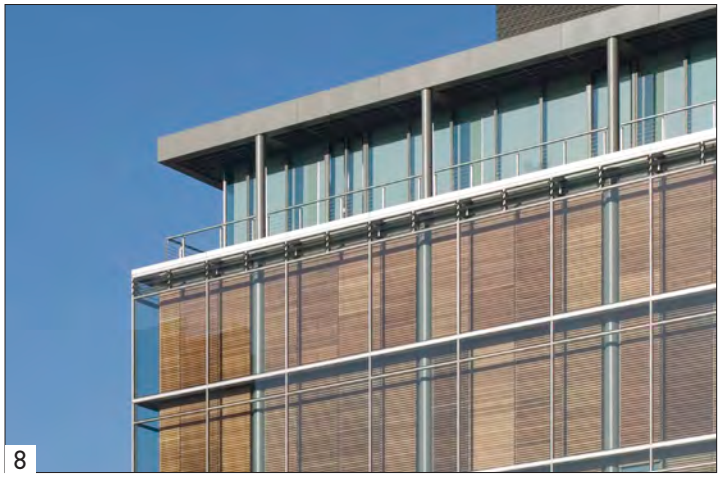

8

1. Punched Windows Example
2. Punched Windows + Curtain Wall Example
3. Punched Windows Example
4. Curtain Wall Example
5. Curtain Wall and Atrium Example
6. Curtain Wall with Boxed Windows Example
7. Window Wall Example
8. Double Skin Example

4.6 FC Façade Composition Cont'd

FC4 Material/Color

INTENT

The intentional application of Material/Color creates a defined architectural vocabulary that provides visual interest and contributes to the urban character. The materiality, patina, texture, color and craftsmanship respond to the unique quality of the district.

DEFINITION

"Material/Color"
The application of materials, color, shades and texture for a building when used as a quality- and character-defining features of the Façade.

For the purposes of meeting standard 4.6.1 Façade Composition, Variations in Material/Color strategies shall include a change in color and a change in material or a change in application of material such as change in pattern and/or texture. Color differences alone do not qualify as a variation.

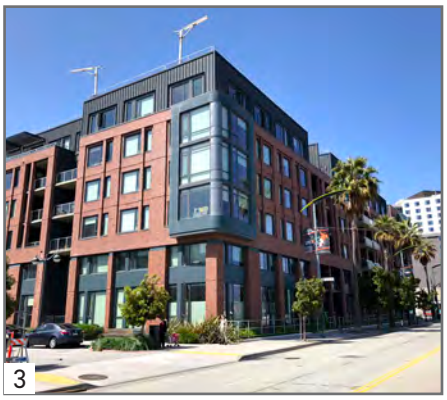
APPLICATION

FC4 Material/Color

Material and color may be used as a volumetric application, as an organizing element, or to create contrast between different building elements. Refer to 4.6 Façade Materials. A non-exhaustive list of strategies are as follows:

Material/Color Strategies:
- Volumetric Application
- Organizing Feature
- Structural
- Tectonics
- Character Defining Feature


2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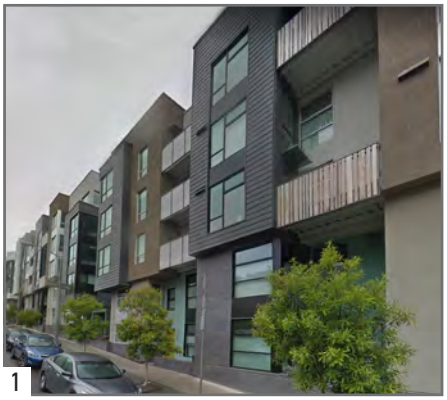
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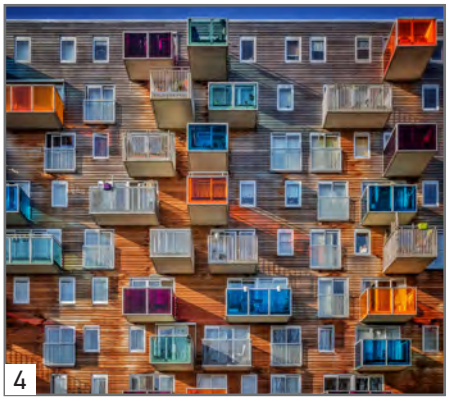
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1. Materials and Colors as a Volumetric Application Example
2. Metal used as Monolithic Application Example
3. Brick as Organizing Element Example
4. Character-Defining Façade Composition Example

4.7 BM Bulk and Massing

INTENT

To facilitate a varied urban form and shape building scale and geometry. To reflect neighborhood character and provide a human-scale pedestrian realm as well as an attractive skyline when viewed from afar.

DEFINITIONS

"Bulk and Massing"
Bulk and Massing regulations are the combination of controls (lot size, lot coverage, open space, yards, heights and setbacks) that determine the maximum Building Envelope.

"Apparent Face"
The unbroken plane of a Building within a single Façade composition.

"Primary Façade Plane"
The plane that incorporates the primary Façade of a Street Fronting Elevation.

STANDARDS

4.7.1 Bulk and Massing Approach

Medium, Large, and Extra Large Buildings shall use at least one[1] of the following approaches for breaking up the Bulk and Massing of Building Façades greater than [150] ft. in length. Buildings are not required to use the same Bulk and Massing Approach for every Façade.

Choose at least one[1] approach:

BM1 Significant Breaks

BM2 Upper Floor Stepbacks

BM3 Façade Variation

4.7 BM Bulk and Massing Cont'd

BM1 Significant Breaks

INTENT

To reduce the Bulk and Massing of buildings by the introduction of vertical breaks within the Façade Plane. Such breaks may articulate building mass or provide rhythm to the Facade.

APPLICATION

BM1 Significant Breaks

An Apparent Face on a Street Fronting Elevation shall be no greater than [150] ft. in length without a Significant Break in the Primary Façade Plane.

Significant Breaks shall be in the form of vertical interruptions within the Primary Façade Plane that are at least as wide and deep as 10% of the longest adjoining Apparent Building Face. (Example: If the longest Apparent Face is [100] ft. in length, the Significant Break shall be at least ten[10] ft. wide and ten[10] ft. deep; if the longest Apparent Face is [150] ft. in length, the Significant Break shall be at least [15] ft. wide and [15] ft. deep.)

Significant Breaks shall extend from the roof plane to a building height of [25] ft. or less from the sidewalk grade. The break may extend to grade.

Significant Breaks may occur at any rhythm or length of a Primary Façade Plane. The minimum Significant Break dimension is two[2] ft. by two[2] ft.

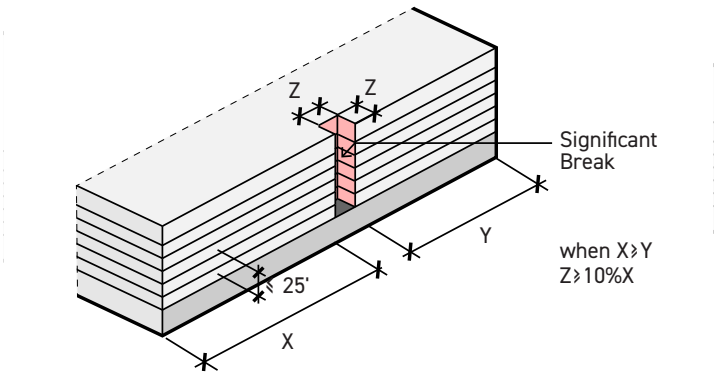


Figure 4.7a: SIGNIFICANT BREAKS A

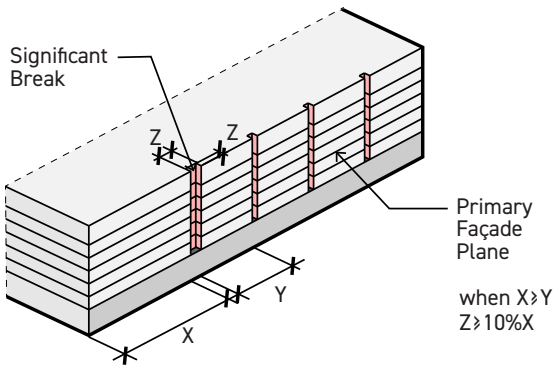


Figure 4.7b: SIGNIFICANT BREAKS B

4.7 BM Bulk and Massing Cont'd

BM1 Significant Breaks


1


2

1. & 2. Significant Break

4.7 BM Bulk and Massing Cont'd

BM2 Upper Floor Stepbacks

INTENT

To reduce the Bulk and Massing of buildings by stepping back the upper floors and thereby reducing the perceived height of the building, and to provide more sunlight to the public realm while reinforcing the character and providing visual interest to the building and roof plane.

APPLICATION

BM2 Upper Floor Stepbacks

At a minimum, the topmost floor of the building shall step back from the Primary Façade Plane.

The Stepback shall be an average minimum of ten[10] ft. from the Primary Façade Plane.

A minimum of 60% of the façade length shall step back a minimum of ten[10] ft. from the Primary Façade Plane.

Upper floor(s) shall Stepback at the following heights:

STEPBACK REQUIREMENTS BY BUILDING HEIGHT	
Building Height	Stepback Height
≤85 ft.	Top floor or lower
85 - 120 ft.	86 ft. or lower

Figure 4.7c: STEPBACK REQUIREMENTS BY BUILDING HEIGHT

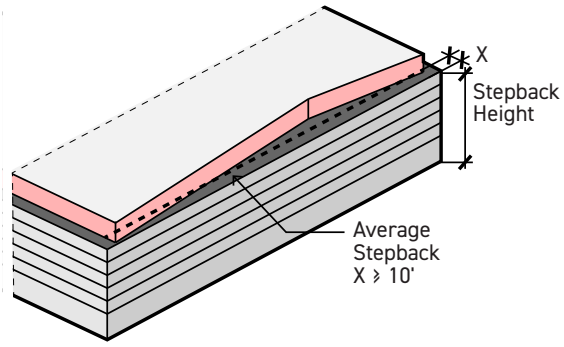


Figure 4.7d: AVERAGE MINIMUM STEPBACK

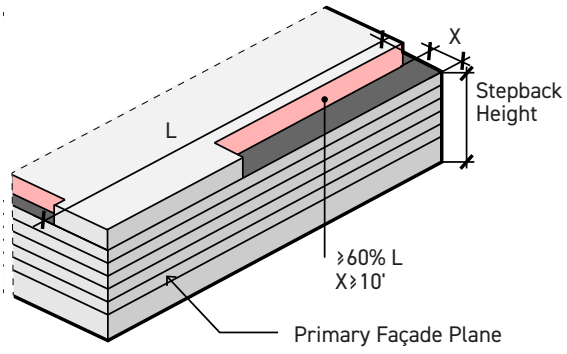


Figure 4.7e: MINIMUM LENGTH OF STEPBACK

4.7 BM Bulk and Massing Cont'd

BM2 Upper Floor Stepbacks

1. Upper Floor Building Stepback

4.7 BM Bulk and Massing Cont'd

BM3 Façade Variation

INTENT

To reduce the appearance of building bulk by incorporating significant changes within the Primary Façade's composition.

DEFINITION

"Variation"
A significant change or difference in form, proportion, position, condition, quantity, level or other compositional characteristic. Variation describes adjacent elements comprising both similar and different attributes that are recognizable as related.

APPLICATION

BM3 Façade Variation

Façades on all Street Fronting Elevations greater than [150] ft. in length shall be broken down into smaller Façade segments, or Apparent Faces, through significant changes in Façade Composition. The significant change may be a Horizontal Variation, a Vertical Variation, or a combination of Horizontal and Vertical Variations, including an angular Variation in the façade.

A significant change in Façade Composition shall include a Variation in at least two[2] of the following Façade Compositions: Modulation, Articulation, Fenestration, and/or Material/Color.

FV1 Horizontal Variations
At least two[2] Horizontal Variations shall occur for any façade that exceeds [150] ft. in length representing a building base, middle and top. Or at least one[1] Horizontal Variations with a Vertical Variation in at least one[1] of the horizontal façade compositions. See *Figure 4.7f* and *Figure 4.7g*.

FV2 Vertical Variations
A Variation in Façade Composition shall occur at a minimum [150] ft. or less of façade plan length. The adjacent apparent face shall be at least 10% as wide as the longest adjoining apparent face. Variations may occur at any rhythm or cadence. See *Figure 4.7h* and *Figure 4.7i*.

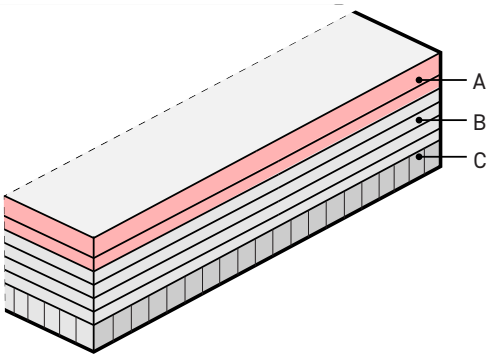


Figure 4.7f: EXAMPLE OF FV1 HORIZONTAL VARIATION A

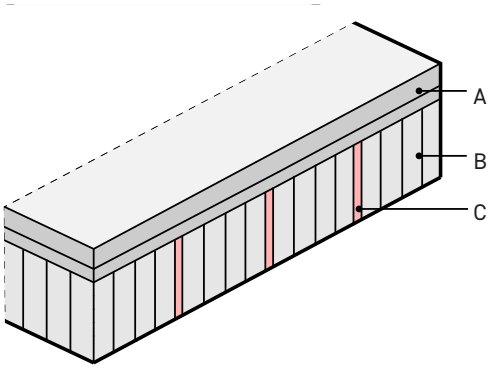


Figure 4.7g: EXAMPLE OF FV1 HORIZONTAL VARIATION B

4.7 BM Bulk and Massing Cont'd

BM3 Façade Variation

1

2

1. Façade Variation FV1 Horizontal
2. Façade Variation FV2 Vertical

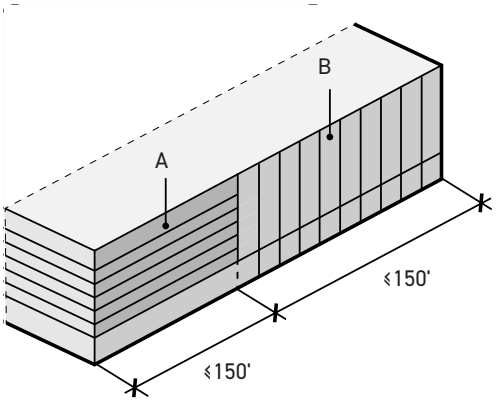


Figure 4.7h: EXAMPLE OF FV2 VERTICAL VARIATION A

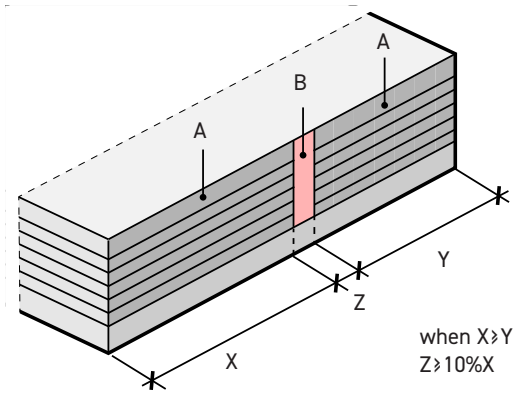


Figure 4.7i: EXAMPLE OF FV2 VERTICAL VARIATION B

4.8 BE/PE Building and Public Realm Enhancements

4.8.1 Building and Public Realm Enhancement Measures for M, L, XL Buildings

INTENT

To break down the scale of buildings and to create sufficient relationships between the interior of the building and the Public Realm through enhancement measures that shape architectural and spatial features.

DEFINITIONS

"Building Enhancement"
An architectural design feature that improves the character of the building and adds interest to the design.

"Public Realm Enhancement"
An expansion of the pedestrian network that provides public access through private developments.

STANDARDS

4.8.1 Building and Public Realm Enhancement Measures for M, L, XL Buildings

Medium (M), Large (L) and Extra Large (XL) buildings shall apply additional enhancement measures as outlined below. The required number of enhancement measures apply to and shall be visible from each Street Fronting Elevation. Any combination of building and Public Realm Enhancement Measures may be applied to a building so that the minimum required number of measures are visible from each Street Fronting Elevation. (Example: a Distinct Corner would apply to two[2] Street Fronting Elevations; an Expressive Entrance would only apply to each Street Fronting Elevation from which it is visible.)

Medium Buildings (M)
Medium Buildings shall apply at least one[1] additional Building Enhancement Measures and/or Public Realm Enhancement Measure.

Large Buildings (L)
Large Buildings shall apply at least three[3] additional Building Enhancement Measures or shall apply at least one[1] additional Building Enhancement Measure and at least one[1] Public Realm Enhancement Measure.

Extra Large Buildings (XL)
Extra Large Buildings shall apply at least four[4] additional Building Enhancement Measures or shall apply at least two[2] additional Building Enhancement Measures and at least one[1] Public Realm Enhancement Measure.

4.8 BE/PE Building and Public Realm Enhancements

BE Building Enhancement Measures
PE Public Realm Enhancement Measures

Cont'd

BUILDING ENHANCEMENT MEASURES (BM)

BE1 Apply One[1] Additional Bulk/Massing Approach
Apply one[1] additional approach from the 4.7.1 Bulk and Massing Approach. See *Figure 4.8a.*

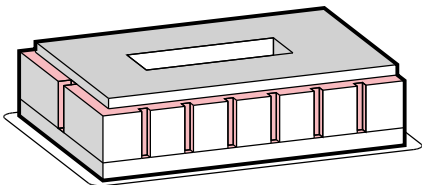


Figure 4.8a: BE1 - APPLY ONE ADDITIONAL BULK/MASSING CONTROL (EXAMPLE: SIGNIFICANT BREAKS + UPPER FLOOR STEPBACK EXAMPLE)

BE2A Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
A minimum of one[1] private courtyard and/or Atrium shall face onto a public right-of-way or Mid-Block Break. Courtyards and Atria shall be of a minimum dimension of [40] ft. x [40] ft. Lowest level of courtyards and/or Atria shall be no higher than [25] ft. from sidewalk grade. See *Figure 4.8b.*

BE2B Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
A minimum of two[2] open-air courtyards shall face onto two[2] public rights-of-way or Mid-Block Breaks or HPS2 open spaces. The two[2] open-air courtyard area dimensions shall be a total of 20 percent of the longest Street Fronting Elevation. Courtyards and Atria shall be of a minimum dimension of [40] ft. x [40] ft. All Street Fronting Elevations receive credit for applying this measure. See *Figure 4.8b.*

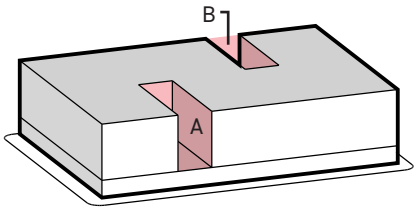


Figure 4.8b:
BE2A - COURTYARD/ATRIA A OR B
BE2B - COURTYARD/ATRIA A + B

BE3 Provide Visual and Physical Access to Interior Courtyard and/or Atrium
Provide Visual and Physical Access through an open-air portal entry into an interior courtyard or direct access into an Atrium from a public right-of-way, open space or Mid-Block Break. Visual access into the building shall be at minimum [25] ft. wide and a minimum two[2] stories in height. The lowest level of courtyards and/or Atria shall be no higher than [25] ft. from sidewalk grade. The physical access may be public or private. See *Figure 4.8c.*

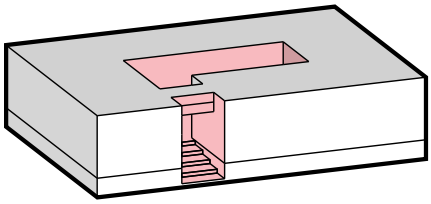


Figure 4.8c: BE3 - PROVIDE VISUAL AND PHYSICAL ACCESS TO INTERIOR COURTYARD AND/ OR ATRIUM

BE4 Permanently Open Public Access to Open Space
Provide ground floor open space with no fencing or barriers that is permanently open and accessible to the public. Ground floor publicly accessible open space shall have a minimum dimension of [40] ft. by [40] ft. See *Figure 4.8d.*

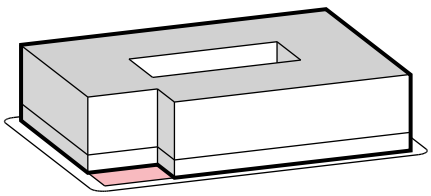


Figure 4.8d: BE4 - PERMANENTLY PUBLIC ACCESS TO OPEN SPACE

4.8 BE/PE Building and Public Realm Enhancements

BE Building Enhancement Measures
PE Public Realm Enhancement Measures

Cont'd

BE5 Reduction in Floor Plate Area of Upper Floors

Provide an additional 30% reduction of Floor Plate at the upper levels as follows: for buildings [75] ft. and taller, reduce the upper two levels by 30% of Floor Plate relative to the floor beneath; for buildings less than [75] ft. tall, reduce the top Floor Plate by 30% relative to the floor beneath. Each Street Fronting Elevation receives credit for applying this measure. See *Figure 4.8e.*

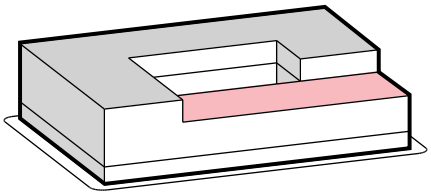


Figure 4.8e: BE5 - REDUCTION IN FLOOR PLATE AREA OF UPPER FLOORS

BE6 Expressive Entrance

Provide an Expressive Entrance to enhance identity and visual access into the building. For residential buildings, the Expressive Entrance shall be at minimum [20] ft. wide along the façade and a minimum two[2] stories in height. For commercial and mixed-use buildings, the Expressive Entrance shall be at minimum [35] ft. wide along the façade and a minimum two[2] stories in height. See *Figure 4.8f*.

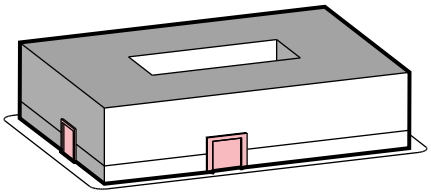


Figure 4.8f: BE6 - EXPRESSIVE ENTRANCE

BE7 Increased Transparency

For commercial buildings, provide a minimum 60% Transparency for the entire Street Fronting Elevation. For residential buildings, provide a minimum 35% Transparency for the entire Street Fronting Elevation. Areas counted in meeting this requirement must be comprised of Transparent Glazing. See *Figure 4.8g*.

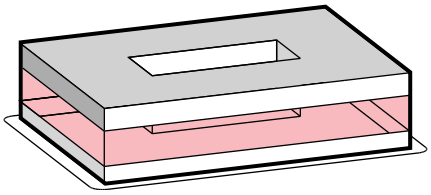


Figure 4.8g: BE7 - INCREASED TRANSPARENCY

BE8 Distinct Corner Architectural Feature

Provide a distinct architectural feature of special character and design that accentuates a change or interruption in the architectural language of the building. The corner element shall be at least [25] ft. in width and change in height by a minimum of five[5] ft. above or below the adjacent roof line and/or be integrated with a Roof Expression. See *Figure 4.8h*.

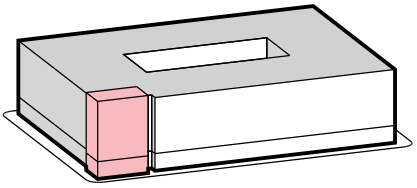


Figure 4.8h: BE8 - DISTINCT CORNER ARCHITECTURAL FEATURE

4.8 BE/PE Building and Public Realm Enhancements

BE Building Enhancement Measures
PE Public Realm Enhancement Measures

Cont'd

BE9 Roof Expression
A roof expression shall be observed as a recognizable shape or profile against the sky as visible from eye-level in the adjacent pedestrian realm. It may accentuate a change or interruption in the architectural language of the building. See *Figure 4.8i*.

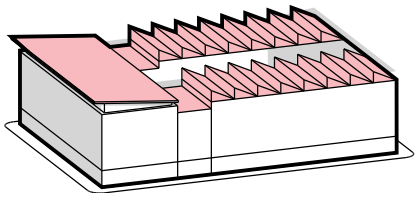


Figure 4.8i: BE9 - ROOF EXPRESSION

BE10 Additional Active Entrances
For Ground Floor Zones 1 and 2, provide a total of two[2] Active Entrances per [75] ft. of Street Fronting Elevation. For Zone 3, provide a total of two[2] Active Entrances per [100] ft. of Street Fronting Elevation. Refer to 4.11 Ground Floor Activation. See *Figure 4.8j*.

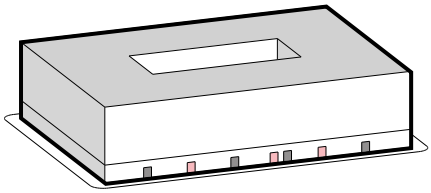


Figure 4.8j: BE10 - ADDITIONAL ACTIVE ENTRANCES

BE11 Additional Ground Floor Activation
Increase Ground Floor Activation from that required by designated Ground-Floor Active Use Zone to meet the percentage of Ground Floor Activation required by the next higher Ground-Floor Active Use Zone (see Ground-Floor Activation Plan on Page 95). Example: Building in Ground-Floor Active Use Zone 2 increases Ground Floor Activation to meet the requirements of Ground-Floor Active Use Zone 1.

PUBLIC REALM ENHANCEMENT MEASURES

PE1 Public Access through the Building
Provide at-grade public access during business hours extending through to the opposite side of the block. Public access shall provide access between a public right-of-way, Mid-Block Break or HPS2 open space to another public right-of-way, Mid-Block Break or HPS2 open space. This pass-through shall be at a minimum two[2] stories in unobstructed height and [25] ft. in width. Above the lowest two[2] stories, public access pass-through may be crossed by catwalks, Skyway connections, habitable spaces, and/or floor plates. All Street Fronting Elevations receive credit for applying this measure. See *Figure 4.8k*.

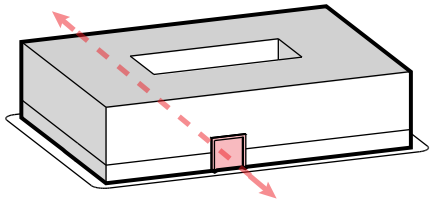


Figure 4.8k: PE1 - PUBLIC ACCESS THROUGH THE BUILDING

PE2 Public Access through Open Space Connection
Provide at-grade public access during business hours in the form of a private common open space that connects through to the opposite side of the block. Open space shall be open to the sky at a minimum of [40] ft. in width. Skyways may be located over open spaces. All Street Fronting Elevations receive credit for applying this measure. See *Figure 4.8l*.

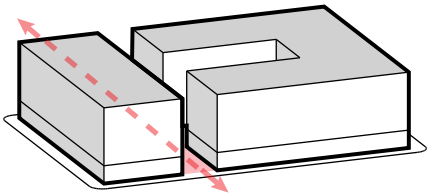


Figure 4.8l:
PE2 - PUBLIC ACCESS THROUGH OPEN SPACE CONNECTION

4.9 Tower Controls

INTENT

To provide standards particular to Towers. Where Towers are designed to meet the ground, Tower standards apply to the entire Tower, all the way to the ground. Where Tower designs are integrated with a podium on the same block, all other standards apply to the portion of the block that is not within the footprint of the tower above.

DEFINITIONS

"Floor Aspect Ratio"
The ratio that controls the proportions of the Floor Plate. Floor Aspect Ratio compares the shorter plan dimension of the Floor Plate to the longer plan dimension. A square Floor Plate would have an aspect ratio of 1:1.

STANDARDS

4.9.1 Tower Locations

Towers shall be located within the flexible tower zones and Towers "A" and "B" shall be a minimum [160] ft. apart. See *Figure 4.9a*.

4.9.2 Tower Floor Aspect Ratio

To maintain the slender appearance of Towers, the Floor Plates shall not exceed [12,500] sq. ft. and the Floor Aspect Ratio shall range between 1:1.2 and 1:1.6. A rectangular Floor Plate without notches is an acceptable form. See *Figure 4.9b*.

4.9.3 Tower Height Variation

The Towers on Blocks 15 and 33 shall differ in height from one another by at least 33%.

4.9.4 Tower Massing and Articulation

Towers shall be stepped, sculpted, tapered, and/or have FC2 - Façade Articulation.

If stepped, the building shall have a 33% reduction in floor area for the top 10% of floors. If sculpted, tapered, or articulated, the maximum floor area for the Tower above [85] ft. in height shall be no greater than the equivalent maximum floor area if there was a 33% reduction in floor area for the top 10% of floors.

4.9.5 Tower Mechanical Equipment

Mechanical Equipment shall not exceed the Maximum Building Height of the Tower by more than 10%. The mechanical equipment shall not occupy a floor plate greater than [10,625] sq. ft. (85% of the allowable floor plate size).

4.9.6 Tower Mechanical Equipment Screening

Mechanical equipment shall be screened from view to its full vertical extent.

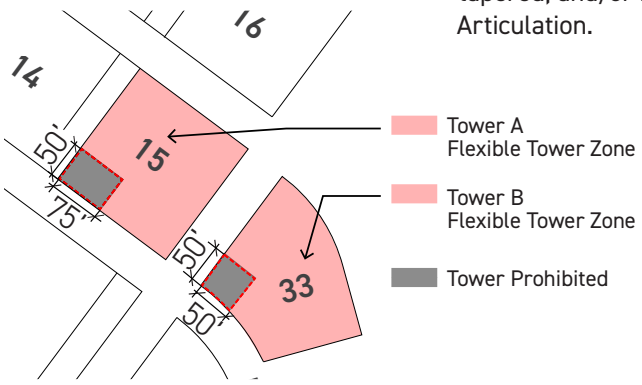


Figure 4.9a: FLEXIBLE TOWER ZONE

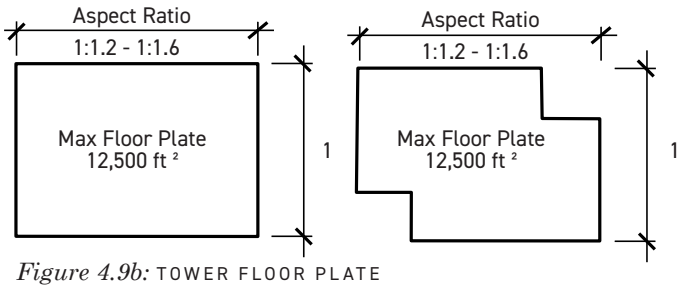


Figure 4.9b: TOWER FLOOR PLATE

4.9 Tower Controls Cont'd

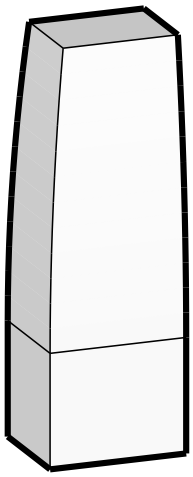


Figure 4.9c: TAPERED TOWER EXAMPLE

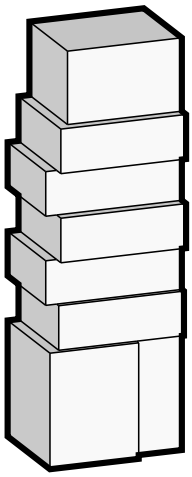


Figure 4.9d: SCULPTED TOWER EXAMPLE

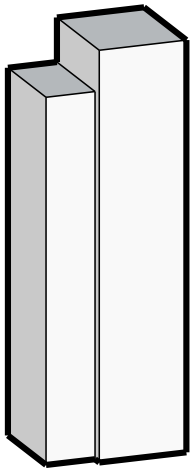


Figure 4.9e: STEPPED TOWER EXAMPLE

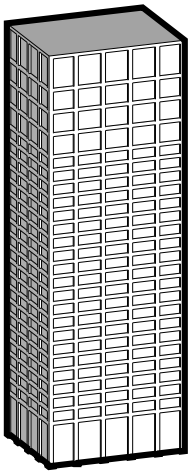
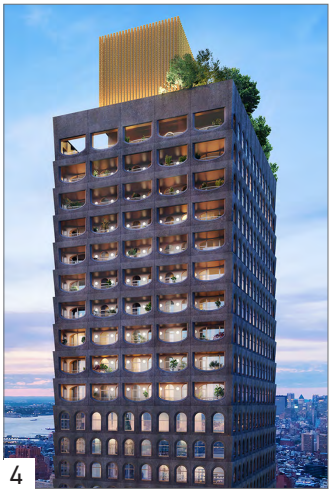


Figure 4.9f: FAÇADE ARTICULATION TOWER EXAMPLE

1

2

3



4

1. Tapered Tower Example
2. Sculpted Tower Example
3. Stepped Tower Example
4. Facade Articulation Tower Example

4.10 Projections

INTENT

To provide visual interest and architectural creativity.

DEFINITIONS

"Habitable Projection"
A portion of the building enclosed by walls and a roof which extends beyond the property or minimum Setback line. Examples include a bay window, a corner element, or a regularly occurring Façade modulation that extends through some or all floors of a building.

"Non-Habitable Projection"
A portion of the building not enclosed by walls and a roof which extends beyond the property or minimum Setback line. Examples include usable balconies or outdoor decks, structural projections, screens, Awnings, fins, or similar architectural elements.

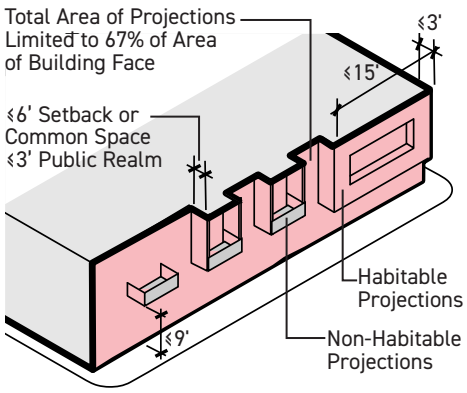


Figure 4.10a: PROJECTIONS

STANDARDS

4.10.1 Projections

Projections into the Setback area, right-of-way, Mid-Block Break, or public open space are allowed as follows:See *Figure 4.10a*.

4.10.2 Habitable Projections

A habitable space may project three[3] ft. beyond the Building Face, either into a Setback zone or into the public realm. No individual Habitable Projection may exceed [15] ft. in length. All Projections shall have a minimum vertical clearance of nine[9] ft. above the sidewalk. All Projections shall have a minimum separation distance equal to the depth of the Projection.

4.10.3 Non-Habitable Projections

Non-habitable spaces may extend into Setbacks or private open spaces by no more than six[6] ft. into a Setback or private open spaces or in no case over three[3] ft. into the public realm. No individual Non-Habitable Projection may exceed [15] ft. in length. All Projections shall have a minimum vertical clearance of nine[9] ft. above the sidewalk. All Projections shall have a minimum separation distance equal to the depth of the Projection.

4.10.4 Other Projections

Decorative elements such as belt courses, cornices, sills and eaves that extend not more than [30] in. beyond the building face are exempt from this standard.

4.10.5 Projection Exemptions

Decks, patios and steps at the first floor of occupancy that extend to the property line are exempt from this standard.

Fences and railings up to [42] in. in height are exempt from this standard.

Retail signs, canopies and awnings that do not extend more than five[5] ft. beyond the property line with a minimum vertical clearance above the sidewalk of at least nine[9] ft. are exempt from this standard.

4.10.6 Maximum Projection Area

The cumulative total of all types of projections shall not exceed 67% of the Building Face.

4.11 Ground Floor Activation

INTENT

To create an interesting and inviting pedestrian environment and to enhance neighborhood safety and security by encouraging "eyes on the street." The goal of Ground Floor design is to employ architectural methods to increase visibility and foster activity while also deterring unwanted behaviors.

DEFINITIONS

"Active Uses"
Ground Floor land uses that create an interesting and inviting pedestrian environment that enhance neighborhood safety and security by encouraging, "eyes on the street," visibility and vibrancy.

"Active Entrance"
A building entrance into an active Ground Floor use. Entrance may be public or private. Single uses may have multiple active Ground Floor entries.

"Active Frontage"
Building Façade length lined with Active Uses

Type "A" Active Uses:
- Retail
- Restaurants
- Community uses
- Commercial lobbies
- Entertainment uses
- Or similar

Type "B" Active Uses:
- Commercial services
- Medical offices
- Storefront offices
- Commercial and residential lobbies
- Parking Structure lobbies
- Professional services
- On-site sales and leasing offices
- Childcare facilities
- Private common open spaces or atria
- Maker spaces
- Art-related uses such as publicly accessible gallery spaces
- Amenity spaces
- Co-working spaces
- Open offices
- Conference rooms
- Cafeterias
- Break rooms
- Bicycle Workshop
- Bicycle Parking*
- Or similar

Type "C" Active Uses:
- Residential lobbies
- Residential amenity spaces
- Stoop porches
- Terraces
- Ground Floor dwelling units with direct, individual pedestrian access to a public right-of-way, MBB or public open space (Ground Floor studio units, embedded one bedrooms and senior housing units are not required to have direct access)

Non-Active Uses:
- Vehicle parking
- Parking and loading entrances
- Emergency egress
- Mechanical and utility rooms
- Exit stairwells and service shafts
- Or similar

4.11 Ground Floor Activation Cont'd

*Bicycle Parking may be considered an Active Use if it is consistent with the Guidelines below:

- Bicycle Parking rooms shall have circulation space along the entire street-facing perimeter.
- Direct and secure access shall be provided from the sidewalk or pedestrian easement.
- Bicycle Parking shall be visually interesting and can use graphics, art, color, etc. to meet this requirement.
- Bicycle Parking Façade shall provide direct visual access into the bicycle parking room. Individual Bicycle Parking stalls or racks can be screened from the Public Realm for security.
- Bicycle Parking shall be well lit but light trespass and glare shall be kept to a minimum.

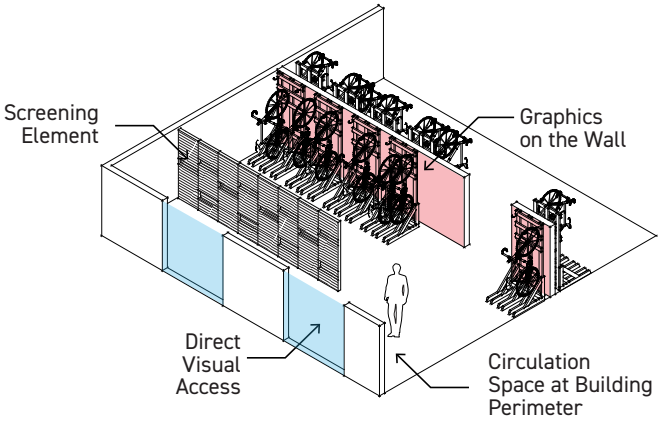


Figure 4.11a: BICYCLE PARKING


1


2

1. & 2. Active Bicycle Storage Examples

4.11 Ground Floor Activation Cont'd

INTENT

To create an interesting and inviting pedestrian environment through increased activity in and out of Ground Floor Active Uses and to maintain an adequate size and scale of Active Use spaces.

STANDARDS

4.11.1 Zone 1 and 2 Active Entrances

Each Street Facing Elevation in Zones 1 and 2 shall have a minimum average of one[1] Active Entrances per [75] ft. or less of Active Frontage. See *Figure 4.11b.*

4.11.2 Zone 3 Active Entrances

Each Street Facing Elevation in Zone 3 shall have a minimum average of one[1] Active Entrances per [100] ft. or less of Active Frontage. See *Figure 4.11b.*

4.11.3 Active Ground Floor Depth

The minimum depth of ground floor active uses for all non-residential buildings, not including service corridors, is [20] ft.; for residential buildings the minimum is ten[10] ft.

4.11.4 Ground Floor Height

Type "A" and Type "B" active uses shall have a minimum ground floor to floor height of [15] ft.

4.11.5 Waterfront Activation

A minimum [3,500] sq. ft. of publicly accessible Type "A" use shall be provided along the waterfront façades of Blocks 26, 27 or 28. The Type "A" Active Use may be located in one or multiple spaces and/or blocks.

4.11.6 Guidelines for Ground Floor Residential Design

Ground floor residential Active Uses shall follow the San Francisco "Guidelines for Ground Floor Residential Design."

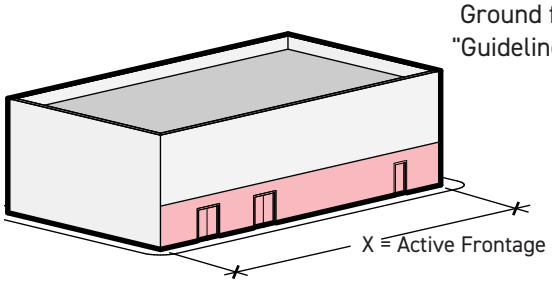


Figure 4.11b: ACTIVE ENTRANCES CALCULATION

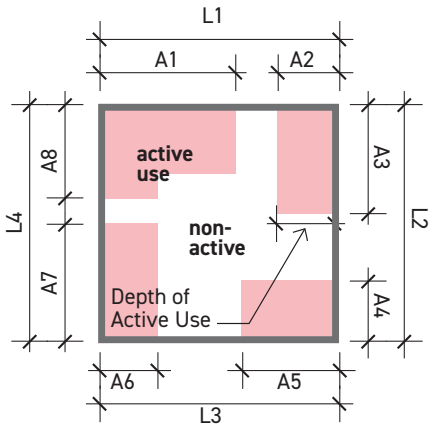
4.11 Ground Floor Activation Cont'd

INTENT

To maintain a minimum amount of active ground floor frontages on all public right-of-ways, Mid-Block Breaks, and public open spaces.

DEFINITIONS

"Shared Parking Structure"
A separate structure providing Accessory Parking to off-site lawful non-Accessory uses and not attached to or included within a building containing a lawful non-Accessory use.



$$\frac{(A1 + A2 + A3 + A4 + A5 + A6 + A7 + A8)}{(L1 + L2 + L3 + L4)} = \%\ \text{Active}$$

Figure 4.11c: ACTIVE USE PERCENTAGE CALCULATION

STANDARDS

4.11.7 Ground Floor Activation

The percentage of Ground Floor Activation is calculated by taking the total combined length of all Active Frontages around the perimeter of a Block and dividing by the overall length of all Façades within that same Block. See *Figure 4.11c.*

At Zones 1, 2 and 3, each Street Facing Elevation shall have a minimum of 50% Active Uses.

Zone 1
Buildings shall contain a minimum 85% of Type "A" Active Frontages uses on the Ground Floor.

Zone 2 and 3
Buildings shall contain a minimum 75% of Active Frontages on the Ground Floor. Active uses shall consist of those established in *Figure 4.11d.*

Zone 4
Shared Parking Structures in Zone 4 shall comply with 4.11.8 Shared Parking Structures Activation. If buildings in Zone 4 are built as primarily commercial or residential uses, Ground Floor activation rules for Zones 2 and 3 shall apply.

4.11.8 Shared Parking Structures Activation

All corners of Shared Parking Structures shall include Type "A", "B" or "C" Active Uses for a minimum of [20] ft. by [20] ft. dimension. In addition, Shared Parking Structures shall include a minimum of 25% of Type "A", "B" or "C" Active Uses on the ground floor.

If two[2] Shared Parking Structures face one another, at least one[1] of the two facing façades shall include at minimum 75% of active uses on the ground floor.

Figure 4.11d: GROUND FLOOR ACTIVATION REQUIREMENTS

4.11 Ground Floor Activation Cont'd

INTENT

To provide visual access to the Ground Floor Building interior, enhance Public Realm safety by providing "eyes on the street", to provide lighter color architectural materials at the ground floor and to minimize blank walls.

DEFINITIONS

"Transparent Glazing"
Glass and glazing systems that are designed to provide visual access and light transmittance.

"Active Use Transparency"
The surface area of Transparent Glazing as a proportion of the surface area of the Ground Floor Active Frontage.

STANDARDS

4.11.9 Ground Floor Active Use Transparency

Active Frontage shall be fenestrated with transparent windows and doorways and allow visibility to the inside of the Building to meet the minimum percentage for each Active Use type as follows and as illustrated in *Figure 4.11e.*

4.11.10 Ground Floor Active Use Glass and Glazing

Ground Floor and retail storefront glass shall be maximum 15% reflective, visible light transmittance greater than 80%, and without tint or coloration in the glass substrate. Non-storefront glazing may have up to 50% reflectivity.

Transparent Glazing shall be used to allow a constant relationship between the inside space and the public realm. Dark tinted and/or opaque glazing is not permitted.

Type "A" and "B":
Active Frontage shall incorporate no less than 60% of transparent glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from finished Ground Floor.

Type "C":
Active Frontage for Residential units shall incorporate no less than 30% of Transparent Glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished ground floor.

Lobby and amenity spaces shall be 60% transparency glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished Ground Floor.

Area of Transparent Façade(sq. ft.) between 4 ft. and 8 ft. in Height / Length of Active Frontage(ft) *4 ft. = % of Transparency

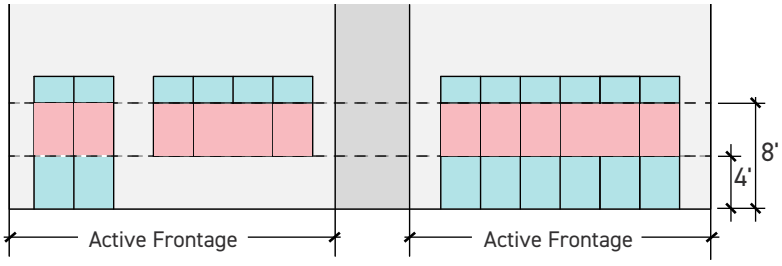


Figure 4.11e: GROUND FLOOR TRANSPARENCY CALCULATION

1 & 2. Ground Floor Transparency Examples


1


2

4.11 Ground Floor Activation Cont'd

This table summarizes the ground floor design controls of the four different Ground Floor Activation zones. Each of the controls listed here is defined in Section 4.11 and 4.17.

Ground Floor Frontage	Zone 1	Zone 2	Zone 3	Zone 4
4.11 Active Uses	Type "A"	Type "A" or "B"	Type "A","B" or "C"	Type "A","B" or "C"
4.11.1 & 4.11.2 Active Entrances	Each Street Facing Elevation in Zones 1 and 2 shall have a minimum average of one[1] active entrances per [75] ft. or less of Façade length		Each Street Facing Elevation in Zone 3 shall have a minimum average of one[1] active entrances per [100] ft. or less of Façade length	N/A
4.11.6 Ground Floor Activation	Buildings shall contain a minimum 85% of Type "A" Active Frontages uses on the Ground Floor	Buildings shall contain a minimum 75% of Active Frontages on the Ground Floor Each Street Facing Elevation shall have a minimum 50% of Active Uses		N/A
4.11.7 Shared Parking Structure Activation	N/A	N/A	N/A	All corners of Shared Parking Structures shall include Type"A", "B" or "C" Active Uses for a minimum of [20] ft. by [20] ft. dimension. In addition, Shared Parking Structures shall include a minimum of 25% of Type "A", "B" or "C" Active Uses on the ground floor If two[2] Shared Parking Structures face one another, at least one[1] of the two facing Façades shall include at minimum 75% of Active Uses on the Ground Floor
4.17.1 Ground Floor Blank Walls	(Not active use zone): Each Blank Wall shall not occupy over eight[8] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 20% of the total Active Frontage.		Each Blank Wall shall not occupy over [12] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 30% of the total Active Frontage.	N/A
4.17.2 Upper Floor Blank Walls	For all buildings, upper level Blank Walls shall not occupy over [30] linear ft. for the entire height of the façade above the base. The total amount of Blank Wall shall be limited to 50% of the total upper-level Building Façade. Shared property-line Building faces are exempt.			For Shared Parking Structures, Screening and/or openings shall not be considered Blank Walls. Green walls that are a significant architectural feature of the Façade will not be considered a Blank Wall Site utilities on Blocks 36B, 55 and/or 56 and Adaptive Reuse Buildings are exempt from the Blank Wall standard.

Figure 4.11f: GROUND FLOOR ACTIVATION ZONE CHART

4.11 Ground Floor Activation Cont'd

This table summarizes the ground floor design controls of the three different Ground Floor Activation types. Each of the controls listed here is defined in Section 4.11.

Ground Floor Frontage	Type "A"	Type "B"	Type "C"
4.11.3 Active Ground Floor Depth	All non-residential Buildings, not including service corridors, is [20] ft. For residential buildings the minimum is ten[10] ft.		
4.11.4 Ground Floor Heights	Minimum ground floor to floor height of [15] ft.		N/A
4.11.5 Waterfront Activation	Minimum [3,500] sq. ft. of publicly accessible Type "A" use shall be provided along the waterfront Façades of Blocks 26, 27 or 28. The amount of use may be in one or multiple spaces and/or Blocks	N/A	N/A
4.11.9 Ground Floor Active Use Transparency	Active Frontage shall be fenestrated with transparent windows and doorways and allow visibility to the inside of the Building to meet the minimum percentage for each Active Use type.		
4.11.10 Ground Floor Active Use Glass and Glazing	Active Frontage shall incorporate no less than 60% of transparent glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from finished Ground Floor.		Active Frontage for Residential units shall incorporate no less than 30% of Transparent Glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished Ground Floor. Lobby and amenity spaces shall be 60% transparency glazing in the vertical zone between four[4] ft. and eight[8] ft. in height from the finished Ground Floor.

Figure 4.11g: GROUND FLOOR ACTIVATION TYPE CHART

4.12 Building Entries

INTENT

To provide Ground Floor activation, pedestrian access to buildings and architectural articulation.

DEFINITIONS

"Primary Building Entries"
The main entries to a building.

STANDARDS

4.12.1 Primary Building Entries

All buildings shall have a Primary Building Entry from a public right-of way, public open space, publicly accessible private open space, or Mid-Block Break.

4.12.2 Green Room Building Entries

Where a building is facing the Green Room, the Primary Building Entry shall front the Green Room

4.12.3 Ground Floor Residential Unit Entries

Ground Floor residential units shall be elevated above the street by a minimum average of between two[2] ft. and four[4] ft. Where street grades are in excess of 5% slope, the average height may exceed four[4] ft. in height.

GUIDELINES

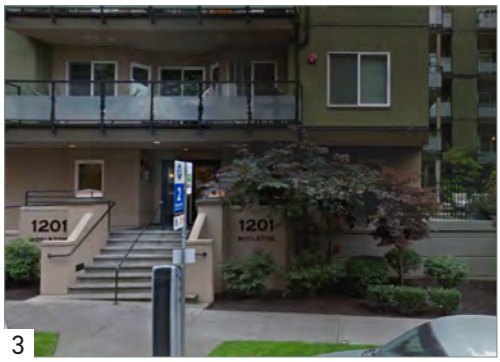
4.12.4 Building Entries

Entrances shall be easily identifiable and well-lit for convenience, visual interest and increased safety. commercial/retail entrances shall be easily identifiable and distinguishable from residential entrances.

1. Clearly Defined Building Entry Example
2. Primary Building Entry Example
3. Entry to Residential Example

1

2



3

4.13 Parking and Service Entrances

INTENT

Strategically locate Parking and Service Entrances in order to mitigate adverse impacts to pedestrians and bicyclists.

DEFINITIONS

"Parking Entrance"
Entries allowing vehicular access to parking areas, including Shared Parking Structures, podium parking, and/or below grade parking.

"Service Entrance"
Entries allowing vehicular access for trucks and/or deliveries, loadings, and/or access to trash rooms.

STANDARDS

4.13.1 Parking and Service Entrances Locations

Parking and Service Entrances are permitted in locations established by *Figure 4.13b*.

4.13.2 Combined Parking and Service Entrances

Each combined parking ingress and egress for off-street parking shall be a maximum width of [24] ft. This may be increased to a maximum of [27] ft. where:

- there is shared access to off-street parking and loading; or
- the extra width is necessary to accommodate the fleet of emergency services or utility providers.

4.13.3 Separate Parking and Service Entrances

Separate vehicular ingress/egress shall each be a maximum width of [11] ft. and be spaced at a minimum of [60] ft. apart.

4.13.4 Maximum Parking and Service Entrances

The sharing of parking and Service Entrances is encouraged. The number of entrances is limited to two[2] ingress and two[2] egress points per block plus one[1] Service Entrance. Shared vehicular entrances shall be a minimum of [40] ft. from block corners and [20] ft. from building entrances.

4.13.5 Parking and Service Entrances

Block 25 may host a transit center. Shall this block require loading access, the design of that access will be developed in close coordination with SFMTA to minimize any potential conflicts with the transit center operations.

GUIDELINES

4.13.6 Parking and Service Entrances (Blocks 38 & 45)

Blocks 38 and 45 shall minimize the impact of parking and Service Entrances on public open spaces. Options to minimize the impact may include providing separate ingress and egress access, locating parking and service access on an MBB, or similar strategies.

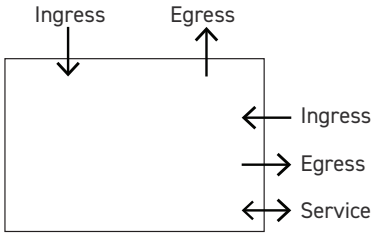


Figure 4.13a: PARKING INGRESS AND EGRESS PER BLOCK

Figure 4.13b: PARKING AND SERVICE ENTRANCES

4.14 Screening

INTENT

To mitigate any adverse impacts of utilities, equipment, and vehicles on the Public Realm.

DEFINITIONS

"Screening"
A physical visual barrier that obstructs or obscures the view of an object or objects. Screening may include shading devices, trellises, canopies, fences, landscaping, and architectural treatments.

STANDARD

4.14.1 Screening

Screening is required to limit visibility of the following facilities and conditions:

- At-grade utilities visible from the Public Realm
- Utilities in the Setback areas
- Ground Floor utilities, mechanical rooms, and alcoves with exterior walls
- Eco-District or Eco-Grid utilities and utility facilities visible above ground
- Rooftop mounted equipment
- Vehicles in parking stalls, rooftops and ramps at shared parking garage structures and podium parking garages

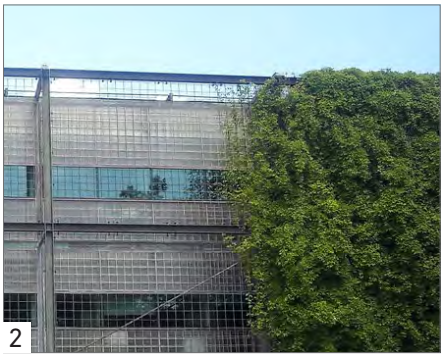
Solar collectors and wind turbines are exempt.

4.14.2 Screening of Utilities Visible at Grade

Enclosure or Screening shall be designed as a logical extension of and/or compatible with the adjacent Building and an integral part of the overall Building design. Screening material and detailing shall be comparable in quality to that of the rest of the Building. Landscaping alone shall not qualify as Screening of at-grade utilities.

1. Metal Screening Example
2. Landscaping and Metal Screening Example
3. Metal Screening Example


1


2

3

4.14 Screening Cont'd

4.14.3 Screening Materials

Screening materials shall be durable and high quality. Screening shall be consistent with the architectural character of the building.

Examples of Screening Materials:

- **Landscaping:** Planting must include systems for maintenance, such as irrigation.
- **Concrete:** Cast-in-place or pre-cast concrete
- **Metal:** Panels, sheet materials, or shingles
- **Wood:** Paneling, and other natural materials
- **Glass:** Clear, colored, or translucent with reflectivity up to 50%.

4.14.4 Screening for Rooftop Equipment

Rooftop mechanical equipment and appurtenances to be used in the operation or maintenance of a building shall be arranged so as not to be visible from any point at or below the roof level of the subject building. Rooftop mechanical equipment shall be obscured by walls, parapet, or Screening.

Enclosure or Screening shall be designed as a logical extension of the building form and integral part of the overall building design. Cladding and detailing shall be comparable in quality to that of the rest of the building.

If the required Screening is an extension of the building wall below, the architectural treatment or characteristics shall be continued on the "screen" and the top of the equipment shall be below the maximum Building Height. Height Exceptions are noted in 4.4.3.

4.14.5 Screening for Upper Floor Parking

All parapet edges and/or façades shall be designed to screen vehicles from public view at all levels. All parapet edges of parking trays, including the roofs, shall be high enough to screen adjacent properties from light trespass from vehicle headlights and direct view of building lighting.

Parking above the ground level shall be screened in a manner that accentuates ground floor uses, minimizes mechanical features and is in keeping with the overall massing and architectural vocabulary of the building.

4.14.6 Screening for Ground Floor Parking

Parking at the ground level shall be located at a minimum [25] ft. from any Setback line facing a public Right-of-way, MBB, or Open Space. Ground Floor parking in Shared Parking Structures and vertical mechanical parking structures may be located up to the Setback line. Ground Floor screening may include non-habitable spaces such as art installations, murals, green walls, landscaping, or similar uses.

4.14.7 Rooftop Screening for Parking

All exposed-to-the-sky parking stalls shall have shading or screening of one of the following types: trellises, solar collectors, PV trellises, trees, glass canopies, fabric shade structures or similar devices, such that parked vehicles cannot be viewed from any point below the roof level and not easily-viewed from adjacent buildings or public vista points.

4.15 Shared Parking Structures

INTENT

To provide architecturally integrated parking facilities that meet the needs and demands of the surrounding neighborhood.

DEFINITIONS

"Shared Parking Structure"
A separate structure providing Accessory Parking to off-site lawful non-Accessory uses and not attached to or included within a building containing a lawful non-Accessory use.

"Convertible"
A Shared Parking Structure designed to be converted into another use and/or designed to be mechanized and deconstructable.

STANDARDS

4.15.1 Shared Parking Structure Locations

Shared Parking Structures shall only be located on Blocks 1, 14, 22, 24, 32, 35, or 43. Shared Parking Structures on any other block not facing the waterfront, the Green Room or the Water Room shall require OCII Commission approval as a Secondary Use, pursuant to Secondary Use approval standards in the Plan. If a use other than a Shared Parking Structure is constructed in a Ground Floor Zone 4, the Ground Floor zone shall be revised to match the zone across the street, except along Robinson Street, which shall be Zone 2, Blocks 22, 24.

4.15.2 Number of Shared Parking Structures

A maximum number of seven[7] Shared Parking Structures shall be permitted in HPS2. An increase in number of Shared Parking Structures beyond seven[7] in HPS2 shall require OCII Commission approval as a Secondary Use, pursuant to Secondary Use approval standards in the Plan, as well as to better serve the transportation and circulation needs of HPS2 while enhancing the pedestrian-level activation and urban design of HPS2.

4.15.3 Shared Parking Structure Design

Shared Parking Structures shall comply with all applicable Standards and Guidelines, including, but not limited to, Architectural Controls by Building Scale, Section 4.5.

4.15.4 Convertible Shared Parking Structures

Shared Parking Structure shall be Convertible. All floors shall be flat except required ramps for vehicular circulation.

Exception: A Shared Parking Structure that does not comply with the convertibility standard shall contain a 25% increase in Ground

4.15 Shared Parking Structures Cont'd

Floor Active Frontage over the minimum amount required in the Ground Floor Zones on *Figure 4.11d*. Shared Parking on Block 32 shall contain a minimum of 75% Active Frontage.

4.15.5 Floor Heights for Convertible Shared Parking Structures

Ground Floor height for Convertible Shared Parking Structures shall be a minimum [15] ft. All upper floors shall have nine[9] ft. clear floor to ceiling height. If a mechanical parking system does not contain structural floors, it is exempt from this Standard.

4.15.6 Shared Parking Structure Lighting

Security lighting shall be directed away from surrounding land uses using state-of-the-art fixtures to minimize light trespass and glare.

GUIDELINES

4.15.7 Shared Parking Structure Ground Floor Uses

Shared Parking Structures shall include Ground Floor facilities that support commuter cyclists including at least one[1] of the following: bike share facilities, changing rooms and showers, bike repair shops, bike racks, and/or secure bike storage.

1. Lighting at Parking Garage Example
2. Screening Example
3. Lighting at Parking Garage Example

1


2


3

4.16 Rooftops

INTENT

To create distinctive or interesting roofs where visible from the hilltop or adjacent buildings.

DEFINITIONS

"High Albedo"
Materials that reflect sunlight and limit the amount of heat gained through those materials. High Albedo Roofing materials are chosen to reduce unwanted heating of roof surfaces.

"Vegetated Roof Covers"
A roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane.

GUIDELINES

4.16.1 Rooftop Façades

Rooftops visible from the hilltop, adjacent buildings, and/or from spaces within the same building shall be designed as a "fifth façade".

The "fifth façade" can be met in the following ways: Where building roofs are free of solar panels, mechanical equipment, or other sustainability infrastructure, they shall be designed to include systems such as roofing materials with high albedo surfaces to reduce heat island effect or vegetated roof covers in order to reduce heat island effect and slow rainwater runoff.

1. Roof with Vegetated Cover Example
2. Roof with Solar Panel Example
3. Roof with Mechanical Equipment Example


1


2


3

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4.17 Blank Walls

INTENT

To limit the location and expanse of Blank Walls and to provide greater building articulation and visual interest, especially at the Ground Floor level.

DEFINITIONS

"Blank Wall"
A building façade area greater than four[4] linear ft. in length parallel to the property line where there is not an entrance, window, or any building articulation, including solid doors and mechanical area wall(s).

STANDARDS

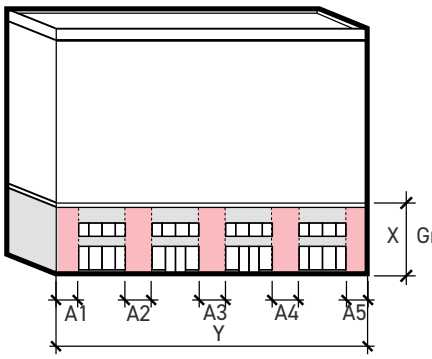
4.17.1 Ground Floor Blank Walls

Active Ground Floor Frontage Zone 1 & 2 (Not active use zone):
Each Blank Wall shall not occupy over eight[8] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 20% of the total Active Frontage.

Active Ground Floor Frontage Zone 3:
Each Blank Wall shall not occupy over [12] linear ft. of Street Fronting Elevation. The total amount of Blank Wall shall be limited to 30% of the total Active Frontage. See *Figure 4.17a.*

Green walls that are a significant architectural feature of the Façade may not be considered a Blank Wall.

Site utilities on Blocks 36B, 55 and/or 56 and Adaptive Reuse Buildings are exempt from the Blank Wall standard.



Zone 1 & 2 (A ≤ 8')

$$\frac{(A1+A2+A3+A4+A5)X}{XY} = \leq 20\%$$

Zone 3 (A ≤ 12')

$$\frac{(A1+A2+A3+A4+A5)X}{XY} = \leq 30\%$$

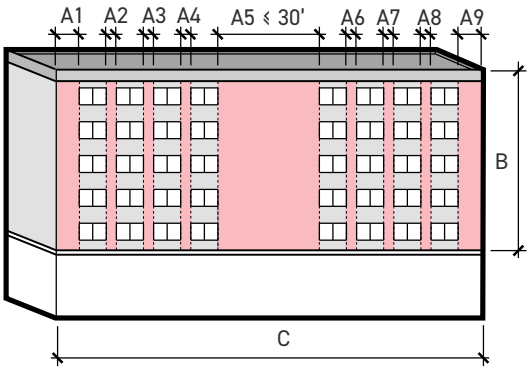
Figure 4.17a: GROUND FLOOR BLANK WALLS CALCULATION

4.17.2 Upper Floor Blank Walls

For all buildings, upper level Blank Walls shall not occupy over [30] linear ft. for the entire height of the façade above the base. The total amount of Blank Wall shall be limited to 50% of the total upper-level building Façade. Shared property-line Building Faces are exempt.

For Shared Parking Structures, screening and/or openings shall not be considered Blank Walls.
Green walls that are a significant architectural feature integrated into the Façade will not be considered a Blank Wall.

Site utilities on Blocks 36B, 55 and/or 56 and Adaptive Reuse Buildings are exempt from the Blank Walls standards. See *Figure 4.17b.*



$$\frac{(A1+A2+A3+A4+A5+A6+A7+A8+A9)X}{BC} = \leq 50\%$$

Figure 4.17b: UPPER FLOOR BLANK WALLS CALCULATION

4.18 Daylight

INTENT

To ensure regularly occupied building areas have access to Daylight.

DEFINITION

"Daylight"
The controlled admission of natural light, direct sunlight, and diffused-skylight into a building to reduce electric lighting and save energy.

"Regularly Occupied Floor Area"
An area where one[1] or more individuals normally spend time (more than one[1] hour per person per day on average) seated or standing as they work, study, or perform other focused activities inside a building.

STANDARDS

4.18.1 Residential Daylight

All residential units shall have at least one[1] bedroom or living area with a window facing outside with an unobstructed view of a minimum [25] ft. clear dimension. See *Figure 4.18a.*

4.18.2 Commercial Daylight

Option 1:
All Regularly Occupied Floor Areas of commercial buildings shall have direct access and/or a view to the exterior courtyard of the building or a daylit Atrium space. See *Figure 4.18b.*

-OR-

Option 2:
At a minimum, 55% of the Regularly Occupied Floor Area shall be within a Floor Plate depth dimension of no greater than two and a half [2.5] times the glazing height. See *Figure 4.18c.*

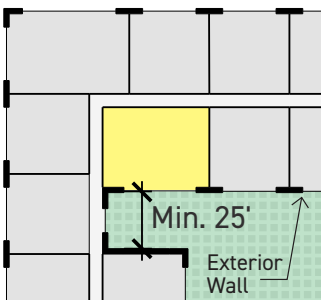


Figure 4.18a: RESIDENTIAL DAYLIGHT

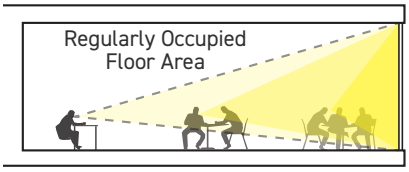


Figure 4.18b: COMMERCIAL DAYLIGHT OPTION 1

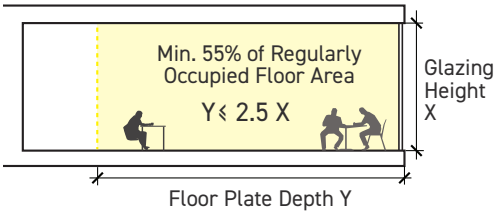


Figure 4.18c: COMMERCIAL DAYLIGHT OPTION 2

4.19 Façade Material

INTENT

To ensure the durability and quality of materials particularly at the Ground Floor that will enhance the pedestrian visual experience.

Material and craft are essential to maintaining a reference to the past use of the site as a Shipyard.

Care shall be taken to reference the streetscape improvements such that the materiality of each district is harmonious as a whole, reinforcing the intention to achieve a subtle variation for each various district.

STANDARDS

4.19.1 Bird-Safe Design

All buildings shall fully comply with bird-safe measures established in the Mitigation Monitoring and Reporting Program for HPS2.

GUIDELINES

4.19.2 Material Quality

Materials shall be high quality, durable, and consistent with industry standards of contemporary architecture.

4.19.3 Material Selection

Material selection and application shall reflect the Material Palette. See material palette in *Figure 4.19a* for reference. The material palette does not preclude the use of other materials or finishes not listed if they are applied in concert with a strategy that fits the HPS2 Vision.

Building materials and colors shall be carefully selected to achieve harmony with neighboring buildings, be environmentally sensitive, and contribute to a varied urban street fabric.

4.19.4 Ground Floor Materials

Active Frontages shall be designed with high-quality materials that offer color, variety, wear resistance, and visual interest to the pedestrian.

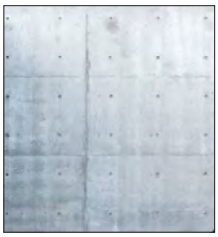
- Consider fine grained material modules and textures at Ground Floor façades to enhance the pedestrian realm and provide contrast to the upper levels.
- Ground Floor Façades shall be finished with more than one[1] material and be unique to the individual program or building.

4.19.5 Marine Environment Materials

Due to the marine environment, materials selected shall demonstrate performance related to moisture protection, maintenance requirements, durability, and ultra violet resistance.

4.19.6 Prohibited Materials

Vinyl and fabric awnings are prohibited. Dryvit as a material is prohibited.



CONCRETE
Cast-in-place or pre-cast

MASONRY
Veneer or structural

STONE
Veneer or structural

METAL
Panels, siding, sheet materials, or shingles (metal panels shall be minimum [18] gauge)

WOOD
Siding, paneling, and other natural materials (wood shall be FSC-Certified)

COMPOSITES
Cementitious board, and other composite materials

CEMENT PLASTER
May be used only in combination with other permitted materials

GLASS
Clear, colored, or translucent with reflectivity up to 50%

Figure 4.19a: MATERIAL PALETTE

4.19 Façade Material Cont'd

Water Room Palette

APPLICATION

ELEMENTAL MATERIALS:
The use of the following material and color palette is encouraged for the buildings fronting the Water Room and Dry Dock 4. See *Figure 4.19b*.

Materials at this location shall reflect the elemental qualities inherent in the idea of a Water Room.

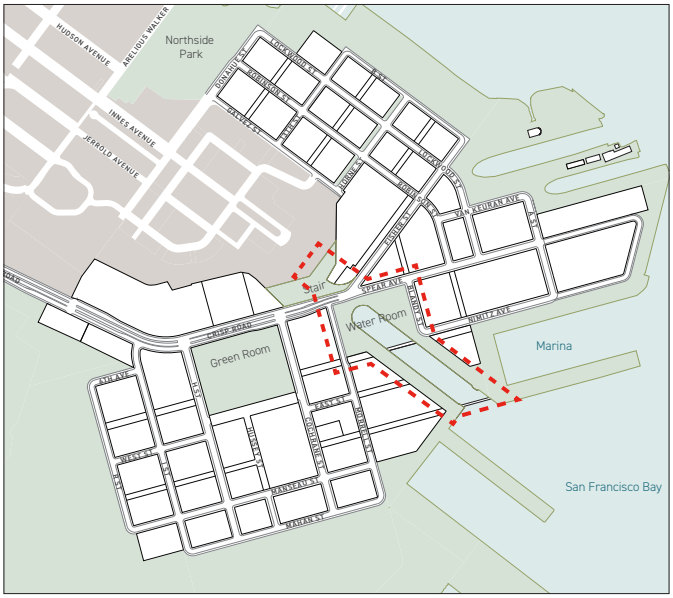
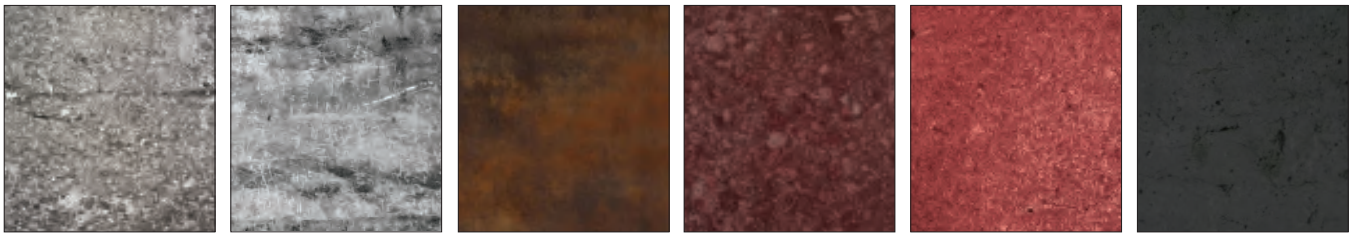
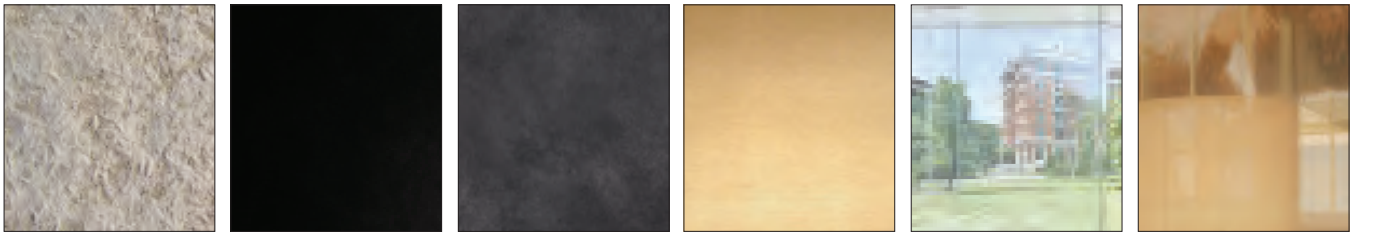


Figure 4.19b: LOCATION OF WATER ROOM



INDUSTRIAL/NAVAL CONCRETE

TINTED CONCRETES/COLORED AGGREGATES/ASPHALT



LIGHT STONE/ PRECAST CONCRETE

DARK STONE/ PRECAST CONCRETE

DARK METALS (STANDARD USE)

WARM METALS (STANDARD USE)

GLASS

BACK-PAINTED GLASS/ TRANSLUCENT SCREENS

TERRACOTTA BAGUETTES

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19c: MATERIAL PALETTE

4.19 Façade Material Cont'd

Development Perimeter Palette

APPLICATION

POROUS & EARTHEN MATERIALS:
The use of the following material and color palette is encouraged for the waterfront and open space edges of the Shipyard North and Warehouse Districts. See *Figure 4.19d*.

Materials in this location shall relate the built environment along the edges of the development to the open spaces, the waterfront, and the sense of the natural topography of the shoreline.

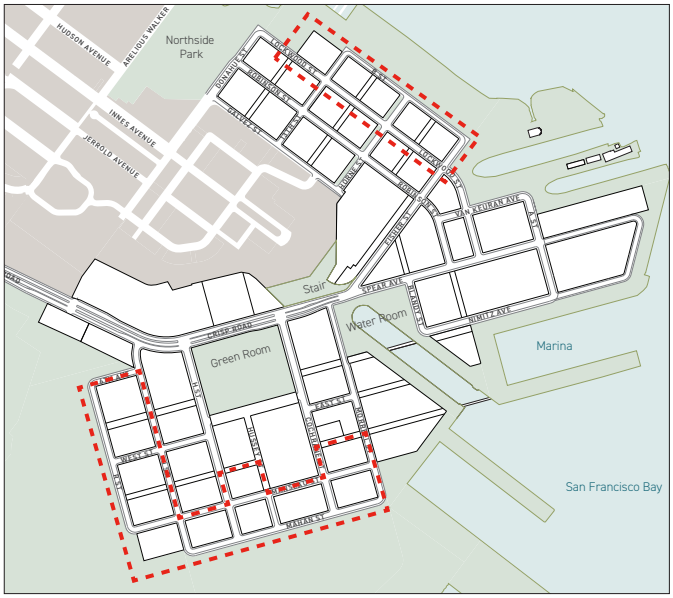
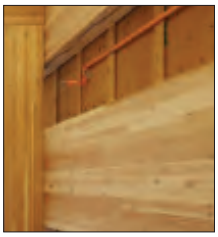
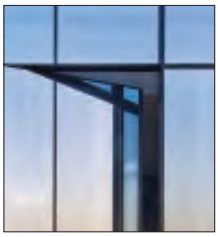


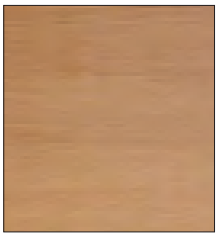
Figure 4.19d: LOCATION OF DEVELOPMENT PERIMETER


CROSS-LAMINATED TIMBER


WARM METALS (SPECIAL USE)


GLAZING

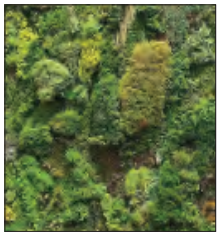

WOODS (MODULAR OR FIELD)

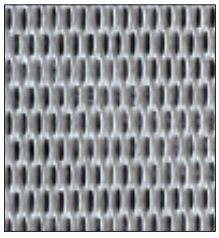



PRECAST CONCRETE

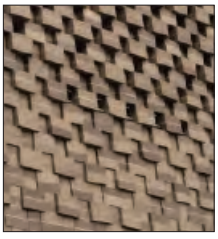

PRECAST CONCRETE


DARK METALS


GREEN WALLS


PERFORATED MESH/ EXPANDED METALS


CONCRETES


MASONRY (PREFAB PANELS OR IN SITU)

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19e: MATERIAL PALETTE

4.19 Façade Material Cont'd

Green Room Palette

APPLICATION

"INVERSE" MATERIALS:
The use of the following material and color palette is encouraged for the buildings fronting the Green Room. See *Figure 4.19f*.

Materials at this location shall contribute to the urban edge and Street Wall of the Green Room, while allowing for ample Daylight into the buildings. A sense of lightness shall be perceptible from the Green Room.

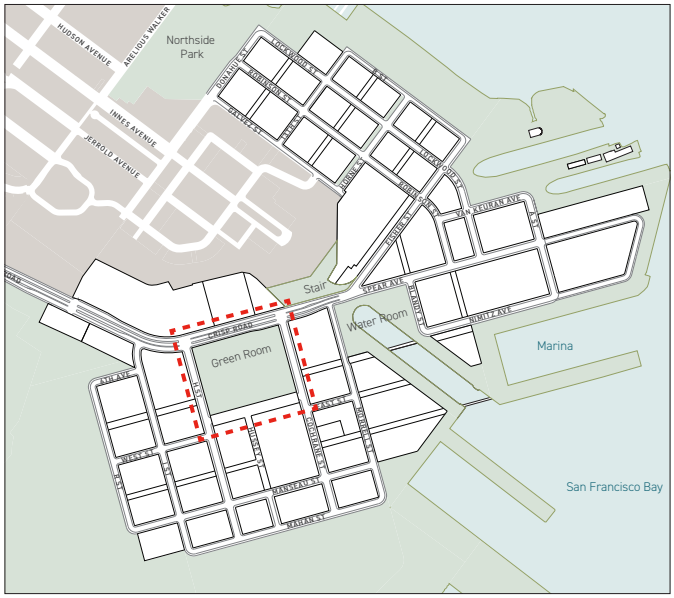
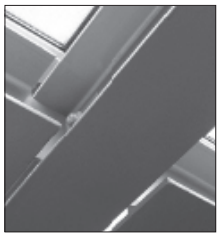
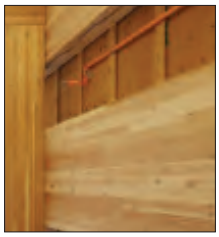


Figure 4.19f: LOCATION OF GREEN ROOM


LIGHT STONE/ PRECAST CONCRETE

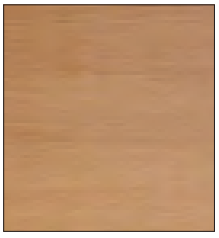

DARK STONE/ PRECAST CONCRETE

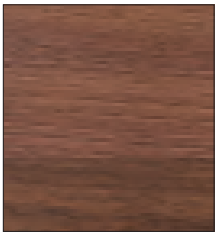

EXPOSED STEEL

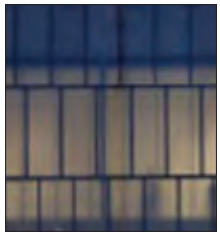

CROSS-LAMINATED TIMBER/GLULAM


WARM METALS (STANDARD USE)

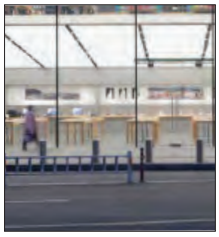

BACK-PAINTED GLASS/ TRANSLUCENT SCREENS


WOODS (MODULAR OR FIELD)




TINTED/OPAQUE GLAZING/SPANDRELS


DARK METALS


GROUND LEVEL GLASS FOR RETAIL(TRANSPARENT)

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19g: MATERIAL PALETTE

4.19 Façade Material Cont'd

Research District and Transit Hub Palette

APPLICATION

INDUSTRIAL MATERIALS:
The use of the following material and color palette is encouraged for the waterfront and open space edges of the Shipyard North and Warehouse Districts. See *Figure 4.19h*.

Materials at this location shall reference the former industrial uses of buildings on these blocks.

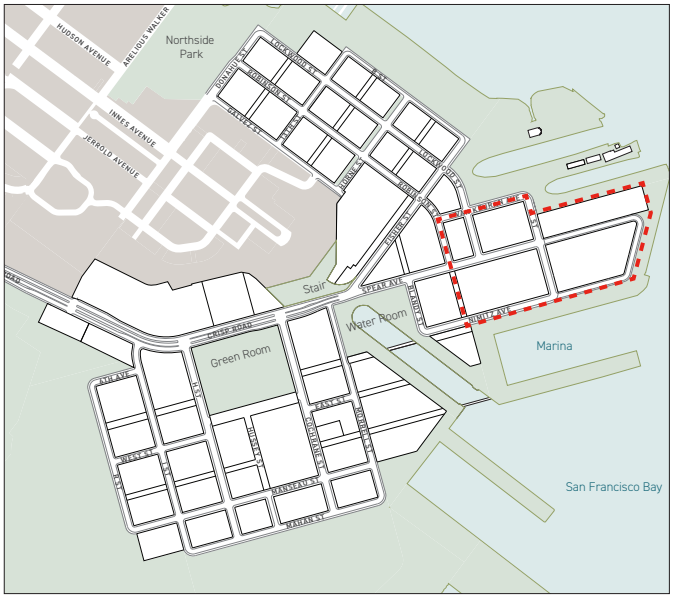
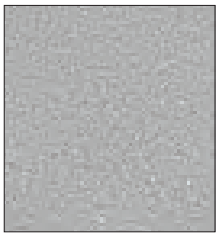
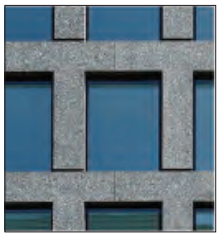


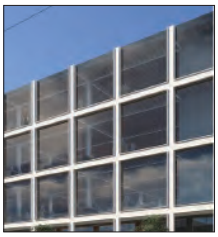
Figure 4.19h: LOCATION OF RESEARCH DISTRICT AND TRANSIT HUB


EXPOSED STEEL

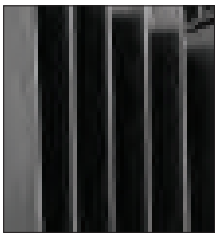

LIGHT METALS


DARK METALS

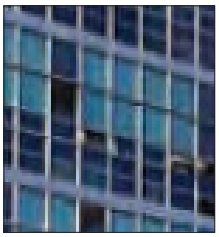

PRECAST CONCRETE/ METALS


STRUCTURAL STEEL/ CURTAIN WALLS


GLASS Façade/ CONCRETED STRUCTURE


METAL FINS


CAST IN PLACE CONCRETE


GLASS CURTAIN WALL


TERRACOTTA BAGUETTES

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19i: MATERIAL PALETTE

4.19 Façade Material Cont'd

Pedestrian Allée Palette

APPLICATION

MATERIAL VARIETY:
The use of the following material and color palette is encouraged for the Pedestrian Allée. See *Figure 4.19j*.

Materials that front the Pedestrian Allée shall provide varied experience as one moves through the allée. Materials shall reinforce the scale of the buildings and be compatible with the adjacent districts.

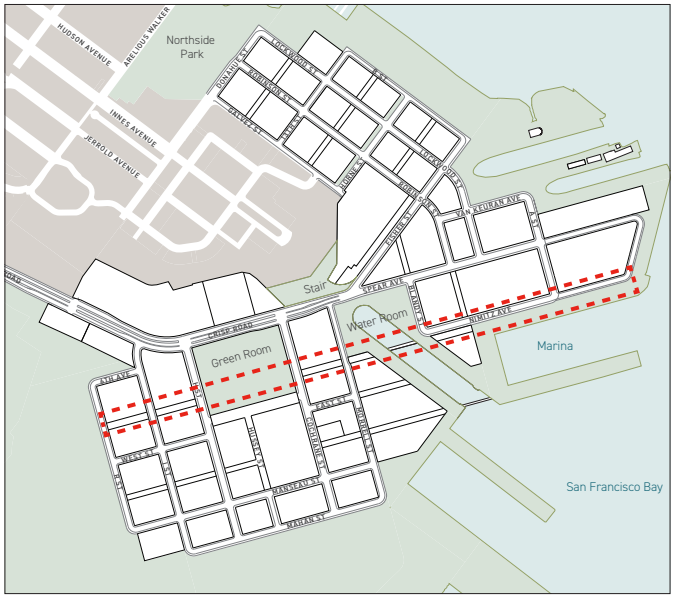
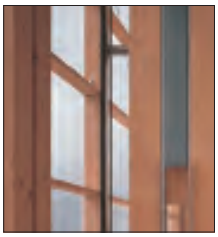
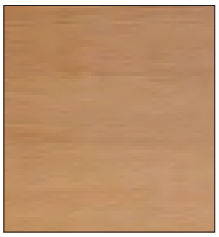


Figure 4.19j: LOCATION OF PEDESTRIAN ALLÉE


CROSS-LAMINATED TIMBER

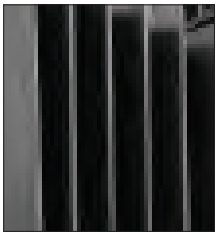

MASONRY (PREFAB PANELS OR IN SITU)


WOODS (MODULAR OR FIELD)


DARK METALS


LIGHT STONE / PRECAST CONCRETE


DARK STONE / PRECAST CONCRETE


METAL FINS


TERRACOTTA BAGUETTES

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19k: MATERIAL PALETTE

4.19 Façade Material Cont'd

Fisher Street Palette

APPLICATION

URBAN EDGE:
The use of the following material and color palette is encouraged for Fisher Street. See *Figure 4.19l*.

Materials at this location shall reinforce an urban edge along Fisher Street.

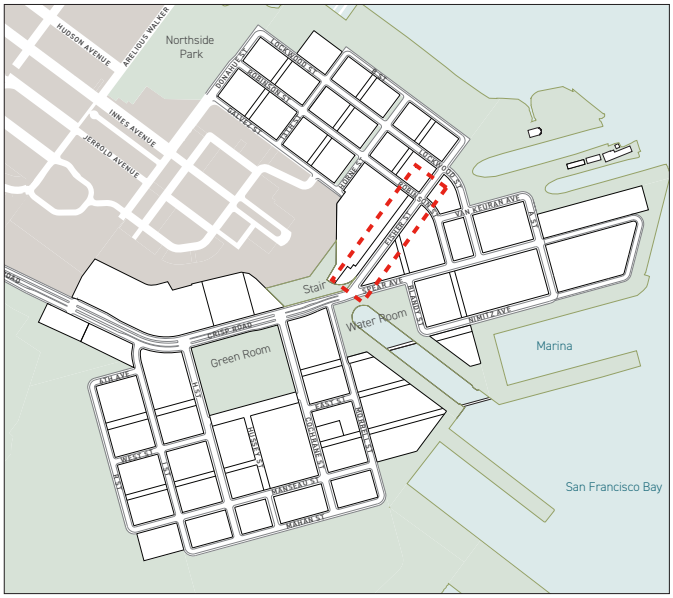


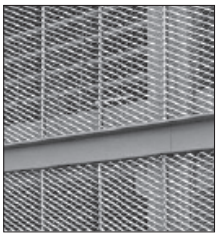
Figure 4.19l: LOCATION OF THE VILLAGE CENTER

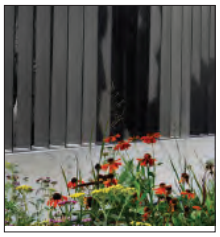

EXPOSED STEEL

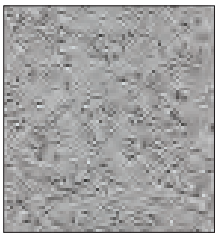

GLASS


TRANSLUCENT GLAZING


CORRUGATED STEEL


METAL FINS


METAL FINS


POLISHED STANDARD CONCRETE

Material and Color Palette is inspirational and can be used in conjunction with other materials.

Figure 4.19m: MATERIAL PALETTE

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4.20 Class I - Bicycle Parking

INTENT

To provide safe, secure and convenient bicycle parking for residents, workers and visitors.

DEFINITIONS

"Class I - Bicycle Parking"
Spaces in secure, weather-protected facilities intended for use as long-term, overnight, and workday bicycle storage by dwelling unit residents, non-residential occupants, and employees.

STANDARDS

4.20.1 Bicycle Parking Capacity

Class I Bicycle parking shall be provided at the following ratios for the occupied floor area:

Office/R+D	1sp/5,000 sf
Community/Arts	1sp/5,000 sf
Retail/Restaurants	1sp/7,500 sf
Maker Spaces	1sp/7,500 sf
Hotel	1sp/30 room
School	4sp/classroom
Childcare	1sp/20 children
Residential	1sp/unit up to 100 units
	1sp/4 units above 100 units
Group/Senior Housing	1sp/10 units

4.20.2 Bicycle Parking Location

Class I Bicycle parking shall be provided for new building construction and adaptive re-use buildings. Bicycle Parking access shall be conveniently located, which may include locations on floors other than the ground floor, provided that pathways to reach Bicycle Parking are designed specifically to accommodate bicycles, (e.g. elevator sizes, hallway widths, etc shall be adequately sized for bicycles specifically).

Commercial bicycle parking may be consolidated in a separate building that is located either adjacent to or across the street from an access point to the subject building.

4.21 Vehicle Parking and Loading

INTENT

To limit the number of vehicle parking spaces by land use and ensure adequate loading and service areas.

STANDARDS

4.21.1 Vehicle Parking and Loading

Parking and Loading minimum and maximum ratios shall be as follows in Figure 4.21a, Figure 4.21b, Figure 4.21c ,and Figure 4.21d. Parking may be provided in individual buildings together with the Principal or Secondary Use(s) served by such Parking or provided in Shared Parking Structures which serve one or more lawfully-permitted uses within HPS2.

MAXIMUM PARKING REQUIREMENTS	
Land Use	Rate
Residential	1 per unit
Regional Retail	3.0 per 1,000 sq. ft.
Neighborhood Retail/Maker Space	3 per 1,000 sq. ft.
Office	1 per 1,000 sq. ft.
Research and Development	1.3 per 1,000 sq. ft.
Hotel	0.25 per room
Film Arts Center	1 per 8 seats up to 1,000 seats, 1 per 10 above 1,000 seats
Artist's Space	1 per 2,000 sq. ft.
Community Uses	1 per 2,000 sq. ft.
Institution/School	0.07 per 1,000 sq. ft.
Marina Slips	0.6 per slip

Figure 4.21a: MAXIMUM PARKING REQUIREMENTS

CAR SHARE PARKING SPACE REQUIREMENTS	
Number of Residential Units	Number of Required Car Share Parking Spaces
0-49	0
50-200	1
201 or more	2, plus 1 for every 200 dwelling units over 200
Number of Parking Spaces Provided for Non-Residential Uses or in a Non-Accessory Parking Facility	Number of Required Car Share Parking Spaces
0-24	0
25-49	1
50 or more	1, plus 1 for every 50 parking spaces over 50

Figure 4.21b: CAR SHARE PARKING SPACE REQUIREMENTS

4.21 Vehicle Parking and Loading Cont'd

4.21.1 Vehicle Parking and Loading

OFF-STREET FREIGHT LOADING SPACE REQUIREMENTS OUTSIDE OF MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS		
Land Use	Size of Use	Number of Spaces Required (per block)
Retail, Wholesale, Manufacturing, Live/Work	0-10,000 sq. ft.	0
	10,000 - 60,000 sq. ft.	1
	60,000 - 100,000 sq. ft.	2
	> 100,000 sq. ft.	3, plus 1 for each additional 80,000 sq. ft.
Offices, Hotels, Residential and All Other Uses	0-100,000 sq. ft.	0
	100,000 - 200,000 sq. ft.	1
	200,000 - 500,000 sq. ft.	2
	> 500,000 sq. ft.	3, plus 1 for each additional 400,000 sq. ft.

Figure 4.21c: OFF-STREET FREIGHT LOADING SPACE REQUIREMENTS OUTSIDE OF MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS

OFF-STREET FREIGHT LOADING SPACE LIMITS MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS		
Land Use	Size of Use	Number of Space Permitted (per block)
Non-Residential Uses	0-50,000 sq. ft.	1
	>50,000 sq. ft.	1 space per 50,000 sq. ft.
Residential - Low Density	0 - 100 units	1
Residential - High Density	> 100 units	1, plus 1 additional loading space for every 200 additional units
Total Number of Loading Spaces Allowed for Any Single Building (all uses)		4

Figure 4.21d: OFF-STREET FREIGHT LOADING SPACE LIMITS MEDIUM- AND HIGH-DENSITY RESIDENTIAL BLOCKS

4.22 Skyway Connections

INTENT

To provide upper level connections between buildings.

DEFINITION

"Skyways"
Upper level connections between buildings are primarily for pedestrians although they could also be used for small service vehicles. Skyways may be enclosed or open air.

STANDARDS

4.22.1 Skyway Connections

Skyways are permitted in the locations indicated in *Figure 4.22a* and only to the extent described below.

All Skyways shall provide a minimum of [30] ft. of vertical clearance below, to allow full pedestrian and automobile access at grade. Each Skyway shall be no wider than [30] ft. and no taller than one[1] story in height. Ground level landscaping may be adjusted as required to allow for solar access.

MBBs between Blocks 44 & 43, 35 & 36, and 28 & 29 shall have no more than two[2] Skyways each. The MBB between Blocks 32 & 33 shall have no more than three[3] Skyways.

Figure 4.22a: SKYWAY CONNECTIONS

4.23 Green Room Datum

INTENT

To provide a consistent architectural expression to unify the façades framing the Green Room.

DEFINITIONS

"Datum"
An articulation strategy on the building façade that, by its continuity and regularity, serves to gather, measure, and organize the pattern of forms and spaces.

STANDARDS

4.23.1 Green Room Datum

All buildings facing the Green Room are required to incorporate an architectural expression of the established Datum. This may be achieved by modulation in the building Façade, a change in material, or another architectural feature.

The Datum elevation shall be set by the first building constructed on the Green Room and be located between [15] ft. and [30] ft. above the sidewalk grade for that building. All future buildings around the Green Room are to match the approximate initial Datum elevation (minor deviations in Datum height, less than three[3] ft. may occur).

Datum Articulation Strategies

Choose at least one[1] strategy:

DS1 Cornice at the Datum
DS2 Change in material at the Datum
DS3 Change in color at the Datum
DS4 Change in building articulation at the Datum
DS5 Change in building modulation at the Datum
DS6 Canopies located at the Datum
DS7 Increase Ground Floor Transparency facing the Green Room to 80% for commercial façades and 60% for residential façades for the entire area up to the Datum
DS8 Applied Materials at the Datum

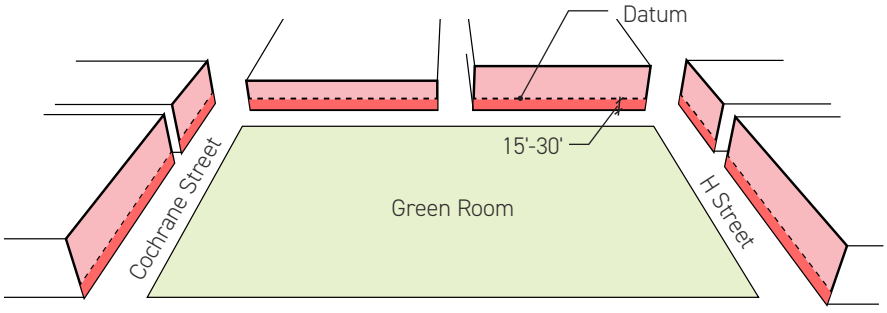
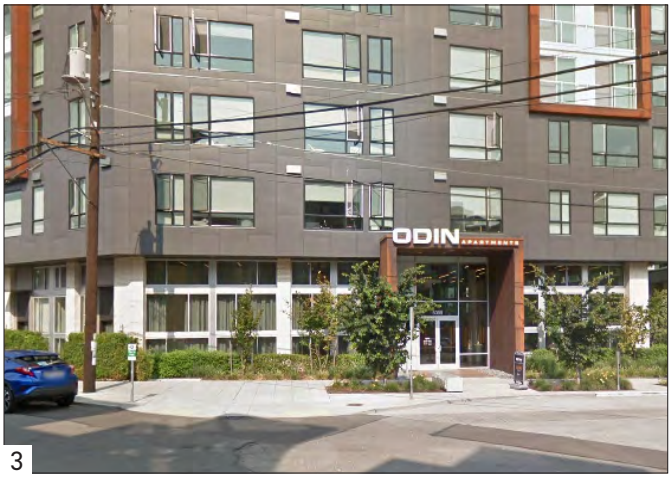


Figure 4.23a: GREEN ROOM DATUM

4.23 Green Room Datum Cont'd

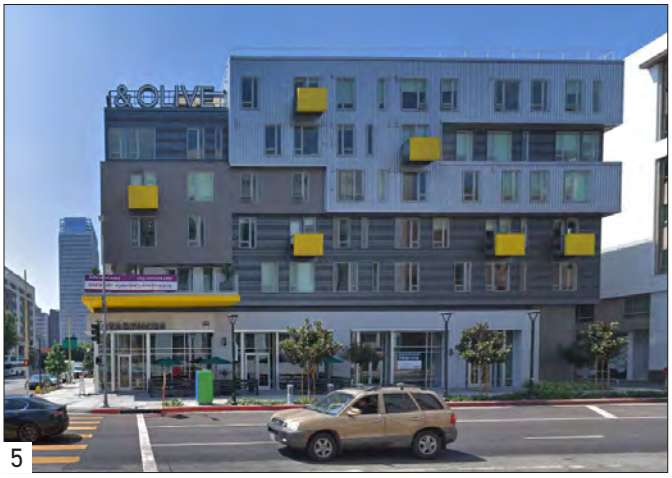
1


2



3


4



5


6

1. Datum: Cornice Creates Datum Example
2. Datum: Change in Architectural Articulation / Modulation Example
3. Datum: Change in Material and Plane Example
4. Datum: Canopy Example
5. Datum: Change in Color and Plane Example
6. Datum: Change in Transparency Example

4.24 Adaptive Reuse

INTENT

There are a number of buildings that have not been officially recognized as cultural resources that reflect historic development patterns of the Hunters Point Shipyard and provide visual interest, cohesion, and a sense of the history of the site. As such, the following standards are intended to encourage the retention of these character-enhancing structures.

DEFINITIONS

"Adaptive Reuse"
Reuse or recreation of an existing structure in part or whole, in a manner that maintains the essence and character-defining building elements of the existing structure. Projects that propose adaptive reuse of any of the following buildings (140, 204, 205, 207, 211, 224, 231, 253) shall provide a written summary of compliance with the then-current Secretary of the Interior's Standards and Guidelines for Rehabilitation.

"Character-Enhancing Structures"
Buildings or structures that may be adaptively reused to enhance the neighborhood character and sense of place, as shown in Figure 4.24a. Detailed information regarding the specific designations of National Register Buildings and others to be studied or considered for retention can be found in the companion documents. (Refer to Section 1.2)

STANDARDS

4.24.1 Adaptive Reuse

When adopted, the Adaptive Reuse of an existing building shall retain at least one[1] public expression of a character-defining building element from the list below for the portions of the building that remain:

Building Elements

1. **Roof Profile:** Retain or replicate at least 50% of the character-defining roof profile.
2. **Structural System:** Retain, retrofit or replicate at least 75% of the character-defining external or internal structural systems. The structural system need not perform in its original function to be considered a character-defining feature.
3. **Building Enclosure:** Retain, replicate or rebuild at least 75% of the building enclosure in a manner that is consistent with the existing character, but may be different in materiality and transparency so long as such qualities are publicly expressed.
4. **Character-Defining Features:** Demonstrate a comprehensive and cohesive scheme that incorporates multiple features of one[1] or more character-defining building elements. Such scheme shall publicly express such character and represent a creative re-imagining of the existing building features without necessarily meeting the quantitative requirements of the three[3] building elements noted above (Roof Profile, Structural System, Building Enclosure).

1. Adaptive Reuse Example
2. Adaptive Reuse Example

1

2

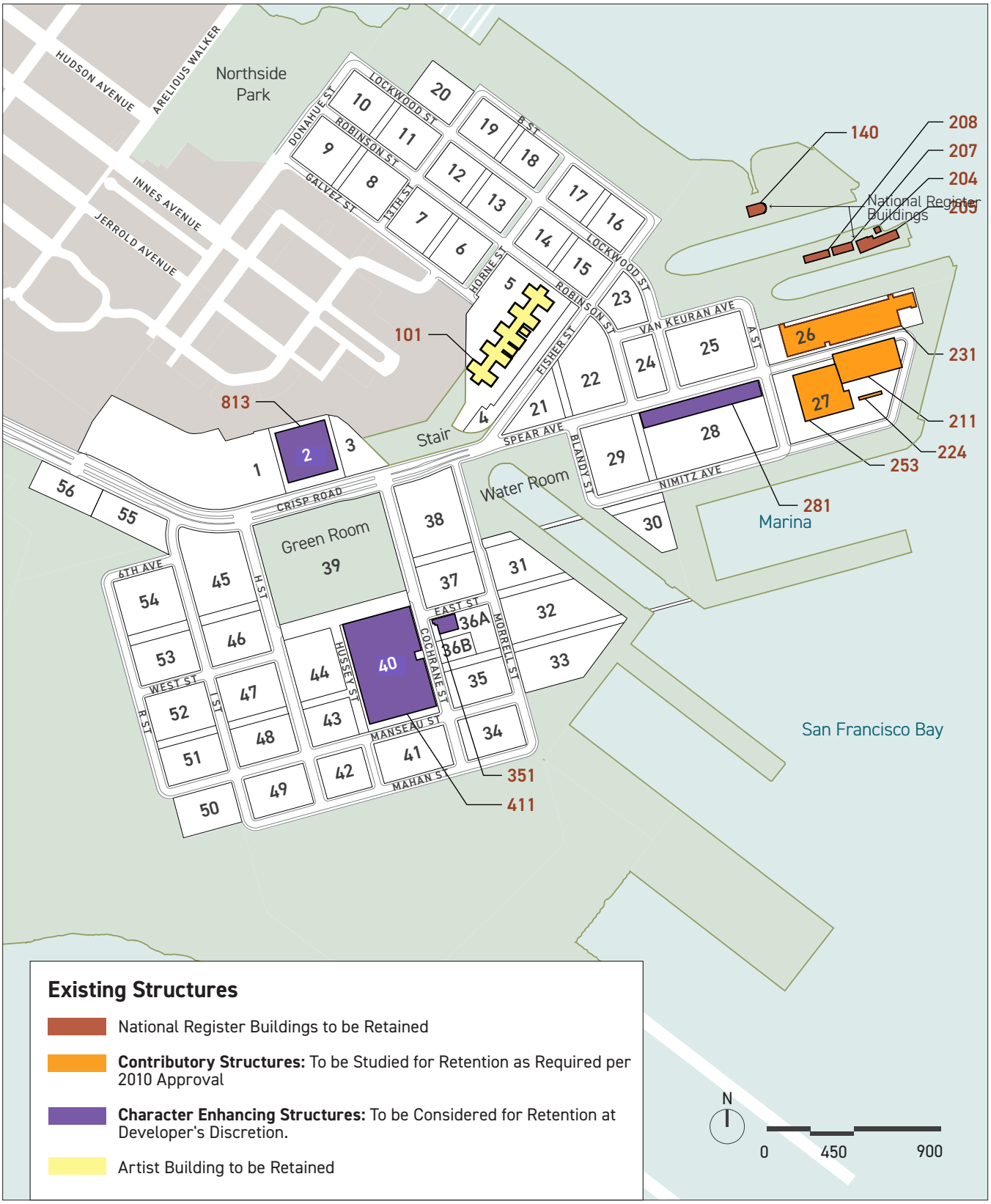


Figure 4.24a: EXISTING STRUCTURES

4.24 Adaptive Reuse Cont'd

4.24.2 Adaptive Reuse Exemptions

STANDARDS

4.24.2 Adaptive Reuse Exemptions

Where other standards in this document conflict with the Adaptive Reuse Standards or prevent the retention of a Contributory or Character-Enhancing Structure, the Adaptive Reuse project shall be exempt from such Standards. Specifically, development projects that comply with the Adaptive Reuse Standards shall be exempt from the following (other standard exemptions will be considered on a case-by-case basis):

4.2.1 Building Setback
4.3.1 Developable Area Coverage
4.4.5 Street Wall
4.5.2 Maximum Plan Length
4.6.1 Façade Composition
4.7.1 Bulk and Massing Approach
4.16.1 Rooftop Façades
4.17.1 Ground Floor Blank Walls
4.17.2 Upper Floor Blank Walls
4.23.1 Green Room Datum

Additions to Contributory or Character-Enhancing Structures are also exempt from these Standards. Designs are allowed to increase the height of the existing structure within the allowable Building Height. Vertical and horizontal additions should be clearly identifiable, but visually harmonious with the existing building's features and scale.

Development improvements extending horizontally outside of the original footprint shall comply with all relevant standards if the addition is not extending, highlighting, or reacting/responding to the character of the features of the existing structure.

4.25 Key Sites Blocks 28 and 40

INTENT

To assure that buildings on Blocks 28 and 40 are either retained pursuant to the Adaptive Reuse controls, or are redeveloped with exemplary architectural design.

STANDARDS

4.25.1 Key Sites Blocks 28 and 40

In addition to all applicable standards for new construction, apply one[1] additional **BE/PE** Building or Public Realm Enhancement Measure.

In addition, apply one[1] of the options below:

Option 1
Allow pedestrian access through the site at the Ground Floor using the following strategies:

- Provide Ground Floor public access through the block
- Public access shall be open during regular business hours
- The connection may be open to air or enclosed
- Upper floor connections above the pedestrian throughway area are permitted
- The scale of the connection shall be of a width and height that is inviting to the public

Option 2
Develop an architectural quality that meets or exceeds the expression and character of the Adaptive Reuse building using the following strategies:

- Building design shall be uniquely identifiable from afar
- Building design shall enhance the pedestrian experience through incorporation of tactile and fine grain materials
- Building design shall evoke or reference the character-defining elements of the building it replaces

4.26 Private Open Space

INTENT

To provide opportunities for individuals to seek a moment of respite or congregate with others in open space.

DEFINITION

"Residential Private Individual Open Space"
Intended for the use of individual residents within a unit and include terraces, patios, balconies, rooftop spaces and other similar areas.

"Residential Private Common Open Space"
Intended to be shared by all residents/users within a building or building cluster and includes rooftop spaces, internal courtyards, gardens, pools, play areas, and other similar areas.

STANDARDS

4.26.1 Private Open Space

Every residential building shall have a minimum net usable Private Open space equivalent to [60] sq. ft. per unit. Private Open Space shall be located on the same parcel as the residents it serves. Any combination of private or common open space may be used to count towards meeting this requirement.

Private Individual Open Space
Residential Private Individual Open Space shall be a minimum of [36] sq. ft. with a six[6] ft. linear dimension.

Private Common Open Space
Residential Private Common Open Space shall be a minimum [15] ft. linear dimension.

A Projection shall maintain nine[9] ft. of vertical clearance to the ground floor in order for the space beneath the Projection to be considered an open space. See *Figure 4.26a* to *Figure 4.26g*.

4.26.2 Private Common Open Space on Waterfront Blocks

Residential buildings adjacent to the waterfront shall have a courtyard opening to the waterfront.

4.26.3 Private Setbacks

The Setback zone of all residential buildings shall be used either to create high quality, usable open space for street facing units, or in the case of building entrances to create a transition zone between private-use and the public realm. Permitted uses within the Setback zone include street-facing stairs, stoops, porches, patios, landscaping, driveways and entry plazas. The Setback zone shall be landscaped with high quality materials from the building edge to the public sidewalk. Residential Ground Floor open space shall follow San Francisco "Guidelines for Ground Floor Residential Design".

4.26.4 Fences

In order to define Private Open Spaces of Ground Floor units, the following can be used: fences, railings, gates, grilles, planters and retaining walls to delineate private from public space. Such elements may be up to three[3] ft. high. If less than 25% opaque, such elements may be up to three and a half[3.5] ft. high.

4.26 Private Open Space Cont'd

GUIDELINES

4.26.5 Defensible Spaces

Stoops and patios shall provide safety measures to ensure the space is defensible. Defensible design includes gates and railings, planters, and appropriate landscaping to provide a buffer from the street, while also allowing for visual connections between the street and the residence.

4.26.6 Orientation

Buildings shall maximize solar access and views of private common open spaces. Balconies on high-rise towers are encouraged to be located away from building corners that face the prevailing wind direction.

4.26.7 Planting Palette

Native and climate appropriate plants are encouraged.

4.26.8 Irrigation

Water demand shall be minimized by carefully controlling irrigation timing and application as well as plant selection.


1


2


3


4

1. Private Common Open Space - Rooftop Example
2. Private Individual Open Space - Balcony Example
3. Private Common Open Space - Internal Courtyard Gardens Example
4. Private Individual Open Space - Front Yard Example

4.26 Private Open Space Cont'd

Setback Zone 1 - Refer to Page 56 Setback requirements

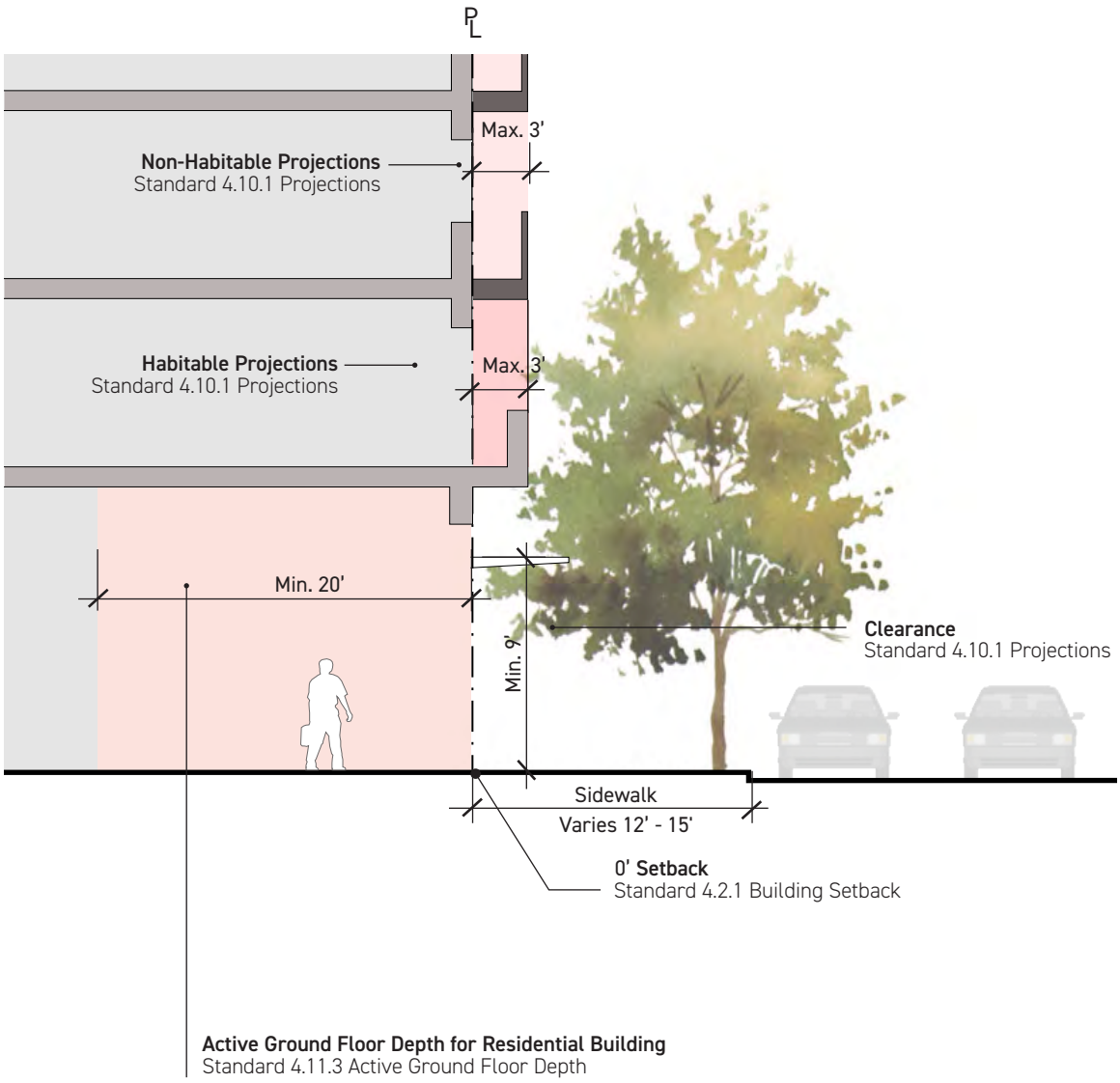


Figure 4.26a: SETBACK ZONE 1 (0' MIN./0' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 2 Variation 1 - Refer to Page 56 Setback requirements

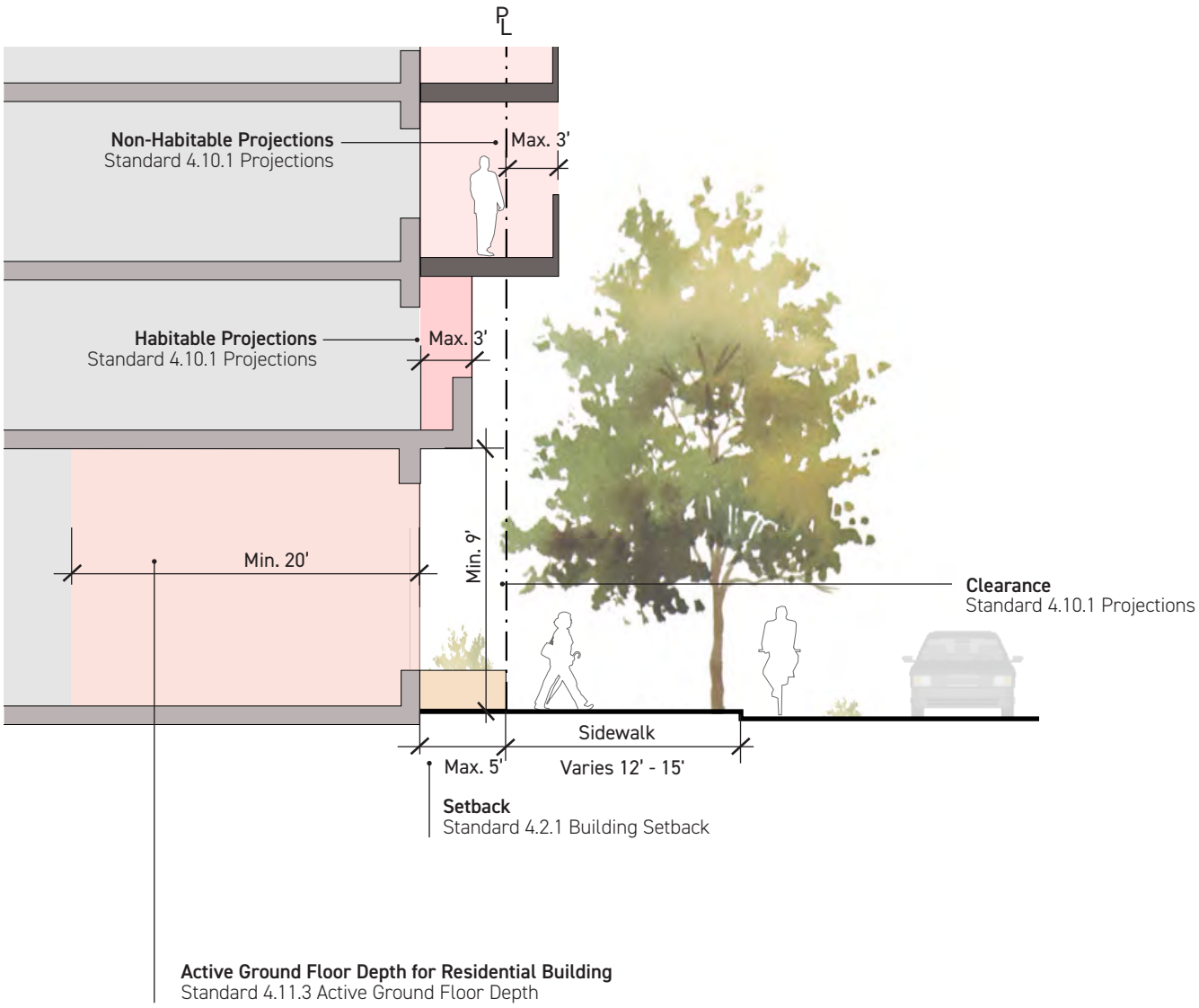


Figure 4.26b: SETBACK ZONE 2 VARIATION 1 (0' MIN./5' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 2 Variation 2 - Refer to Page 56 for Setback requirements

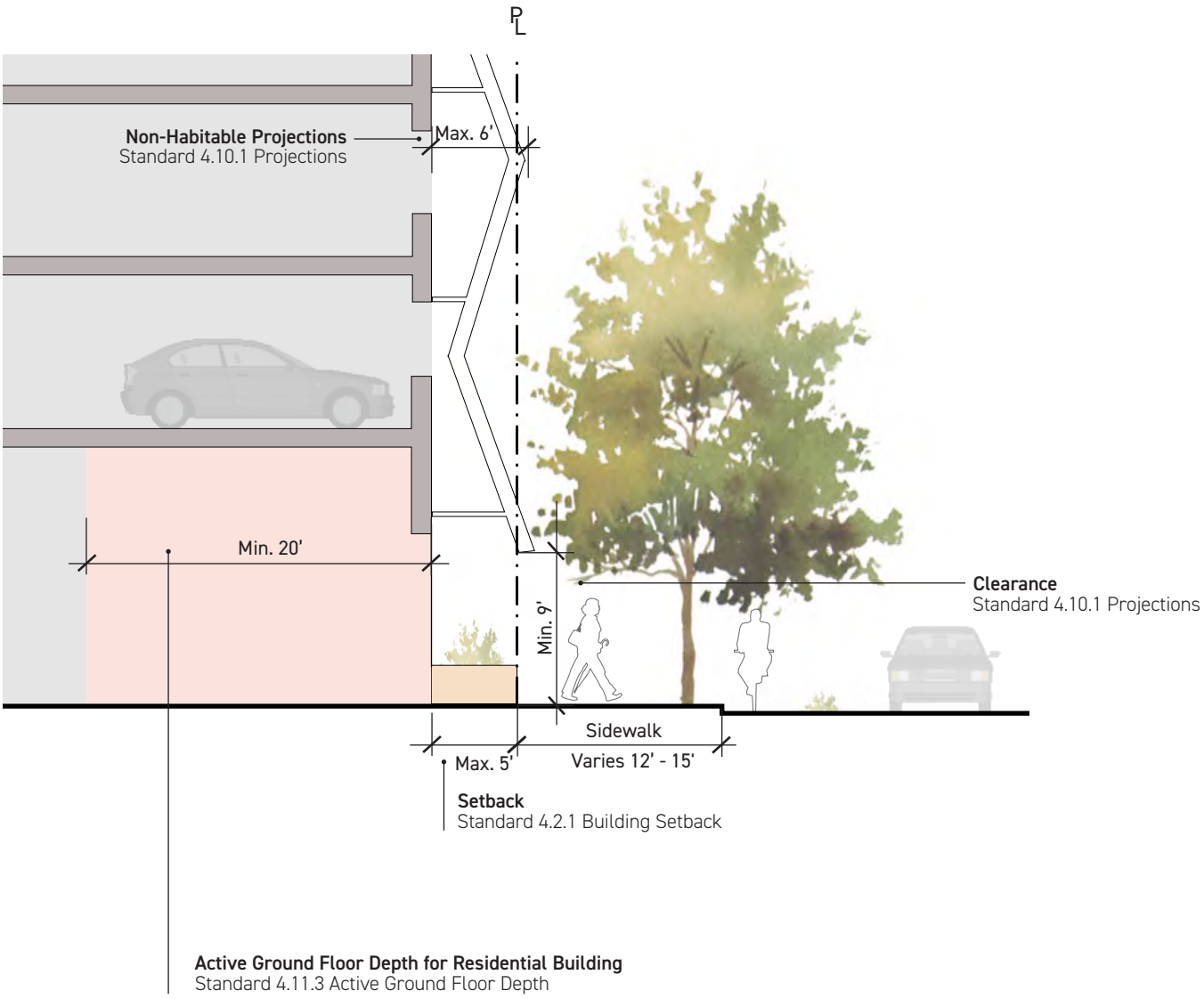


Figure 4.26c: SETBACK ZONE 2 VARIATION 2 (0' MIN./5' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 3 - Refer to Page 56 for Setback requirements

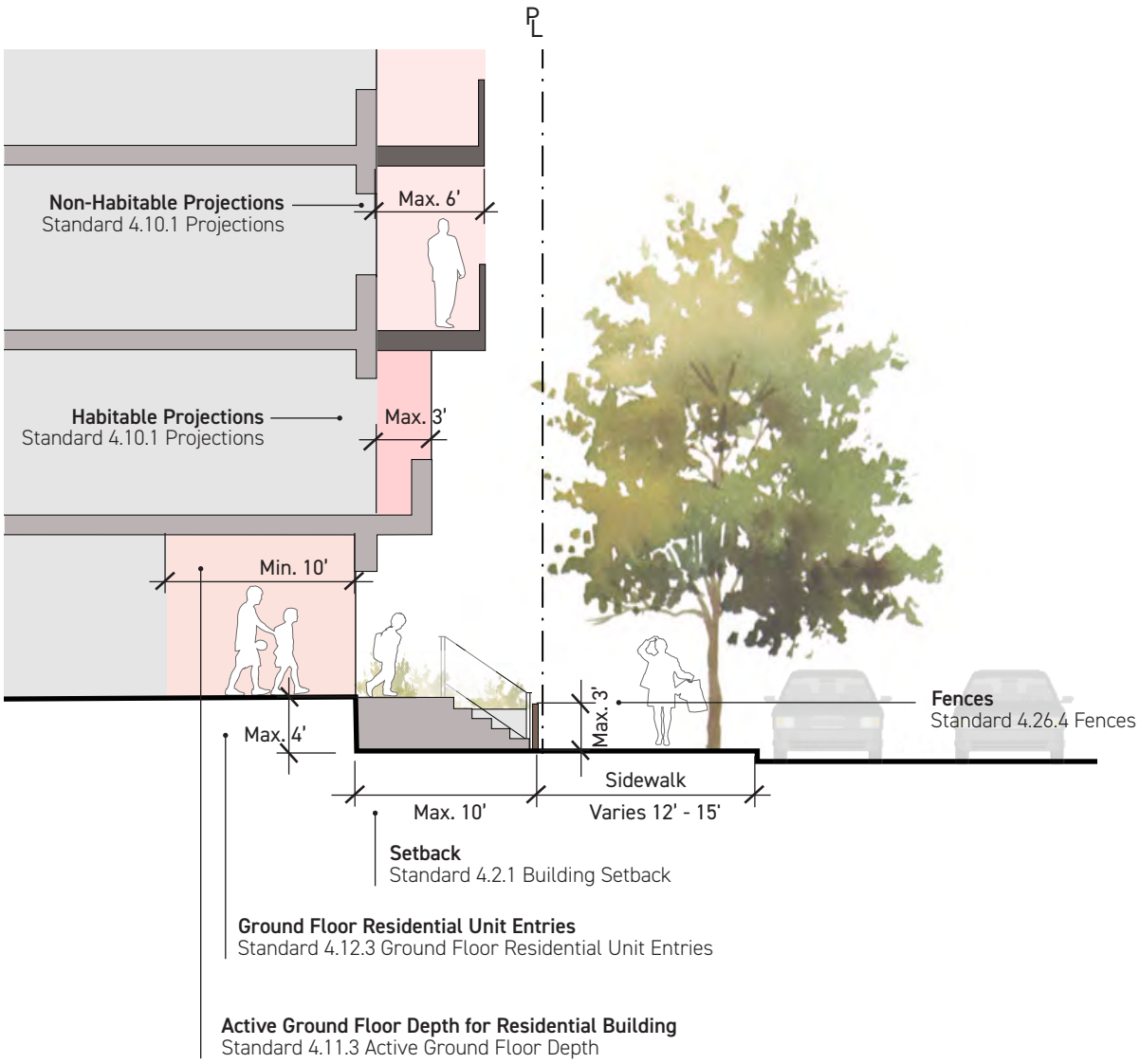


Figure 4.26d: SETBACK ZONE 3 (5' MIN./10' MAX.)

0 5' 10' 20'

4.26 Private Open Space Cont'd

Setback Zone 4 - Refer to Page 56 for Setback requirements

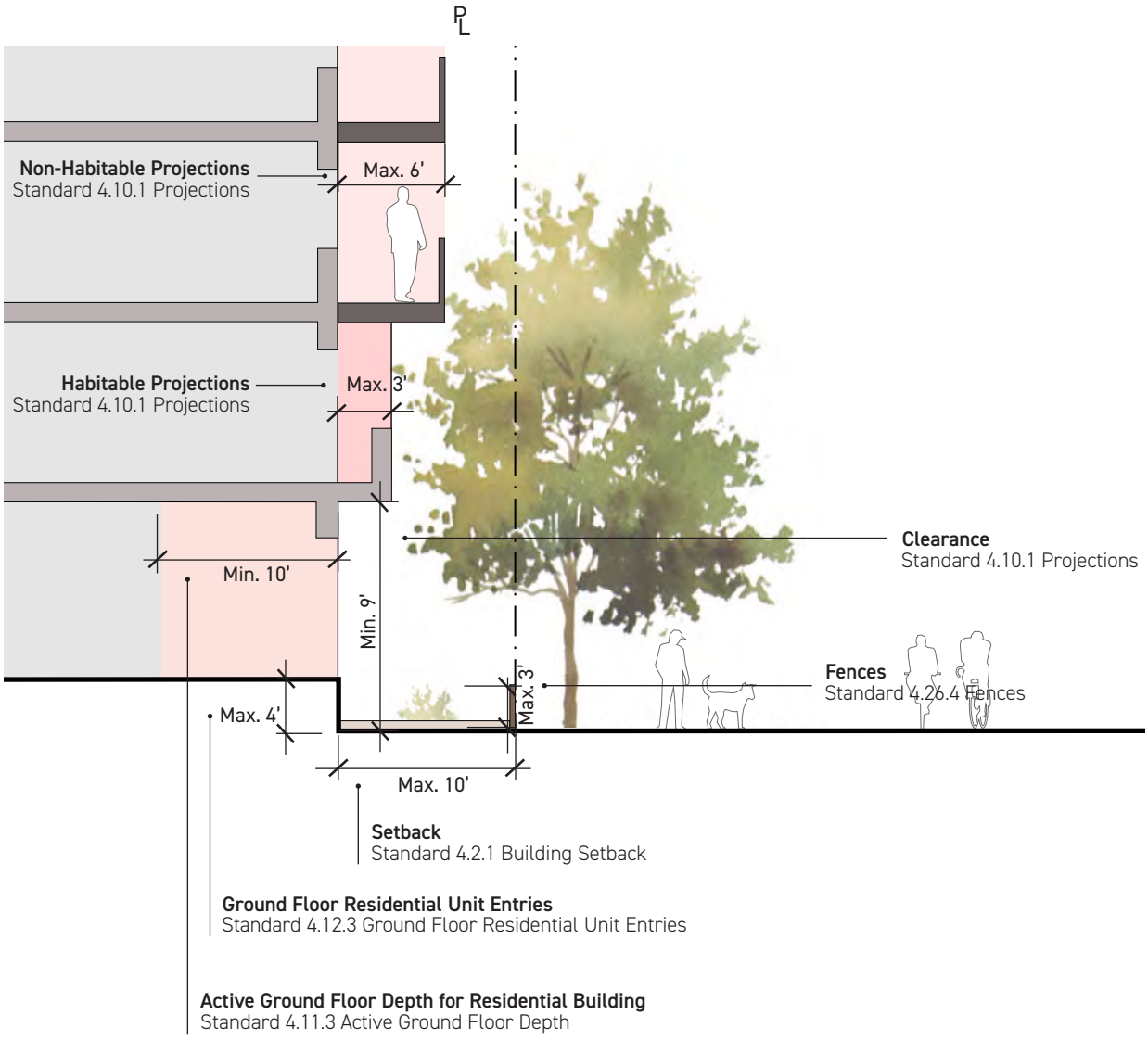


Figure 4.26e: SETBACK ZONE 4 (0' MIN./10' MAX.)

4.26 Private Open Space Cont'd

Setback Zone 5 - Refer to Page 56 for Setback requirements

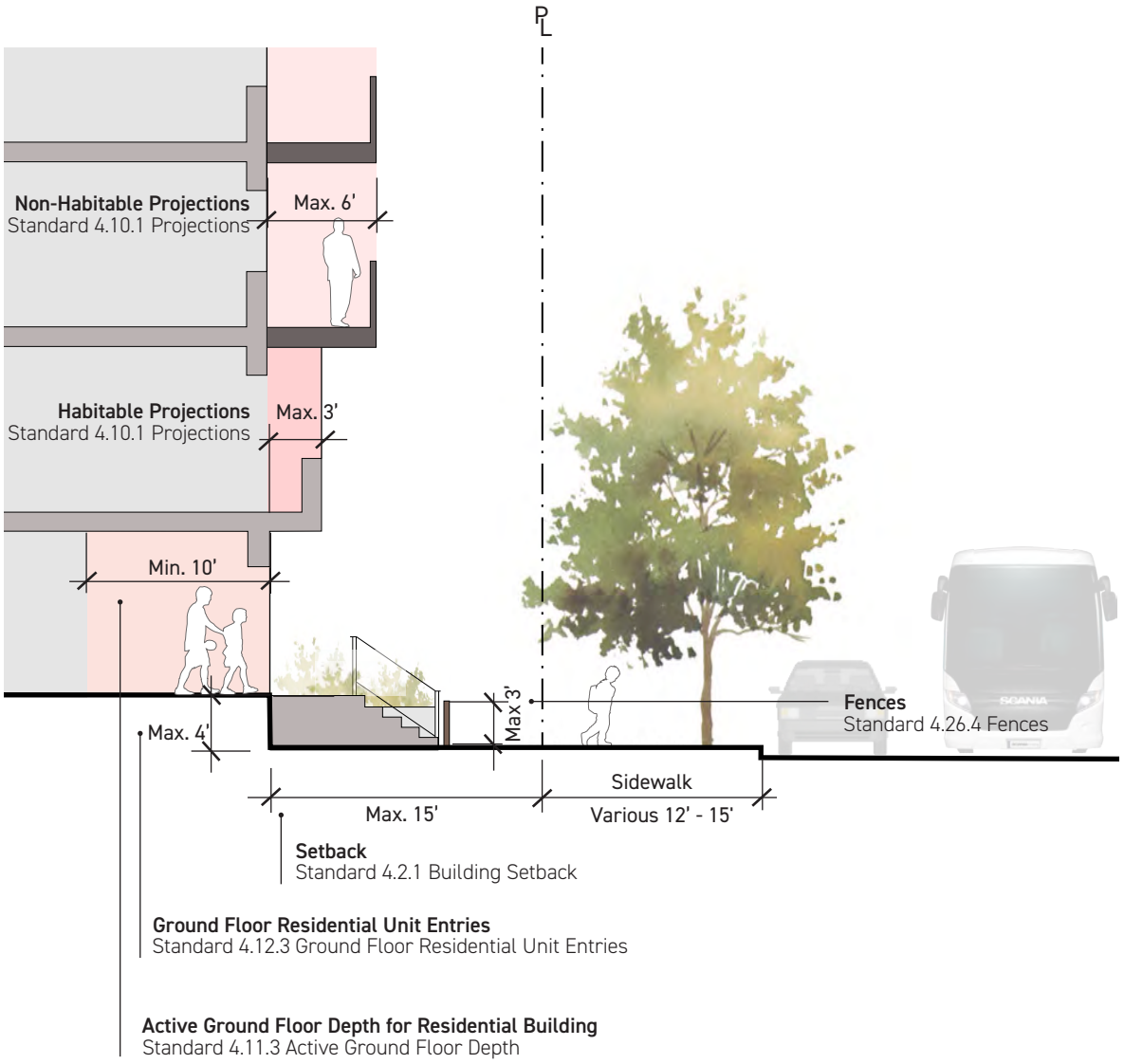


Figure 4.26f: SETBACK ZONE 5 (10' MIN./15' MAX.)

0 5' 10' 20'

4.26 Private Open Space Cont'd

Setback Zone 6 - Refer to Page 56 for Setback requirements

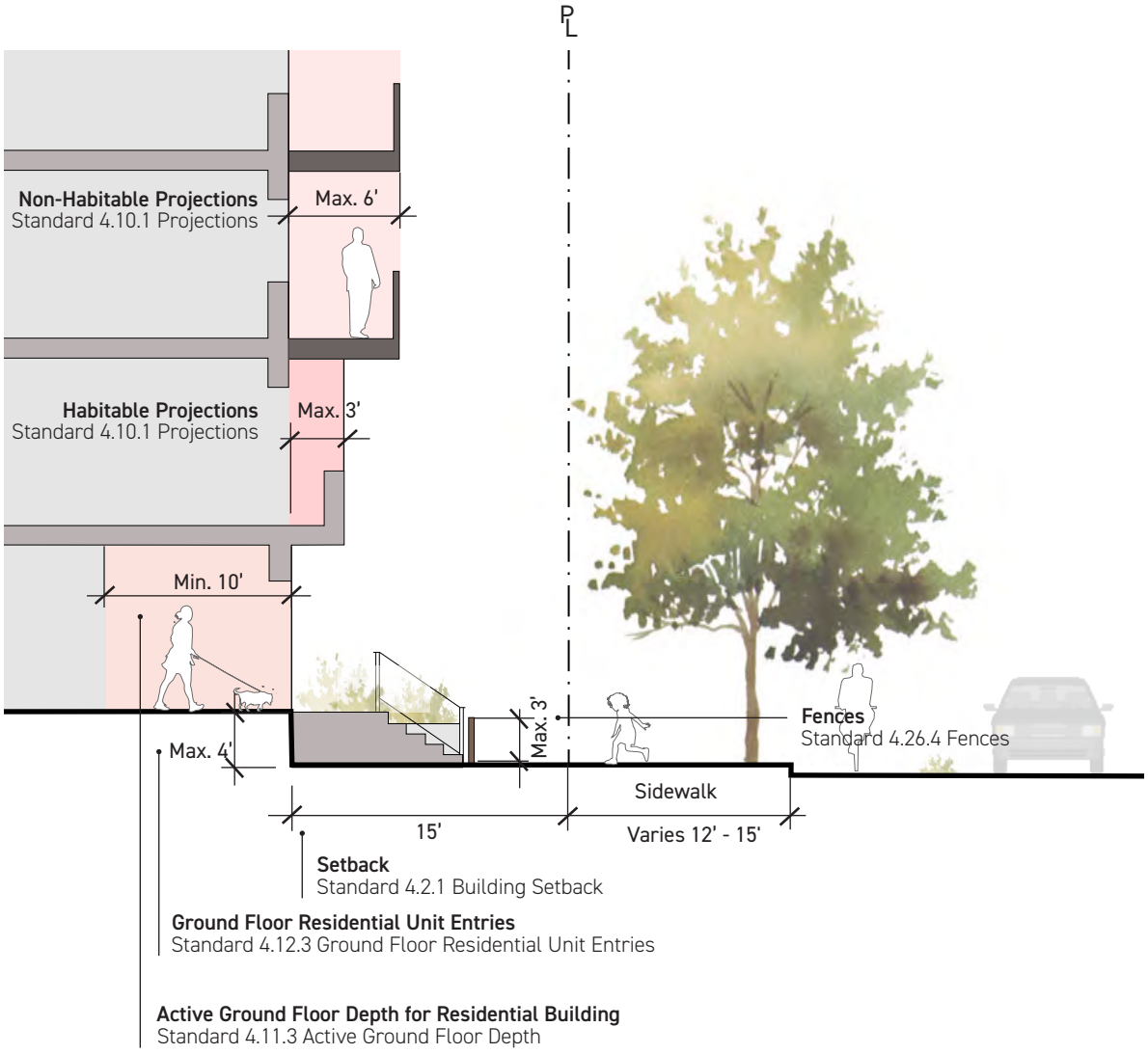


Figure 4.26g: SETBACK ZONE 6 (15' MIN./15' MAX.)

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4.27 Private Open Space - Mid-Block Breaks

INTENT

Mid-Block Breaks (MBBs) are intended to allow public access through private development blocks to promote connectivity and walkability and create a finer grain circulation system.

MBBs are regulated by the CPHPS2 Infrastructure Plan, Transportation Plan, and Streetscape Master Plan.

Block sizes may be legal parcels or may be part of a legal parcel.

Mid-Block Break Specification Book will be provided per the DRDAP.

Residential Mid-Block-Breaks
Residential Mid-Block-Breaks will be domestic in character with defined transition zones between the public throughway and the Ground Floor residential units and amenity spaces. Residential Mid-Block Breaks may accommodate pedestrian, bicycle and low-volume vehicular access. The design will prioritize pedestrian access and safety, incorporate traffic-calming design elements and other Public Realm amenities. Residential spaces such as terraces, Stoops, or porches may spill into landscaped Setback zones. Ground Floor residential units will be slightly raised above-grade, to allow for privacy and Stoops, while access to ground-floor amenity spaces may further activate the Mid-Block Break and provide 'eyes on the street'.

Commercial Mid-Block-Breaks
Commercial Mid-Block-Breaks will be more public in nature and framed by uses such as Ground Floor retail storefronts, office and amenity spaces. Commercial Mid-Block Breaks may accommodate pedestrian, bicycle and low-volume vehicular access. The design will prioritize pedestrian access and safety, incorporate traffic-calming design elements and other public realm amenities. Interior active uses such as workspaces and restaurant seating may spill out into the Mid-Block Breaks. Landscape plantings, furnishings, gathering spaces and other design elements may serve as visual cues to differentiate pedestrian-dedicated areas from shared pedestrian or vehicular zones.

STANDARDS

4.27.1 Public Access

Mid-Block Breaks shall have unrestricted public access.

4.27.2 Throughway Dimensions

All Mid-Block Breaks shall have a pedestrian path with a minimum dimensions of ten[10] ft. in width. The access may be configured as two five[5] foot paths on either side of the Mid-Block Break or as one ten[10] foot path. A pedestrian path may be shared with bicycles and vehicles.

4.27.3 Surfaces

Hardscape surfaces within the MBB Width including throughway and landscape zones/Setback zones shall be limited to 80% of the ground plane.

4.27.4 Street Trees

A double row of street trees shall be planted at a spacing that is not greater than [30] ft. on center. Tree planters should be a minimum of [28] sq. ft. in size each. Trees may be located in the Mid-Block Break or in private Setback zones.

4.27.5 Lighting

Adequate lighting shall be provided to ensure pedestrian and vehicular safety and may be located in the Mid-Block Break or in the Setback zones.

4.27 Private Open Space - Mid-Block Breaks Cont'd

GUIDELINES

4.27.6 Community Spaces

Social spaces, seating and places for informal play are encouraged and may be located in the Mid-Block Break or in the Setback zones.

4.27.7 Landscaping

All Mid-Block Breaks are intended to be an outdoor room. Rich landscaping is encouraged so the drive aisle (in the case of a vehicular lane way) is subordinate. This includes street trees, shrub beds, patios and steps, benches, and lighting. Landscape planters can be raised or at grade based on architectural design. Landscaping may be located in the Mid-Block Break or in the Setback zones.

4.27.8 Minimizing Vehicular Speeds

Features to reduce vehicle speeds are encouraged, such as narrow drive aisle and offsets in the drive aisle alignment.

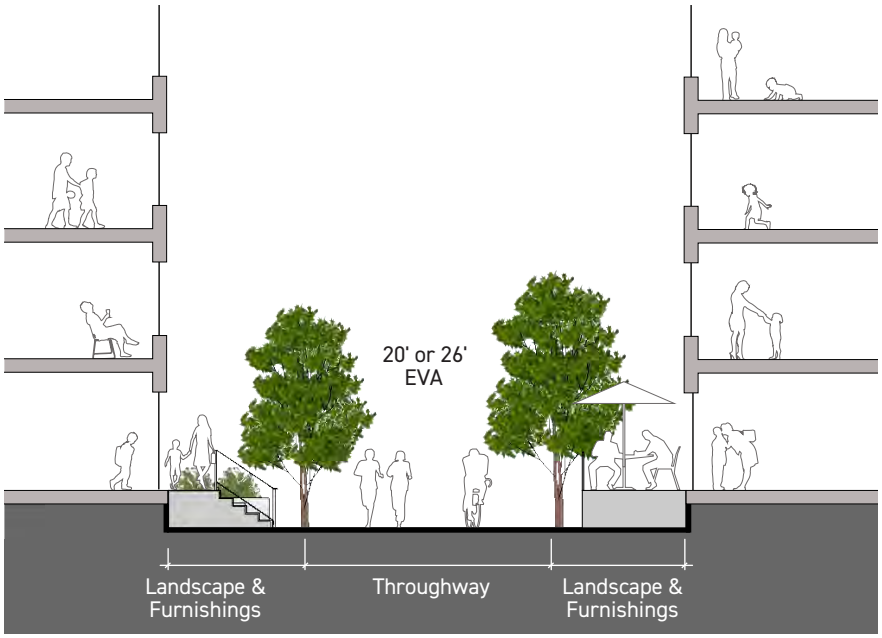

Figure 4.27a: RESIDENTIAL MID-BLOCK BREAK

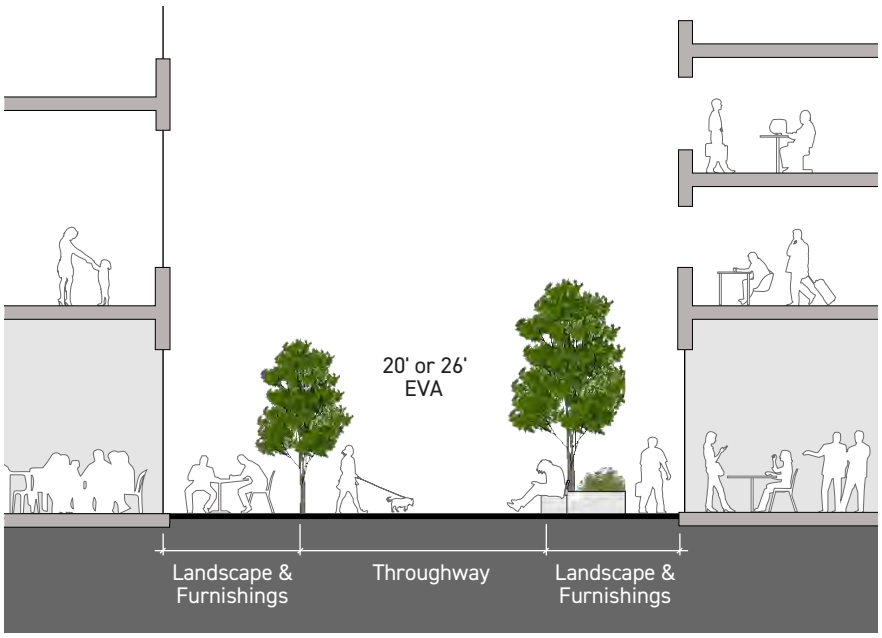

Figure 4.27b: COMMERCIAL MID-BLOCK BREAK

4.28 Building Signage

DEFINITIONS

"Sign"
Any structure, part thereof, or device or inscription which is located upon, attached to, or painted, projected or represented on any land or right-of-way; or on the outside of any building or structure including an Awning, Canopy, marquee or similar appendage; or affixed to the glass on the outside or inside of a window so as to be seen from the outside of the building, and which displays or includes any numeral, letter, word, model, banner, emblem, insignia, symbol, device, light, trademark, or other representation used as, or in the nature of, an announcement, advertisement, attention-arrester, direction, warning, or designation by or of any person, firm, group, organization, place, commodity, product, service, business, profession, enterprise or industry.

Two or more Sign faces shall be deemed to be a single Sign if such faces are contiguous on the same plane, or are placed back to back to form a single structure and are at no point more than two[2] ft. from one another. Also, on Awnings or marquees, two[2] or more faces shall be deemed to be a single Sign if such faces are on the same Awning or marquee structure.

"Business/Retail Signage"
A Sign which directs attention to the primary business, commodity, service, industry or other activity which is sold, offered, or conducted on the premises upon which the Sign is located or to which it is affixed. Where a number of businesses, services, industries or other activities are conducted on the premises, or a number of commodities, services, or other activities with different brand names or symbols are sold on the premises that one or more of those businesses, commodities, services, industries or other activities by brand name or symbol as an accessory function of the business Sign, provided that such advertising is integrated with the remainder of the business Sign, and provided also that any limits which may be imposed by the following standards on the area of the individual Signs and the area of the Signs on the property are not exceeded. The primary business, commodity, service, industry or other activity on the premises shall mean the use which occupies the greatest area of the premises upon which the business Sign is located, or to which it is affixed.

SIGN TYPES

Sign types for HPS2 are divided into two[2] general categories: Permanent Signs and Temporary Signs.

Permanent Signs
- Building Wall Signs
- Projecting or Blade Signs
- Canopy or Awning Signs
- Window Signs
- Street or Unit Address Signs
- Identifying Signs
- Freestanding or Directional Signs

Temporary Signs
- Temporary Signs
- Portable Signs

1. Hand-painted Wall Graphics Example
2 & 5-8. Building Wall Signs Example
3. Temporary Graphics and Signs Example
4. Awning Signs Example
9. Canopy Signs Example
10. Projecting or Blade Signs Example
11. Window Signs Example
12 & 13. Street and Unit Address Signs Example
14. Directional Signs Example
15. Identifying & Freestanding Signs Example
16. Directional Signs Example & Freestanding Signs Example

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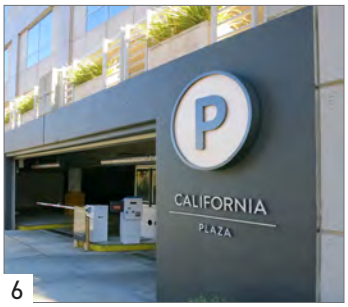

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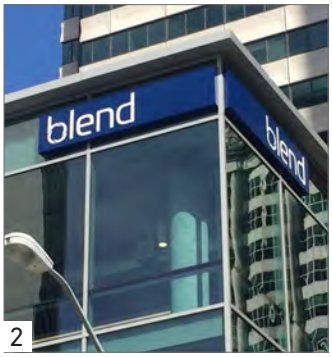

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4.29 All Signs

STANDARDS

4.29.1 Transparency

Window signage shall not diminish transparency for the area of the Sign. Where window Signs are used, they shall maintain a high degree of visibility between interior and exterior spaces.

4.29.2 Concealed Electrical Signage Elements

All electrical signage elements such as wires, exposed conduit, junction boxes, transformers, ballasts, switches, and panel boxes shall be concealed from view.

4.29.3 Typefaces & Colors

Sign typefaces shall be legible to approaching vehicles and pedestrians and of a scale that is appropriate with the neighboring buildings, allowing for larger formats in more urban or retail-oriented areas and smaller formats on residential neighborhood streets. Tenants may use their type style and brand on signage.

4.29.4 Sign Materials

High quality materials, workmanship and detailing are encouraged in the design of building Signs. Sign materials and overall scale shall be complimentary to the buildings' architectural materials and thoughtfully integrated into the building's wall detailing and fenestration. Sign materials shall be selected that are durable and weather resistant and appropriate for the marine environment typical of the site. Where window Signs are used, Sign materials shall maintain a high degree of transparency, avoiding large opaque shapes. Refer to FC4- Façade Composition - Material/Color for building materials palette reference examples.

4.29.5 Graphic Style

Visually representational Signs with a creative graphic or iconic character are encouraged to allow for clearer interpretation and a variety of graphic styles. Wall Signs are encouraged to employ individual, dimensional pan-channel lettering and/or logos. Cabinet Signs shall be allowed, but only where integral to the tenant's identity.

4.29.6 Integration

Signage shall be appropriate to the District's buildings and streetscapes; designed to relate to use, composition, scale, and architecture. Signage shall be considered an important architectural and artistic feature within the overall building design.

4.29 All Signs Cont'd

STANDARDS

4.29.7 New Technology Signs

Signage using new forms of technology, such as dynamic content Signs, digital displays, or light projections may be appropriate where it is integrated into the building façade or behind the window glass. The displays shall be designed, located, oriented, and operated in a manner that has no adverse safety impacts.

Restrictions on New Technology Signs may include, but are not limited to:

- Large format digital displays that may be considered "digital billboards".
- Limiting the hours of operation of the electronic Sign, generally between 5 am and midnight.
- Limiting the amount and frequency of animation, or ensuring the content on dynamic content or digital Signs has a minimum dwell time and transition time of [15] seconds.
- Limiting Sign brightness.
- Locating the Sign inside a business premises and set back from window glazing.
- Orienting the face of the Sign away from the adjoining street network and away from residential buildings / neighborhoods or facing the Green Room or the Bay. No flashing Signs.

4.29.8 Sign Illumination

Building wall, window or projecting Sign lighting may be externally or internally illuminated. Freestanding Sign types may be externally or internally illuminated; or during business hours, directly illuminated. However, cabinet Signs with internally face-lit plastic Sign faces are prohibited.

The amount of Sign illumination hours per day shall be limited to normal business hours, except as noted for electronic Signs.

Decorative, external light source fixtures are encouraged for externally illuminated Signs. However, junction boxes, tubing, conduits and raceways shall be concealed or incorporated into the design of the Sign structure to the greatest extent possible. No exposed LED, neon or other lighting sources is allowed.

1. Digital Display Sign

1

4.29 All Signs Cont'd

4.29.9 Prohibited Signage

STANDARDS

4.29.9 Prohibited Signage

The following types of Signs and Sign conditions are not permitted:

- Signs attached to a building that extend or are located above the roof line of the building to which it is attached
- Wind Signs which are composed of one or more banners, flags, or other objects, except official City, State or Federal flags, mounted serially and fastened in such a manner as to move upon being subjected to pressure by wind
- Revolving Signs which rotate or spin
- Blinking or flashing Signs which exhibit rapidly changing levels of illumination
- Balloon or inflated Signs constructed of materials supported by inflated means
- Billboards, specifically a large graphic panel designed to carry outside advertising
- Posters or handbills of a temporary nature not contained in a designated wall-mounted or freestanding poster case or display fixture
- Signs that obstruct the passage or sight lines of motorists, bicyclists or pedestrians
- Signs that replicate, mimic or could be mistaken as a traffic control device
- Signs with mirror-reflective materials, colors or finishes. Reflective materials exclude LED signs behind glass
- Signs with sound, vibration, odor or other emissions, unless the emission is necessary as part of a community message or to meet applicable disability standards
- Video, moving or flashing Signs
- Exposed LED or neon Signs

4.30 Permanent Signs

4.30.1 Commercial Wall Signage

INTENT

Wall Signs utilizing the building structure as a mounting surface.

DEFINITIONS

"Wall Sign"
A Sign painted directly on the wall or mounted flat against a building wall with its copy or graphics parallel to the wall to which it is attached and not protruding more than the thickness of the Sign.

"Sign Area"
Sign Area is defined as the area of a Sign that is used for display purposes. Sign Area shall be calculated by measuring the size of a rectangle large enough to contain the entire Sign's display, graphics, and text that form an integral part of the display or are used to differentiate such Sign from the background against which it is placed. The calculation of Sign Area excludes the necessary supports or uprights on which such Sign is placed.

STANDARDS

4.30.1 Commercial Wall Signage

Commercial wall signage is used to highlight the building name, district identity, or primary tenant.

One[1] commercial Wall Sign is allowed for each building façade.

For commercial Wall Signs, the maximum height of a Sign affixed to a building shall be [24] ft. from sidewalk grade.

The area of all commercial building Wall Signs shall not exceed [125] sq. ft. for each building frontage. In no case shall any one[1] Wall Sign be taller than five[5] ft. in height.

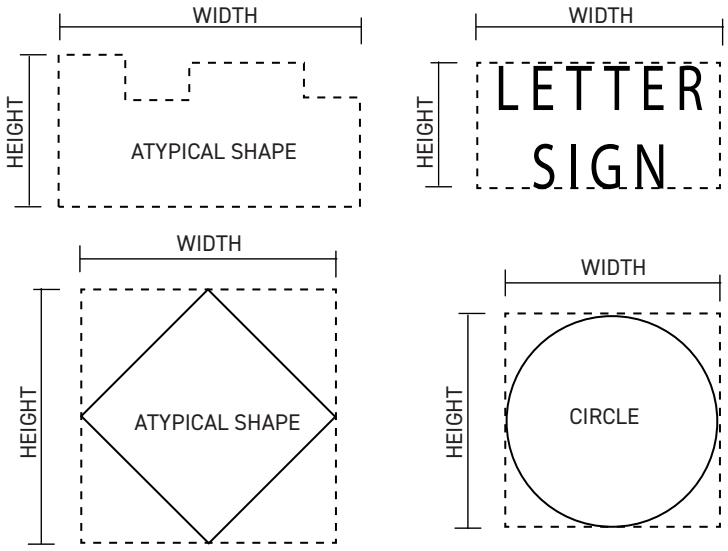


Figure 4.30a: SIGN AREA CALCULATION DIAGRAM

4.30 Permanent Signs Cont'd

STANDARDS

4.30.2 Storefront and Retail Wall Signage

No more than two[2] Wall Signs per single-tenant retail space are permitted. If a single-tenant retail space has more than one[1] street frontage, an additional Sign beyond the two[2] allowed on the main frontage is permitted on each additional frontage.

The area of all storefront or retail tenant Wall Signs shall not exceed two[2] sq. ft. for each one[1] linear ft. of street frontage occupied by the business measured along the wall to which the Signs are attached, or up to [100] sq. ft. for each street frontage, whichever is less. In no case shall the Wall Sign or combination of Wall Signs cover more than 50% of the surface of any wall, excluding openings.

The maximum height of a storefront or retail Sign affixed to a building shall be the bottom of the window sill of the first story, or [24] ft., whichever is lower.

4.30.3 Residential Wall Signage

Residential Wall Signs shall not exceed [20] sq. ft. total, except for Wall Signs providing the primary identification of multi-unit residential buildings, which shall not exceed [25] sq. ft. and one[1]ft. in height and shall be located at the building entrance, or up to [100] sq. ft. for each building frontage, whichever is less.

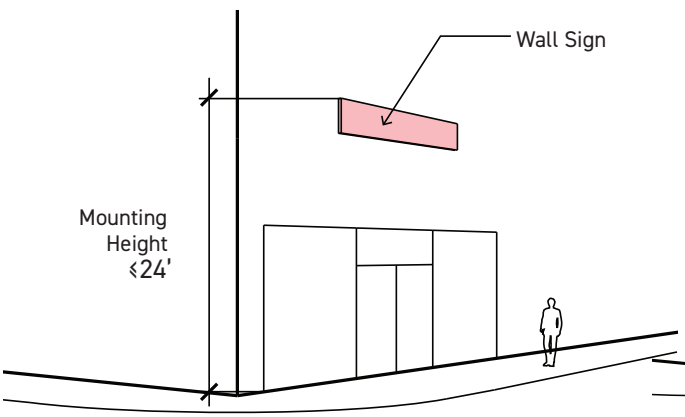


Figure 4.30b: BUILDING WALL SIGN

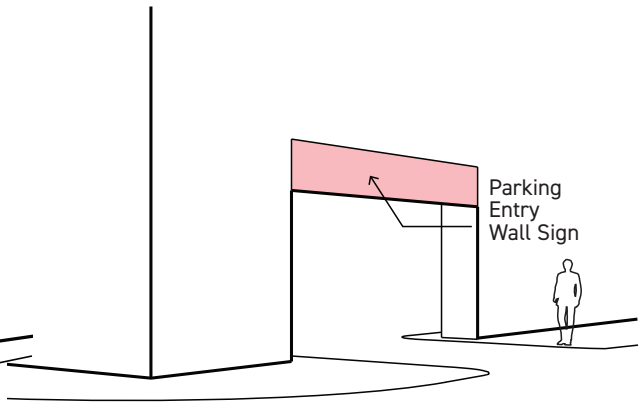


Figure 4.30c: ENTRY WALL SIGN

4.30 Permanent Signs Cont'd

4.30.4 Projecting Signs

INTENT

Projecting Signs are attached to a building and project perpendicularly from the mounting surface. They are intended to provide long distance visibility to approaching vehicles and pedestrians.

DEFINITIONS

"Projection"
The horizontal distance by which the furthermost point used in measuring the area of a Sign extends beyond a Street Property Line or a building Setback line.

STANDARDS

4.30.4 Projecting Signs

No part of a Projecting Sign shall project more than 75% of the horizontal distance from the Property Line to the curb line, or six[6] ft. six[6] in. from face of building, whichever is less. One[1] Projecting Sign is allowed per Ground Floor business and shall not exceed [24] sq. ft. in area. Corner businesses are allowed one[1] primary Projecting Sign per street frontage. Projecting Signs for retail tenants shall be attached below the second floor window sill level.

The height of a Projecting Sign shall not exceed [24] ft., or the height of the wall to which it is attached, or the height of the lowest of any residential windowsill on the wall to which it is attached, whichever is lowest, but bottom of Sign shall be least ten[10] ft. above sidewalk grade. Text shall be no greater than one[1] ft. in height.

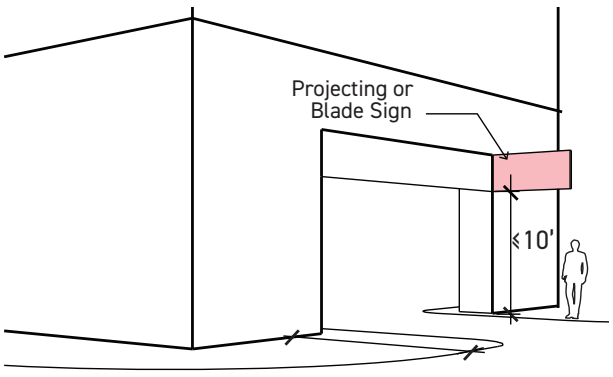


Figure 4.30d: PROJECTING SIGN

4.30 Permanent Signs Cont'd

4.30.5 Window Signs

INTENT

Window Signs provide messaging on, or behind, window glazing at building frontages.

DEFINITIONS

"Window Sign"
A Sign painted or applied directly on the surface of a window glass or placed behind the surface of a window glass.

STANDARDS

4.30.5 Window Signs

Window Signs applied to building glazing shall not cover more than a maximum of 30% of the storefront glazing area. Glazing transparency shall be maintained within the window graphics zone, avoiding large opaque shapes or materials.

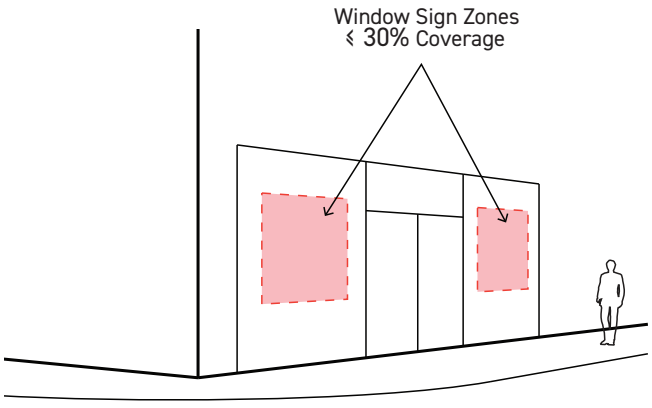


Figure 4.30e: WINDOW SIGNS

4.30 Permanent Signs Cont'd

4.30.6 Identifying, Freestanding, or Directional Signs

INTENT

Identifying Signs serve as the primary project or parcel identification, and are placed at the primary district entry points.

A Freestanding Sign is permitted in lieu of a Projecting Sign, if the building or buildings are recessed from the Street Property Line.

DEFINITIONS

"Freestanding & Directional"
Signs detached from the building and in no part supported by the building providing identification, information or direction to a building or group of buildings.

STANDARDS

4.30.6 Identifying, Freestanding, or Directional Signs

The maximum height for free-standing or Identifying Signs shall not exceed [12] ft., nor exceed [24] sq. ft. in total area. The existence of a Freestanding business Sign will preclude the placement of a Freestanding Identifying Sign on the same lot.

The location of pedestrian Directional Signs associated with a building or group of buildings shall not exceed a maximum height of eight[8] ft., nor more than [12] sq. ft. in total area.

Freestanding or Identifying Signs shall be limited to the Setback zone.

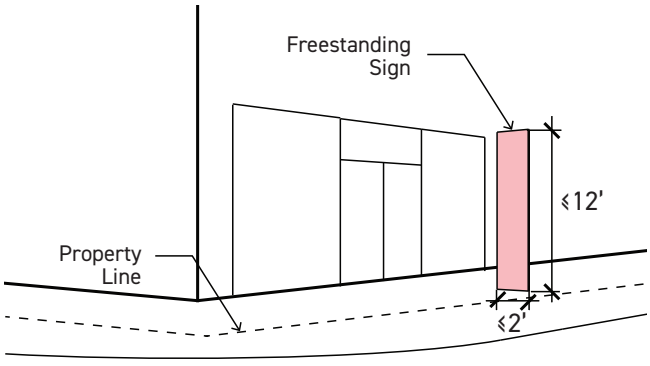


Figure 4.30f: FREESTANDING SIGNS

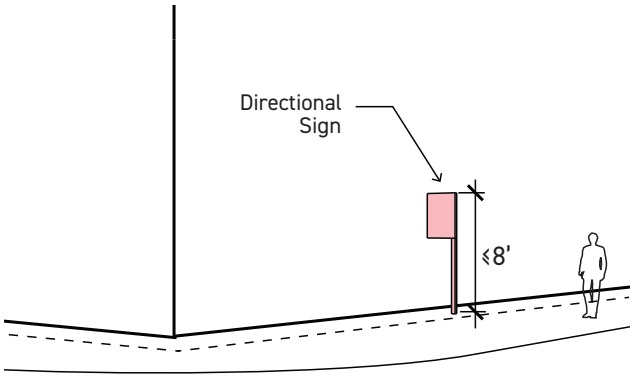


Figure 4.30g: DIRECTIONAL SIGNS

4.30 Permanent Signs Cont'd

4.30.7 Canopy/Awning Signage

INTENT

Signage or graphics messaging applied to an awning or projecting canopy structure in lieu of Projecting Signs.

DEFINITIONS

"Awning"
A light roof-like structure, supported entirely by the exterior wall of a building, consisting of a moveable frame covered with approved materials, extending over doors and windows, with the purpose of providing protection from sun and rain and embellishment of the façade.

"Canopy"
A light roof-like structure, supported by the exterior of a building, consisting of a fixed or frame covered with approved cloth, plastic or metal, with the purpose of providing protection from sun and rain and embellishment of the façade.

STANDARDS

4.30.7 Canopy/Awning Signage

Any signage on projecting building Awnings or Canopies shall not exceed a total of [24] sq. ft.. Residential projects may utilize signage on Awnings over the primary multi-unit entryway. Awning or Canopy Sign copy shall be non illuminated ,constructed of metal or fabric covered metal frame.

The bottom of any Awning or Canopy Sign shall be at least ten[10] ft. above finished grade.

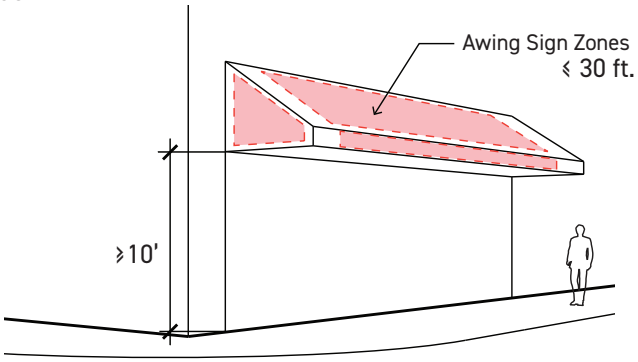


Figure 4.30h: AWNING SIGNS ZONES

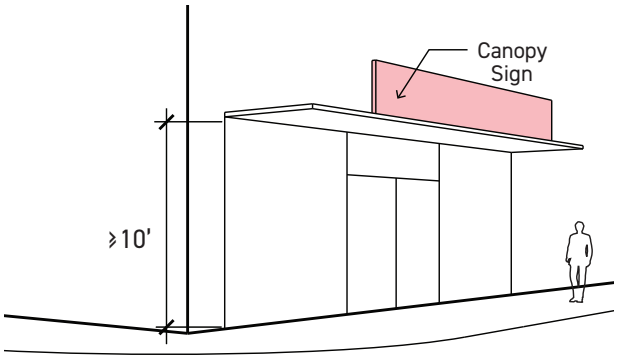


Figure 4.30i: CANOPY SIGNS

4.30 Permanent Signs Cont'd

4.30.8 Street or Unit Address Signs, Nameplates

INTENT

Street address or unit address signs provide address identification visible from streets and walkways. Nameplate Signs designate the names or individual name and professional occupations of persons in a building.

STANDARDS

4.30.8 Street or Unit Address Signs, Nameplates

Street address or unit identification applied to the building at entries shall be clearly visible from street, and shall comply with San Francisco Fire Department requirements, and shall not exceed eight[8] sq. ft. in total area. Nameplate Signs also shall be associated with the building wall adjacent to building entries, and shall not exceed two[2] sq. ft. in total area.

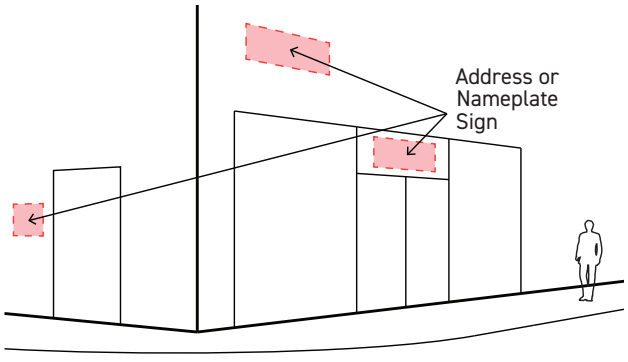


Figure 4.30j: ADDRESS OR NAMEPLATE SIGNS

4.31 Temporary Signs

4.31.1 Temporary Signs

INTENT

Freestanding, window-mounted, wall-mounted or barricade graphics or signage intended to be temporary in nature and duration.

1

1. Temporary Signs Example

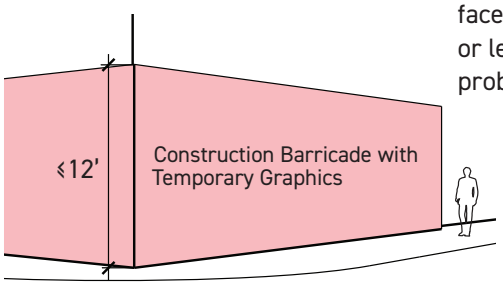


Figure 4.31a: TEMPORARY BARRICADE GRAPHICS ZONES

STANDARDS

4.31.1 Temporary Signs

Temporary, freestanding Signs shall not exceed [12] ft. in height, nor exceed a total area of [50] sq. ft.

Temporary construction project identification Signs or graphics shall not exceed [500] sq. ft. and shall be removed within seven[7] days of contract completion. Project signage is limited to one[1] Sign per frontage. Where there is more than one entity (e.g. general contractor, architect, broker etc.), a single project Sign shall be used, stating the name and contact information of all entities. Opaque storefront signage or coverings used during construction at Ground Floor storefronts such as applied film or other temporary window obscuring techniques are allowed while spaces remain unoccupied.

Temporary signage areas/applications shall be maintained free of posters, graffiti and in an otherwise presentable manner.

Temporary construction safety fencing, barricades or scaffolding are allowed to be covered with construction wrap/super graphics. Construction wrap/super graphics are allowed placed along the full length of temporary safety fencing or scaffolding up to [12] ft. high, but shall not restrict or obstruct vehicular or pedestrian access to the construction site, or information required to be publicly displayed, including but not limited to contractor contact information, regulatory and directional signage.

Construction wrap shall not be affixed to a fence, barricade or scaffolding unless the fence, barricade and/or scaffolding is constructed to withstand the consequence of wind and other loads.

All construction wrap/super graphics shall bear the name of the installer and a local or toll-free phone number, labeled “Service Number”, located on the face on the wrap at a minimum size of two[2] in., where citizens may contact or leave word for the installer of the banner regarding maintenance or repair problems.

4.31 Temporary Signs Cont'd

4.31.2 Portable Signs

INTENT

Portable Signs are movable Sign units placed adjacent to the business or tenant entry or frontage.

DEFINITIONS

"Portable"
Signs which are freestanding, movable and not permanently anchored or attached to the ground.

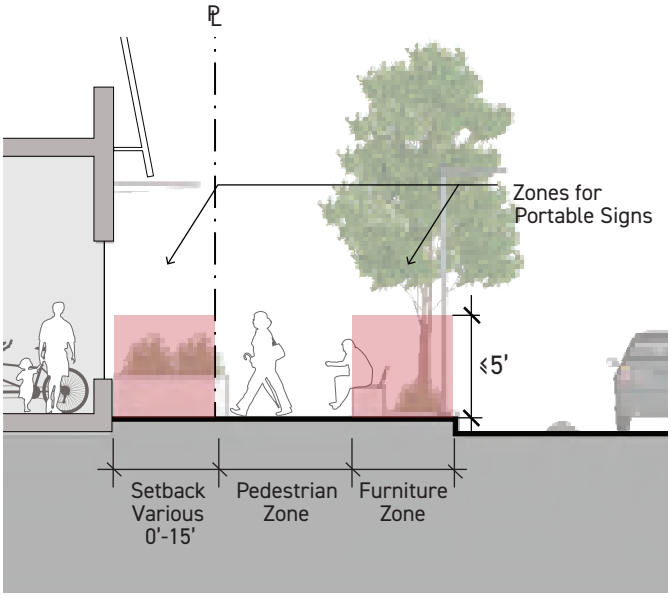
STANDARDS

4.31.2 Portable Signs

Portable Signs, such as sandwich boards, "A frames" or similar temporary Sign structures, are permitted and limited to no more than one[1] per business. All Portable Signage shall be located within frontage or furnishing zones not to exceed [20] ft. wide on sidewalks, or within open spaces fronting the businesses. Portable Signage shall not exceed five[5] ft. in height, nor be larger than ten[10] sq. ft. in area.

Portable Signs shall be sited so as to not obstruct the passage or sight lines of motorists, bicyclists or pedestrians.

1



1. Portable Signs Example

Figure 4.31b: PORTABLE SIGNS PLACEMENT ZONES

4.32 Building Lighting

INTENT

Building designs are encouraged to use lighting in innovative and engaging ways to create an attractive and secure environment, both during the day and at night. However, lighting shall not dominate the urban character of the neighborhood. Lighting shall be integrated with the design of the building, in harmony with building architecture, highlighting significant architectural features where appropriate; such as Signs, entrances, walkways, or display windows.

GUIDELINES

4.32.1 Glare Reduction

Lighting shall be designed to minimize glare and light trespass into neighboring buildings.

4.32.2 Energy Consumption

Smart lighting technology shall be incorporated where feasible or practical, such as those with automated controls that adjust based on occupancy or daylight availability, or use motion sensors. High-efficiency technology such as LED lighting with advanced controls, shall be utilized to minimize energy consumption.

4.32 Building Lighting Cont'd

STANDARDS

4.32.3 Building Entrances

Lighting at Building Entrances shall be provided for security. Pedestrian paths into and around the ground floor and stairways linking parking structures to public ways of the parking structure shall be well-lit at night.

GUIDELINES

4.32.4 Dark Sky

Lighting shall be shielded to prevent light from emitting above a 90-degree angle. Any lighting source located on rooftop parking shall be a full cutoff type.

4.32.5 Dark Sky Exception

Temporary accent lighting may be appropriate to create art, illuminate art, or highlight architectural features.

1

2

1. & 2. Entrances and Ground Level Lighting Examples

4.33 Private Infrastructure

INTENT

To implement odor control methods at the Recycled Water Treatment Facility and screening controls for above grade infrastructure on private property to mitigate any adverse impacts of utilities and equipment on the public realm.

GUIDELINES

4.33.1 Odor Control at the Recycled Water Facility

If the recycled water facility is constructed, the facility's odor control methods identified in the supporting environmental analysis will be implemented.

Odor control methods could include enclosed and covered process tanks, a suction blower to capture air from one or more unit processes, a scrubber system, and the off-site processing of sludge.

The operator shall post a telephone number in a conspicuous place at the facility to accept odor complaints, and in the highly unlikely event that the facility develops an odor issue, the existing odor control measures will be repaired or maintained, or additional odor control measures will be implemented until the odor issue is completely addressed.

4.33.2 Screening of Eco-District or Eco-Grid Utilities Visible at Grade

Enclosure or Screening shall be designed as a logical extension of and/or compatible with the adjacent building and an integral part of the overall building design. Screening material and detailing shall be comparable in quality to that of the rest of the building. Landscaping alone shall not qualify as Screening of at-grade utilities.

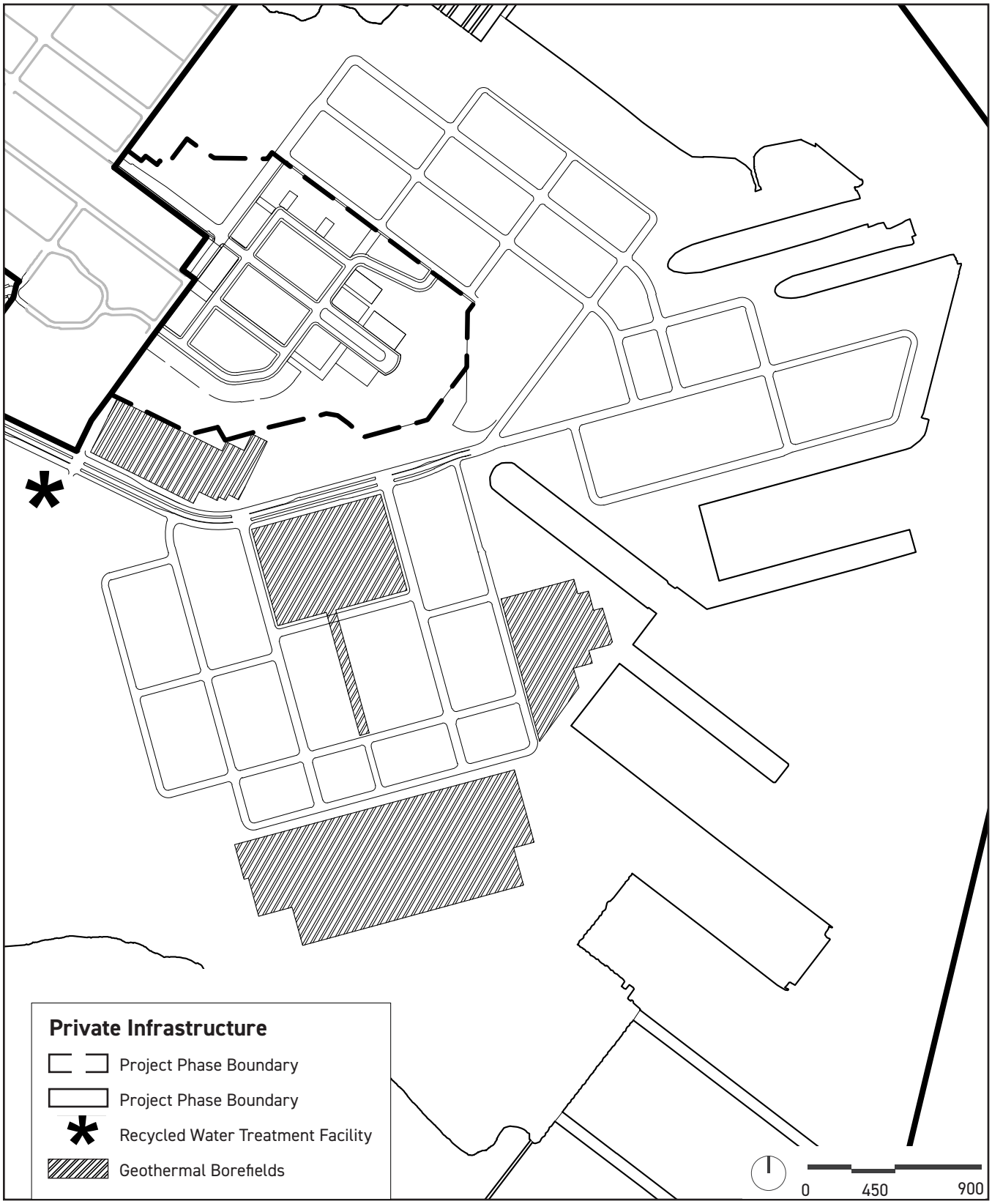


Figure 4.33a: PRIVATE INFRASTRUCTURE

HUNTERS POINT SHIPYARD PHASE 2 DESIGN FOR DEVELOPMENT

5 IMPLEMENTATION

5 Implementation

5.1 Review and Approval of Design Documents

The Design Review and Document Approval Procedures (DRDAP) establishes the processes by which applications for approvals are to be submitted and subsequently reviewed by the Commission of the Office of Community Investment and Infrastructure (OCII). Specific to the D4D, the DRDAP further establishes the processes and time lines for OCII review of architectural and design documents– including Schematic Design, Design Development and Construction Documents – for various improvements within the Shipyard that are subject to the Disposition and Development Agreement or Owner Participation Agreement.

The OCII and City agencies having jurisdiction have entered into an Interagency Cooperation Agreement that sets forth the City agencies' obligations in connection with review and approval of applications pursuant to the DRDAP, as well as review and approval of various permits, subdivision maps, and other authorizations required from the City.

As provided in the Shipyard Plan, OCII review of any application relating to development within the Shipyard shall be evaluated for consistency with the allowable land use set forth in the HPS Redevelopment Plan and in this Design for Development document.

5.2 Deviations and Variances

The owner of any property that is subject to this Design for Development document may make a written request for either a deviation or a variance from the design standards or any other provision of this document. A deviation is a minor modification no greater than ten[10] percent of a dimensional or numerical building standard. Only the following standards may be considered for a Deviation:

4.1.1 Block Sizes (dimensions only)
4.2.1 Building Setback
4.4.4 Roof Area Building Height Exception
4.4.5 Street Wall Requirement (Required Percentage of Build-up Only)
4.10.1 Projections
BM1 Significant Building Breaks (dimensions only)
BM2 Upper Floor Stepbacks (dimensions only)
BM3 Façade Variation (dimensions only)
4.11.3 Active Ground Floor Depth
4.11.9 Active Use Ground Floor Transparency
4.12.3 Ground Floor Residential Unit Entries
4.13.5 Parking and Service Entrances (dimensions only)
4.17.1 Ground Floor Blank Walls
4.17.2 Upper Floor Blank Walls
4.18.2 Commercial Daylight
4.22.1 Skyway Connections (dimensions only)
4.23.1 Green Room Datum
4.26.1 Private Open Space
4.26.4 Fences
4.27.4 Street Trees

Deviations must meet the purpose and intent statements of the Design for Development and may be authorized by the OCII Director. To the extent reasonably possible, proposed Deviations must be identified at the time of Schematic Design Document submittal pursuant to the DRDAP. The OCII Director's approval or disapproval of proposed Deviations shall be limited to a determination of its compliance with the Design for Development, the Redevelopment Plan and any applicable Redevelopment Requirements. Should a request for Deviation be made after OCII Commission approval of Schematic Design, the OCII Director, in her or his sole discretion, may seek comment and guidance from the public and OCII Commission on the granting of any deviations.

Variance decisions must be made by the OCII Commission. A request for a variance must state fully the grounds for the application and include relevant facts in support of the application. The OCII Commission may grant a variance from development controls under the following circumstances:

Due to unique physical constraints or other circumstances applicable to the property, the enforcement of development regulations would result in difficulties for the development and create undue hardship for the owner or developer, or would constitute an unreasonable limitation beyond the intent of the D4D; and

The effect of the variance would be in harmony with the goals of the D4D, and would not be materially detrimental to public welfare, neighboring property or nearby improvements.

The OCII Commission's decision to grant or deny a variance is final, and not appealable to either the San Francisco Planning Commission or the Board of Supervisors.

5.3 Process for Amendment of the Design for Development Document

D4D amendments require approval of both the San Francisco Planning Commission and the OCII Commission.

6 APPENDIX

6.1 Checklist

Building Design

STANDARD			NOTES
☐	**4.1**	**Block Sizes and Mid-Block Breaks**	
☐	4.1.1	Mid-Block Break Locations	
☐	**4.2**	**Building Setback**	
☐	4.2.1	Building Setbacks	
☐	4.2.2	Mid-Block Break Setback	
☐	**4.3**	**Developable Area Coverage**	
☐	4.3.1	Developable Area Coverage	
☐	**4.4**	**Building Height**	
☐	4.4.1	Building Height	
☐	4.4.2	MBB Building Stepbacks	
☐	4.4.3	Building Height Exceptions	
☐	4.4.4	Roof Area Building Height Exception	
☐	4.4.5	Street Wall	
☐	4.4.6	Implied Façade	
☐	4.4.7	Street Wall Exceptions for Adaptive Reuse	
☐	4.4.8	Street Wall Exceptions for Recessed Areas	
☐	**4.5**	**Architectural Controls by Building Scale**	
☐	4.5.1	Architectural Controls by Building Scale	
☐	4.5.2	Maximum Plan Length	
		Flow Chart for Architectural Controls	
☐	**4.6**	**FC Façade Composition**	
☐	4.6.1	Façade Composition (FC)	
☐	4.6.2	Block to Block Variation	
☐		FC1 Façade Modulation Strategies	
☐		FC2 Façade Articulation Strategies	
☐		FC3 Façade Fenestration Strategies	
☐		FC4 Material/Color Strategies	

STANDARD			NOTES
☐ **4.7**	**BM**	**Bulk and Massing**	
☐ 4.7.1		Bulk and Massing Approach	
☐	BM1	Significant Building Breaks	
☐	BM2	Upper Floor Stepbacks	
☐	BM3	Façade Variation (FV)	
☐ **4.8**	**BE/PE**	**Building and Public Realm Enhancements**	
☐ 4.8.1		Building and Public Realm Enhancement Measures for M, L, XL Buildings	
☐	BE1	Apply One[1] Additional Bulk/Massing Control	
☐	BE2A	Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)	
☐	BE2B	Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)	
☐	BE3	Provide Visual and Physical Access to Interior Courtyard and/or Atrium	
☐	BE4	24/7 Public Access to Open Space	
☐	BE5	Reduction in Floor Plate Area of Upper Floors	
☐	BE6	Expressive Entrances	
☐	BE7	Increased Transparency	
☐	BE8	Distinct Corner Architectural Feature	
☐	BE9	Roof Expression	
☐	BE10	Additional Active Entrances	
☐	BE11	Additional Ground Floor Activation	
☐	PE1	Public Access through the Building	
	PE2	Public Access through Open Space Connection	
☐ **4.9**		**Tower Controls**	
☐ 4.9.1		Tower Locations	
☐ 4.9.2		Tower Floor Aspect Ratio	
☐ 4.9.3		Tower Height Variation	
☐ 4.9.4		Tower Massing and Articulation	
☐ 4.9.5		Tower Mechanical Equipment	
☐ 4.9.6		Tower Mechanical Equipment Screening	

6.2 Checklist cont'd

STANDARD		NOTES
☐ **4.10**	**Projections**	
☐ 4.10.1	Projections	
☐ 4.10.2	Habitable Projections	
☐ 4.10.3	Non-Habitable Projections	
☐ 4.10.4	Other Projections	
☐ 4.10.5	Projection Exemptions	
☐ 4.10.6	Maximum Projection Area	
☐ **4.11**	**Ground Floor Activation**	
☐ 4.11.1	Zone 1 and 2 Active Entrances	
☐ 4.11.2	Zone 3 Active Entrances	
☐ 4.11.3	Active Ground Floor Depth	
☐ 4.11.4	Ground Floor Height	
☐ 4.11.5	Waterfront Activation	
☐ 4.11.6	Guidelines for Ground Floor Residential Design	
☐ 4.11.7	Ground Floor Activation	
☐ 4.11.8	Shared Parking Structures Activation	
☐ 4.11.9	Ground Floor Active Use Transparency	
☐ 4.11.10	Ground Floor Active Use Glass and Glazing	
☐ **4.12**	**Building Entries**	
☐ 4.12.1	Building Entries	
☐ 4.12.2	Green Room Building Entries	
☐ 4.12.3	Ground Floor Residential Unit Entries	
☐ 4.12.4	Building Entries	
☐ 4.12.5	Guidelines for Ground Floor Residential Design	
☐ **4.13**	**Parking and Service Entrances**	
☐ 4.13.1	Parking and Service Entrances Locations	
☐ 4.13.2	Combined Parking and Service Entrances	
☐ 4.13.3	Separate Parking and Service Entrances	
☐ 4.13.4	Maximum Parking and Service Entrances	
☐ 4.13.5	Parking and Service Entrances	
☐ 4.13.6	Parking and Service Entrances (Blocks 38 & 45)	
☐ 4.13.7	Residential Mechanical Parking	

STANDARD		NOTES
☐ **4.14**	**Screening**	
☐ 4.14.1	Screening	
☐ 4.14.2	Screening of Utilities Visible at Grade	
☐ 4.14.3	Screening Materials	
☐ 4.14.4	Screening for Rooftop Equipment	
☐ 4.14.5	Screening for Upper Floor Parking	
☐ 4.14.6	Screening for Ground Floor Parking	
☐ 4.14.7	Rooftop Screening for Parking	
☐ **4.15**	**Shared Parking Structures**	
☐ 4.15.1	Shared Parking Structure Locations	
☐ 4.15.2	Number of Parking Structures	
☐ 4.15.3	Shared Parking Structure Design	
☐ 4.15.4	Convertible Shared Parking Structures	
☐ 4.15.5	Floor Heights for Convertible Shared Parking Structures	
☐ 4.15.6	Shared Parking Structure Lighting	
☐ 4.15.7	Shared Parking Structure Materials	
☐ 4.15.8	Shared Parking Structure Ground Floor Uses	
☐ **4.16**	**Rooftops**	
☐ 4.16.1	Rooftop Façades	
☐ **4.17**	**Blank Walls**	
☐ 4.17.1	Ground Floor Blank Walls	
☐ 4.17.2	Upper Floor Blank Walls	
☐ **4.18**	**Daylight**	
☐ 4.18.1	Residential Daylight	
☐ 4.18.2	Commercial Daylight	

6.3 Checklist cont'd

STANDARD		NOTES
☐ **4.19**	**Façade Material**	
☐ 4.19.1	Bird-Safe Design	
☐ 4.19.2	Material Quality	
☐ 4.19.3	Material Selection	
☐ 4.19.4	Ground Floor Materials	
☐ 4.19.5	Marine Environment Materials	
☐ 4.19.6	Prohibited Materials	
☐ **4.20**	**Class I - Bicycle Parking**	
☐ 4.20.1	Bicycle Parking Capacity	
☐ 4.20.2	Bicycle Parking Location	
☐ **4.21**	**Vehicular Parking and Loading**	
☐ 4.21.1	Vehicle Parking and Loading	
☐ **4.22**	**Skyway Connections**	
☐ 4.22.1	Skyway Connections	
☐ **4.23**	**Green Room Datum**	
☐ 4.23.1	Green Room Datum	
☐ **4.24**	**Adaptive Reuse**	
☐ 4.24.1	Adaptive Reuse	
☐ 4.24.2	Adaptive Reuse Exemptions	
☐ **4.25**	**Key Sites Blocks 28 and 40**	
☐ 4.25.1	Key Sites Blocks 28 & 40	

Private Open Space

STANDARD		NOTES
☐ **4.26**	**Private Open Space**	
☐ 4.26.1	Private Open Space	
☐ 4.26.2	Private Common Open Space on Waterfront Blocks	
☐ 4.26.3	Private Setbacks	
☐ 4.26.4	Fences	
☐ 4.26.5	Defensible Space	
☐ 4.26.6	Orientation	
☐ 4.26.7	Planting Palette	
☐ 4.26.8	Irrigation	
☐ **4.27**	**Private Open Space - Mid-Block Breaks**	
☐ 4.27.1	Public Access	
☐ 4.27.2	Throughway Dimensions	
☐ 4.27.3	Surfaces	
☐ 4.27.4	Street Trees	
☐ 4.27.5	Lighting	
☐ 4.27.6	Community Spaces	
☐ 4.27.7	Landscaping	
☐ 4.27.8	Minimizing Vehicular Speeds	

6.4 Checklist cont'd

Signage

STANDARD		NOTES
☐ **4.28**	**Building Signage**	
☐ **4.29**	**All Signs**	
☐ 4.29.1	Transparency	
☐ 4.29.2	Concealed Electrical Signage Elements	
☐ 4.29.3	Typefaces & Colors	
☐ 4.29.4	Sign Materials	
☐ 4.29.5	Graphic Style	
☐ 4.29.6	Integration	
☐ 4.29.7	New Technology Signs	
☐ 4.29.8	Sign Illumination	
☐ 4.29.9	Prohibited Signage	
☐ **4.30**	**Permanent Signs**	
☐ 4.30.1	Commercial Wall Signage	
☐ 4.30.2	Storefront and Retail Wall Signage	
☐ 4.30.3	Residential Wall Signage	
☐ 4.30.4	Projecting Signs	
☐ 4.30.5	Window Signs	
☐ 4.30.6	Identifying, Freestanding, or Directional Signs	
☐ 4.30.7	Canopy/Awning Signage	
☐ 4.30.8	Street or Unit Address Signs Nameplates	
☐ **4.31**	**Temporary Signs**	
☐ 4.31.1	Temporary Signs	
☐ 4.31.2	Portable Signs	

Lighting

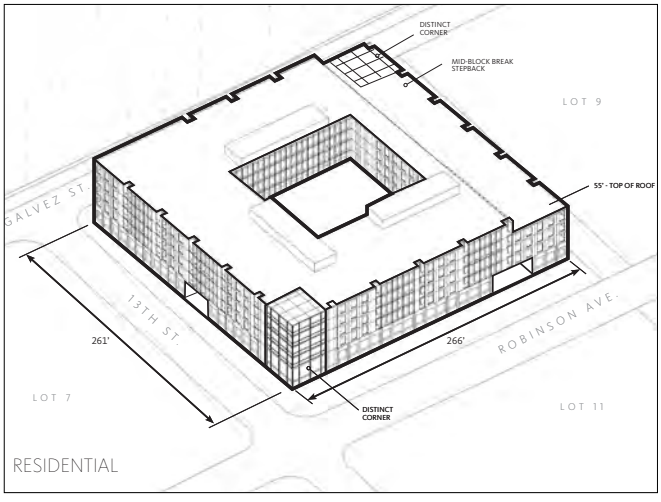
STANDARD		NOTES
☐ **4.32**	**Building Lighting**	
☐ 4.32.1	Glare Reduction	
☐ 4.32.2	Energy Consumption	
☐ 4.32.3	Building Entrances	
☐ 4.32.4	Dark Sky	
☐ 4.32.5	Dark Sky Exemption	

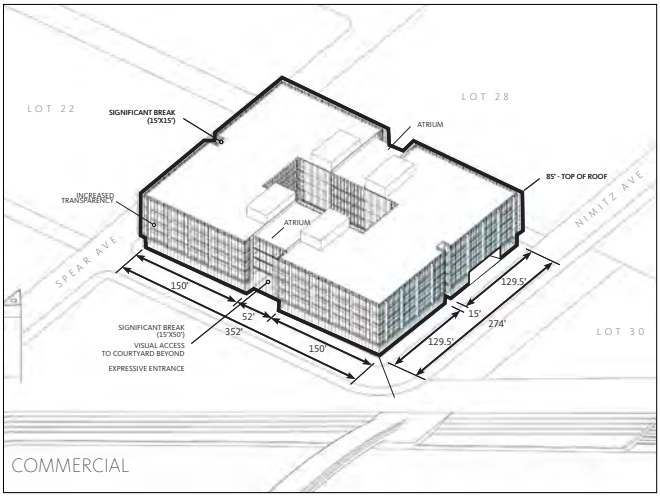
Private Infrastructure

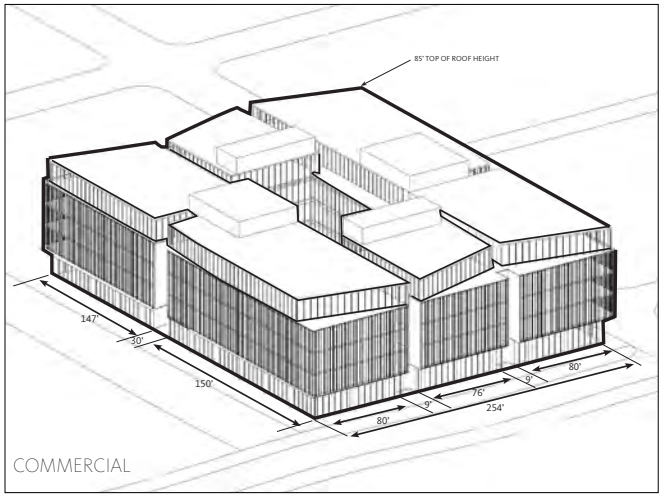
☐ **4.33**	**Odor Control at the Recycled Water Facility**	
☐ 4.33.1	Odor Control at the Recycled Water Facility	

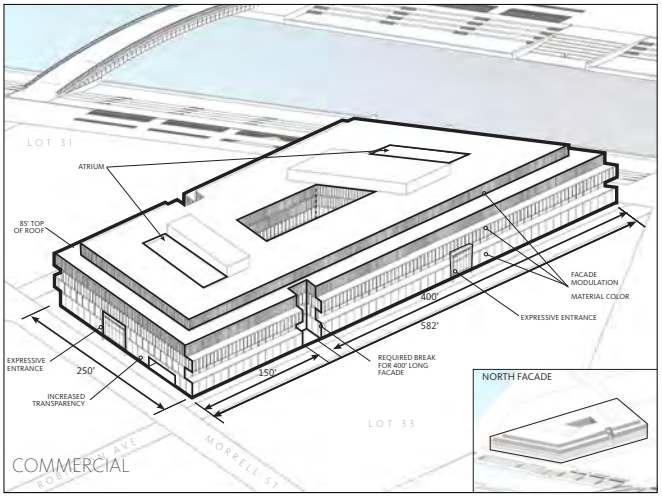
6.5 Building Design Application Studies

The following building studies illustrate how the Guidelines and Standards apply in combination for M, L and XL buildings to support the vision for HPS2. These options illustrate an example of real world applications and the building envelopes do not necessarily maximize allowable block coverage. Selected controls and enhancement measures are indicated in bold. These designs are for illustrative purposes only.






85' TOP OF ROOF HEIGHT
147'
30'
150'
80'
9'
76'
9'
80'
254'
COMMERCIAL

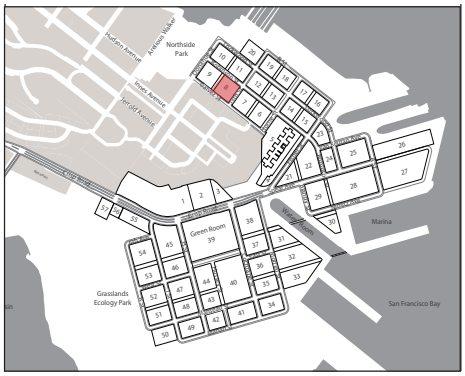

LOT 31
ATRIUM
85' TOP OF ROOF
FACADE MODULATION
MATERIAL COLOR
400'
582'
EXPRESSIVE ENTRANCE
EXPRESSIVE ENTRANCE
250'
150'
REQUIRED BREAK FOR 400' LONG FACADE
INCREASED TRANSPARENCY
NORTH FACADE
LOT 33
COMMERCIAL

6.5.3 MEDIUM BUILDING (RESIDENTIAL - BLOCK 8)

BUILDING SIZE:

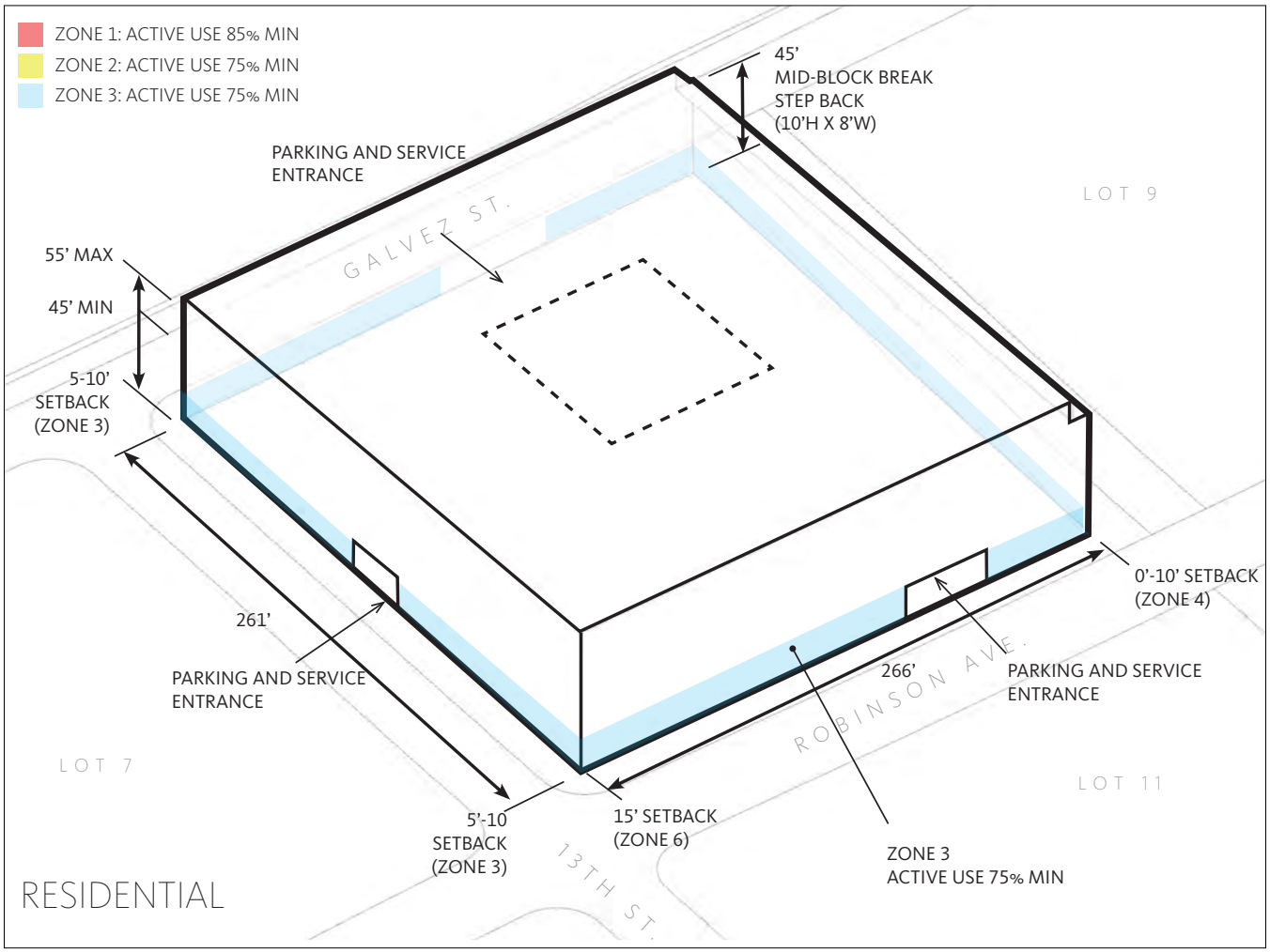
M

1 Bulk and Massing Control
and
1 Building Enhancement or
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Residential
Lot Area: ~ 69,233 SF
Developable Area:
0'-40' : 100%
41'-95' : 75%
Gross Floor Area: 311,549 SF
Setback: 5'-10' (Zone 3), 0'-10' (Zone 4-MBB), 15' (Zone 6)
Plan Length: 250'
Number of Stories: 5
Building Height: 45' Min / 55' Max)
Street Wall: 50%/20' (Typical)



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Façade Fenestration Strategies
FC4. Material/Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Façade Articulation
- Fenestration/ Transparency
- Material Color

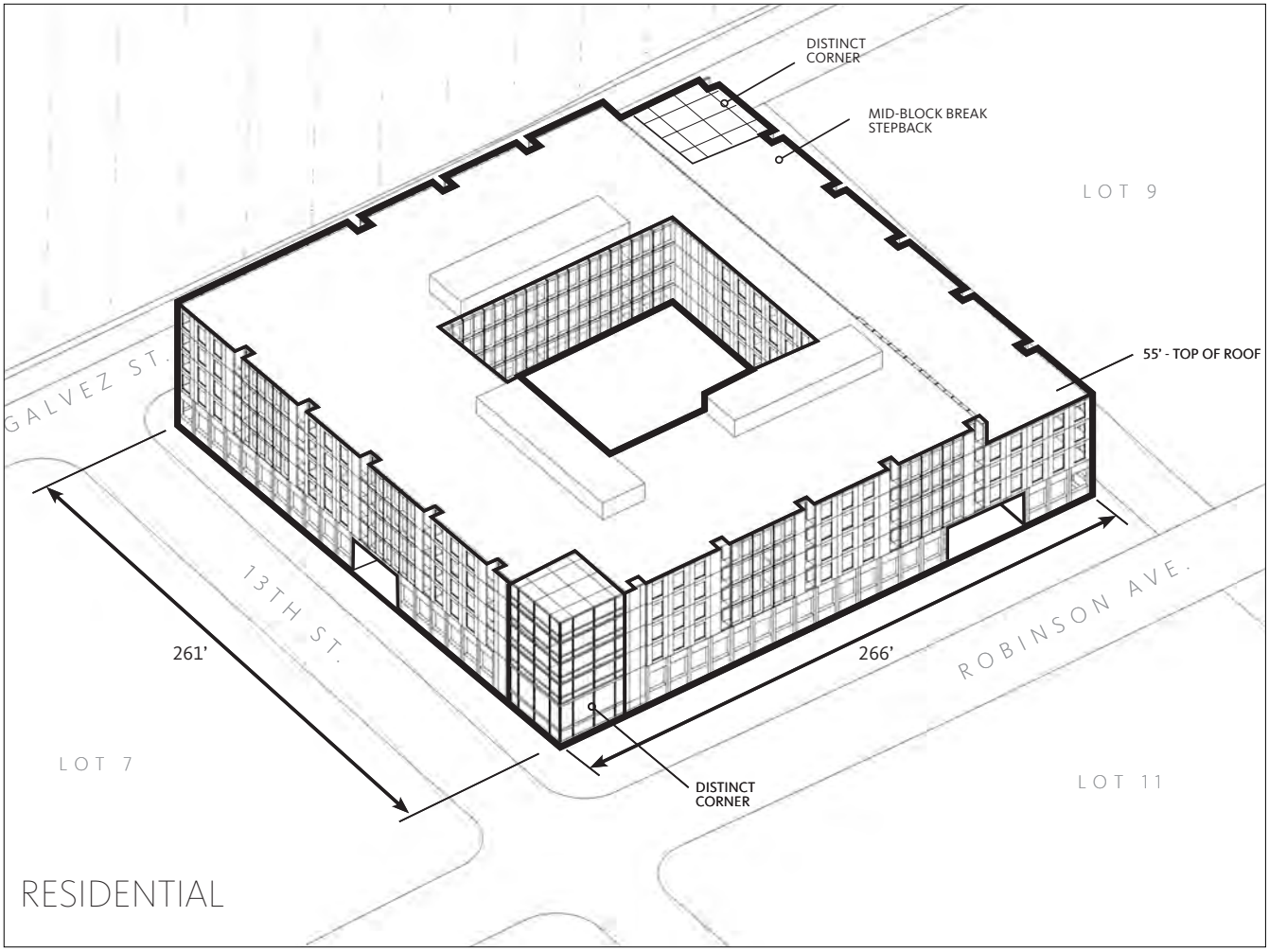
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual and Physical Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through the Building
PE2. Public Access though Open Space Connection

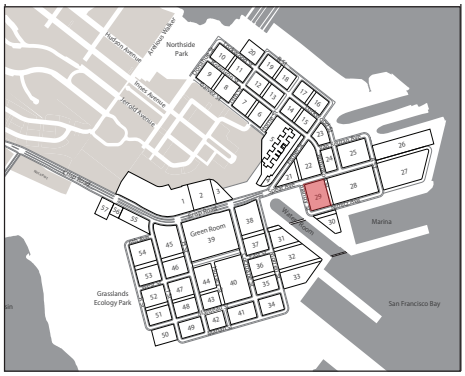


6.5.4 LARGE BUILDING (COMMERCIAL - BLOCK 29)

BUILDING SIZE:

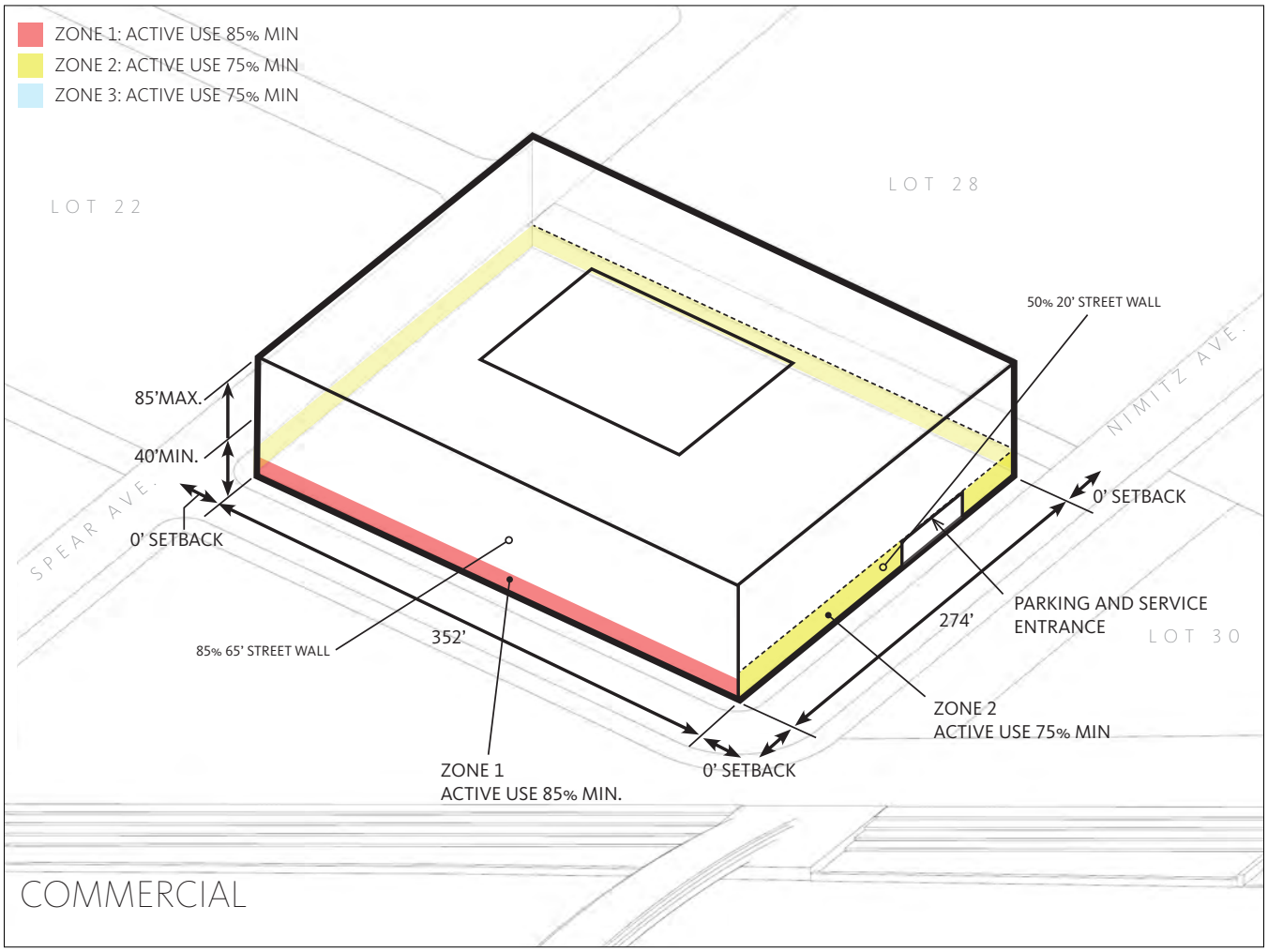
L

1 Bulk and Massing Control
and
3 Building Enhancements
or
1 Building Enhancement and
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Commercial
Lot Area: 96,478 SF
Developable Area:
0-40' : 100%
41'-95' : 90%
96'-120' : 80%
Gross Floor Area: 410,032 SF
Setback: 0' (Zone 1)
Plan Length: 350'
Number of Stories: 5
Building Height: 40' Min / 85' Max)
Street Wall: 85%/60', 50%/20'



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Façade Fenestration Strategies
FC4. Material/Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Façade Articulation
- Fenestration/ Transparency
- Material Color

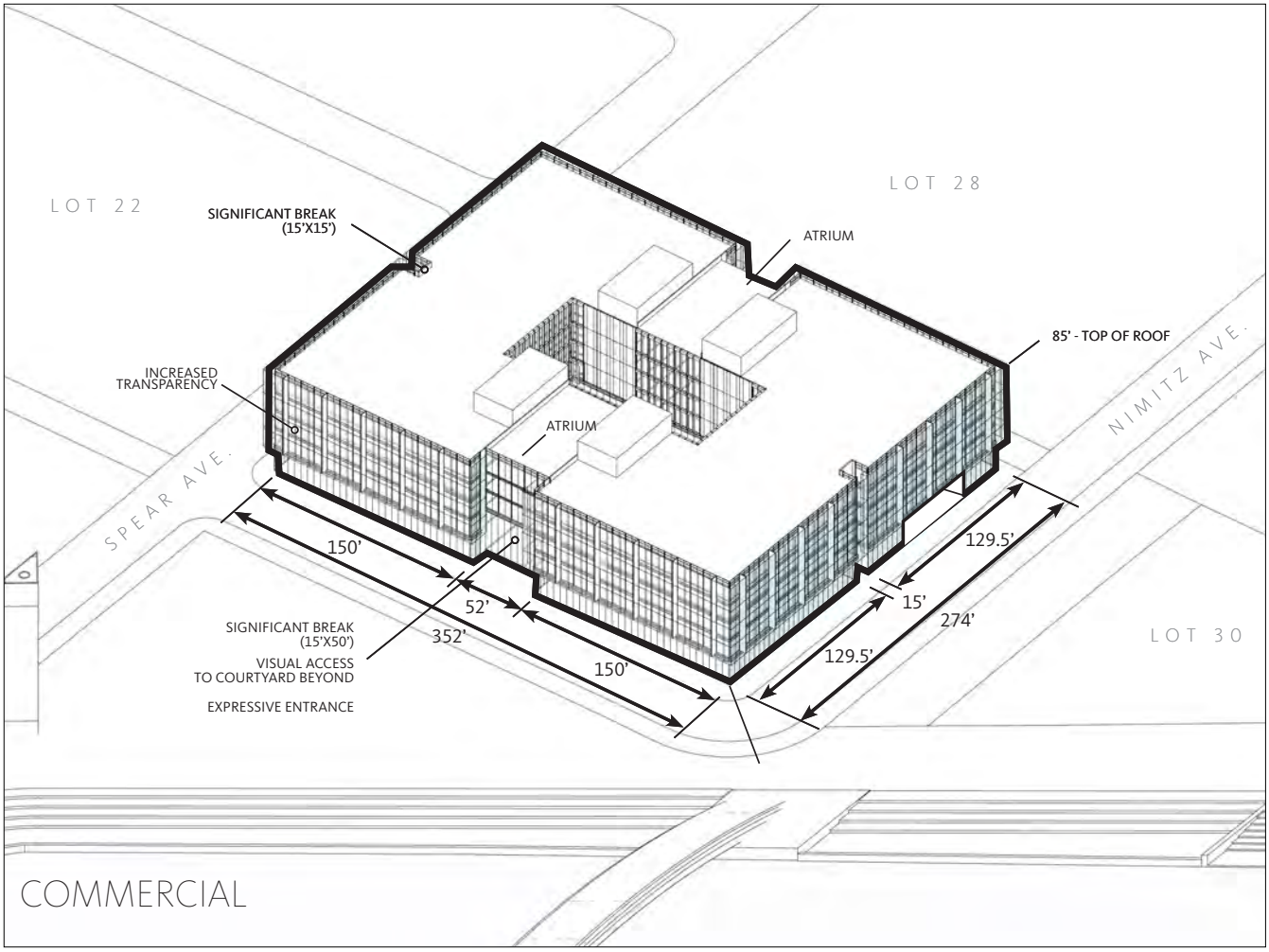
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual and Physical Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through the Building
PE2. Public Access though Open Space Connection

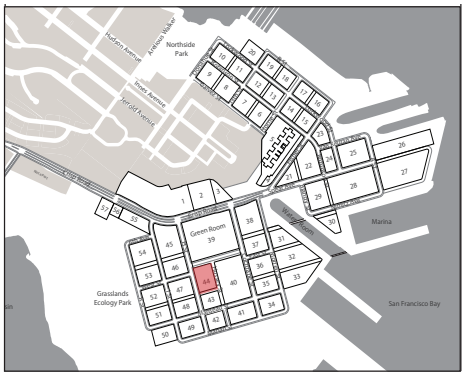


6.5.5 LARGE BUILDING (COMMERCIAL - BLOCK 44)

BUILDING SIZE:

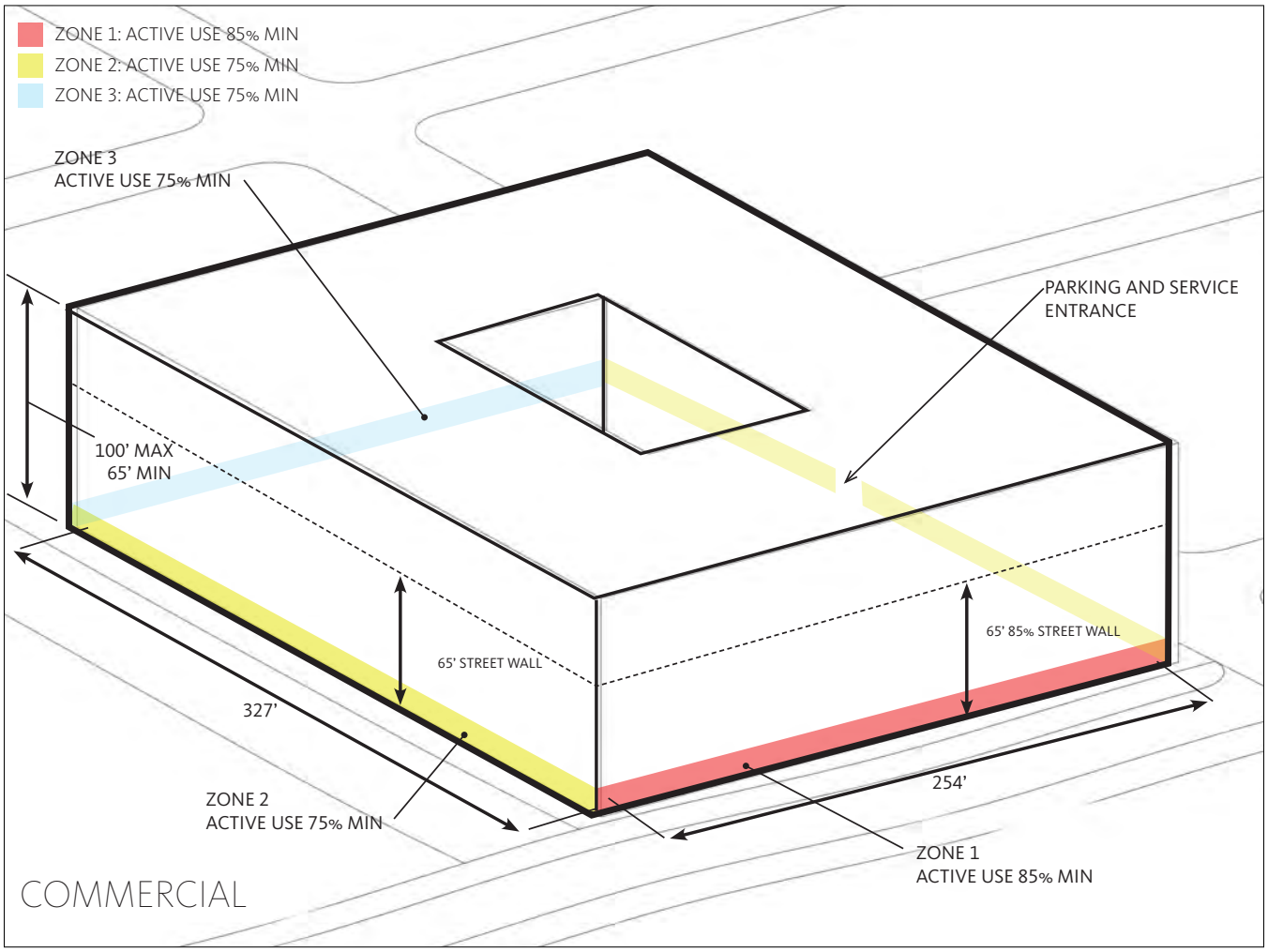
L

1 Bulk and Massing Control
and
3 Building Enhancements
or
1 Building Enhancement and
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Residential
Lot Area: 83,017 SF
Developable Area:
0-40' :100%
41'-95' : 90%
96'-120' : 80%
Gross Floor Area: 415,082
Setback: 0' (Zone 1), 0'-5' (Zone 2)
Plan Length: 363'
Number of Stories: 5
Building Height: 40' Min / 85' Max)
Street Wall: 85%/60



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Fenestration Strategies
FC4. Material / Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Façade Articulation
- Fenestration/ Transparency
- Material Color

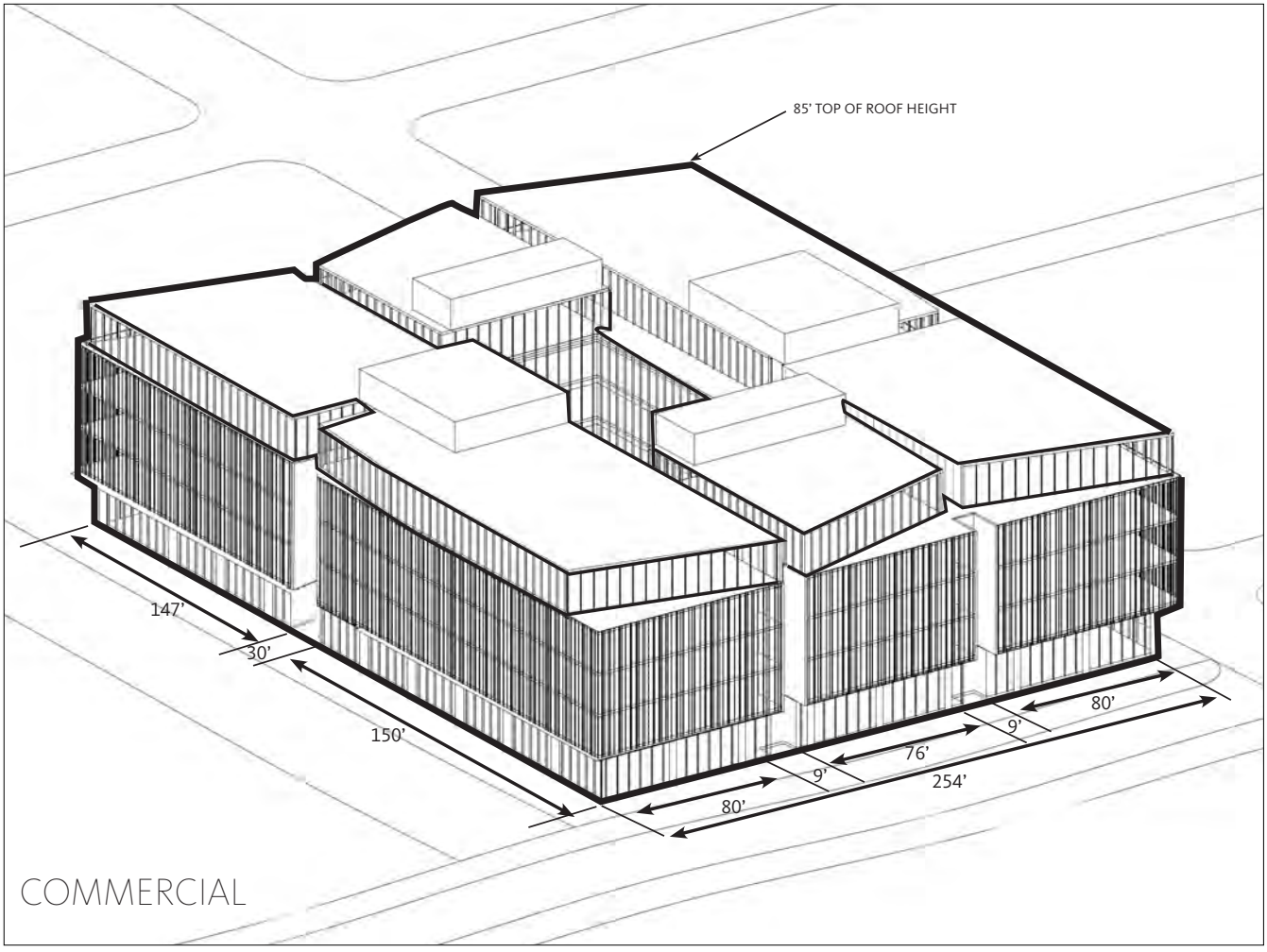
STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual Access to Interior Courtyard and/or Atrium
BE4. Permanently Open Public Access to Open Space
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through the Building
PE2. Public Access though Open Space Connection

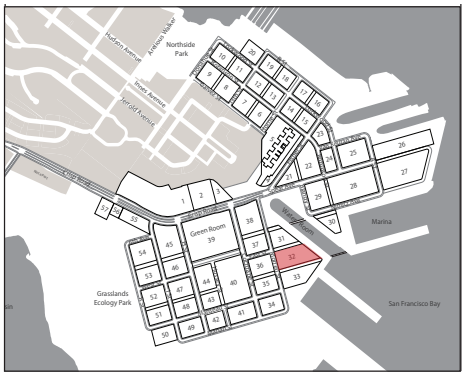


6.5.6 EXTRA-LARGE BUILDING (COMMERCIAL - BLOCK 32)

BUILDING SIZE:

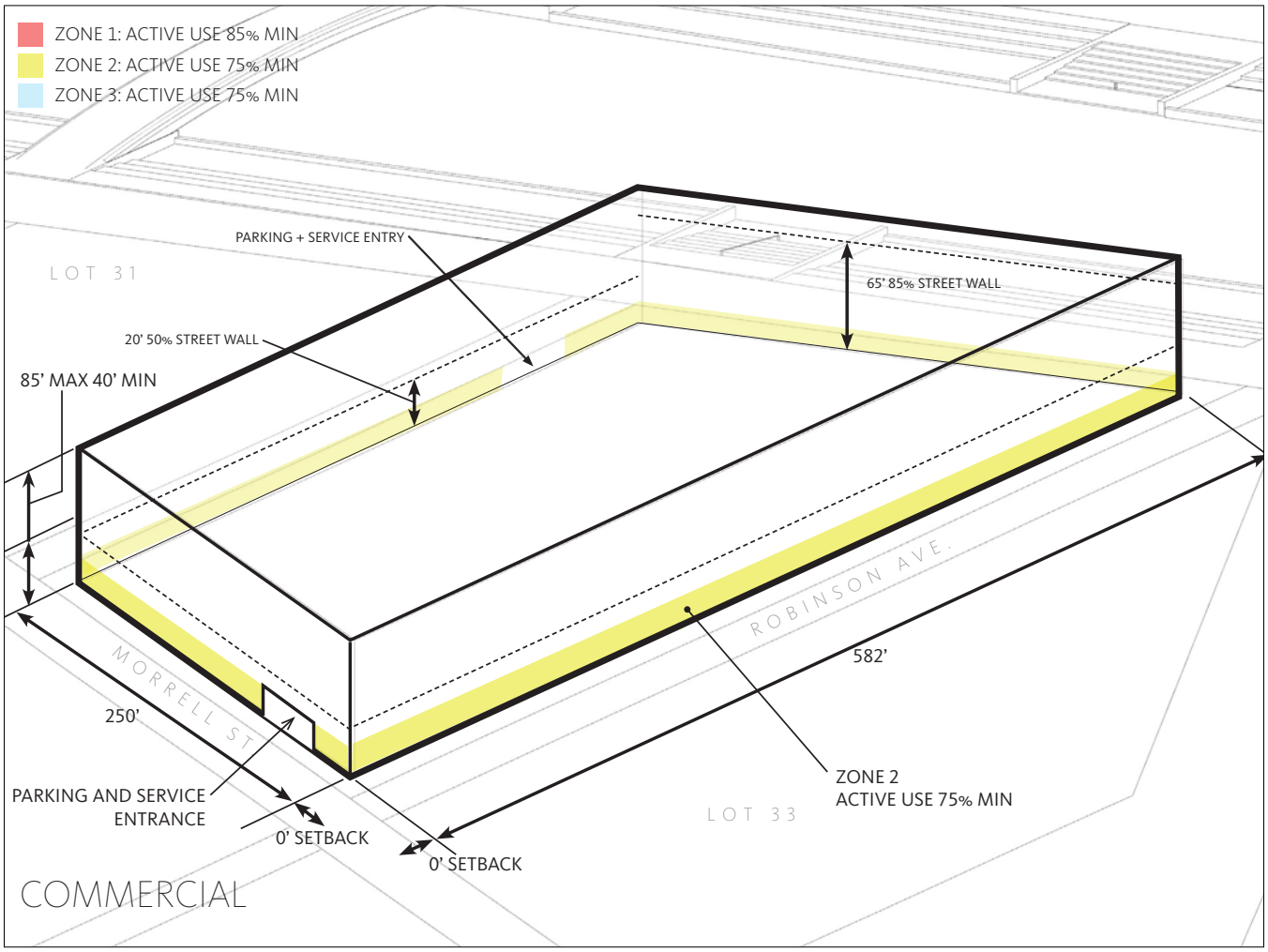
XL

1 Bulk and Massing Control
and
4 Building Enhancements
or
2 Building Enhancements and
1 Public Realm Enhancement



SITE

BUILDING DESIGN STANDARDS
Zoning: Commercial
Lot Area: 121,012 SF
Developable Area:
0-40' : 100%
41'-95' : 90%
96'-120' : 80%
Gross Floor Area: 514,301 SF
Setback: 0' (Zone 1)
Plan Length: 395'
Number of Stories: 5
Building Height: 40' Min / 85' Max)
Street Wall: 85%/60', 50%/20'



STEP 1

FACADE COMPOSITION (FC), PICK TWO

FC1. Façade Modulation Strategies
FC2. Façade Articulation Strategies
FC3. Façade Fenestration Strategies
FC4. Material/Color Strategies

STEP 2

BULK AND MASSING (BM)

BM1. Significant Building Breaks
BM2. Upper Floor Stepbacks
BM3. Façade Variation (pick two)
- Façade Modulation
- Facade Articulation
- Fenestration/ Transparency
- Material Color

STEP 3

BUILDING ENHANCEMENT (BE)

BE1. Apply One [1] Additional Bulk/Massing Control
BE2A. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Per Street Fronting Elevation)
BE2B. Orient Private Courtyards and/or Atria Onto a Public ROW or MBB (Multiple Street Fronting Elevations)
BE3. Provide Visual and Physical Access to Interior Courtyard and/or Atrium
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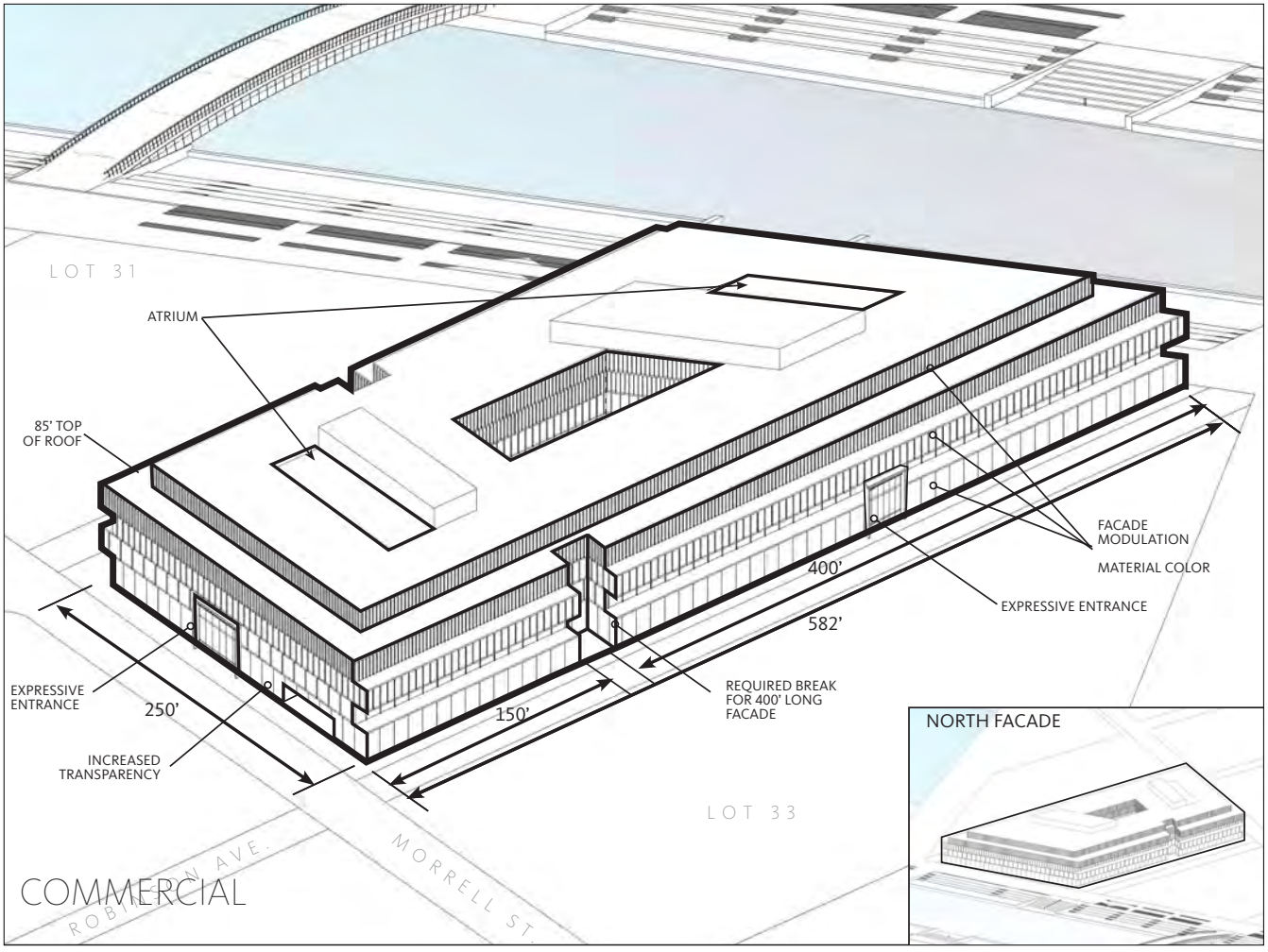
BE5. Reduction in Floor Plate Area of Upper Floors
BE6. Expressive Entrances
BE7. Increased Transparency
BE8. Distinct Corner Architectural Feature
BE9. Roof Expression
BE10. Additional Active Entries
BE11. Additional Ground Floor Activation

PUBLIC REALM ENHANCEMENT (PE)

PE1. Public Access Through Building
PE2. Public Access though Open Space Connection



6.6 Sitewide Diagrams

6.6.7 DISTRICTS MAP

Figure 6.3a: DISTRICTS AND DEVELOPMENT BLOCKS

6.6.8 ROUGH FINISH GRADES

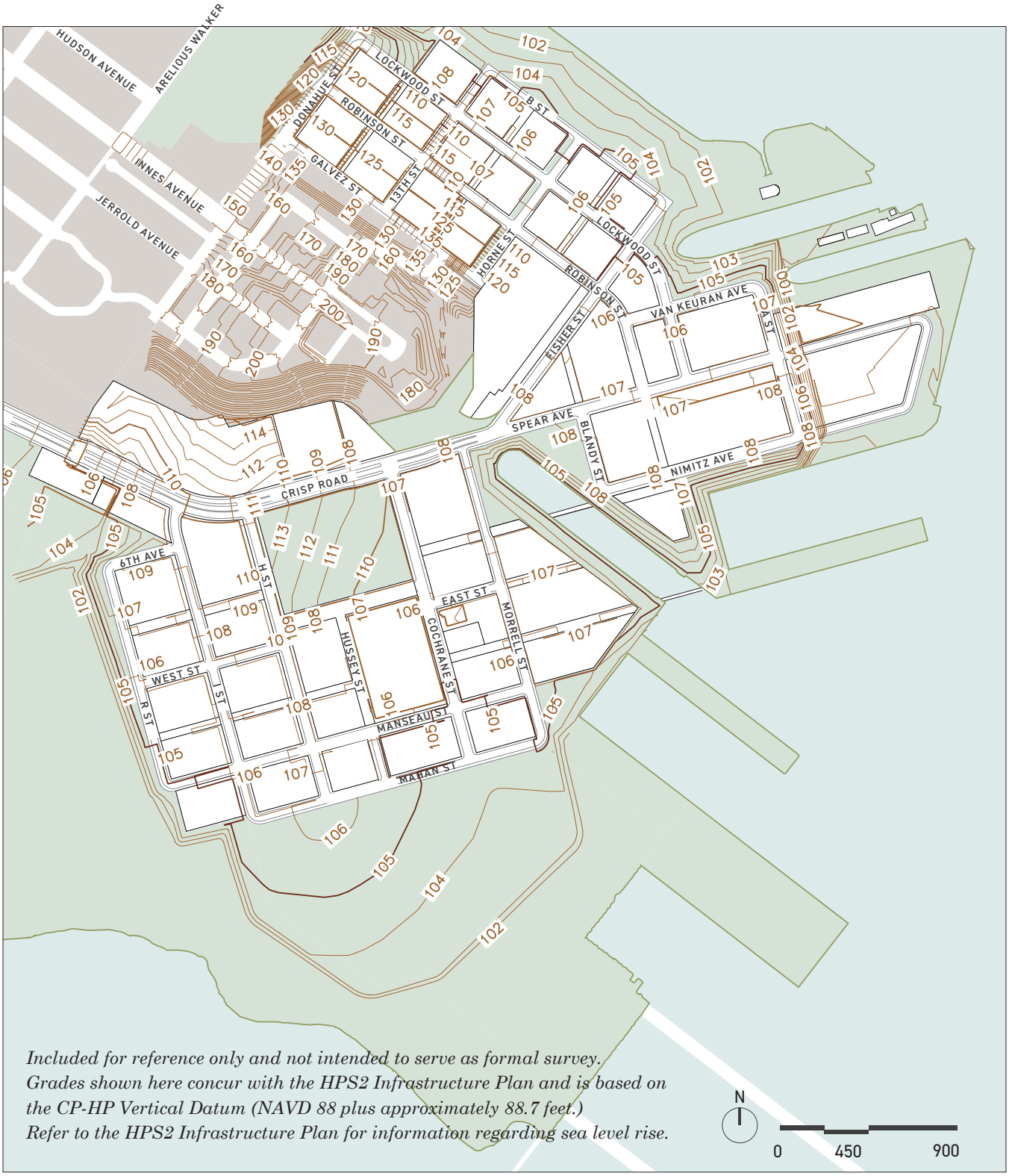


Figure 6.3b: TOPOGRAPHY

6.6.9 PHASING

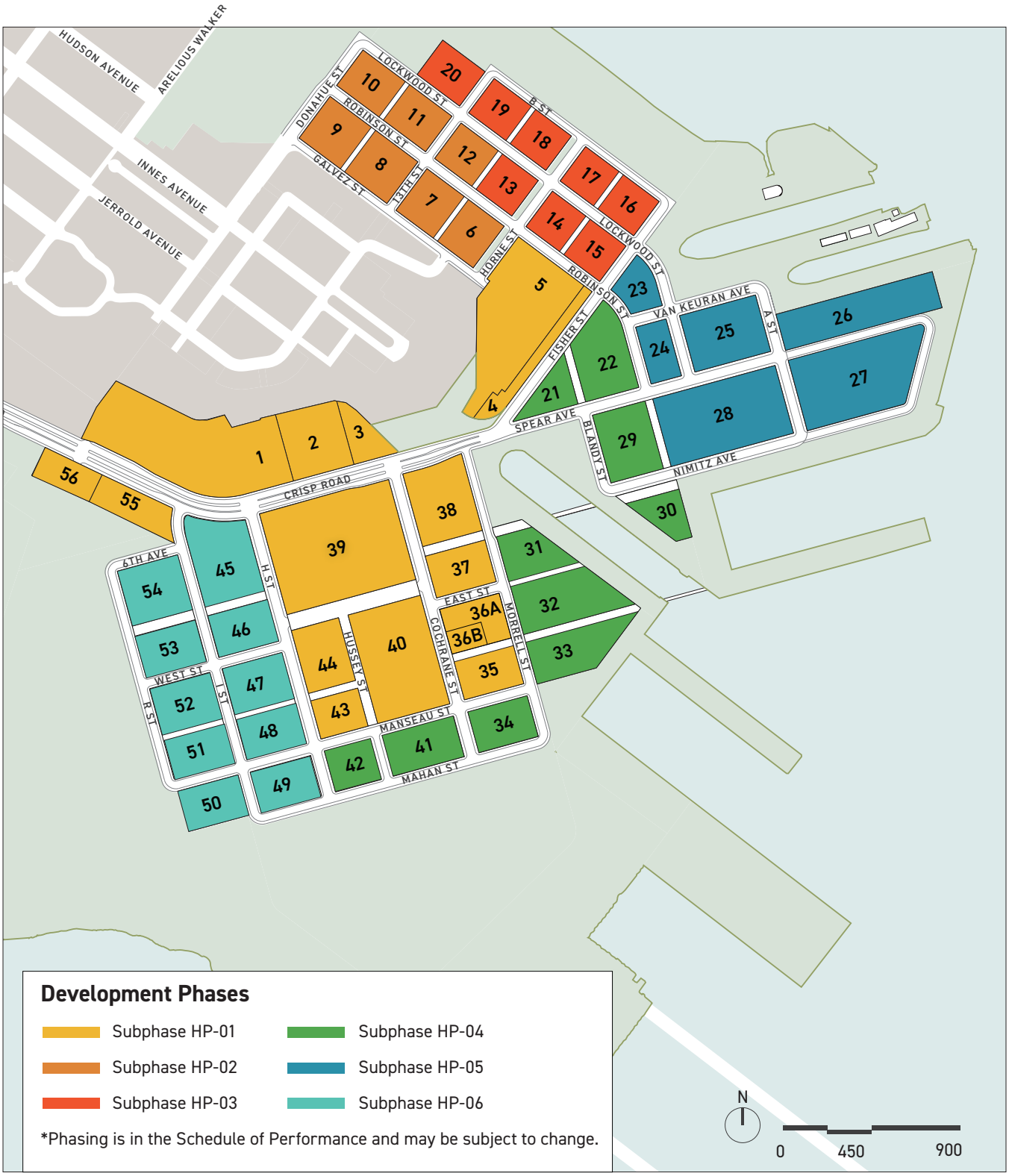


Figure 6.3c: DEVELOPMENT PHASES

6.7 Term Definitions

Terms used in the D4D shall have the meaning defined in Part XI of the HPS Redevelopment Plan, or as otherwise outlined below. In the event of inconsistency between a term definition in the HPS Redevelopment Plan and the D4D, the term definition in the HPS Redevelopment Plan shall prevail:

Active Entrance	A building entrance into an Active Use. Entrance may be public or private. Single uses may have multiple Active Entries.
Active Frontage	Building façade length lined with Active Uses.
Active Uses	Ground floor land uses that create an interesting and inviting pedestrian environment that enhances neighborhood safety and security by encouraging "eyes on the street," visibility and vibrancy.
Active Use Transparency	The surface area of Transparent Glazing as a proportion of the surface area of the Active Frontage.
Adaptive Reuse	Reuse or re-creation of an existing structure, in part or in whole, in a manner that maintains the essence and character-defining building elements of the existing structure.
Agency	The Office of Community Investment and Infrastructure, or Successor Agency to the San Francisco Redevelopment Agency.
Apparent Face	The unbroken plane of a building with a single façade composition.
Atrium	A multi-leveled enclosed building area that is glazed on one [1] or more sides and includes roof glazing and/or skylights.
Awning	A light, roof-like structure, supported entirely by the exterior wall of a building, consisting of a moveable frame covered with approved materials, extending over doors and windows, with the purpose of providing protection from sun and rain and embellishment of the façade.
Blank Wall	A building façade area greater than four [4] linear ft. in length, parallel to the property line where there is not an entrance, window, or any building articulation, including solid doors and mechanical area wall(s).
Block	An area bounded by a public right-of-way, open space, or Mid-Block Break.
Block Sizes	Block Sizes and legal parcels are defined in the Final Map. Approximate parcel dimensions are provided in *Figure 4.1b* and are subject to change. Block sizes may be legal parcels or may be part of a legal parcel.
Building Enhancement	An architectural design feature that improves the character of the building and adds interest to the building overall.
Building Entry	Building doors not including service or loading access, parking entries, or locked fire exits.

Building Envelope	The exterior dimensions dictating the maximum dimensions of width, depth, height, and bulk, within which a building may exist on a given site.
Building Face	A plane of the exterior wall of the building along a public right-of-way, open space, or other publicly accessible space. The term is often used in context with its relationship to an adjacent street or public area. In instances where a minimum Street Wall requirement presides, the Building Face aligns with the build-to line.
Building Height	Building Height is measured from the highest corner at finished sidewalk grade to the average point on the finished roof in the case of a flat roof, and the average height of the rise in the case of a pitched or stepped roof, or similarly sculpted roof form. For parcels adjacent to streets with a slope greater than 5%, Building Height is determined by measuring at the mid-point of the building at the sidewalk grade adjacent to each street-fronting Building Face. The maximum height envelope may extend from one frontage up to a depth of half the distance to the opposite side of the block. Multiple frontages may be used to determine maximum Building Height envelope.
Building Projection	A portion of the building that extends beyond the primary Building Face, either into a Setback or beyond the property line.
Bulk and Massing	Bulk and Massing regulations are the combination of controls (lot size, lot coverage, open space, yards, heights, and setbacks) that determine the maximum Building Envelope.
Business/Retail Signage	A Sign which directs attention to the primary business, commodity, service, industry or other activity which is sold, offered, or conducted on the premises upon which the Sign is located or to which it is affixed.
Canopy	A light, roof-like structure, supported by the exterior of a building, consisting of a fixed frame covered with approved cloth, plastic, or metal, with the purpose of providing protection from sun and rain, and embellishment of the façade.
Calculating Sign Area	Sign area is defined as the area of a sign that is used for display purposes. Sign area shall be calculated by measuring the size of a rectangle large enough to contain the entire sign's display, graphics, and text that form an integral part of the display or are used to differentiate such sign from the background against which it is placed. The calculation of Sign Area excludes the necessary supports or uprights on which such sign is placed.
Canopy or Awning Signs	Lettering or graphics applied to projecting architectural awnings or canopies at the first floor.
Character-enhancing Structure	Buildings or structures that may be adaptively reused to enhance neighborhood character and sense of place. Character-enhancing Buildings are 281, 351, 411, and 813.
Class I Bicycle Parking	Spaces in secure, weather-protected facilities intended for use as long-term, overnight, and workday bicycle storage by dwelling unit residents, non-residential occupants, and employees.

Clearly Defined Building Entry	A clearly identifiable building entry is expressed by such elements as taller volumes, recessed doorways, canopies, lighting, public art, special materials, and/or paving.
Convertible Parking	A Shared Parking Structure designed to be converted into another use and or designed to be mechanized and deconstructable.
Coverage	The percentage of Floor Plate in relation to the Developable Area that includes the total horizontal area when viewed in plan. Coverage is regulated at various height thresholds.
Datum	An articulation strategy on the building façade that, by its continuity and regularity, serves to gather, measure, and organize the pattern of forms and spaces.
Daylight	The controlled admission of natural light, direct sunlight, and diffused skylight into a building to reduce electric lighting and save energy.
Developable Area	All land inside the legal property line, excluding Setbacks.
District	A grouping of development blocks that share a number of similar characteristics.
EVA	Emergency Vehicular Access.
Extra Large Building (XL)	Buildings with a maximum floor plate area greater than [100,000] sq. ft.
Façade	Any vertical exterior face or wall of a building that is adjacent to or fronts a street, public or semi-private right-of-way, park, or plaza.
Façade Articulation	Expressions of material properties, craft, treatment, pattern, and/or assembly that create visible shadows and/or texture across the building façade. Facade Articulation strategies are intended to create visual interest, texture, and shadows through the tectonics, materiality, and craft of the facade.
Façade Composition	The design of large scale building form and smaller scale facade tectonics, including material selection and detailing.
Façade Modulation	
Fenestration	The design, construction, or presence of openings in a building. Fenestration includes windows, doors, louvers, vents, wall panels, skylights, storefronts, curtain walls, and slope glazed systems.
Floor Aspect Ratio	The ratio that controls the proportions of the Floor Plate. Floor Aspect Ratio compares the shorter plan dimension of the Floor Plate to the longer plan dimension. A square Floor Plate would have an aspect ratio of 1:1.
Floor Plate	The Gross Floor Area for an individual floor level of a building.
Freestanding or Directional Signs	Signs detached from the building, and in no part supported by the building, providing identification, information, or direction to a building or group of buildings.
Gateway	A primary vehicular or pedestrian point of entry into the development project, typically at a key intersection between two or more public streets.

Gross Floor Area	The sum of the gross areas of the several floors of a building or buildings, measured from the exterior faces of exterior walls or from the centerlines of walls separating two buildings. Where columns are outside and separated from an exterior wall (curtain wall) that encloses the building space or are otherwise so arranged that the curtain wall is clearly separate from the structural members, the exterior face of the curtain wall shall be the line of measurement, and the area of the columns themselves at each floor shall also be counted. Shall include, but not be limited to, the following: • Basement and cellar space, including tenants' storage areas and all other spaces except that used only for storage or services necessary to the operation or maintenance of the building itself • Elevator shafts, stairwells, exit enclosures, and smoke-proof enclosures at each floor • Floor space in penthouses except as specifically excluded in this definition • Attic space capable of being made into habitable space • Floor space in balconies or mezzanines in the interior of the building • Floor space in open or roofed porches, arcades, or exterior balconies, if such porch, arcade, or balcony is located above the ground floor or first floor of occupancy above basement or garage and is used as the primary access to the interior space it serves • Any floor area dedicated to accessory or non-accessory parking Shall not include the following: • Mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself if located at an intermediate story of the building and forming a complete floor level • Outside stairs to the first floor of occupancy at the face of the building which the stairs serve, or fire escapes • Required off-street loading and required car-share parking • Bicycle parking • Balconies, porches, roof decks, terraces, courts, and similar features, except those used for primary access provided that: • If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the clear space is less than 15 feet in either dimension, the area shall not be excluded from Gross Floor Area unless it is fully open to the sky • If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high), or by such walls and interior lot lines, and the clear space is 15 feet or more in both dimensions: (i) The area shall be excluded from Gross Floor Area if • If, however, 70 percent or less of the perimeter of such an area is enclosed by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the open side or sides face on a yard, street or court whose dimensions satisfy the requirements.
Ground Floor	The lowest story of a building that is at or nearest to sidewalk grade other than a basement or cellar as defined in the Building Code.

Habitable Projections	A portion of the building enclosed by walls and a roof which extends beyond the property or minimum Setback line. Examples include a bay window, a corner element, or a regularly occurring façade modulation that extends through some or all floors of a building.
High Albedo	Materials that reflect sunlight and limit the amount of heat gained through those materials. High Albedo Roofing materials are chosen to reduce unwanted heating of roof surfaces.
Horizontal Shift	A horizontal change in the building façade. A horizontal change shall include at least one floor of the building façade.
Identifying Signs	Primary parcel identification signs, which may be projecting, wall-mounted, or freestanding.
Implied Façade	An Implied Façade is a Building Face that completes the apparent massing through vertical and horizontal architectural elements, such as the roof line, columns, angular shifts, or other elements, that extend to and maintain the Street Wall.
Large Building (L)	Buildings with a maximum floor plate area between [70,000] and [100,000] sq. ft.
Lot Coverage	The percentage of the lot area that is covered by building area, which includes the total horizontal area when viewed in plan.
Maker Space	Uses for contemporary forms of small-scale manufacturing, repair, and post-manufacturing activities. Maker Space should typically include a retail component, and may include several other uses within a single space, including but not limited to light industrial, office, research and development, and Neighborhood Retail Sales and Services, among many others.
Material/Color	The application of materials, color, shades, and texture for a building when used as a quality- and character-defining feature of the façade.
Maximum Plan Length	The maximum linear dimension of a building measured in plan along a building elevation parallel to the immediately adjacent public right-of-way, MBB, or Public Open Space.
Medium Building (M)	Buildings that have a maximum plan dimension greater than [150] ft. in length along any facade and have a maximum floor plate area less than [70,000] sq. ft.
Mid-Block Breaks or MBBs	A pedestrian, bicycle, and/or vehicle lane way on private property.
Mid Block Break Width	The mandatory Street Wall to Street Wall width for a MBB and associated Setback Zones.
Non-habitable Projections	A portion of the building not enclosed by walls and a roof which extends beyond the property or minimum setback line. Examples include usable balconies or outdoor decks, structural projections, screening, awnings, and fins. Or similar architectural elements.
Parking Entrance	Entries allowing vehicular access to parking areas, including Shared Parking Structures, podium parking, and/or below grade parking.
Portable Signs	Signs which are freestanding, movable, and not permanently anchored or attached to the ground.

Primary Building Entries	The main entries to a building.
Primary Façade Plane	The plane that incorporates the primary façade of a Street Fronting Elevation.
Projecting or Blade Signs	Signs attached to a building, projecting perpendicular to the mounting surface.
Projection	The horizontal distance by which the furthermost point used in measuring the area of a sign extends beyond a Street Property Line or a Building Setback Line.
Public Realm	An expansion of the pedestrian network that provides public access through private developments.
Public Realm Enhancement	An expansion of the pedestrian network that provides a continuation of public access through private developments.
Regularly Occupied Floor Area	An area where one [1] or more individuals normally spend time (more than one [1] hour per person per day on average) seated or standing as they work, study, or perform other focused activities inside a building.
Residential Private Individual Open Space	Intended for the use of individual residents within a unit and includes terraces, patios, balconies, rooftop spaces and other similar areas.
Residential Private Common Open Space	Intended to be shared by all residents/users within a building or building cluster and includes rooftop spaces, internal courtyards, gardens, pools, play areas, and other similar areas.
Rounding	For purposes of calculating a number, any fraction equal to or greater than one half (1/2) shall be rounded up to the nearest whole number and any fraction less than one half (1/2) shall be rounded down to the nearest whole number.
Roof-Mounted Equipment	Any equipment installed on the roof of a structure, such as air conditioners, compressors, condensers, conduits, pipes, vents, ducts, and sustainable systems such as solar ready equipment.
Screening	A physical visual barrier that obstructs or obscures the view of an object or objects. Screening may include shading devices, trellises, canopies, fences, landscaping, and architectural treatments.
Setback	The required horizontal distance between a building face and a property line.
Service Entrance	Entries allowing vehicular access for trucks and/or deliveries, loading, and/or access to trash rooms.
Shared Parking Structure	A stand-alone structure providing Accessory Parking to off-site, lawful, non-Accessory uses and not attached to or included within a building containing a lawful non-Accessory use.
Sign	A display used to identify a place, business, or a product.
Significant Break	A vertical change in the building façade. A vertical plane break shall be at least as wide as 10% of the longest adjoining façade length.
Skyways	Upper level connections between buildings are primarily for pedestrians, although they could also be used for small service vehicles. Skyways may be enclosed or open air.

Small Building (S)	Buildings that have maximum plan dimensions that are less than [150] ft. in length along each building face and have a maximum floor plate area less than [22,500] sq. ft.
Stepback	The distance that upper levels of a building may be inset from the primary Building Face.
Stoop	An outdoor entryway into residential units raised above the sidewalk level.
Storefront	The façade of a ground-floor Active Use space between the street grade and the ceiling of the first floor.
Story	A level or floor of a building containing a ceiling and floor. A double height or two [2] Story space references two [2] combined levels/floors of space.
Street Fronting Elevation	Building façades facing onto a public right-of-way, MBB, or public open space.
Street Wall	The aggregate effects of the façades of buildings along a property line adjacent to a street or open space. The typical context for this term is in defining the public realm and framing or engaging the street.
Temporary Sign	Construction signs, super graphics applied to construction barricades, fences, project signs, or other temporary structures providing project graphics, development names, consultant information, or residential sales information.
Terrace	A raised, flat platform associated with and usually providing egress from a [usually residential] building.
Tower (High Rise)	Building with shared corridors and vertical circulation with a height greater than [120] ft.
Transparency	The degree of visibility through a building façade; or a characteristic of clear façade materials, such as glass, that provide an unhindered visual connection between the sidewalk and internal areas of the building.
Variation	A significant change or difference in form, proportion, position, condition, quantity, level, or other compositional characteristic. Variation describes adjacent elements comprising both similar and different attributes that are recognizable as related.
Vegetated Roof Covers	A roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane.
View Corridor	A three-dimensional area extending out from a viewpoint. The width of the view corridor depends on the focus of the view. The focus of the view may be a single object, which would result in a narrow corridor, or a group of objects, such as a distinct skyline, which would result in a wide corridor.
Wall	Any building or structure wall area that is not transparent, including solid doors and mechanical area wall(s).
Wall Sign	A Sign painted directly on the Wall or mounted flat against a building wall with its copy or graphics parallel to the Wall to which it is attached and not protruding more than the thickness of the Sign.
Window Sign	A Sign painted or applied directly on the surface of a window glass or placed behind the surface of a window glass.

6.8 List of Figures

6.9 Image Credits

1 INTRODUCTION
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Figure 1.0a Hunters Point Shipyard Site Location in San Francisco
Satellite Image of San Francisco; Copyright Google Earth

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Figure 1.4a Project History and Timeline
The Ohlone
Courtesy of the Library of Congress

Chinese Shrimp Camps
Courtesy of the Library of Congress

California Dry Dock Co.
Courtesy of the Library of Congress

P.09
Figure 1.4a Project History and Timeline
Navy Expansion
Courtesy of the Library of Congress

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1-3. Archival images of the working shipyard
Courtesy of the Library of Congress

2 VISION
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View of the Site towards the Grunning Crane
Photo by Vittoria Zupicich

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1. Shipyard Existing Aerial Photo
Photo by Henrik Kam

2. Shipyard Historic Photos
Courtesty of the Library of Congress

3. Shipyard Existing Photo
Photo by Henrik Kam

4. Shipyard Future Development Example
Copyright Getty Images

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Urban Outfitters Corporate Campus, Philadelphia
Photo by Christopher Leaman

2. New Building Example
Małopolska Garden of Arts by Ingarden & Ewý Architects
Photo by Krzysztof Ingarden

3 Shipyard Existing Photo
Photo by Henrik Kam

4. Waterfront Open Space Example
Dusseldorf Waterfront
Sourced: OEBB Online Magazine

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Witte de Withstraat, Rotterdam
Photo by Alamy

4. Office through Adaptive Reuse Example
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5. Ground Floor Retail Example
Santana Row, San Jose
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Photo by Vittoria Zupicich

2. Building 351
Photo by Vittoria Zupicich

3. Building 411
Photo by Vittoria Zupicich

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1. Mid-Rise Residential Example
Courtesy of Sellen Construction

2. Open Space Example
Sourced: Shutterstock

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1. Building 101
Photo by Angela Lin, Square One Productions

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1. Artists' Studios Examples
Creative Commons

2. Artists' Studios Examples
Building 18 Anthropologie's Headquarter, Philadelphia
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3. Maker Space Examples
TechShop, Brooklyn
Photo by Dana Gordon

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3. Building 253
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1. Residential Tower Example
Gensler rendering

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1. Green Room Examples
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2. Water Room Examples
Photo by Tomasz Majewski

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1. Pedestrian Allee Examples
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P.41
2. Waterfront Open Space Examples
Sourced: Shutterstock

4 BUILDING DESIGN STANDARDS AND GUIDELINES
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Figure 4.4j: Implied Facade
Copyright Google Streetview

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Figure 4.6a: Building A
400 Grove Street, San Francisco
Photo by Riki Nishimura

Figure 4.6b: Building B
333 Brannan St., San Francisco
Photo by Riki Nishimura

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1. Horizontal Shift Example
Strato, Paris by Hardel and Le Bihan Architectes
Photo by Vincent Fillon

2. Horizontal Shift Example
1180 Fourth Street, San Francisco
Photo by Riki Nishimura

3. Vertical Shift Example
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Addendum 5 to the CP-HPS2 2010 FEIR

Addendum Date:	**April 9, 2018**
Case No.:	2007.0946E
Project Title:	Candlestick Point–Hunters Point Shipyard Phase II
EIR:	2007.0946E, certified June 3, 2010
Project Sponsor:	CP Development Co., LLC
Lead Agency:	Office of Community Investment & Infrastructure
OCII Staff Contact:	José Campos – 415.749.2554 jose.campos@sfgov.org
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I. PROJECT DESCRIPTION

I.A Introduction

This addendum (Addendum 5) describes and analyzes proposed modifications to the 2010 Candlestick Point–Hunters Point Shipyard Phase II Project (CP-HPS2, or 2010 Project[1]).

The modifications discussed in Addendum 5 relate primarily to Hunters Point Shipyard Phase II (HPS2) and are now being pursued in anticipation of the future transfer of certain parcels from the Navy to the Office of Community Investment & Infrastructure (OCII); in addition, there are minor changes proposed at Candlestick Point (CP). The modifications at HPS2 and CP are collectively referred to as the 2018 Modified Project Variant, which is proposed by the Project Sponsor as a new variant as a means to clearly compare the environmental impacts of the new proposal to the 2010 Final EIR (2010 FEIR) environmental analysis. The 2018 Modified Project Variant includes all Project revisions evaluated in previous addenda, to the extent they remain applicable as part of the Project Sponsor's current proposal. In this document, the 2018 Modified Project Variant may also be referred to as the "proposed modifications," either in reference to CP or HPS2.

At HPS2, the 2018 Modified Project Variant generally includes revisions to the existing land uses and height/bulk limits; modified standards for location of two high-rise towers; reconfiguration of the design and sizes of parks and open space areas; revisions to the number of housing units proposed by the Project Sponsor; revisions to the street network and roadway cross-section dimensions and alignments, the provision of water taxi infrastructure and two bridges; revisions to the proposed utility network and systems; and changes to the phasing plan. The two bridges are located over Dry Dock 4 at HPS2. The Water Room Bridge would be a pedestrian and bicycle bridge and the Eastern Bridge would be a pedestrian bridge. Addendum 5 Section I.C.1 (HPS2 Proposed Modifications) discusses the changes at HPS2 under the 2018 Modified Project Variant in detail.

Modifications are also being sought in relation to Candlestick Point (CP) to reorder CP Major Phase 2 construction sub-phases to proceed with development in an easterly rather than northern direction; to remove a parcel from the CP boundary (the Jamestown Parcel, in CP-02) and shift this parcel from Zone 1 and include it in Zone 2 of the BVHP Redevelopment Plan; and to modify the boundary of CP-05. In addition, other modifications include revisions to the number of housing units proposed by the Project Sponsor. Addendum 5 Section I.C.2 (CP Proposed Modifications) discusses the changes at CP under the 2018 Modified Project Variant in detail.

The 2018 Modified Project Variant includes conforming modifications to the Hunters Point Shipyard and Bayview Hunters Point Redevelopment Plans and additional modifications to the plans allowing for limited conversion of approved uses within the plan areas and a limited transfer of commercial uses between the plan areas, Disposition and Development Agreements for HPS Phase 1

[1] The 2010 Project is the "main project" analyzed in the CP-HPS2 FEIR, which is alternatively referred to as the "stadium project."

(HPS1), CP-HPS2 and attachments thereto (including but not limited to the Infrastructure; Transportation; Parks, Open Space, and Habitat Concept; and Housing Plans), and the HPS Design for Development (2018 HPS D4D). The approvals required to implement the 2018 Modified Project Variant are listed in greater detail in Section I.F (Project Approvals).

I.B Project Overview

I.B.1 Project Location

The CP-HPS2 Project covers approximately 702 acres along the southeastern waterfront of San Francisco, bordered by India Basin on the north; the Executive Park area and San Mateo County line on the south; Bayview Hill, the Bayview-Hunters Point (BVHP) neighborhood, Yosemite Slough, and Hunters Point Hill on the west; and San Francisco Bay on the north and the east. Figure 1 (Project Location) illustrates the Project boundaries. Table 1 (2018 Modified Project Variant Site Areas) presents the acreage of the Project site.

The 2018 Modified Project Variant would primarily occur within HPS2 but would also include minor modifications at CP. The location of HPS2 and CP is provided by Figure 1. The HPS2 site is approximately 421 acres in area and is located to the southeast of the BVHP neighborhood. The CP site is approximately 281 acres in area and is located east of Bayview Hill and southeast of the Bayview Neighborhood.

TABLE 1 2018 MODIFIED PROJECT VARIANT SITE AREAS

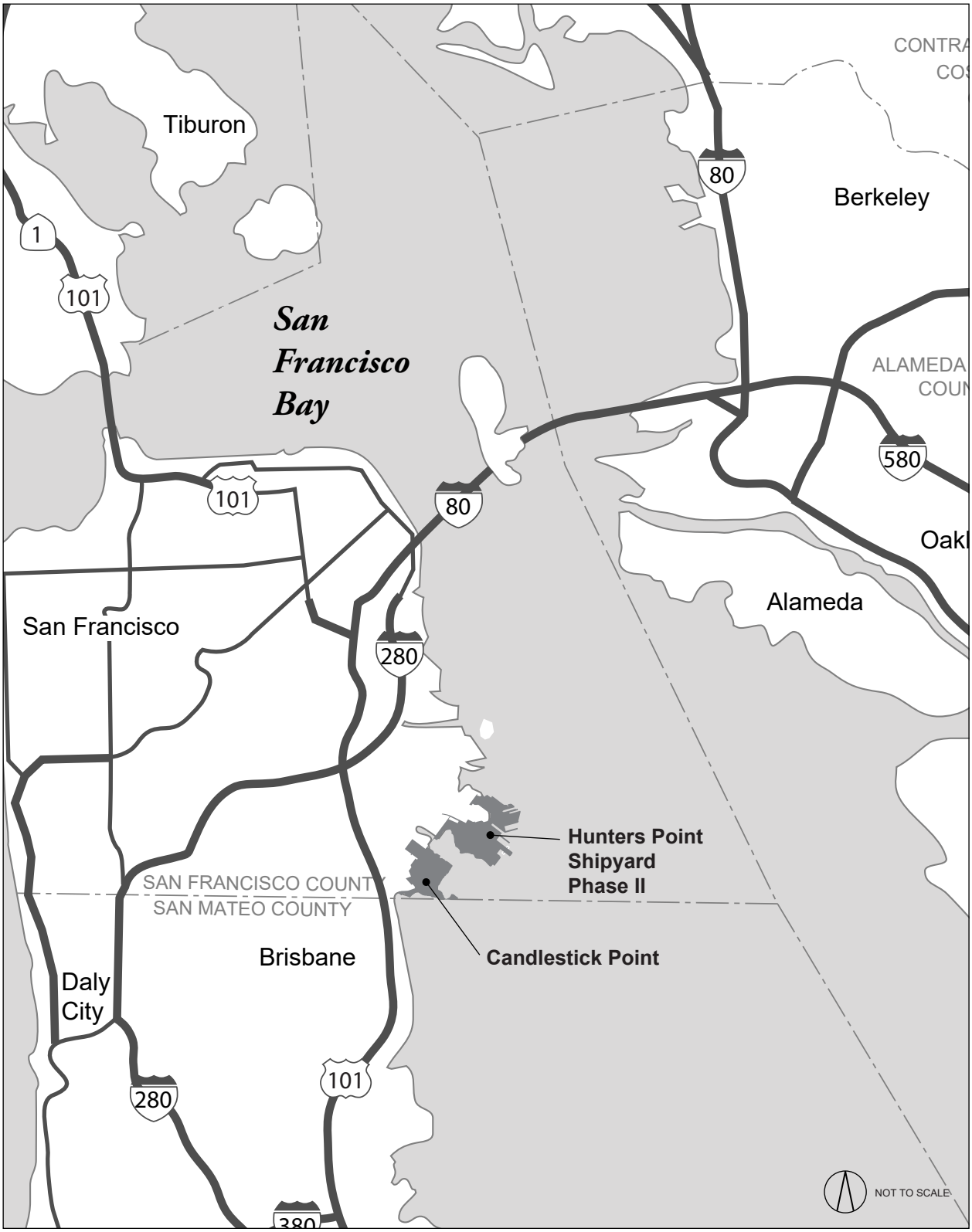
Development Area	*Acres*
Candlestick Point	281[a]
Hunters Point Shipyard Phase II	421
Total	***702***

SOURCE: Lennar Urban, 2009.

Candlestick Point includes the approximately 120.2-acre Candlestick Point State Recreation Area.

a. The 2010 FEIR reflected 281 acres for CP; however, if the BVHP Redevelopment Plan amendment is adopted, the Jamestown parcel would be removed, which would reduce the size of CP by approximately 9.4 acres.

Changes at CP as a result of the 2018 Modified Project Variant would occur within the area labeled as "Candlestick Point" in Figure 1. The Candlestick Point portion of the Project site comprises approximately 281 acres, of which 120.2 acres are part of the Candlestick Point State Recreation Area (CPSRA), which is east of Bayview Hill Park. A recreational vehicle park occupies a portion of the site on Gilman Avenue, and the CP State Recreation Area occupies the area of land along the CP shoreline.



SOURCE: Clement Designs, 2008; ESA 2018.

FIGURE 1 Addendum 5 to the CP-HPS2 2010 FEIR

PROJECT LOCATION

I.B.2 Previous Approvals and Development Status

On June 3, 2010, the San Francisco Planning Commission and the San Francisco Redevelopment Agency (SFRA) Commission certified the Final Environmental Impact Report (FEIR) for the CP-HPS2 Project, San Francisco Planning Department File Number 2007.0946E and SFRA File Number ER6.05.07. On July 14, 2010, the San Francisco Board of Supervisors affirmed the Planning Commission's certification of the 2010 FEIR (Motion No. M10-110).

Between June 3, 2010, and August 3, 2010, the Planning Commission, SFRA, Board of Supervisors, and other City Boards and Commissions adopted findings of fact, evaluation of mitigation measures and alternatives, a statement of overriding considerations (File No. 100572), and a mitigation monitoring and reporting program (MMRP) in fulfillment of the requirements of the California Environmental Quality Act (CEQA). These entities then adopted various resolutions, motions and ordinances related to Project approval and implementation, including, but not limited to (1) General Plan amendments; (2) Planning Code amendments; (3) Zoning Map amendments; (4) BVHP Redevelopment Plan amendments; (5) HPS Redevelopment Plan amendments; (6) Interagency Cooperation Agreements; (7) Design for Development documents; (8) Health Code, Public Works Code, Building Code, and Subdivision Code amendments; (9) Disposition and Development Agreement (DDA), which included as attachments a Phasing Plan and Schedule of Performance, a Transportation Plan, an Open Space Plan and an Infrastructure Plan, among other items; (10) Real Property Transfer Agreement; (11) Public Trust Exchange Agreement; (12) Park Reconfiguration Agreement; and (13) Tax Increment Allocation Pledge Agreement.

The 2010 FEIR evaluated several variants[2] of the CP-HPS2 Project. In 2010, it was not known whether the 49ers football team would require a new stadium as part of the Project. As a result, the 2010 FEIR included, and the City approved, several potential land use and development options for the Project, specifically:

1. The Project with a stadium, as described in Chapter II of the 2010 FEIR, with Candlestick Tower Variant (Variant 3D), Utilities Variant (Variant 4), and Shared Stadium Variant (Variant 5);
2. The Project without the stadium, with Non-Stadium R&D Variant (Variant 1), Candlestick Tower Variant (Variant 3D), and Utilities Variant (Variant 4);

[2] Variants proposed and analyzed in the 2010 FEIR: (1) R&D Variant (Variant 1): this variant would not include a stadium, but would increase R&D space at the previously proposed stadium location; (2) Housing Variant (Variant 2): this variant would not include a stadium, but would relocate 1,350 residential units from CP to the previously proposed stadium location; (3) Housing/R&D Variant (Variant 2A): this variant would not include a stadium, but would relocate 1,650 residential units from CP to the previously proposed stadium location, and would include an additional 500,000 sf of R&D when compared to the Project; (4) Tower Variants A, B, C, and D (Variant 3): these variants would have the same land use program and overall description as with the Project, but would have different locations and heights for residential towers at CP; (5) Utilities Variant (Variant 4): this variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy; and (6) Shared Stadium Variant (Variant 5): this variant would include a shared stadium where both the San Francisco 49ers and the Oakland Raiders would play at the stadium at HPS2.

3. The Project without the stadium, with Non-Stadium Housing Variant (Variant 2), Non-Stadium Housing/R&D Variant (Variant 2A),[3] Candlestick Tower Variant (Variant 3D), and Utilities Variant (Variant 4); and
4. Sub-alternative 4A, which provides for the preservation of four historic structures in HPS2; Sub-alternative 4A could be implemented with either the stadium variant or non-stadium variants (see Board of Supervisors CEQA Findings pp. 2–4).

Following the 49ers relocation to Santa Clara, the Project Sponsor elected to implement Option 3 above, the Housing/R&D Variant (Variant 2A), including Candlestick Tower Variant (Variant 3D) and Utilities Variant (Variant 4) (collectively called the "Housing/R&D Variant [Variant 2]"). In 2014 and 2016, the Project Sponsor obtained certain approvals allowing development to commence at CP.[4] Development at CP includes construction associated with Sub-phase CP-01 (Alice Griffith) in the northern area of the site, which is nearing completion. In the southern area of the site, the stadium was demolished in 2015 and civil works associated with CP Center are underway generally north of Harney Way, west of Ingerson Avenue, and east of Jamestown Avenue.

Since certification of the 2010 FEIR, four addenda have been prepared to address proposed modifications to the 2010 Project, although only two of the Projects described in those addenda were pursued by the Project Sponsor (Addenda 1 and 4).[5]

Addenda 1 and 4 are summarized as follows:

- **Addendum 1 (published on January 7, 2014): The** Project Sponsor received approval for changes to the Phasing Plan and Schedule of Performance, the schedules for implementation of the Transportation Plan (including the Transit Operating Plan of the Infrastructure Plan), and other public benefits. In addition, approvals to the Master Streetscape Plan and Signage Plan were received and mitigation measure MM TR-16 was amended.
- **Addendum 4 (published on March 3, 2016):** The Project Sponsor received approval for modifications of the approved Project Candlestick Point Design for Development (2016 CP D4D), and proposed transportation system changes that require modification of the Major Phase 1 CP Approval, including the Schedule of Performance, the Candlestick Point Infrastructure Plan, the Candlestick Point Hunters Point Shipyard Phase II Transportation Plan. In addition, mitigation measures MM TR-16 and MM TR-23.1 were also amended.

[3] Housing/R&D Variant (Variant 2A) was evaluated in the Responses to Comments to the 2010 Draft EIR, and is included and analyzed as part of the 2010 FEIR.

[4] Modifications to the Phasing Plan and Schedule of Performance and the schedules for implementation of the Transportation Plan and other public benefits were analyzed in Addendum 1, published on December 11, 2013, and approved by various City agencies and OCII in 2014. Addendum 4, published on February 22, 2016, analyzed modifications to the CP Design for Development and certain transportation system changes that required modification of several CP-HPS2 Project plan documents. These modifications were approved in 2016.

[5] OCII has also prepared two other addenda to the 2010 FEIR. Addendum 2 to the 2010 FEIR, published on May 2, 2014, evaluated the potential environmental impacts of the Automatic Waste Collection System described in the 2010 FEIR as part of Utility Variant 4 (in more detail). The Project Sponsor did not pursue this option. Addendum 3 to the 2010 FEIR, published on September 19, 2014, evaluated the potential environmental impacts of a proposal to demolish Candlestick Park stadium with explosives rather than conventional and/or mechanical demolition. This proposal was not pursued by the Project Sponsor, and the stadium was demolished using conventional and mechanical means.

Table A-1 (Comparison of CP-HPS2 Project Changes Since 2010) of Addendum 5 Appendix A (Comparison of CP-HPS2 Project Changes Since 2010) provides a summary of the CP-HPS2 Project changes that have occurred since 2010 as evaluated in Addenda 1 and 4. The changes are provided by primary project component (e.g., land use plan, phasing, utility systems, transportation and transit system, and mitigation measures).

Three parcels of land (D-2, UC-1, and UC-2) have been transferred from the Navy to the Office of Community Investment and Infrastructure ("OCII," the successor agency to the SFRA). Vertical development to date at HPS2 is limited to these parcels and includes the demolition of the "commercial kitchen" building, which was located along Robinson Street, north of Fisher Street, and construction of a new commercial kitchen, which is now located along Fisher Street near the intersection of Spear Avenue. The new commercial kitchen was considered in the 2010 FEIR as a use within the artist building; however, it is now provided in an adjacent building, along Robinson Street.

Other construction activities include excavation of the artist building/plaza, with soil being stockpiled behind Buildings 808/813. Water and storm drain utilities are currently being installed in the roadway on Galvez/Horne/Robinson (in the winter of 2017), and subsequent grading and paving of these roadways is anticipated in the early part of 2018. Ongoing remediation activities by the Navy are also occurring at Navy-owned parcels within HPS2.

Future transfer parcels to the Project Sponsor would occur in accordance with the terms of the DDA and other CP-HPS2 Project documents.

I.B.3 Summary of 2018 Modified Project Variant

The 2018 Modified Project Variant would retain the same land use categories as analyzed in the 2010 FEIR (with the exception of the stadium). These uses generally include residential, commercial/retail, research and development, artist space, community uses, parks and open space, a marina, and parking; however, certain new uses (i.e., hotel, institutional, bridges, and a water taxi) would also be provided.

The distribution of the allowed residential units between HPS2 and CP would change, providing more units at HPS2 and fewer units at CP. The square footage of certain commercial uses at HPS2 would also change to allow new uses and to accommodate other revisions to the land use program Additionally, the location of certain parks and open space at HPS2 would change and overall acreage would increase. Transportation networks and utility systems would also change. The Phasing Plan and Schedule of Performance would be modified, resulting in construction beginning later (in 2014, rather than 2011, as envisioned in the 2010 FEIR) and concluding later (in 2034, rather than 2031, as envisioned in the 2010 FEIR). Construction would still occur over a 21-year period.[6]

[6] The Schedule of Performance and the construction schedule used in the environmental analysis differ. The Schedule of Performance shows "outside dates" required to fulfill the contractual obligations related to the transfer of parcels. The construction schedule used in the environmental analysis shows a more aggressive schedule to provide a conservative environmental analysis in the event that the transfer of parcels occurs more quickly than required.

The modifications evaluated in Addendum 5 are described in detail in Section I.B.4 (Overview of 2018 Modified Project Variant) and Section I.C (2018 Modified Project Variant).

The 2018 Modified Project Variant incorporates 2010 FEIR Candlestick Tower Variant 3D and certain components of the Utilities Variant 4, which proposed an alternative utility system. The 2018 Modified Project Variant would include the following alternative utilities systems: a solar electricity distribution and storage system (through a building-scale photovoltaic (PV) system and building- and utility-scale battery storage systems), a recycled water treatment and distribution system, and district heating and cooling plants (including a geothermal heating and cooling system as a component of the district heating and cooling plants). If approved, the 2018 Modified Project Variant would be implemented instead of the 2010 Project, R&D Variant (Variant 1), or R&D/Housing Variant (Variant 2A), all of which were described and analyzed in the 2010 FEIR. Necessary infrastructure, including utilities, transportation improvements, and parks and open space improvements, would be included as part of the development within each sub-phase of the 2018 Modified Project Variant.

The 2018 Modified Project Variant includes 172 dwelling units and 71,000 square feet (sf) of retail uses that were approved for HPS1, but have not and will not be constructed at HPS1. Instead, these dwelling units and retail square footage would be incorporated into HPS2 and constructed on the HPS2 site. While these units and square footage were accounted for in the 2010 FEIR as part of the cumulative analysis, in Addendum 5, they are analyzed as part of the HPS2 project under the 2018 Modified Project Variant.

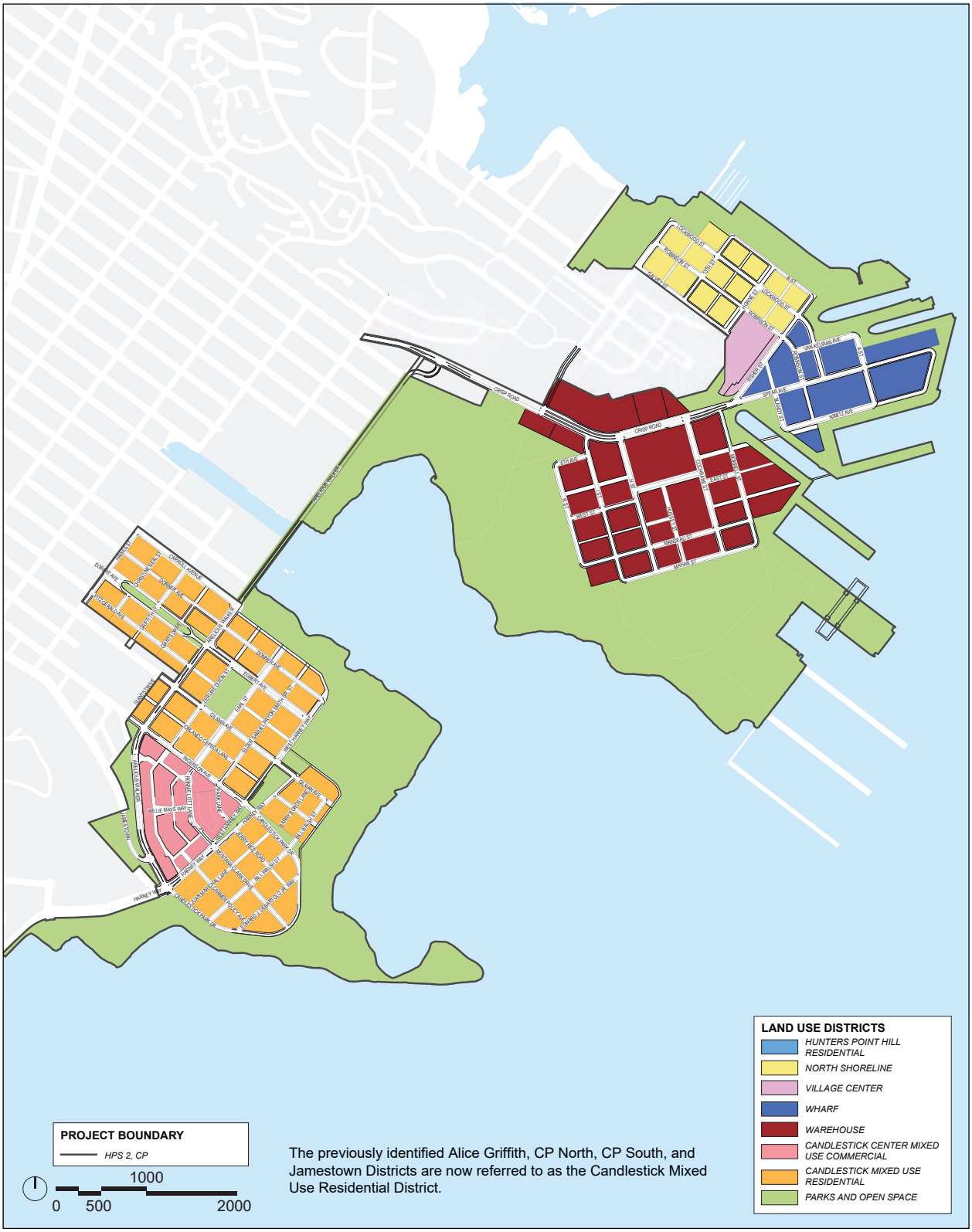
In Addendum 5, the 2018 Modified Project Variant is primarily described and assessed in relation to the Project described in 2010 FEIR Chapter II (Project Description). However, certain impacts are assessed in comparison to the 2010 FEIR R&D Variant (Variant 1) and Utilities Variant (Variant 4), where impacts are most comparable to those variants instead of the 2010 Project. A more-detailed description of the analysis methodology is provided in Section II.A (Approach to the Analysis).

I.B.4 Overview of 2018 Modified Project Variant

Land Use Districts

The Bayview Hunters Point (BVHP) and Hunters Point Shipyard (HPS) Redevelopment Plans define the land use districts for CP and HPS2, respectively. Figure 2 (CP-HPS2 Land Use Districts) illustrates the CP-HPS2 land use districts. The HPS2 site is divided into five land use districts: North Shoreline District, Village Center District, Wharf District, Warehouse District, and Parks and Open Space District.[7] The CP site is divided into three districts: Candlestick Center Mixed Use Commercial

[7] The district names have changed relative to the 2010 FEIR and the 2010 HPS Redevelopment Plan. The Shipyard North Residential District is now the North Shoreline District; the Shipyard Village Center Cultural District is now the Village Center District; the Shipyard Research and Development District is now the Wharf District; the Shipyard South Multi-Use District is now the Warehouse District; and the Shipyard Shoreline Open Space District is now the Parks and Open Space District.



SOURCE: FivePoint, 2018.

FIGURE 2 Addendum 5 to the CP-HPS2 2010 FEIR

CP-HPS2 LAND USE DISTRICTS

District, Candlestick Mixed Use Residential District,[8] and Parks and Open Space District. For comparative purposes, Figure 3 (HPS2 Redevelopment Plan Land Use Districts) illustrates the land use districts in the 2010 HPS Redevelopment Plan as compared to the 2018 HPS Redevelopment Plan, and Figure 4 (BVHP Redevelopment Plan Land Use Districts) illustrates the land use districts in the 2010 BVHP Redevelopment Plan as compared to the 2018 BVHP Redevelopment Plan. Figure 4 shows that the Jamestown parcel would be removed from the limits of Zone 1 of the 2018 BVHP Redevelopment Plan area and the CP site; it would, instead, be included within Zone 2 of the BVHP Redevelopment Plan, which is outside of the CP Project boundary and is not depicted on Figure 4.

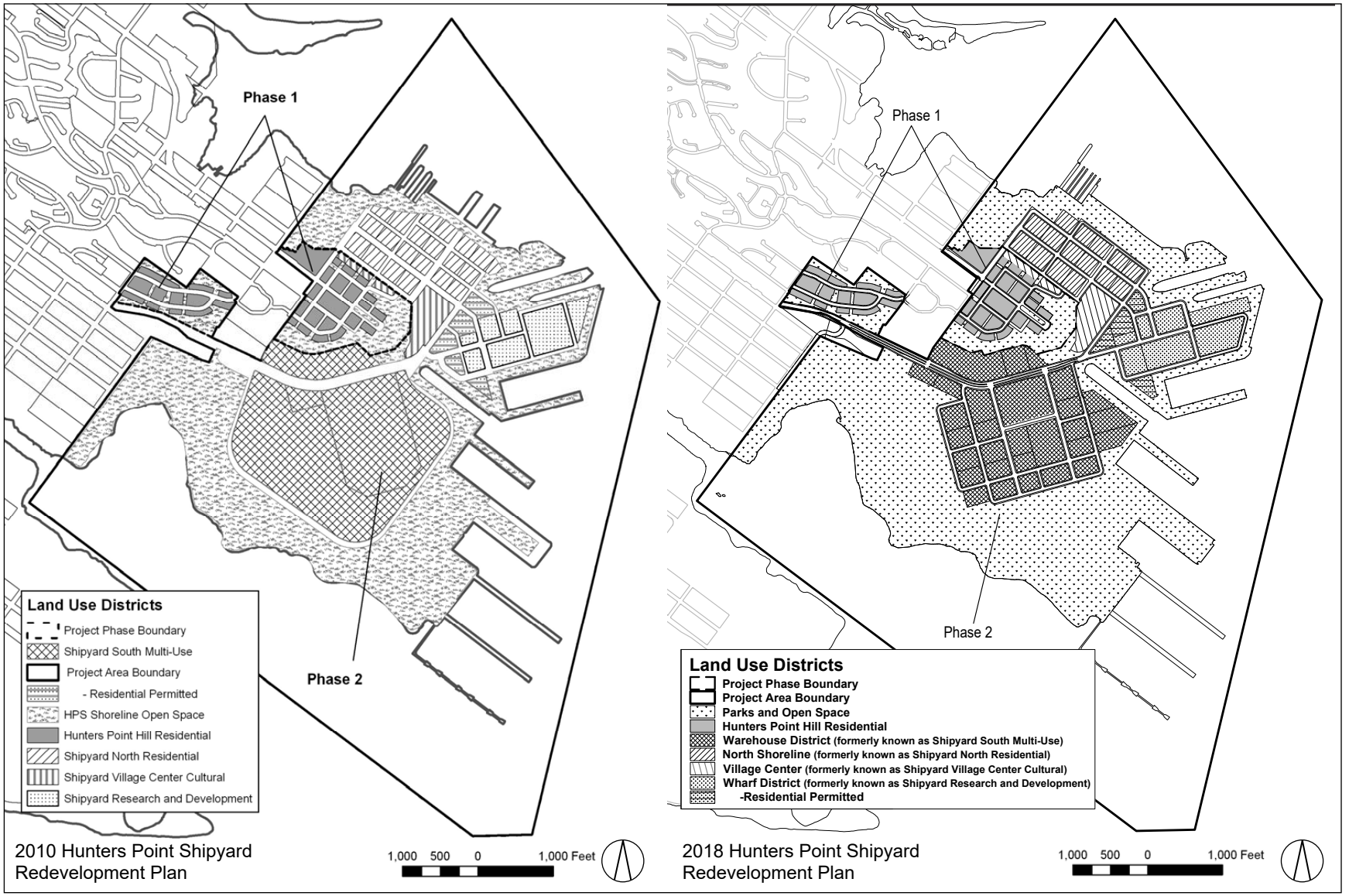
Proposed Modifications and Key Redevelopment Plan Provisions

The 2018 Modified Project Variant at HPS2 generally includes the following modifications at HPS2, with additional detail provided in Addendum 5 Section I.C.1 [HPS2 Proposed Modifications] and Section I.D [HPS2 Construction Activities]:

1. Increase residential units in HPS2 by 804 units, as compared to the 2010 Project, resulting in 3,454 residential units at HPS2 (including 172 units previously approved for HPS1)
2. Provide for new land uses, including a school and hotel;
3. Adjust the location and acreage of parks and open space, providing for an increase of approximately 1.3 acres of new parks and other parks as compared to the 2010 Project;
4. Revise standards for the location of two of the approved towers;
5. Increase and decrease height and bulk limitations in various locations, as further discussed in Section I.C.1 and II.B.4 (Aesthetics);
6. Change the street layout (including the extension of Donahue Street from LaSalle Avenue/ Kirkwood Avenue to Crisp Road), street geometrics, bicycles route locations, and transit network;
7. Add two bridges over Dry Dock 4;
8. Revise the number of parking spaces for residential and commercial garages and on-street parking based on approved parking ratios[9] and revised street layouts, respectively. The number of spaces analyzed in Addendum 5 corresponds to the number of residential units and the square footage of nonresidential uses identified as part of the 2018 Modified Project Variant and would result in an increase of approximately 3,686 structured parking spaces and 804 on-street parking spaces;
9. Provide a new water taxi service from Dry Dock 4;

[8] The previously identified Alice Griffith, CP North, CP South, and Jamestown Districts, which is proposed for removal from CP under the 2018 Modified Project Variant, are referred to as the Candlestick Mixed Use Residential District.

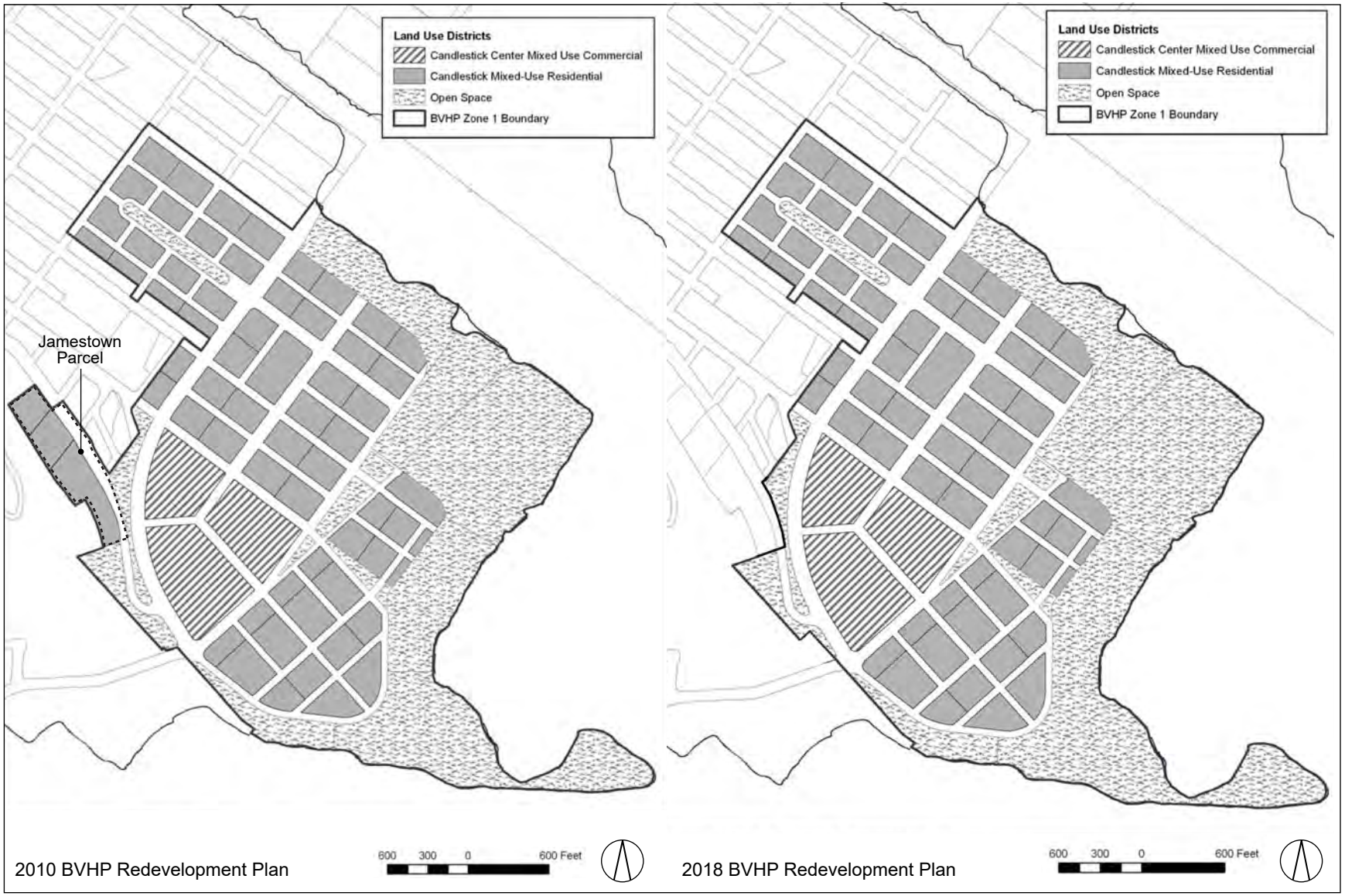
[9] Each land use has a parking ratio identified in the 2010 FEIR, which would be maintained for the 2018 Modified Project Variant. Therefore, while the land use program has been modified, which has increased the number of parking spaces required, the 2018 Modified Project Variant meets the same parking standards as provided in 2010 FEIR. Further, if any land uses change in the future, the number of parking spaces would be provided according to the established parking ratios identified in the 2010 FEIR and Addendum 5, unless different ratios are agreed upon between the Project Sponsor, EP, OCII, and any other involved parties.



SOURCE: OCII Office of Community Investment and Infrastructure, 2010 and 2018

FIGURE 3 Addendum 5 to the CP-HPS2 2010 FEIR

HPS REDEVELOPMENT PLAN LAND USE DISTRICTS: 2010 AND 2018



SOURCE: OCII Office of Community Investment and Infrastructure, 2010 and 2018

FIGURE 4 Addendum 5 to the CP-HPS2 2010 FEIR

BVHP REDEVELOPMENT PLAN LAND USE DISTRICTS: 2010 AND 2018

10. Provide details for previously identified alternative utility systems[10] (as generally described under 2010 FEIR Alternative 4, including a solar electricity generation system, a recycled water treatment and distribution system, and district heating and cooling plants) and provide for new alternative utility systems (including a geothermal heating and cooling system as a component of the district heating and cooling plants and solar electricity distribution and storage [through a building-scale photovoltaic (PV) system and building-scale and utility-scale battery storage systems]);
11. Update the Phasing Plan and Schedule of Performance; and
12. Update construction information, including construction methods.

The 2018 Modified Project Variant at CP generally includes the following modifications, with additional detail provided in Addendum 5 Section I.C.2 [CP Proposed Modifications]:

1. Provide for 7,218 housing units at CP, which would be a decrease of 632 units as compared to the 2010 Project;
2. Include an updated phasing plan, which would re-order CP Phase 2 construction sub-phases to proceed with development in an easterly rather than northern direction; and
3. Remove a parcel from the CP boundary (the Jamestown Parcel, in CP-02) and modify the boundary of CP-05.

Overall, the number of residential units would increase from 10,500 units to 10,672 units, which includes the 172 units previously approved HPS1 but not constructed. The overall development plan would consist of the 2010 development program for CP (less 632 housing units) and the 2018 development program for HPS2. The combination of these two development programs is evaluated in Addendum 5.

In addition to the specific modifications described above for the 2018 Modified Project Variant, the BVHP and HPS Redevelopment Plans would be amended to allow the transfer of up to 118,500 sf of nonresidential uses from HPS2 to CP, which represents approximately 10 percent of the total nonresidential land use program at CP, which is 1,185,000 sf, and the internal conversion of uses within HPS2 and CP. The manner in which these project elements are evaluated in Addendum 5 is described in Section II.A, Approach to the Analysis.

I.C 2018 Modified Project Variant

Table 2 (2018 Modified Project Variant Land Use Program) provides the land uses proposed under the 2018 Modified Project Variant for both CP and HPS2. Table 3 (Land Use Comparison) provides the land uses proposed under the 2018 Modified Project Variant as compared to the projects approved in the 2010 FEIR Findings, which included the 2010 Project, Variant 1, and Variant 2A, each of which assumed either the presence or absence of a stadium, as well as the inclusion of the tower variant and the utility variant.

[10] The use of the term "alternative utility system" does not mean that these alternative systems would entirely supplant the use of traditional utility systems at CP and/or HPS2; instead, the alternative utility systems would be supplementary to traditional utility systems.

TABLE 2 2018 MODIFIED PROJECT VARIANT LAND USE PROGRAM

	2018 Modified Project Variant					
Use	***Candlestick***		***Hunters Point Phase 2***		***Total***	
Nonresidential Land Use[a]						
Artist Studio	0	sf	255,000	sf	**255,000**	**sf**
Community Use	50,000	sf	50,000	sf	**100,000**	**sf**
Arena	75,000	sf	0	sf	**75,000**	**sf**
	10,000	seats	0	seats	**10,000**	**seats**
Hotel (New Proposed HPS2 Use)	150,000	sf	120,000	sf	**270,000**	**sf**
	220	rooms	175	rooms	**395**	**rooms**
Institution (New Proposed HPS2 Use):[b]	0	sf	410,000	sf	**410,000**	**sf**
Elementary School/Junior High School	*0*	*sf*	*345,000*	*sf*	***345,000***	***sf***
	0	*students*	*±1,000*	*students*	***±1,000***	***students***[c]
High School/Post-Secondary	*0*	*sf*	*65,000*	*sf*	***65,000***	***sf***
	0	*students*	*±1,000*	*students*	***±1,000***	***students***[d]
Stadium	0	sf	0	sf	**0**	**sf**
	0	seats	0	seats	**0**	**seats**
R&D/Office	150,000	sf	4,265,000	sf	**4,415,000**	**sf**[e,f]
Regional Retail	635,000	sf	100,000	sf	**735,000**	**sf**
Neighborhood Retail	125,000	sf	226,000	sf	**351,000**	**sf**[g]
Maker Space	0	sf	75,000	sf	**75,000**	**sf**
Gross-Square-Foot Total	**1,185,000**	**sf**	**5,501,000**	**sf**	**6,686,000**	**sf**
Residential	7,218	units	3,454	units	**10,672**	**units**[h]
Car Parking						
Residential (Structured) Parking	7,218	spaces	3,454	spaces	**10,672**	**spaces**
Commercial (Structured) Parking	2,736	spaces	7,152	spaces	**9,888**	**spaces**
Parking Total	**9,954**	**spaces**	**10,606**	**spaces**	**20,560**	**spaces**
± On-Street Parking	*1,360*	*spaces*	*1,487*	*spaces*	***2,847***	***spaces***[i]
Marina	0	slips	300	slips	**300**	**slips**
Water Taxi	No		Yes		**Yes**	
Parks and Open Space						
New Parks	9.0	acres	173.9	acres	**182.9**	**acres**
New Sports Fields and Active Urban Recreation	0.0	acres	58.1	acres	**58.1**	**acres**
New State Recreation Area	5.8	acres	0.0	acres	**5.8**	**acres**
Existing State Recreation Area	90.9	acres	0.0	acres	**90.9**	**acres**
Parks and Open Space Total	**105.7**	**acres**	**232.0**	**Acres**	**337.7**	**acres**
Other Parks	7.1	acres	17.3	acres	**24.4**	**acres**[j]

NOTES:

a. All infrastructure is excluded from the development program's square footage, with the exception of any associated office space, which is included in the R&D/Office category.

b. Although schools were allowed as institutional uses in the 2010 HPS Redevelopment Plan, specific school uses were not analyzed in the 2010 FEIR and are considered new uses for purposes of Addendum 5.

b. Includes 400 students living on campus.

c. Includes 600 high school students and 400 college students. Half the high school students would be on site at any one time. One-third of the college students would be on site at any one time.

d. Consistent with the 2010 FEIR, R&D uses are defined to include research and development, office, and light-industrial uses.

e. Converts R&D/Office gsf to Institution gsf at HPS2.

f. Includes 71,000 sf of approved (but not constructed) commercial space from HPS1.

g. Includes 172 approved (but not constructed) housing units from HPS1, increasing the overall unit count for CP-HPS2 from 10,500 to 10,672.

h. On-street parking is in addition to structured parking.

i. Other Parks, which are detailed in Table A-5 of Addendum 5 Appendix A, and occur in both CP and HPS2, are included for informational purposes only; they are not included in the final calculation of useable parks and open space.

TABLE 3 LAND USE COMPARISON

	2010 Project (Project with Stadium, Candlestick Tower Variant D, Utility Variant, 49ers/Raiders Shared Stadium Variant)		*Variant 1 (Project without Stadium, with Candlestick Tower Variant D, Utility Variant, R&D Variant [Variant 1])*		*Variant 2A (Project without stadium, with Candlestick Tower Variant D, Utility Variant, Housing/R&D Variant [Variant 2A])*		*2018 Modified Project Variant*	
Land Use Plan Components	***CP***	***HPS***	***CP***	***HPS***	***CP***	***HPS***	***CP***	***HPS***
Residential Units	7,850	2,650	7,850	2,650	6,225	4,275	7,218	3,454
Office (gsf)	150,000	0	150,000	0	150,000	0	150,000	0
Hotel (gsf)	150,000	0	150,000	0	150,000	0	150,000	120,000
Research & Development/Office (gsf)	150,000	2,500,000	150,000	5,000,000	150,000	3,000,000	150,000	4,265,000
Regional Retail (gsf)	635,000	0	635,000	0	635,000	0	635,000	100,000
Neighborhood Retail (gsf)	125,000	125,000	125,000	125,000	125,000	125,000	125,000	226,000
Artists' Studios/Art Center (gsf)	N/A	255,000	N/A	255,000	N/A	255,000	N/A	255,000
Community Services (gsf)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Football Stadium (seats)	0	69,000[a]	0	0	0	0	0	0
Arena (seats)	10,000	0	10,000	0	10,000	0	10,000	0
Marina (slips)	N/A	300	N/A	300	N/A	300	0	300
Yosemite Slough Bridge	Auto/BRT/Ped		BRT/Ped		BRT/Ped		BRT/Ped	
Parking (spaces):								
• Residential	7,850	2,650	7,850	2,650	6,225	4,275	7,218	3,454
• Commercial	2,346	4,028	2,346	7,028	2,346	4,428	2,736	7,152
• General and Commercial (on-street)	1,360	683	1,360	1,678	1,360	1,428	1,360	1,487
Total Parking (Spaces)	*18,917*		*22,912*		*20,062*		*23,407*	
Total Park and Rec Space (acres):								
• New Parks	8.1	140	8.1	152.4	8.1	150.9	9.0	173.9
• Active Recreation	N/A	91.6	N/A	69.8	N/A	70.9	0.0	58.1
• State Parkland	96.7	N/A	96.7	N/A	96.7	N/A	96.7	0.0
Subtotal Park and Rec Space	*104.8*	*231.6*	*104.8*	*222.2*	*104.8*	*221.8*	*105.7*	*232.0*

SOURCE: San Francisco Planning Department, *Candlestick Point–Hunters Point Shipyard Phase II Project California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations*, 2010, Table A (Comparison of Land Use Development Scenarios [Stadium and Non-Stadium Options]); FivePoint, 2018.

NOTE:

a. While the Findings associated with the 2010 FEIR reflected 70,000 seats for the stadium, the 2010 FEIR and the traffic analysis associated with the 2010 FEIR assumed 69,000 seats; therefore, Addendum 5 reflects 69,000 seats.

Appendix A Tables A-2 through A-4 (Table A-2 [Comparison of 2018 Modified Project Variant to 2010 Project], Table A-3 [Comparison of 2018 Modified Project Variant to 2010 R&D Variant (Variant 1)], and Table A-4 [Comparison of 2018 Modified Project Variant to 2010 R&D/Housing Variant (Variant 2A)] also provide a comparison of the 2018 Modified Project Variant to the 2010 Project, Variant 1, and Variant 2A; however, these tables further show net changes by land use, which is not provided in Table 3.

Figure 5 (CP-HPS2 2010 Project Land Use Plan) illustrates the arrangement of land uses under the 2010 Project, and Figure 6 (CP-HPS2 2018 Modified Project Variant Land Use Plan) illustrates the arrangement of land uses under the 2018 Modified Project Variant.

Table A-1 (Comparison of CP-HPS2 Project Changes Since 2010) of Addendum 5 Appendix A provides a summary of the CP-HPS2 Project changes that have occurred since 2010. The changes are provided by primary project component (e.g., land use plan, phasing, utility systems, transportation and transit system, and mitigation measures).

I.C.1 HPS2 Proposed Modifications

At HPS2, the 2018 Modified Project Variant generally includes revisions to the proposed land uses and height limits; adjusted locations for two high-rise towers; reconfiguration of the design and sizes of parks and open space areas; revisions to the number of housing units proposed by the Project Sponsor; revisions to the street network and roadway cross-section dimensions and alignments, the provision of water taxi infrastructure and two bridges; revisions to the proposed utility network and systems; and changes to the phasing plan.

Land Use Plan

The 2018 Modified Project Variant would result in changes to the distribution and amount of square footage associated with nonresidential land uses at HPS2. The proposed square footage for new and existing uses within HPS2 (5,501,000 gsf) was determined by identifying the maximum amount of R&D square footage allowed under the HPS Redevelopment Plan and analyzed in the 2010 FEIR (5,000,000 gsf, as analyzed in Variant 1), and converting a portion of that space to other uses based on vehicle trip generation. The commensurate reduction in R&D floor space would accommodate an increase in square footage for retail/maker space, school/institutional uses, and a hotel.

HPS2 Residential Land Uses

The 2018 Modified Project Variant would result in a total of 3,454 residential units at HPS2, which represents an increase of 804 units as compared to the 2010 Project of 2,650 units.

HPS2 Commercial and Institutional Land Uses

The commercial and institutional and use modifications under the 2018 Modified Project Variant are described below and shown on the Proposed HPS2 Land Use Plan (Figure 6).

SOURCE: Lennar Urban, 2009

FIGURE 5 Addendum 5 to the CP-HPS2 2010 FEIR

CP-HPS2 2010 PROJECT LAND USE PLAN

SOURCE: FivePoint, 2018

FIGURE 6

Addendum 5 to the CP-HPS2 2010 FEIR

CP-HPS2 2018 MODIFIED PROJECT VARIANT LAND USE PLAN

Retail

As shown in Table 2, the 2018 Modified Project Variant would result in approximately 400,000 sf of retail uses, which would include regional retail (up to 100,000 sf), neighborhood retail and maker space, which is approximately 276,000 sf more than assumed under the 2010 Project for retail uses; further, no regional retail or maker space was assumed in the 2010 Project.

Maker space would be used for contemporary forms of small-scale manufacturing activities in urban areas, as further described in the Hunters Point Shipyard Redevelopment Plan.[11] At HPS2, maker spaces would specifically involve small-scale manufacturing and post-manufacturing activities, such as (but not limited to) craft, industrial arts and design, robotics, woodwork, digital technologies and electronics, jewelry, clothing and apparel, 3D printing, food and beverage (production, tasting, and sales), and bicycle repairs, among many others. Maker spaces typically have a small retail storefront.

Hotel

The 2018 Modified Project Variant would include a new proposed hotel use with approximately 175 rooms and 120,000 sf.

Schools

The 2018 Modified Project Variant would provide for one or more public or private schools as new proposed uses. A high school and postsecondary school would be expected to accommodate up to 1,000 students in 65,000 sf of space; however, school schedules would be staggered, resulting in fewer students present on site at any time. An elementary and junior high school would accommodate approximately 1,000 students in 335,000 sf of space, with up to 400 students residing on campus.

Other Uses

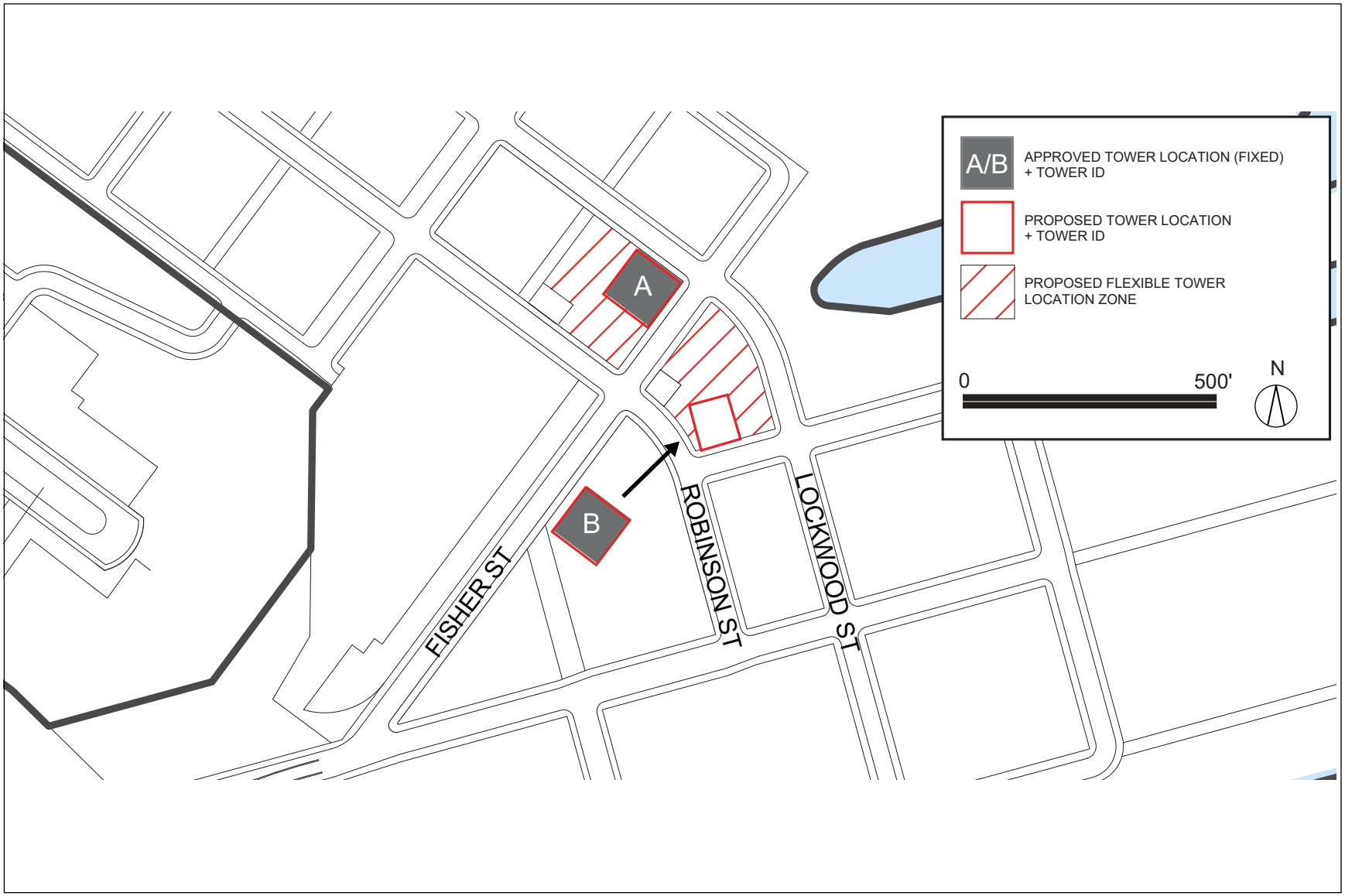
As shown in Table 2, community uses, artist uses, the arena, and the marina remain unchanged as compared to the 2010 Project. Parks and open space are discussed in "Parks and Open Space Plan," p. 22, and the water taxi and parking are discussed in "Transportation Plan," p. 27.

Tower Locations and Building Heights

Tower Location

The 2018 Modified Project Variant would modify the location of Towers A and B, as illustrated in Figure 7 (Tower Locations: Towers A and B).

[11] All land uses are described and defined in either the Bayview Hunters Point Redevelopment Plan or the Hunters Point Shipyard Redevelopment Plan.



SOURCE: FivePoint, 2018.

FIGURE 7 Addendum 6 to the CP-HPS2 2010 FEIR

TOWER LOCATIONS: TOWERS A AND B

Tower A would be located in the same location and on the same block as shown in the 2010 FEIR; however, a flexible tower zone would be added to the remainder of the block. Tower B would be located one block north of its previously approved location, and a flexible tower location zone would also be created for the balance of this block. The establishment of a flexible tower location zone would provide flexibility in the geographic placement of Tower A and Tower B. If the zone is established, both Towers A and B could be located in any part of the flexible tower location zone subject to 2018 HPS D4D requirements. However, for purposes of environmental analysis, the towers are proposed at the locations depicted in Figure 7. While the heights of both towers would not change, the 2018 HPS D4D would allow screened mechanical equipment to be up to 10 percent of the total height of the building (within an area that represents 85 percent of the building floorplate).

Maximum Building Heights

The 2018 Modified Project Variant would change maximum building heights and/or bulk for HPS2 as compared to the 2010 Project (that included a stadium). This would both increase and decrease heights in various locations. Maximum building heights under the 2018 Modified Project Variant are shown in Figure 8 (Building Heights) and described below. Further, Figure 36 (Height Changes: 2018 Modified Project Variant vs. 2010 Project), p. 167, illustrates the change in maximum building heights throughout HPS2 when comparing the 2018 Modified Project Variant to the 2010 Project.

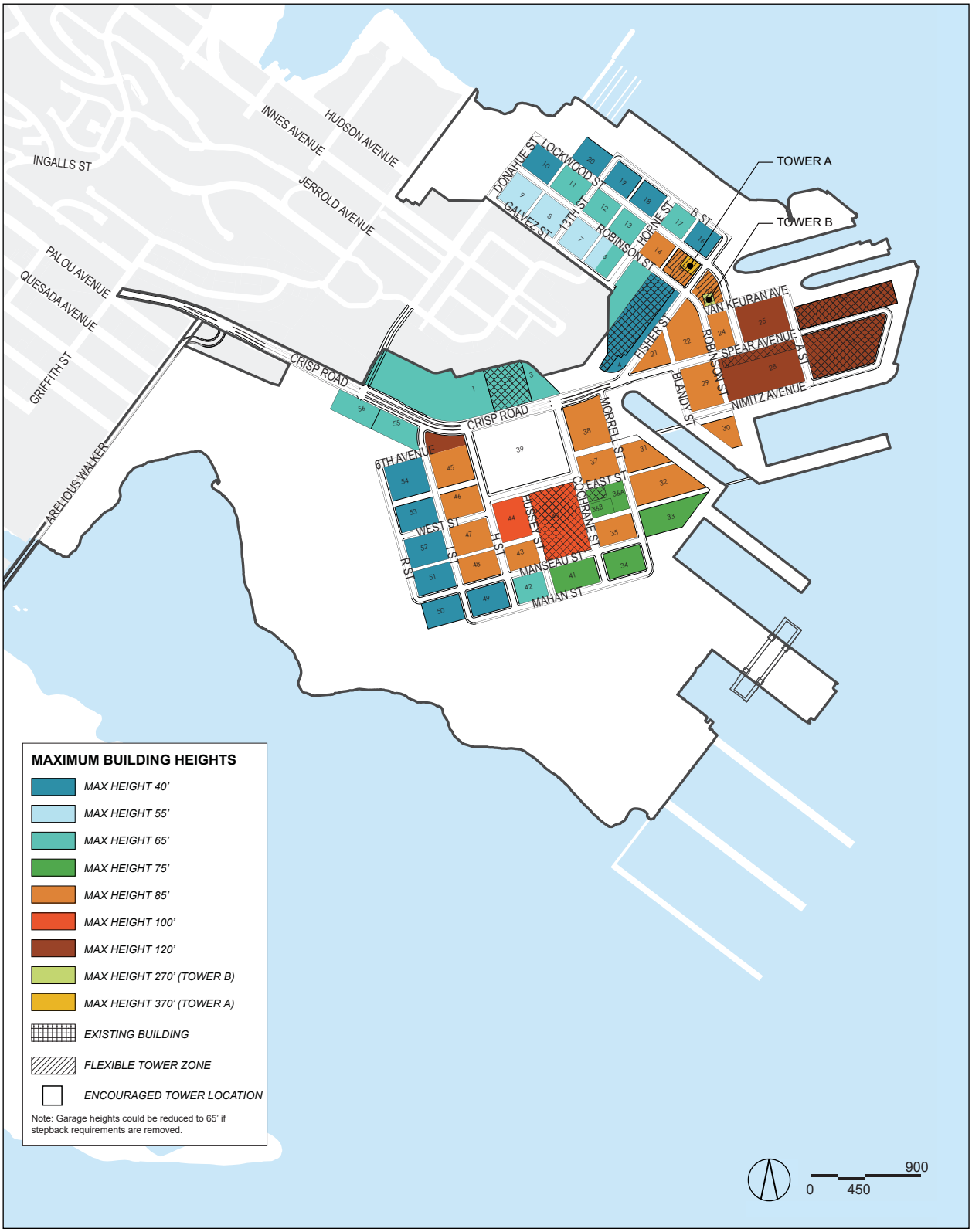
North Shoreline District

Under the 2018 Modified Project Variant, the maximum building heights in the North Shoreline District would be modified as illustrated by Figure 8 and generally described below:

- The maximum height of waterfront buildings in 2010 was 65 feet, and would generally be reduced to 40 feet, with the exception of one Agency Lot, which would remain at 65 feet.
- The maximum height of buildings along Galvez and Robinson Streets in 2010 was 65 feet for all blocks except two (on either side of Robinson/Horne intersection) which had a maximum height of 85 feet. Building heights along Galvez and Robinson Streets would generally remain at 65 feet or below, with the exception of Lots 14 and 15, which would have a maximum height of 85 feet. In 2010, Lot 14 had a maximum height of 85 feet, and as such, no height variance would occur.
- The location of Tower A, with a maximum (and unchanged) height of 370 feet, would be modified as described above.

Village Center District

Under the 2018 Modified Project Variant, building heights in the Village Center District are not proposed to change. Maximum building heights in this district would remain at 65 feet as illustrated by Figure 8.



SOURCE: FivePoint, 2018.

FIGURE 8 Addendum 5 to the CP-HPS2 2010 FEIR

BUILDING HEIGHTS

Wharf District

Under the 2018 Modified Project Variant, building heights in the Wharf District would be modified as illustrated by Figure 8 and generally described as follows:

- The location of Tower B, with a maximum (and unchanged) height of 270 feet, would be modified as described above.
- The remaining blocks (or portions thereof) within this district would generally increase in height. Height increases would be from a previous maximum height of 65 feet to 85 and 120 feet in height, and from 85 and 105 feet to 120 feet in height. A number of blocks would remain at 85 feet. Existing buildings would remain at 120 feet.

Warehouse District

Under the 2018 Modified Project Variant, building heights in the Warehouse District would be modified as illustrated by Figure 8 and generally described as follows:

- Under the 2010 Project, the area now known as the Warehouse District was proposed to only contain a Stadium with a maximum height of 156 feet. North of Crisp Road, the maximum building height was proposed to be 85 feet with small portions of land with a maximum building height of 65 feet. South of Crisp Road, but north of the Stadium, the maximum building height was proposed to be 65 feet at two portions of land directly abutting Crisp Road.
- Generally, the maximum height of the community use and residential blocks along the waterfront, west of H Street, would be 40 feet on some blocks and would be 85 feet on some blocks;
- Generally, the maximum height of the commercial blocks (which include R&D) and some residential blocks would be 75, 85, 100, or 120 feet; and
- For Lots 1, 2, 3, 55, and 56, which abut Crisp Road, maximum building heights would be 65 feet, with an interspersed existing building within this height parameter.

The arrangement of building heights throughout the Warehouse District would be adjusted to accommodate the revised street layout. The additional height would allow for a taller floor-to-floor height at ground level, provide flexibility for different commercial uses, amenities and a distinctive built form throughout the neighborhood. The reduction in height at the western perimeter reflects the programming for townhomes, and facilitates the "step down" of built form at the waterfront and park.

Parks and Open Space Plan

The 2018 Modified Project Variant would replace previously planned parks with new parks and reconfigure the design and sizes of parks and open space areas at HPS2. Table 4 (2018 Modified Project Variant Parks and Open Space Acreages) summarizes the acreage of parks and open space that would result from the 2018 Modified Project Variant. The difference in parks and open space acreage between the 2018 Modified Project Variant and the 2010 Project, 2010 R&D Variant

(Variant 1), and 2010 R&D/Housing Variant (Variant 2A) are provided in Table A-5 of Appendix A.[12] Further, Figure 9 (HPS2 Parks and Open Space) shows parks and open space at HPS2 for the 2018 Modified Project Variant and the 2010 Project. Overall, the 2018 Modified Project Variant would result in an increase of approximately 1.3 acres of new parks as compared to the 2010 Project. The increase in parks and open space is primarily attributed to the Grassland Ecology Park, Water Room/Dry Dock 4, and the Green Room. While there is an overall net increase in parks and open space acreage, there is a decrease of approximately 33.5 acres associated with sports fields and active urban recreational areas at HPS2 when comparing the 2018 Modified Project Variant to the 2010 Project; however, even with the reduction in acreage of sports fields and active urban recreational areas, the 2018 Modified Project Variant would accommodate the same number of sports fields as compared to the 2010 Project.

TABLE 4 2018 MODIFIED PROJECT VARIANT PARKS AND OPEN SPACE ACREAGES

	2018 Modified Project Variant
HPS2	
New Parks	
Grassland Ecology Park	106.8
Heritage Park	15.5
Hunters Point Mini Park	0
Hunters Point Neighborhood Park	0
Hunters Point Park Blocks	0
Hunters Point South Park	0
Hunters Point Wedge Park	0
Northside Park	12.8
R&D Plaza	0
Shipyard Hillside Open Space[a]	2.4
Water Room/Dry Dock 4	7.3
Waterfront Promenade	29.1
New Parks Subtotal	*173.9*
New Sports Fields and Active Urban Recreation	
Maintenance Yard	5.5
Multi-Use Lawn/Fields	20.5
Sports Field Complex	28.7
Waterfront Recreation and Event Pier	3.4
New Sports Fields and Active Urban Recreation Subtotal	*58.1*
HPS2 POSH Total	***232.0***

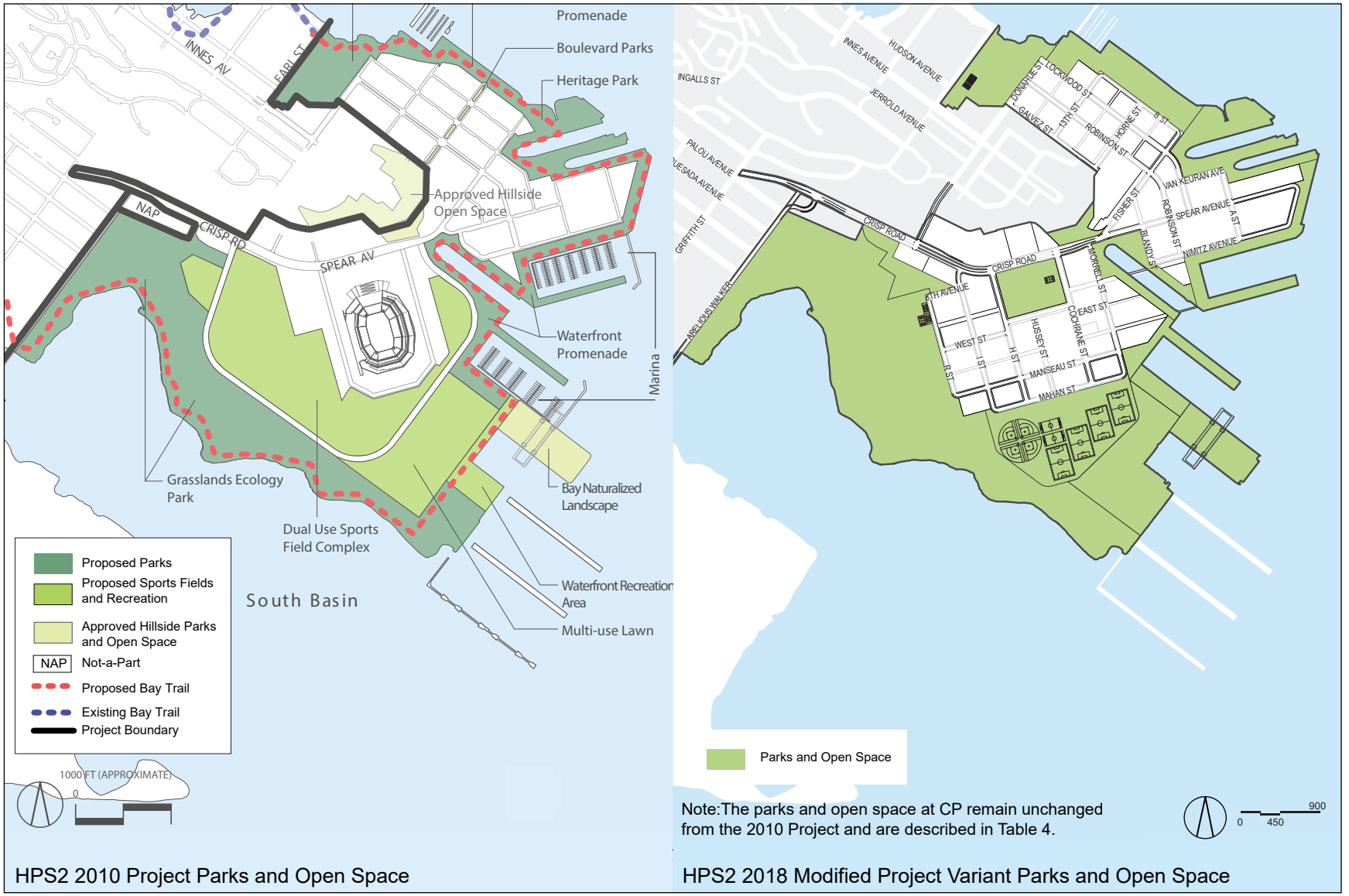
[12] The Shipyard Hillside Open Space, Horne Boulevard Park, and the Bay Naturalized Habitats below the Regunning Crane, were excluded from the total parks calculation in the 2010 FEIR because they were not considered to serve a functional active or passive recreation purpose due to topography and terrain. OCII has re-evaluated the Shipyard Hillside Open Space and determined that it does function as a park; accordingly, this acreage is included in the total parks calculations for the 2018 Modified Project Variant. Horne Boulevard Park was not included in the total acreage for either the 2010 FEIR or the 2018 Modified Project Variant because it was considered as part of the streetscape, rather than a separate park. In the 2018 Modified Project Variant, the new open space designated as the Green Room is also not included in the total acreage of new parks because it would be privately owned, although it would be publicly accessible.

TABLE 4 2018 MODIFIED PROJECT VARIANT PARKS AND OPEN SPACE ACREAGES

	2018 Modified Project Variant
Other Parks[b]	
Green Room (New)	8.1
Gunning Crane Pier Habitats	9.2
Shipyard Hillside Open Space	Provided under New Parks
Horne Boulevard Park	0.0
Other Parks Subtotal	*17.3*
HPS2 TOTAL	***249.3***
CANDLESTICK POINT	
New Parks	
Alice Griffith Neighborhood Park	1.4
Bayview Gardens/Wedge Park	3.7
Candlestick Point Neighborhood Park	3.1
Mini Wedge Park	0.8
New Parks Subtotal	*9.0*
State Park Land	
Bayview Gardens North	9.5
Grasslands South	10.3
The Heart of the Park (includes new State Park)	15.4
The Last Port (includes new State Park)	14.6
The Last Rubble	24.5
The Neck (includes new State Park)	4.9
The Point	6.1
Wind Meadow	11.4
State Park Land Subtotal	*96.7*
CP POSH Total	***105.7***
Other Parks[a]	
Bayview Hillside Open Space	3.5
Earl Boulevard Park	0.0
Jamestown Walker Slope	3.6
Other Parks Total	***7.1***
CP Total	**112.8**
CP-HPS2 TOTAL	***362.1***
Total Parks and Open Space (Excluding "Other Parks")	
New Parks	182.9
New Sports Fields and Active Urban Recreation	58.1
State Park Land	96.7
Total Parks and Open Space (Excluding "Other Parks") Total	***337.7***
Other Parks Total	**24.4**

a. The Shipyard Hillside Open Space was listed in “Other Parks” in the 2010 FEIR because OCII did not consider it as creditable parkland; however, OCII now considers the Shipyard Hillside Open Space as creditable park land, and, accordingly, it is now listed under “new parks.”

b. Other Parks are included for informational purposes only; they are not included in the final calculation of parks and open space.



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010 and FivePoint, 2018.

FIGURE 9 Addendum 5 to the CP-HPS2 2010 FEIR

HPS2 PARKS AND OPEN SPACE

Green Room (Warehouse District)

As a result of retaining the existing street grid to reflect the historic shipyard configuration, the 2018 Modified Project Variant would remove three individual parks (Hunters Point Park Blocks, Hunters Point Wedge Park, and R&D Plaza) included in the 2010 Project and provide a new, consolidated 8.1-acre publicly accessible private open space (POPOS) on Crisp Road, known as the Green Room. The Green Room would be a key public space at HPS2 and would be privately maintained and programmed to provide amenities that serve both local and regional functions. Two existing buildings (#411 and #813) would continue to be located on the southern and northern edges of the park, respectively.

Waterfront Promenade North and Water Room

The Waterfront Promenade, which includes the Water Room/Dry Dock 4 area, would be modified under the 2018 Modified Project Variant to increase the acreage of the park by 6.9 acres, as compared to the 2010 Project. This increase in acreage is the result of the removal of a row of development blocks on the northern edge of the North Shoreline District, thereby increasing the setback of the development to the shoreline, as well as increasing in the open space area at the end of Dry Dock 4. A new civic square would be created in the Wharf District at the end of Dry Dock 4 near Fisher Street and Spear Avenue, known as the Water Room. The Water Room would wrap around Dry Dock 4 and be programmed to establish a central community gathering point. Dry Dock 4 would have two new bridges and new seating constructed for the full extent of the dock.

The design plans for the Water Room would be required by the proposed amendments to the DDA to comply with the Standards for Preservation outlined in the SOI's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*,[13] and the preliminary Preservation Guidelines that have been developed to guide the design of the improvements associated with Dry Dock 4. The preliminary preservation guidelines are included in Appendix H (Historic Resources Memorandum) Table 2 (Dry Dock 4 Preservation Guidelines).

Grasslands Ecology Park

The Grasslands Ecology Park would be reconfigured to respond to the revised location of the sports field complex and the condensed street layout in the Warehouse District, and would increase in size by approximately 24.7 acres (from 82.1 acres under the 2010 Project to 106.8 acres).

Shipyard Hillside Open Space

The Shipyard Hillside Open Space would provide a pedestrian connection between Hilltop Park (HPS1) and the Water Room (HPS2), as envisioned in the 2010 Project. Also consistent with the 2010 Project, a pedestrian plaza would be created at the base of the hillside between Fisher Street and Building 101.

[13] U.S. Department of the Interior, 2017.

The Shipyard Hillside Open Space was listed in "Other Parks" in the 2010 FEIR because OCII did not consider it as creditable park land; however, proposed amendments to the Parks, Open Space, and Habitat Concept Plan considers the Shipyard Hillside Open Space as creditable park land since the stairway connecting the Hilltop Park and the Water Room provides an active recreational experience, and, accordingly, it is now listed under "new parks."

Sports Fields and Active Urban Recreational Areas

The sports field complex program would be accommodated in a more efficient layout than the 2010 Project because it co-locates the sports fields, rather than providing them in two different locations. The relocation of the sports fields would create greater connectivity of the parks and open space network along the waterfront; however, the size of this complex would be reduced by approximately 33.5 acres (from 91.6 acres in the 2010 Project to 58.1 acres), as shown in Table 5 (Comparison of 2018 Modified Project Variant to 2010 Project, R&D Variant (Variant 1), and Housing/R&D Variant (Variant 2A) (Parks and Open Space)).

Maintenance Yard

The maintenance yard, which would be 5.5 acres in size and would now provide services essential to the maintenance of all parks that were not considered under the 2010 Project (and hence, is considered additional parks and open space acreage under the 2018 Modified Project Variant). Crisp Road would provide access to the maintenance yard, allowing the facility to service the parks on both CP and HPS2.

TABLE 5 COMPARISON OF 2018 MODIFIED PROJECT VARIANT TO 2010 PROJECT, R&D VARIANT (VARIANT 1), AND HOUSING/R&D VARIANT (VARIANT 2A) (PARKS AND OPEN SPACE)

	2010 Project	*2010 R&D Variant (Variant 1)*	*2010 Housing/ R&D Variant (Variant 2A)*	*2018 Modified Project Variant*	*Net Change from 2010 Project to 2018 Modified Project Variant*
New Parks	148.1	160.5	159.0	182.9	34.8
New Sports Fields and Active Urban Recreation	91.6	69.8	70.9	58.1	(33.5)
State Park Land	96.7	96.7	96.7	96.7	0.0
Subtotal	*336.4*	*327.0*	*326.6*	*337.7*	*1.3*
Other Parks	19.8	19.8	19.8	24.4	4.6

Transportation Plan

The 2018 Modified Project Variant would incorporate changes to the approved 2014 Transportation Plan related to roadway location, function, configuration phasing, and cross-section at HPS2. These changes to roadway cross sections would encourage slow-speed auto traffic and better accommodate transit, bicyclists, and on-street parking based on recent San Francisco Municipal Transportation Agency (SFMTA) design guidance for travel lane widths.

The extension of existing transit lines and the proposed new transit lines remain consistent with the 2010 Project described in the 2010 FEIR and the 2014 Transportation Plan. However, the Transit Center, consisting of on-street bus layovers and other facilities, would be moved two blocks to the northeast and a modified bicycle network is proposed; both of these changes occurred in consultation with SFMTA staff. The proposed changes to the bicycle network are shown in Figure 26 (2018 Modified Project Variant Bicycle Network Plan).

Reconfiguration of Street Network in Warehouse District

Streets in the Warehouse District would be reconfigured to a pattern that is more consistent with the existing Navy street network and Navy parcel boundaries. The reconfigured street network would facilitate a more logical sequence of development and construction phasing consistent with the progressive transfer of land parcels from the Navy and would allow for additional existing buildings to be retained, including Building 351 and Building 411. Refer to Figure 6 (CP-HPS2 2018 Modified Project Variant Land Use Plan) for a depiction of the reconfigured street network under the 2018 Modified Project Variant.

Donahue Street Extension

The 2018 Modified Project Variant would extend Donohue Street from La Salle Avenue/Kirkwood Avenue southwards to Crisp Road, pending dedication of land from Mariners Village to the City. The extension would provide a new vehicular and pedestrian connection to HPS1 from the south, connect existing communities with future recreation areas and services in HPS2, and redirect bypass traffic.

The length of the extension would be approximately 750 feet. The width of the right-of-way would be 60 feet, made up of two 12-foot-wide travel lanes, two 6-foot-wide sidewalks and two 12-foot-wide grades accommodating the cut into the hillside.

Street Cross-Section Revisions

The 2018 Modified Project Variant reflects input from SFMTA staff, the San Francisco Planning Department, OCII, San Francisco Department of Public Works, and the San Francisco Fire Department regarding cross-section dimensions for various street components, such as width of parking lanes, width of travel lanes, and width of bicycle lanes. Additionally, Spear Avenue, Lockwood Street, and Donahue Street have been revised to include transit-only lanes to ensure efficient transit operation within the HPS2 site. While some refinements are proposed to specific lane dimensions, all auto and transit travel lanes would continue to be within a range of 10 to 12 feet, consistent with the range of widths analyzed in the 2010 FEIR. Parking lanes would be 8 feet wide, increasing to 9 feet wide when adjacent to Class II bicycle lanes. Class I, Cycletrack, and Class II bicycle lanes would generally be 6 to 7 feet wide, except when adjacent to (9-foot-wide) on-street parking or buffered from adjacent traffic, in which case they could be 5 feet wide. With the exception of the extension of Donahue Street, as noted above, sidewalk widths would range

primarily from 12 to 15 feet wide, throughout the HPS2 site, consistent with the range of sidewalk widths described in the 2010 FEIR (p. III.D-118).

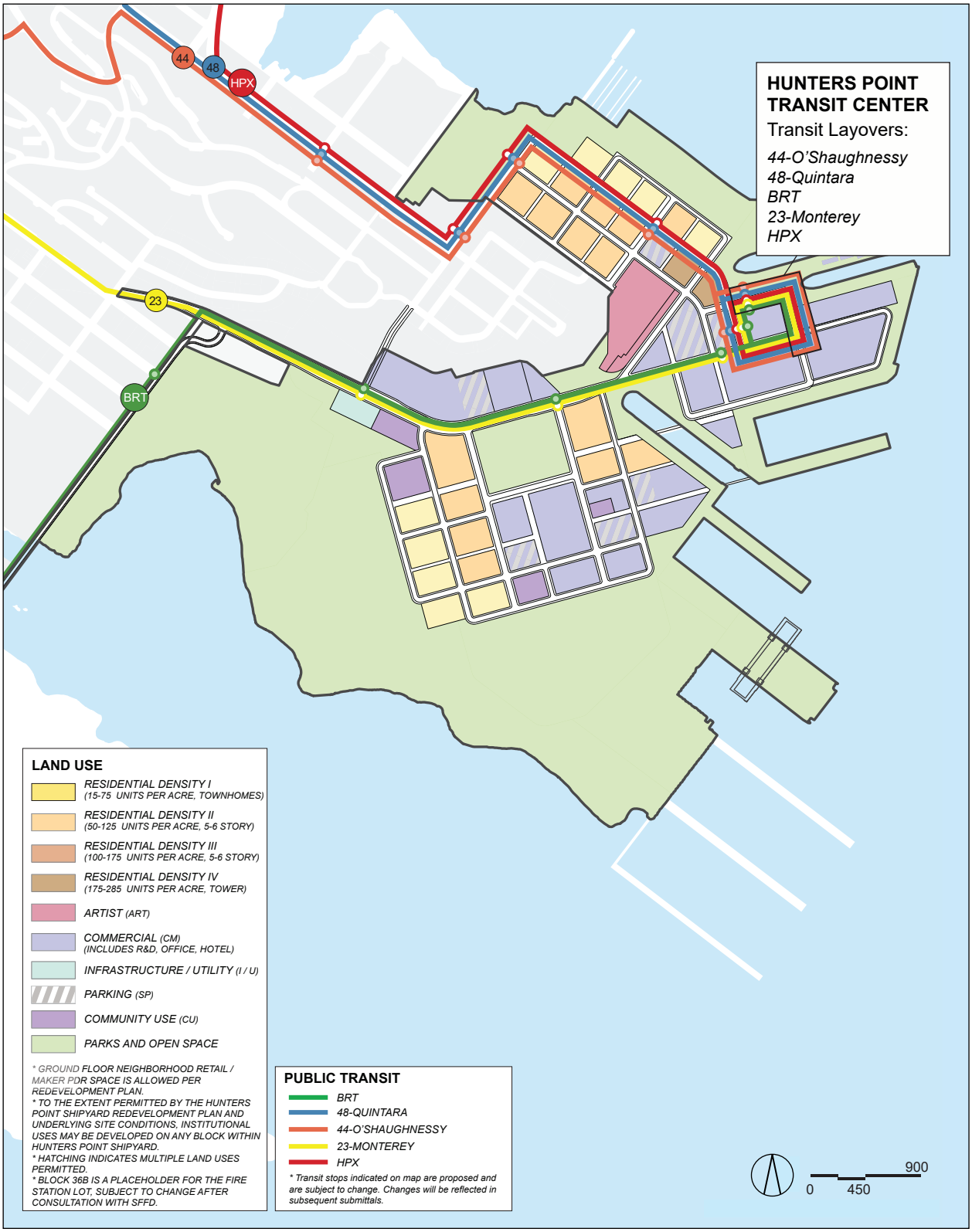
Transit Network Modifications

In the approved transit network, the Hunters Point Transit Center was located on the south side of Spear Avenue near the intersection of Lockwood Street. Under the 2018 Modified Project Variant, the Hunters Point Transit Center would be located on the north side of Spear Avenue, near Dry Dock 2, as indicated on Figure 10 (HPS2 Transit Improvements). The transit center would serve all transit lines serving HPS2 and would provide 14 bus bays (an increase of four bus bays over the 2014 Transportation Plan).

As shown on Figure 10 and Figure 11 (HPS2 Transit Layover Detail), in the 2018 Modified Project Variant, four existing MUNI-bus lines servicing the Shipyard (Route 44-O'Shaughnessy, Route 48-Quintara, Route 28R-19th, and Route 23-Monterey) would be extended to terminate and re-start at the Transit Center, and the proposed Hunters Point Express (HPX) bus service to Downtown San Francisco would also connect to the Transit Center.

Bicycle Network Modifications

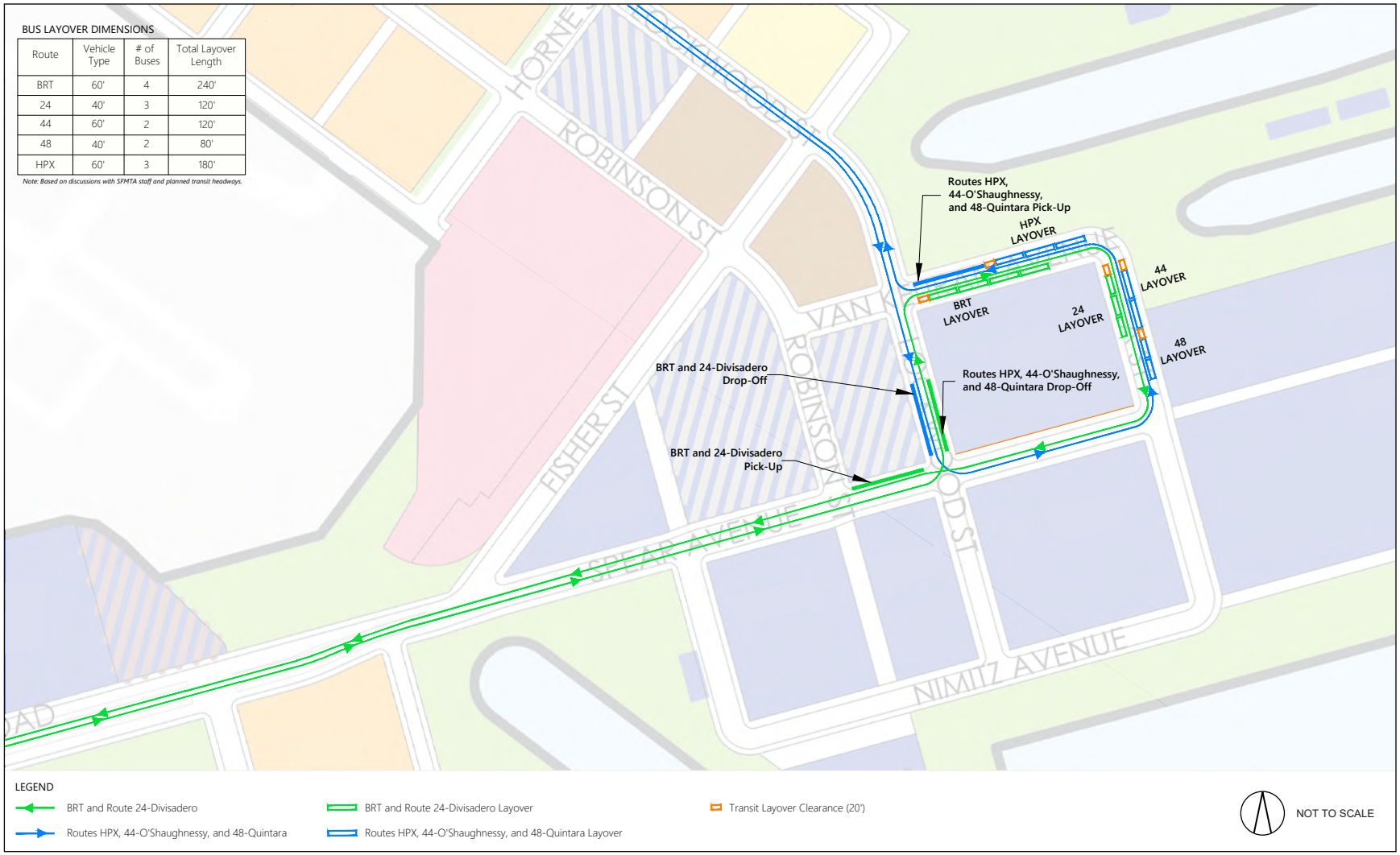
The primary change to the bicycle network in the 2018 Modified Project Variant as compared to the changes evaluated in Addendum 1 and approved in the 2014 modifications to the CP-HPS2 Transportation Plan (in Attachment 6-N to the 2014 Transportation Plan) would be the re-alignment of the cycletrack facility in the Warehouse District. The 2018 Modified Project Variant proposes an institutional/educational use and some R&D uses on the northern side of Crisp Avenue, which may require driveways or other curb cuts that could disrupt the cycletrack. Therefore, the 2018 Modified Project Variant proposes to align the cycletrack through the open space and park area south of Crisp Avenue and along one of the midblock breaks in the Warehouse District. From there, it would extend across the new pedestrian/bicycle bridge across Dry Dock 4, where it would connect to the planned portion of the Bay Trail traversing the perimeter of HPS and with proposed facilities on Robinson Street. The facility on Robinson Street would be constructed as a Class IV separated facility providing an additional buffer between cyclists and adjacent traffic. These changes would ensure a more direct route between HPS and CP and would ensure a complete connection within HPS and to proposed cycletrack facilities west of HPS within the proposed India Basin Mixed-Use Development Project. As a result, the 2018 Modified Project Variant would provide a more complete and connected network of routes and facilities and would penetrate through the center of the Warehouse District, instead of along its northern edge as had previously been contemplated. Other minor refinements would continue to improve the overall bicycle network in CP and HPS2.



SOURCE: FivePoint, 2018.

FIGURE 10 Addendum 5 to the CP-HPS2 2010 FEIR

HPS2 TRANSIT IMPROVEMENTS



SOURCE: Fehr & Peers, 2018.

FIGURE 11 Addendum 5 to the CP-HPS2 2010 FEIR

HPS2 TRANSIT LAYOVER DETAIL

Bridges Over Dry Dock 4

As previously mentioned, the 2018 Modified Project Variant would include construction of two bridges over Dry Dock 4, as depicted in Figure 12 (Bridge Locations). The first, the Water Room Bridge, would be a pedestrian and bicycle bridge located in the western portion of Dry Dock 4 near the Water Room. The second, the Eastern Bridge, would be a pedestrian bridge located in the eastern portion of Dry Dock 4, near the entry point to the San Francisco Bay. Only the Water Room Bridge would serve both bicycles and pedestrians. The Eastern Bridge would allow small vessels to pass underneath the bridge, and the clearance required for these vessels would render it unsafe for bicyclists.

The design plans for the bridges would be required by the proposed amendments to the DDA to comply with the Standards for Preservation outlined in the SOI's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*,[14] and the preliminary Preservation Guidelines that have been developed to guide the design of the improvements associated with Dry Dock 4. The preliminary Preservation Guidelines are outlined in Table 21 (Dry Dock 4 Preservation Guidelines) of Section II.B.9 (Cultural Resources) and Table 2 (Dry Dock 4 Preservation Guidelines) of Appendix H.

Parking

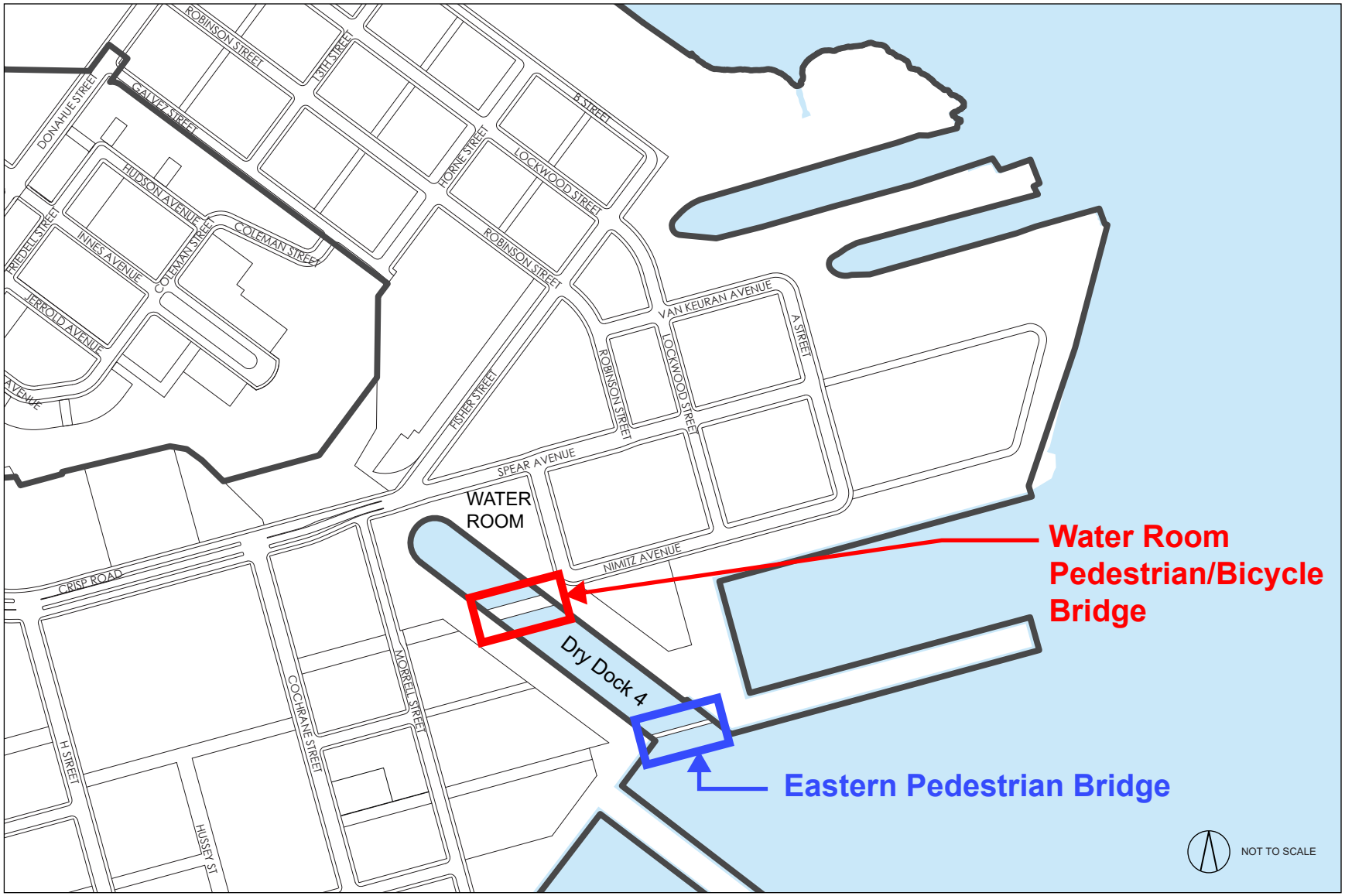
The total on- and off-street parking supply would be modified corresponding to changes in land use in the 2018 Modified Project Variant compared to the 2010 R&D Variant (Variant 1), which is most comparable to the 2018 Modified Project Variant because it does not include a stadium use. Specifically, there would be an overall increase in the maximum spaces allowed at Hunters Point Shipyard of 737 spaces and a corresponding decrease in the maximum amount of parking allowed at CP of 242 spaces. As shown in Table 6 (Maximum Allowed Parking Supply), the resulting maximum total of parking allowed within the 2018 Modified Project Variant would be 495 spaces more than allowed under 2010 FEIR Variant 1 (R&D).

TABLE 6 MAXIMUM ALLOWED PARKING SUPPLY

	2010 Project			*2010 R&D Variant (Variant 1)*			*2010 Housing/R&D Variant (Variant 2A)*			*2018 Modified Project Variant*		
	CP	***HP***	***Total***	***CP***	***HP***	***Total***	***CP***	***HP***	***Total***	***CP***	***HP***	***Total***
On-Street	1,360	683	***2,043***	1,360	1,678	***3,038***	1,360	1,428	***2,788***	1,360	1,487	***2,847***
Off-Street	10,196	6,678	***16,874***	10,196	9,678	***19,874***	8,571	8,703	***17,274***	9,954	10,606	***20,560***
Total	***11,556***	***7,361***	***18,917***	***11,556***	***11,356***	***22,912***	***9,931***	***10,131***	***20,062***	***11,314***	***12,093***	***23,407***

SOURCE: Candlestick Point–Hunters Point Shipyard Phase II Development Plan EIR, 2010; and FivePoint, 2018.

[14] U.S. Department of the Interior, 2017.



SOURCE: FivePoint, 2018.

FIGURE 12 Addendum 5 to the CP-HPS2 2010 FEIR

HPS2 BRIDGE LOCATIONS

Commercial and Residential Structured Parking

The 2018 Modified Project Variant does not change the commercial or residential parking ratios required by the Transportation Plan and analyzed in the 2010 FEIR. The parking ratio for the new schools would be consistent with Planning Code provisions, and the parking ratio for regional retail uses would be consistent with those in the 2016 CP D4D. As shown in Table 2 (2018 Modified Project Variant Land Use Program) and Table 6 (Maximum Allowed Parking Supply), a total of 9,954 structured parking spaces would be provided at CP and a total of 10,606 structured parking spaces would be provided at HPS2, for a total of 20,560 structured parking spaces.

Table 6 and Appendix A Table A-2 show that the 2018 Modified Project Variant would result in a decrease of 242 structured parking spaces at CP and an increase of 928 structured parking spaces at HPS2, resulting in a total increase at the CP-HPS2 project site of 686 structured parking spaces, as compared to the 2010 R&D Variant (Variant 1).

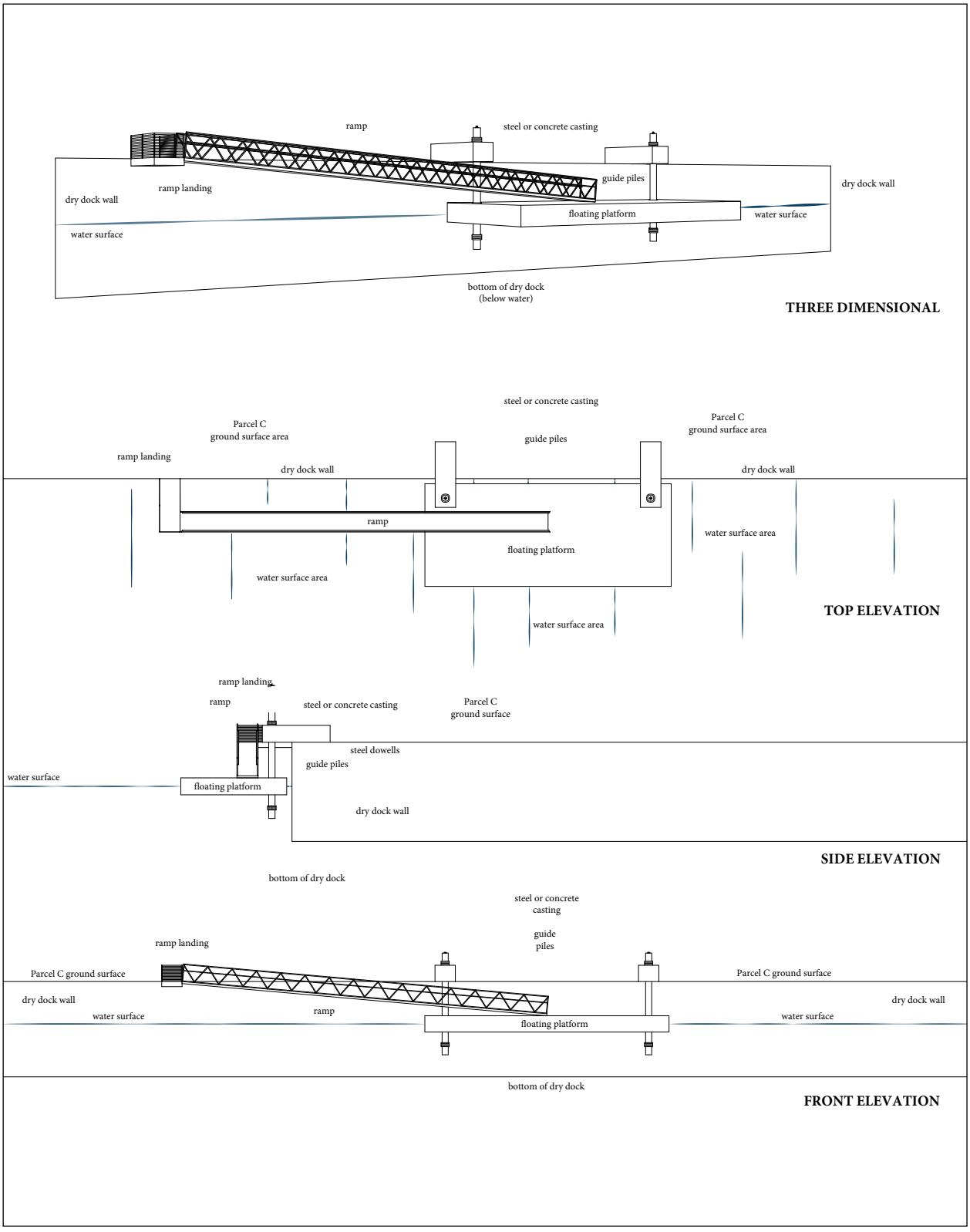
General and Commercial On-Street Parking

On-street parking was estimated using the linear feet of curbside space available for parking in the street cross sections. The 2018 Modified Project Variant includes revised street cross sections, which results in revised estimates of on-street parking availability. As more-detailed plans are developed, this estimate could change. As shown in Table 2 (2018 Modified Project Variant Land Use Program) and Table 6 (Maximum Allowed Parking Supply), a total of 1,360 on-street parking spaces would be provided at CP and a total of 1,487 on-street parking spaces would be provided at HPS2, for a total of 2,847 on-street parking spaces.

Table 6 and Appendix A Table A-2 show that the 2018 Modified Project Variant would result in a decrease of 191 on-street parking spaces at HPS2 as compared to the 2010 R&D Variant (Variant 1).

Water Taxi

The 2018 Modified Project Variant would establish a water taxi service to and from HPS2 at Dry Dock 4 to serve residents and visitors to the Project site. Water taxi services to and from HPS would dock at a landing at Dry Dock 4. New infrastructure on the land and in the water would be constructed to accommodate the services. Figure 13 (Water Taxi Dock at HPS2 Dry Dock 4) provides conceptual drawings depicting the design of the water taxi dock, including all of the elements described below (except the waiting area) in the sections entitled Infrastructure within the Water and Infrastructure on the Land.



SOURCE: Tideline Marine Group, 2016.

FIGURE 13 Addendum 5 to the CP-HPS2 2010 FEIR

WATER TAXI DOCK AT HPS2 DRY DOCK 4

Infrastructure within the Water

The water taxi would require infrastructure to be placed in the water adjacent to Dry Dock 4. The infrastructure would be similar to the water taxi facilities at Pier 1.5 in San Francisco. These items would include:

- **A floating platform**—A floating platform would be required for people to alight to and from the water taxi. The floating platform would be approximately 60 feet in length, approximately 25 feet in width and approximately 4 feet deep. The floating platform would sit on the surface of the water and move vertically with the rise and fall of the tide. It would be secured from horizontal movement by two guide piles (see immediately below) and would generally be offset approximately 1 foot from the wall of the dry dock.
- **Guide piles**—The floating platform would be secured from horizontal movement by two 25-foot guide piles that would connect to castings on the ground surface of Dry Dock 4. The bases of the guide piles would be inserted on the corners of the floating dock nearest the Dry Dock wall. The tops of guide piles would be affixed to castings that are joined to the land surface (see below, under the discussion of Infrastructure on Land). The bases of the guide piles would extend approximately 2 to 4 feet below the surface of the water depending on the height of tide. They would not touch the bottom of the dry dock.
- **Access ramp**—The floating platform and the land would be connected by a ramp that connects with a landing on the dry dock. The ramp would be approximately 90 feet in length and approximately 5 feet in width (approximately 450 sf in total). The ramp would be designed to satisfy ADA requirements by having a maximum grade of 1:20; railings that are approximately 4 feet in height above the walking deck surface; and a hand grip rail that would be attached to the railings above the walking deck surface.

All items of infrastructure within the water would be transportable. In the event that the floating platform, guide piles, or ramps would need to be moved, they could be safely stored in the water against a bulkhead until they could be reinstated back at the Dry Dock 4 landing area.

Infrastructure on the Land

The new landing area would require new items of infrastructure to be constructed on the landside of Dry Dock 4. These items are:

- **Floating Platform Castings**—To connect the guide piles that secure the floating platform with the land surface, two castings would be installed on the ground surface of Parcel C at the edge of the dry dock. Each casting would be approximately 5 feet wide by approximately 4 feet deep by approximately 16 feet in length, and cantilever approximately 7 feet beyond the edge of the dry dock wall. The castings would be anchored into the ground surface of the dry dock.
- **Access Ramp Landing Platform**—To connect the access ramp with the land surface, a landing platform would be constructed at the edge of the dry dock wall. The platform would cantilever approximately 13 feet beyond the edge of the dry dock and be approximately 5 feet in width (approximately 65 sf in total). The access ramp landing platform (or ramp

landing) would be designed to satisfy ADA requirements in the same manner as described for the access ramp in terms of railings and handgrip rails. The ramp landing would be anchored into the ground surface of the dry dock.

- **Waiting Area**—A waiting area of approximately 1,000 sf would be provided on Parcel C near the ramp landing platform.

Trips and Destinations

In the early stages, water taxi service would occur during weekday morning and evening peak hours to accommodate commuter traffic. Approximately 8 AM trips (4 inbound and 4 outbound) and 8 PM trips (4 inbound and 4 outbound), or a total of 16 trips, would be expected. The boat would have a maximum capacity for 22 passengers, as well as captain and crew. As the population at HPS2 grows, trips could occur throughout the day, as supported by demand. At this time, however, future demand is unknown.

Destinations for outbound trips and origins of inbound trips would depend on passenger demand, but are expected to include any of the docking locations in the San Francisco Bay, including San Francisco, Marin County, the East Bay, and the South Bay.

Alternative Utility System

The 2010 FEIR Utilities Variant 4, which was approved in 2010 (refer to Section I.B.2 [Previous Approvals and Development Status]), analyzed implementation of a district heating and cooling system, on-site wastewater treatment, and an automatic waste collection system (which is not proposed under the 2018 Modified Project Variant). Additionally, the 2010 FEIR acknowledged that the Project Sponsor would implement renewable energy strategies at HPS2, including the use of photovoltaic cells to reduce energy usage.

The 2018 Modified Project Variant includes a ground-source geothermal heating and cooling system as the primary source of heating and cooling for the development; solar electricity generation, distribution, and storage; and recycled water treatment and distribution. A general comparison of the alternative utility systems proposed under the 2010 Project as compared to the 2018 Modified Project Variant are provided in the next section, entitled "Comparison of 2010 Project and 2018 Modified Project Variant Alternative Utility Systems." Additional detail regarding the 2018 Modified Project Variant alternative utility systems is provided in the section entitled "2018 Modified Project Variant Alternative Utility Systems," which follows the comparative discussion.

The use of the term "alternative utility system" does not mean that these alternative systems would entirely supplant the use of traditional utility systems at CP and/or HPS2; instead, the alternative utility systems would be supplementary to traditional utility systems.

General Comparison of 2010 Project and 2018 Modified Project Variant Alternative Utility Systems

Heating and Cooling System

Under the 2010 Project, the district heating and cooling system would be provided from a centralized plant. One heating and cooling (district) plant was proposed to serve Candlestick Point and a second district plant was proposed to serve Hunters Point, with hot water (or steam) and chilled water distributed from the district plant to individual buildings via a pipe distribution network located under the streets. Heating was to be provided by natural gas-fired boilers that could generate either steam or hot water, while cooling was to be provided by natural gas-fired, steam-fired, or electrically driven chillers.

Under the 2018 Modified Project Variant, district heating and cooling would use a geothermal heating and cooling system that would include up to three small-scale (about 15,000 sf) central energy plants (CEPs), a vertical bore geothermal heat exchange system, a closed-loop pumping and piping system associated with each CEP that circulates through the boreholes and to residential and commercial buildings, and other systems that transfer heating and cooling to building HVAC systems.

Recycled Water System

The 2010 FEIR Utilities Variant would collect and route wastewater flows to eleven decentralized wastewater treatment plants, each sized to accommodate approximately 100,000 gallons per day of wastewater, with seven plants located in Candlestick Park and four plants in Hunters Point. The eleven decentralized plants would generate 1.05 mgd of reclaimed water. Under the 2010 FEIR Utilities Variant 4, each wastewater treatment plant would require approximately 6,250 sf of aboveground footprint to house the treatment plant components, pumps, and chemical storage area. Wastewater, recycled water, and sludge storage tanks could be located below-grade (e.g., under parking spaces or driveways) to reduce the footprint of the facilities. The estimated belowground footprint requirement for each facility would be approximately 30,000 sf. Thus, each plant would require approximately 36,250 sf and the proposed eleven plants would occupy approximately 400,000 sf.

Under the 2018 Modified Project Variant, the 2018 Modified Project Variant would include a single, dedicated 976,000 gpd central treatment plant at HPS2, rather than 11 decentralized plants, and the single plant would serve both CP and HPS2. Consistent with the Utilities Variant 4, the central treatment plant under the 2018 Modified Project Variant would divert wastewater from the sanitary sewer system for treatment. Rather than storing the solids (sludge) in a storage tank for periodic collection and transport off site for processing, as proposed for the treatment plants in the Utilities Variant 4, the solids removed from the water during treatment would be diverted back to the San Francisco Public Utilities Commission (SFPUC) sewer system.

The footprint area requirements for the 976,000 gpd water reuse facility would range from 10,000 to 82,000 sf, depending on the phase, actual capacity and a number of factors, including available tank depth, membrane type, and final storage area requirements among other area constraints/ considerations. A building containing blowers, pumps, treatment systems, and process controls would take up about one third of that footprint. Outside the building would be below-grade equalization tanks, below-grade sludge holding tanks, and above-grade reuse water tanks. The building would require 17-foot ceilings to accommodate necessary equipment, which would result in a building of approximately 20 feet to 35 feet in height.

Solar Photovoltaic System and Battery Storage Systems

As previously stated, the 2010 FEIR acknowledged that the Project Sponsor would implement renewable energy strategies at HPS2, including the use of photovoltaic cells to reduce energy usage. However, under the 2018 Modified Project Variant, the alternative utilities system incorporates a more robust program to incorporate building-scale solar photovoltaic (PV) systems that would generate renewable energy to supplement SFPUC's power supply to the site. The 2018 Modified Project Variant utilities system would also include a building-scale and utility-scale battery storage system.

2018 Modified Project Variant Alternative Utility Systems

Geothermal Heating and Cooling System

The 2018 Modified Project Variant includes a geothermal heating and cooling system. It includes four integrated components: (1) closed-loop vertical bore geothermal heat exchange systems; (2) water-to-water heat exchangers and pump systems located within the CEPs; (3) closed-loop piping systems for distributing hot and chilled water from the centralized plants to and from buildings within the project area; and (4) heat exchangers and air handling systems within buildings in the project area for the heating and cooling of those buildings.

The CEPs would house the essential plant and operational system infrastructure, including the geothermal source water pumps, distribution pumps, chillers, and heat exchangers associated with the geothermal HVAC system, and lithium ion batteries associated with the electricity storage system (described below). Up to three CEPs would be provided. Each CEP would be approximately 15,000 sf in area (typically 175 feet by 85 feet) with a floor-to-floor height between 18 feet and 25 feet. The CEPs are expected to be integrated with other buildings, such as in the ground floor of parking structures. All components would be entirely within the building footprint and screened to avoid being visible from the public realm. The plant would not contain any combustion or chemicals, and would have acoustic treatment applied to ensure noise does not exceed 40 decibels (dBA) at adjacent, nearby noise-sensitive outdoor use areas, following a detailed noise assessment to be completed upon final design. Potential sites for the CEPs could include Blocks 1, 7, 15, 22, 24, 35, 41, and 43.

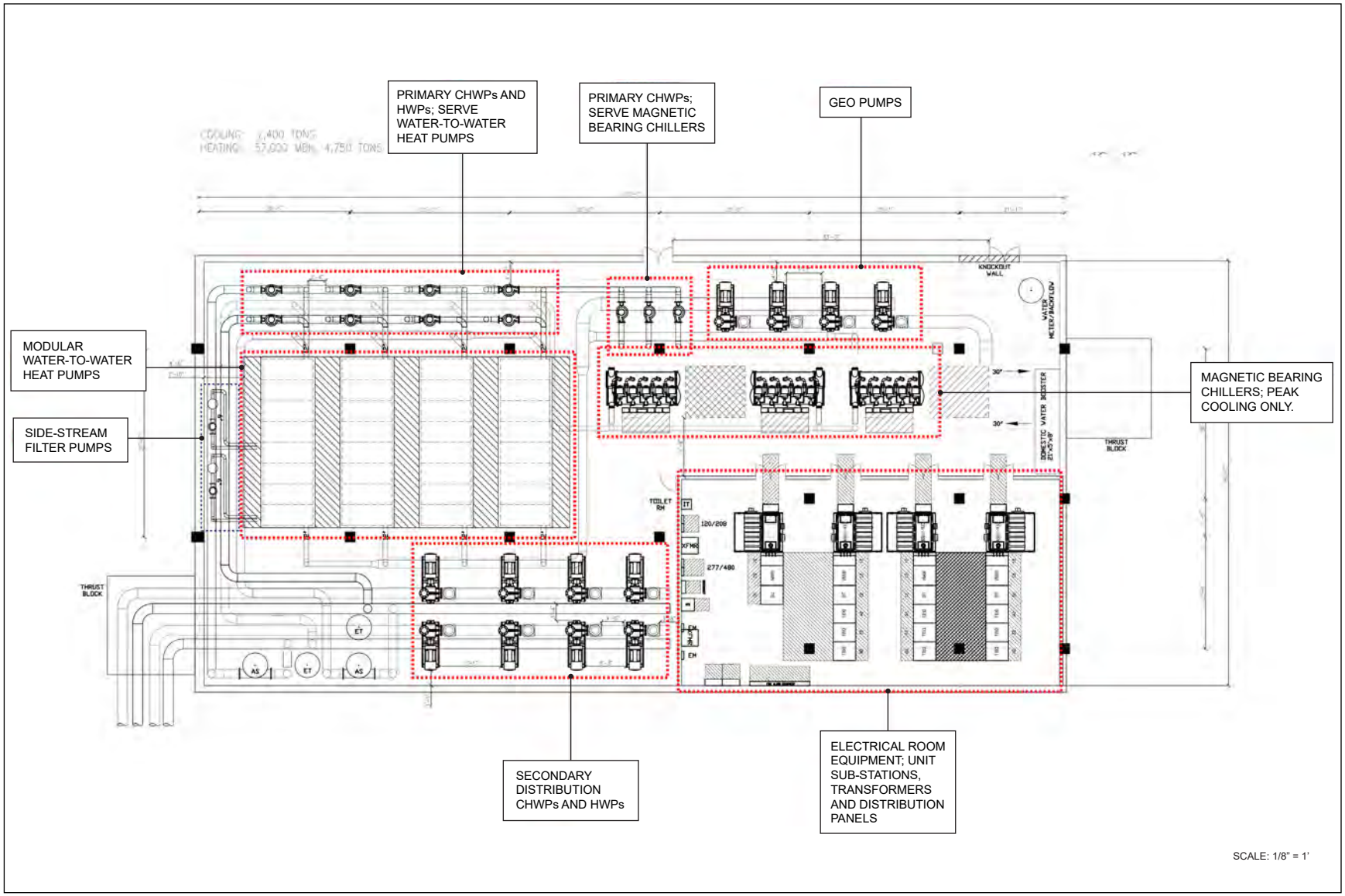
Figure 14 (Central Energy Plant Equipment Layout) shows how the pumps, chillers, heat exchangers, and electrical transformers and distribution panels may be configured within the CEP. The specific components of each element of the geothermal heating and cooling system are discussed below. Geothermal heat exchange systems are more efficient than traditional electric heating and cooling systems. A recent study by the California Energy Commission (CEC) indicates that geothermal heat pump systems for residential buildings should consume 65 percent less energy than conventional heating and cooling systems in the Bay Area region.[15] The key principle behind a geothermal heat exchange system is to utilize the sub-surface temperature of Earth for heating and cooling. Figure 15 (Geothermal Heating and Cooling System: Schematic) provides a conceptual depiction of the type of geothermal heating and cooling system proposed for HPS2. The proposed geothermal heat exchange system pumps a water-based fluid in a closed loop through a series of vertical bores that extend several hundred feet below the ground surface. During the winter, the water being pumped through the geothermal borehole absorbs the warmth of the Earth prior to being directed to water-to-water heat exchangers located in the CEP, where the heat would be extracted before returning the water to the borehole. The water-to-water heat exchangers in the CEP transfer heat from the geothermal loop to a closed loop piping system used to distribute hot water to HPS2 buildings. Electric-powered boilers at the CEP further heat the water in the hot water distribution loop as needed.

In summary, the process would be reversed as relatively cool water would be extracted from the Earth. Heat exchangers in the CEP transfer cooling to a chilled water distribution loop, which would be enhanced as needed by electric-powered chillers. Similar to the hot water loop, the chilled water loop transfers cooling energy to the building HVAC system, and the warmer water returning to the CEP would be replenished with cooling from the geothermal heat pump.

Vertical Bore Geothermal Heat Exchange System

The HPS2 geothermal system would require approximately 2,800 geothermal boreholes to meet heating and cooling demands. Pumps would be located at the CEP, and boreholes would be located in clusters throughout HPS2 where they could be installed without conflicting with other uses of the site and in areas with minimal soil contamination or other environmental restrictions to the extent possible (for more detail on drilling techniques see Section I.D.3 [Construction Methods and Equipment]). Boreholes are anticipated to extend as deep as 600 feet, and would typically be 4 to 6 inches in diameter and spaced at least 15 to 20 feet apart. The conveyance piping that extends from the bores typically are buried a minimum of 3 feet deep and could be buried deeper to avoid conflicts with foundations, utility lines, and other shallow subsurface features if necessary. The geothermal boreholes would be located Warehouse in areas where environmental restrictions are minimal and where interference with other subsurface infrastructure are limited. Specifically,

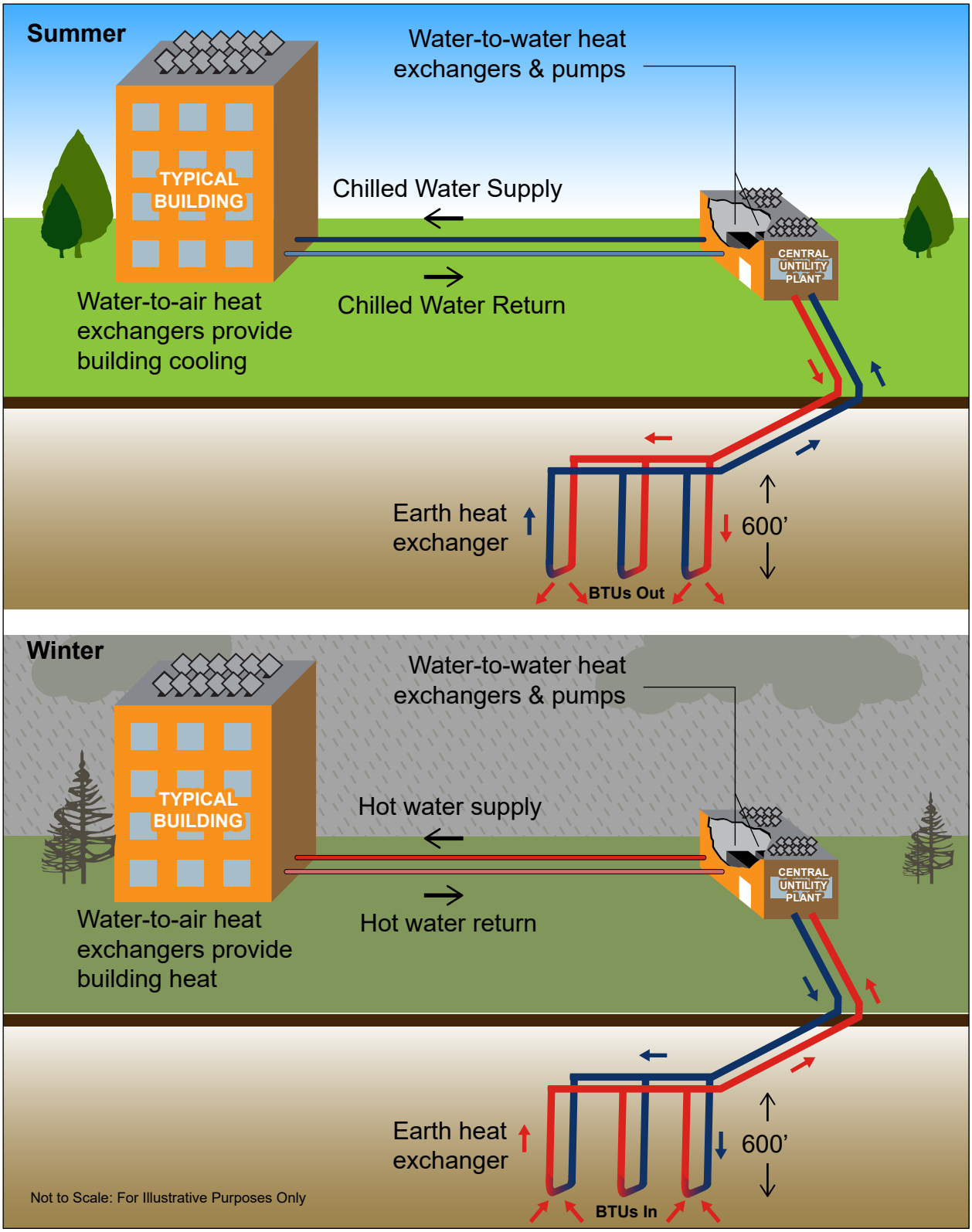
[15] California Energy Commission, *Assessment of California's Low Temperature Geothermal Resources: Geothermal Heat Pump Efficiencies by Region*, CEC-500-2014-060, April 2012, Table 3, p. 20.



SOURCE: MEP Associates, LLC, 2017.

FIGURE 14 Addendum 5 to the CP-HPS2 2010 FEIR

CENTRAL ENERGY PLANT EQUIPMENT LAYOUT



SOURCE: GI Energy and ESA, 2017

FIGURE 15 Addendum 5 to the CP-HPS2 2010 FEIR

GEOTHERMAL HEATING AND COOLING SYSTEM: SCHEMATIC

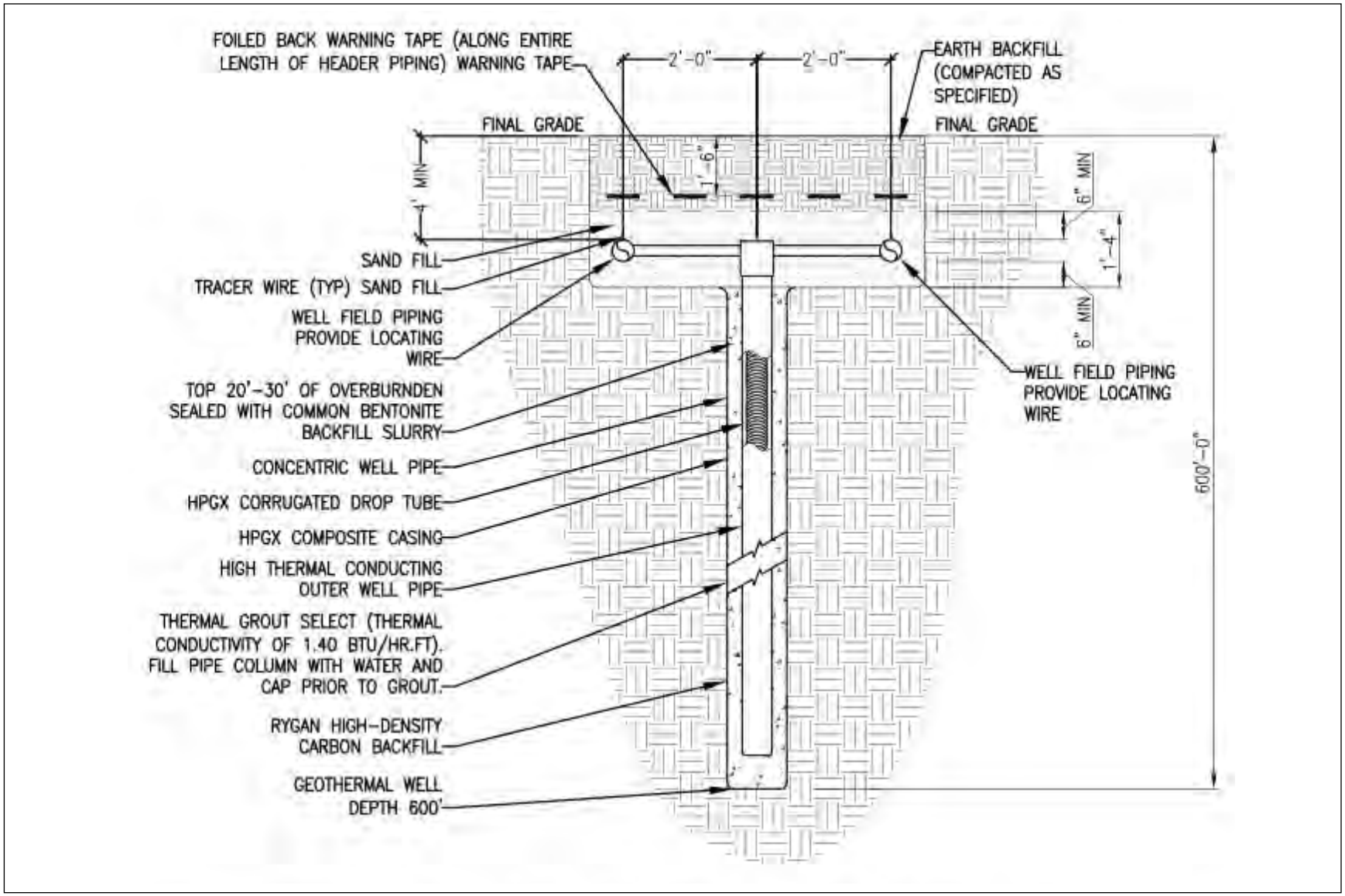
clusters of boreholes would be located below public parks and open space areas, playground or athletic fields, parking structures, and commercial buildings with ground floor or basement level parking. Generally, the environmental restrictions in these areas require regulators to approve workplans prior to disturbing existing fill soil and require maintenance of soil cover once work is completed. The borehole cluster locations would avoid other areas, as feasible, that have additional administrative and/or sub-surface restrictions. Examples of such areas are beneath public roads, public trust lands, radiological restricted areas, and other areas with additional soil or groundwater restrictions such as areas with groundwater monitoring wells or soil vapor mitigation beneath building foundations. Figure 16 (Geothermal Borehole Details) shows cross section details of geothermal borehole construction and associated piping.

The only mechanical equipment required for the heat exchange system would be the pumps used to induce flow through the closed loop of numerous interconnected vertical bores. Once installed, there would be no access or maintenance that would be required for the piping system, which means that it could be located beneath buildings and structures without causing any impact. The fluid inside the pipes would meet certain specifications and would be tested on an annual basis to verify the fluid continues to meet the design specifications.

An alternative approach to installation of the geothermal system (or loop) in a clustered borehole field would be to incorporate the use of "energy piles" that would co-locate the geothermal loop piping with the foundation support piles that are installed under building foundations. The key benefit of the energy pile approach on sites with building foundations is that, subject to the number, quantity, and size of foundations being constructed to support each building, the geothermal loop would be installed as part of the foundation, and not as a separate installation or construction process. In most cases, the foundation shape or size is not altered; therefore, no additional drilling is required. This approach would substantially reduce the amount of soil that is generated as compared to the clustered borehole field approach.

Heating and Cooling Distribution to Buildings

Heating and cooling fluid from the CEP would be pumped to end-user buildings using closed-loop piping systems. For commercial buildings, separate loops would deliver hot and chilled fluid to heat exchangers and air handling systems that control and distribute conditioned air throughout the building as needed. For residential buildings, a single closed loop would be used to deliver geothermal-sourced fluids to fluid-to-air heat pumps located at individual living units. As closed loop systems, fluid supplied to the buildings for heating and cooling would be returned to the CEP and reused. Pipelines connecting the CEP to buildings would be installed along with other utilities beneath roadways.



SOURCE: MEP Associates, LLC, 2017.

FIGURE 16

Addendum 5 to the CP-HPS2 2010 FEIR

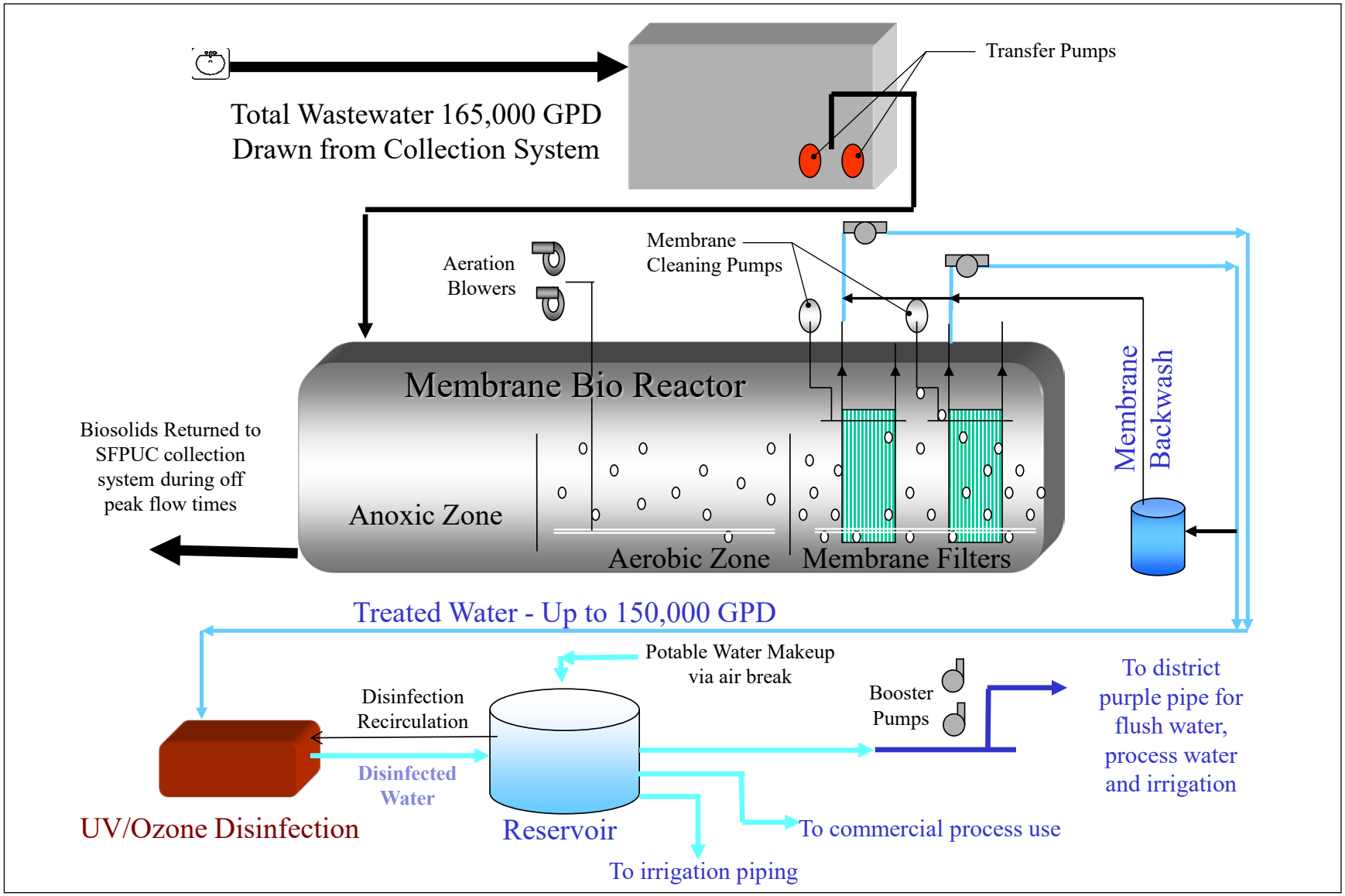
GEOTHERMAL BOREHOLE DETAILS

Recycled Water System

The 2018 Modified Project Variant would include a centralized recycled water system at HPS2, consisting of a dedicated 976,000 gpd central treatment plant and would serve both CP and HPS. The central treatment plant would divert wastewater from the sanitary sewer system for treatment using membrane bioreactor (MBR) technology to obtain a water quality appropriate for irrigation, toilet flushing and other nonpotable uses (i.e., recycled water). Rather than storing the solids (sludge) in a storage tank for periodic collection and transport off site for processing, as proposed for the treatment plants in the Utilities Variant 4, the solids removed from the water during treatment would be diverted back to the SFPUC sewer system.

A typical MBR facility schematic is included as Figure 17 (Distributed Water Reuse System Schematic). Wastewater processed for reuse would be diverted to a sewer collection pipe into the treatment facility. An MBR is divided into a number of steps that consist of:

- **Anoxic Treatment**—This first biological treatment step introduces the raw wastewater into a mixed anoxic, denitrifying bacteria chamber where nitrogen is removed and vented.
- **Aerobic Tank**—This second treatment step provides aerobic biological treatment where the wastewater undergoes carbonaceous oxidation and nitrification via a complete mix tank with air diffusers fed by blowers.
- **Membrane Filters**—This third step is a separate stage that includes ultrafiltration membrane filters that have a very fine pore size to remove virtually all particulate contaminants and produce a filtrate that is passed along for polishing. The membrane filters extract clear, treated water from the mixed liquor that is contained in the aeration tank via a membrane permeate pumping system. The filters are air scoured via air diffusers and can be backwashed in place.
- **UV/Ozone Disinfection**—Upon leaving the MBR, the filtered water can be disinfected further via units that subject the liquid contents to ultraviolet radiation and ozone treatment to oxidize any remaining compounds that impart color and/or odor in the treated water.
- **Storage Tanks**—The recycled water is stored in storage tanks. These storage tanks are kept nearly full at all times and a computer controller that operates the treatment system extracts wastewater from the wastewater collection pipeline for processing as the level in the storage tanks begins to drop. In addition, a continuous loop of water is taken from the tanks and reprocessed through the ultraviolet disinfection and ozone treatment to assure that the contents remain disinfected, clear, and odorless.
- **Water Return Distribution System**—A series of high-pressure pumps draws water from the storage tanks and distributes it via a piping network to the reuse district and irrigation and commercial uses that is labeled as "nonpotable" for reuse purposes.
- **Thermal Recovery System**—A thermal recovery system enables extraction of heat energy from the reclaimed water, which can be used to pre-heat domestic hot water systems along with space heating/cooling, etc. This option would be evaluated further when additional details are known about the HPS2 hot water systems and central plant configuration later in the detailed design process.



SOURCE: Natural Systems Utilities, 2017.

FIGURE 17 Addendum 5 to the CP-HPS2 2010 FEIR

DISTRIBUTED WATER REUSE SYSTEM SCHEMATIC

- **Odor Control Measures**—Odor control measures would be instituted to prevent emission of objectionable odors from the site of the recycled water facility. Treatment unit processes and raw sewage process tanks would be covered. An air collection system connected to the head space of tanks would be installed to keep a negative pressure on process tanks. Captured air would be conveyed to granular activated carbon air scrubbers. Scrubbed air would be discharged to the atmosphere. Scrubber monitoring and maintenance would be part of system operations. A more detailed description of odor control methods is provided in Addendum 5 Section II.B.7 (Air Quality), Impact AQ-8.

The MBR treatment system eliminates the need for secondary clarification and enables MBR facilities to operate at higher mixed-liquor-suspended-solids (MLSS) concentrations, which results in smaller process tanks and a smaller treatment plant footprint; less sludge production; a better ability to automate process control; and high-quality product water with low turbidity, bacteria, total suspended solids (TSS) and biochemical oxygen demand (BOD).

Preliminary design studies show that the recycled water facility, shown on Figure 18 (Location of Recycled Water Facility), could meet over 100 percent of nonpotable water demand through the first three sub-phases of development at HPS2 as determined by the SFPUC calculator. Provisions would be made to have potable makeup and supplemental supply if needed to meet peak or extraordinary demands. Connections to the sanitary collection system would be provided in the event the recycled water facility needs to be bypassed.

Based on current projected water demands, the recommended treatment system capacity for the first three sub-phases at HPS2 would be 150,000 gpd, eventually and potentially expanding to a final treatment system capacity of 976,000 gpd at full build-out. Full build-out includes provision for adding neighboring demands to the district. If a connection would be provided to CP, recycled water would be transported from the HPS2 plant to CP via a pipe attached to the bottom of the Yosemite Slough Bridge.

The 976,000 gpd treatment plant would be constructed in phases as one facility, starting with 150,000 gpd and then would be expanded incrementally as demand dictates. Final sizing would depend on confirmed phasing projections and detailed design calculations based on seasonal cooling demand estimates.

For each 150,000 gpd of recycled water produced, approximately 165,000 gpd of raw wastewater would be diverted from the SFPUC sewer system to the plant, which returns approximately 15,000 gpd of undigested biosolids to the sewer system.

The footprint area requirements for the 150,000 to 976,000 gpd water reuse facility would range from 10,000 to 82,000 sf, depending on the phase, actual capacity and a number of factors including available tank depth, membrane type, and final storage area requirements among other area constraints/considerations. A building containing blowers, pumps, treatment systems, and process

SOURCE: FivePoint, 2018.

FIGURE 18 Addendum 5 to the CP-HPS2 2010 FEIR

LOCATION OF RECYCLED WATER FACILITY

controls would take up about one third of that footprint. Outside the building would be below-grade equalization tanks, below-grade sludge holding tanks, and above-grade reuse water tanks. The building would require 17-foot ceilings to accommodate necessary equipment, which would result in a building of approximately 20 feet to 35 feet in height.

The recycled water would be pressurized and distributed to the demand district through a network of recycled water main lines that are connected to individual buildings. At present, planned uses include irrigation and toilet flush water. Commercial process water is also being contemplated. Actual requirements for commercial users may vary depending on the user, but uses such as specialized cooling, cleaning and washing, additional irrigation, and office uses are possible, either directly or via additional point-of-use treatment. It is possible that there would be a direct off-take to larger-scale irrigation as well.

Noise from equipment inside the recycled water treatment building would result in exterior noise levels that are at or below existing ambient conditions in the immediate vicinity of this building. The recycled water treatment building would be required to comply with Noise Ordinance Section 2909(b), which limits increases in noise levels at adjacent property lines to less than 8 dBA, and with Noise Ordinance Section 2909(d), which would require control of noise so that interior noise levels at the nearest residential receptor are less than 45 dBA.

Construction of the wastewater (or recycled water) treatment plant would begin when demand for recycled water reaches 150,000 gpd (currently projected at the beginning of Sub-phase HP-02). Prior to the operation of the recycled water facility, the low-pressure water system would supply water for irrigation and other nonpotable uses. Before the treatment plant is connected to the recycled water distribution system, the low-pressure water supply would be disconnected (via an air gap).

If the on-site recycled water system is not constructed, the recycled water lines would be interconnected and charged with potable water until SFPUC provides a source for recycled water to the project site. At this time, there are no long-term capital plans to provide such a source.

Solar Photovoltaic System and Battery Storage Systems

The utilities network would incorporate building-scale solar PV systems to generate renewable energy that could supplement SFPUC's power supply to the site. The utilities network would also include a building-scale and utility-scale battery storage system.

Solar Photovoltaic (PV) System

Solar PV systems would be installed on newly constructed buildings to maximize on-site renewable power output. Power produced by the PV cells would be delivered either directly to the building or directly to the local utility (SFPUC) distribution grid at street level utilizing industry standard bi-directional smart meters.

The solar PV system across HPS2 would have a 10.5- to 16.5-megawatt (MW) generating capacity. Figure 19 (Potential Areas of Solar Installation) depicts the aerial extent of the proposed solar PV arrays.

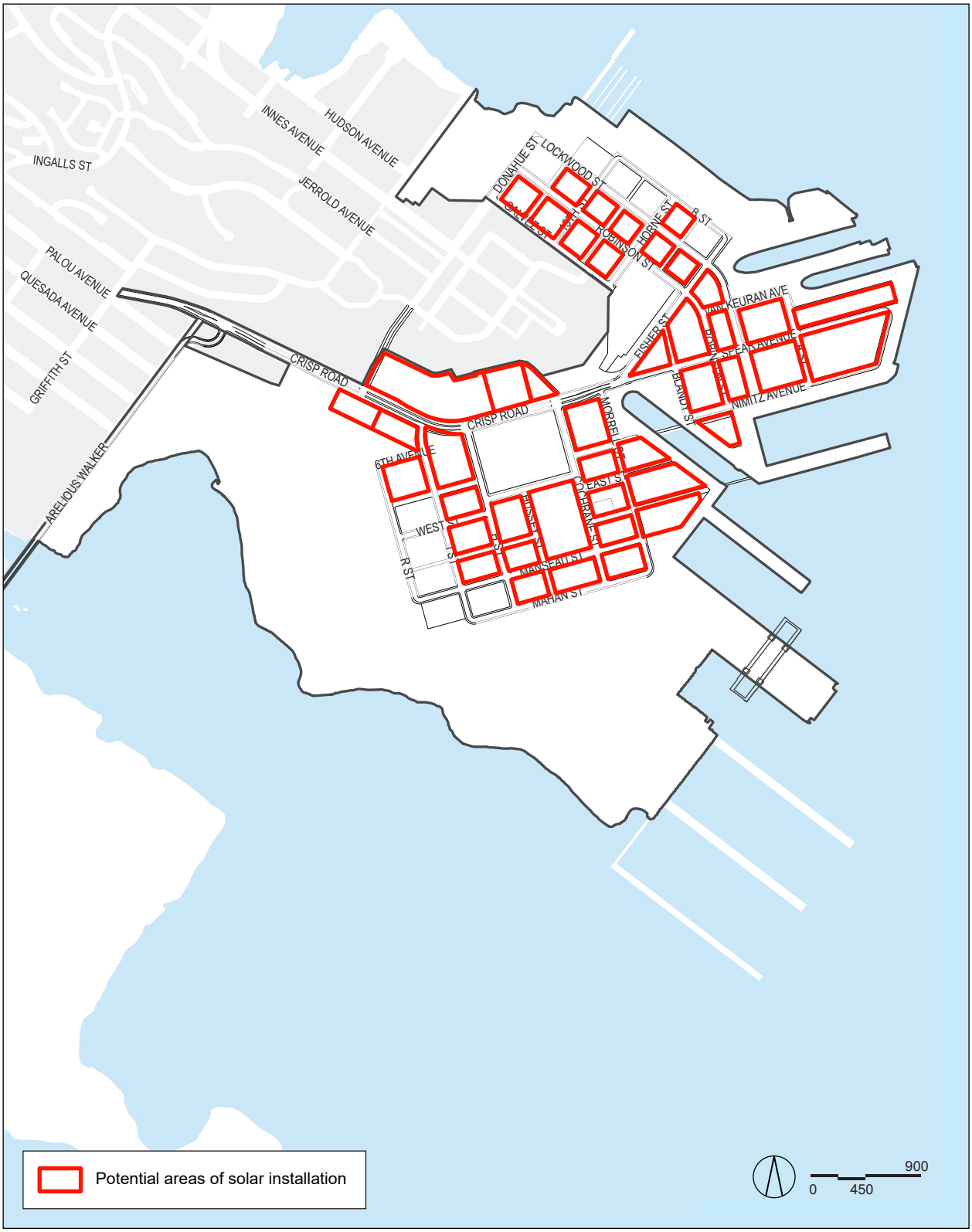
Solar panels would be installed in select areas where vertical PV elements could be integrated within building envelopes as a replacement for conventional building materials. These elements would be developed as buildings become available. The PV system would consist of mounted solar PV panels/tables, solar inverters, and cabling connecting the solar panels to inverters, batteries, and electric conduits in roadways. General building heights within the HPS2 site are anticipated to be between 40 feet and 120 feet high, with the exception of two towers that would be 270 feet and 370 feet tall, respectively. Each solar PV panel would be approximately 3 feet by 5 feet and depending on spacing and planning to optimize sunlight capture, may be grouped together as one larger "table" consisting of multiple panels. Panels/tables may be installed to be stationary and, when installed on rooftops, would be located within a couple feet above the rooftop surface or have the ability to tilt, in which case the panel tables may be up to 5 feet high as needed to optimize sunlight capture.

Photovoltaic arrays have minimal maintenance requirements and zero emissions associated with their operation. The panels would require occasional cleaning during their 20- to 30-year lifespan to ensure they continue to operate at optimal efficiency. The electronic components of the inverters would also need to be replaced during that lifespan; however, this would be infrequent and not cause any impacts to the panels and buildings.

Building-Scale and Utility-Scale Battery Storage System

Building-scale and utility-scale battery storage would be a component of the utility electricity systems to store surplus energy generated from the solar PV systems. The battery storage systems would enable better management of electricity loads during peak periods when electricity is typically most expensive.[16] Specifically, surplus energy stored in the batteries would be discharged into the network in lieu of importing electricity from the SFPUC grid. The battery storage systems could also provide backup power for critical customer loads at the Shipyard. In addition to demand reduction and limited backup power for HPS2 tenants, battery storage is increasingly being used to provide grid services to distribution utilities and transmission operators. The role of battery storage is rapidly evolving and future uses may include participating in demand response programs, providing ancillary services, such as frequency regulation and/or voltage support, and smoothing renewable generation to ease pressure on the grid. These services have traditionally been provided by central generators. However, distributed battery storage is increasingly being seen as a viable alternative provider of these services. In the initial phases of the project, advanced lithium-ion batteries would be used for energy storage due to their cost-effectiveness and space efficiency. Other battery technologies (e.g., reduction–oxidation flow batteries, molten salt batteries, and metal-air batteries) may be considered in future phases.

[16] Battery storage may occur "in front of the meter" and/or "behind the meter" depending on final design of the utility grid and integration with SFPUC's distribution management plan.



SOURCE: FivePoint, 2018.

FIGURE 19 Addendum 5 to the CP-HPS2 2010 FEIR

POTENTIAL AREAS OF HPS2 SOLAR INSTALLATION

The battery storage systems would be located at central plants enclosed in parking structures (discussed above) and in other buildings. Battery systems would consist of numerous battery cell "blocks," typically 10-by-10-foot cubes that may be wired in series, or parallel for increased voltage and amp hours. The blocks would have the ability to charge, store, and discharge energy in a self-sufficient manner. Other components of the battery storage system would include a power conditioning system for conversion between DC and AC power, control cabinets with computer and monitoring equipment, a HVAC system to maintain safe ambient operating temperature conditions, and a fire suppression system. Fire suppression equipment may include sprinklers or flame-retardant chemical dispersants.

I.C.2 CP Proposed Modifications

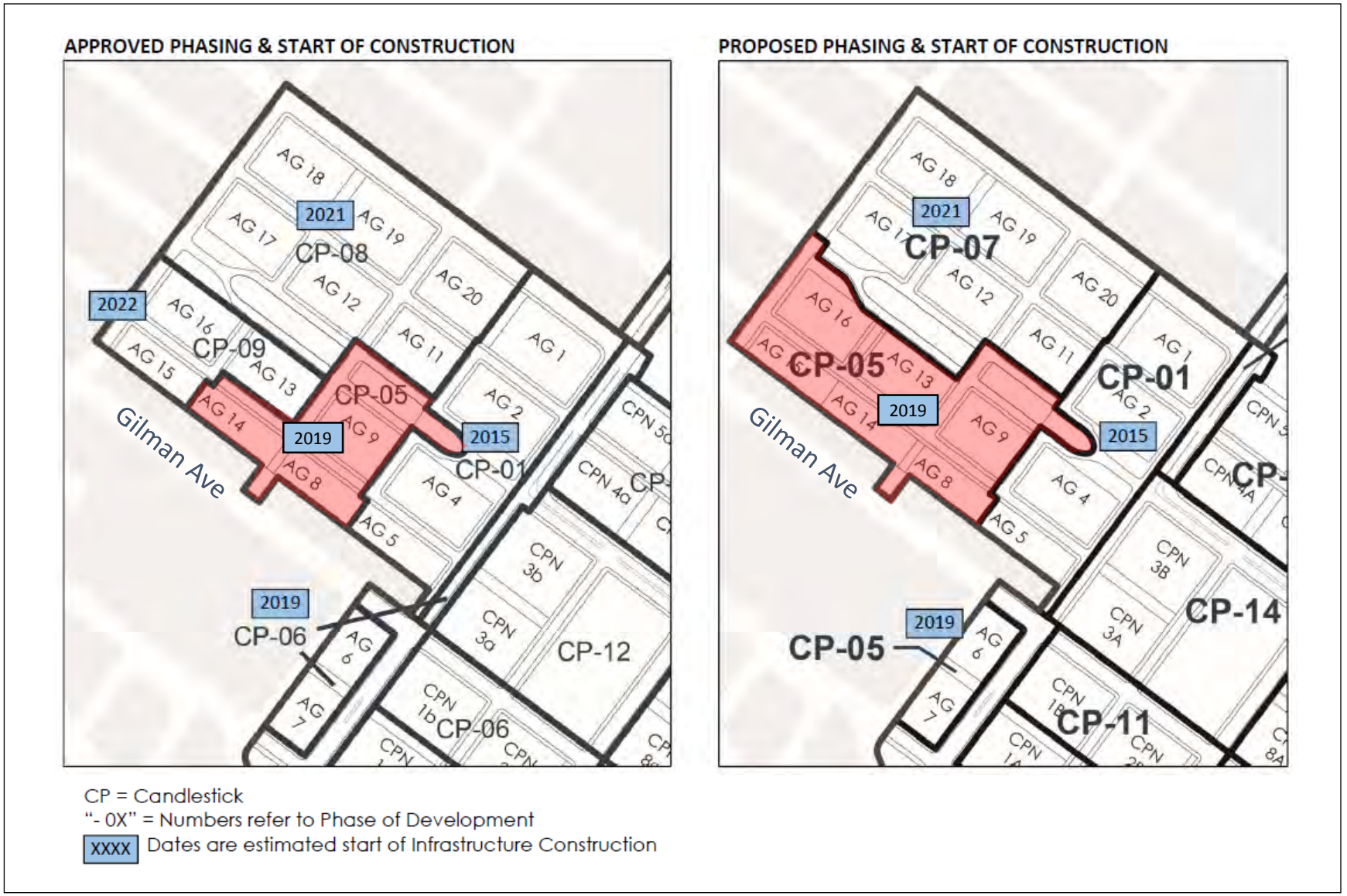
Land Use Plan

The 2018 Modified Project Variant would result in a total of 7,218 units at CP, which is 632 fewer units than assumed in the 2010 Project; however, the overall development program assumes 10,500 units between CP and HPS2, although an additional 172 units that were previously approved for HPS1 are assumed in HPS2, resulting in a total of 10,672 units. All other components of the development program remain the same as assumed in the 2010 Project (refer to Appendix A Table A-2); however, the configuration of the land uses and heights would follow the land use plan evaluated in Addendum 4 and approved in the 2016 CP D4D document by OCII and San Francisco Planning Commission.

The modifications associated with CP also include an updated phasing plan, which would re-order CP Major Phase 2 construction sub-phases to proceed with development in an easterly rather than northern direction and modify the boundary of CP-05.[17] Proposed changes to the CP-05 boundary are shown in Figure 20 (CP-05 Boundary and Phasing Modifications).The Jamestown Parcel, which is approximately 9.4 acres (2010 FEIR Table II-4, p. II-15), would be removed from the CP project boundary. Consequently, the Jamestown Parcel would be shifted from Zone 1 (the Candlestick Point Activity Node) to Zone 2 of the Bayview Hunters Point Redevelopment Plan Area (BVHP Project Area B) of the Bayview Hunters Point Redevelopment Plan (BVHP Plan).

The Jamestown Parcel was originally included in the BVHP Plan in 2006. In 2010, the BVHP Plan was amended to allow the development of the CP component of the CP-HPS2 project. The 2010 BVHP Plan amendments established two zones (Zone 1 and Zone 2) within the BVHP Project Area B of the BVHP Plan. Under the 2010 Plan amendments, the Jamestown Parcel was included within Zone 1. The 2010 Project proposed 325 residential units at Density Ranges I and II, with a maximum height of up to 65 feet (Density I) and 85 feet (Density II) for the Jamestown Parcel (2010 Project EIR, p. II-16).

[17] The Sub-phase CP-05 boundary has been expanded from three development blocks to eight development blocks, which allows for all 256 Alice Griffith Replacement Units and the Community Facility Lot to remain designated with the first major phase.



SOURCE: FivePoint, 2018

FIGURE 20 Addendum 5 to the CP-HPS2 2010 FEIR

CP-05 BOUNDARY AND PHASING MODIFICATIONS

Following approval of the proposed shift of the Jamestown Parcel from Zone 1 to Zone 2 of the BVHP Project Area B, this parcel would no longer be subject to the land use controls under the BVHP Plan, which apply only in Zone 1. Zone 2 is regulated by the San Francisco Planning Code. Consequently, the Jamestown Parcel zoning would revert to the underlying zoning of RH-2 District (Residential, House, Two-family). Under the Planning Code, up to one unit per 1,500 sf of lot area is permitted in the RH-2 District with Conditional Use authorization. The 2006 BVHP height limit of 40 feet would be reassigned to the Jamestown Parcel. Given these density and height limits and other Planning Code site development standards (e.g., open space, setbacks, rear yard, and parking), it is reasonable to assume that a conservative estimate of 200 units could be developed on the Jamestown Parcel under Planning Code requirements.

I.D HPS2 Construction Activities

I.D.1 Abatement and Demolition

Proposed demolition activities at HPS2 would include removal of structures and infrastructure to allow the construction of the new infrastructure. Demolition of existing structures within the Project site would occur from 2014 to 2034. The total quantity of construction debris generated by the removal of structures, roads, and infrastructure under the 2018 Modified Project Variant is estimated to remain approximately the same as with the approved plan. The 2010 CP-HPS2 Project called for removal of Piers B and C, removal of the timber cribbing associated with Dry Docks 5, 6, and 7,[18] and demolishing of five buildings due to radiological concerns, prior to the transfer of HPS2 to the City. The Navy has since completed these activities.

The Project Sponsor would demolish all other buildings proposed for removal. As necessary, abatement of hazardous building materials, such as lead and asbestos, would occur in buildings prior to demolition. Existing infrastructure would be demolished and removed or cut and capped. The Navy would remove most stormwater and sewer lines prior to transfer. The Project Sponsor would remove existing surface improvements such as asphalt and concrete pavement, concrete sidewalk and other surface improvements.

I.D.2 Site Preparation and Earthwork/Grading

Earthwork and Grading

For the 2018 Modified Project Variant, total quantity of excavated soil at the HPS2 site is estimated at approximately 100,000 cubic yards (cy) (as compared to 82,500 cy assumed for 2010 Project), with the increase primarily due to additional utility trenching, installation of the geothermal boreholes, and more refined information regarding construction activities. Excavation associated with the geothermal boreholes would result in approximately 12,250 cy of soil.

[18] Figures II-2 and II-19 of the 2010 FEIR depict the boundaries of Piers B and C, and Dry Docks 5, 6, and 7.

As with the 2010 Project, the 2018 Modified Project Variant would require up to 2,546,300 cy of imported fill for the developed areas and open space areas. Of this, up to 10,600 cy (590 dump truck loads) of sand would be imported to use as fill at the base of the trenches. Imported fill dirt and sand would be screened for contaminants in accordance with soil import criteria that would be developed for the project to comply with the regulatory requirements that would be applicable to the site through the CERCLA process and other local, state, and federal regulations.

In addition, locally excavated and imported fill would be used to add 5 to 10 feet of additional fill over existing ground surface, raising the site grade such that finished floor elevations would be 5.5 feet above the Base Flood Elevation (BFE) (as compared to 3.5 feet as analyzed by the Project in the 2010 FEIR) to complete surcharging and ground improvement, to elevate the site in compliance with new requirements for sea level rise (SLR) planning, and to provide the SFPUC with required freeboard and cover for utility systems.

Shoreline Protection Improvements and Sea-Level Rise Adaptation

Since certification of the 2010 FEIR, global sea levels have continued rising due to climate change, and they are expected to continue to rise at an accelerating rate for the foreseeable future. In December 2017, Moffatt and Nichol completed a supplement[19] to their 2009 project specific SLR study (Moffatt and Nichol 2009)[20] to provide updates to SLR projections, applicable policies, and design criteria for the HPS2 project that have occurred since 2010, when the 2010 FEIR, Infrastructure Master Plan, and Open Space and Parks Plan were prepared. The 2017 supplement reflects revised SLR projections from the National Research Council (NRC),[21] and subsequent policies and updated guidance from the California Ocean Protection Council, California Coastal Commission, San Francisco Bay Conservation and Development Commission (BCDC), and the City of San Francisco Planning Department, as they apply to the design and construction of the 2018 Modified Project Variant.

Under the revised design requirements for SLR, the HPS2 site would be graded such that finished floor elevations are a minimum of 5.5 feet above the base flood elevation (BFE), 2 feet higher than the 2010 FEIR requirement that finished floor elevations be 3.5 feet above BFE, to accommodate NRC's future SLR projections for the end of the century. In addition, to protect the perimeter of the HPS2 site and adjacent open space (shoreline areas), which have higher adaptive capacity and resilience compared to development areas, shoreline and public access improvements would be designed to allow for future SLR of 24 inches above the BFE, rather than the 16 inches required by the 2010 FEIR, to account for the NRC's mid-century SLR projection along with anticipated wave run-up along the shoreline.

[19] Moffatt & Nichol, *Memorandum: Sea Level Rise Supplement, Hunters Point Shipyard Development Project*, December 7, 2017.
[20] Moffatt & Nichol, *Hunters Point Shoreline Structures Assessment*, October 2009.
[21] National Research Council, *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*, Washington, DC: The National Academies Press, 2012. Available at https://www.nap.edu/catalog/13389/sea-level-rise-for-the-coasts-of-california-oregon-and-washington, accessed November 30, 2017.

Geotechnical Stabilization

Site preparation at HPS2 would include geotechnical treatments to address the potential hazard of liquefaction, settlement, and lateral spreading that may occur during a major earthquake. Where shallow foundations for low-rise and mid-rise structures would be underlain by artificial fill and the estimated settlement would be small, geotechnical treatment could employ a combination of removal and recompaction with the placement of geogrid[22] beneath structures to help distribute differential settlement that might occur.

In areas of the HPS2 site containing loose artificial fill with a greater risk of liquefaction and settlement, a range of ground improvement techniques could be used to densify the fill and reduce seismically induced settlement risk, including but not limited to Deep Dynamic Compaction (DDC),[23] static soil surcharging, Drilled Displacement Columns, Vibro-Compaction, Vibro-Densification, Deep Soil Mixing (DSM), Stone Columns, and Grout Columns. The use of DDC is identified as a potential solution to address seismically induced ground failure related to liquefaction, lateral spreading, and/or settlement in mitigation measure MM GE-5a of the 2010 FEIR. The use of DDC combined with static soil surcharging has now been advanced as likely ground improvement techniques at HPS2 and CP, consistent with mitigation measure MM GE-5a and, therefore, is evaluated in Addendum 5.

The performance of a full-scale test program (ENGEO 2017)[24] demonstrated that DDC is an appropriate method for densifying the upper 20 to 30 feet of artificial fill across portions of the CP site to mitigate liquefaction risks. In particular, DDC treats the fill sufficiently to allow mid-rise construction to be founded on a shallow foundation system as an alternative to deep foundation systems, which derive support on deeper competent material. In areas where soft young bay mud underlies the fill material, static soil surcharging would be implemented following DDC to provide additional ground improvement that would result in reduced settlement potential beneath building foundations. Static soil surcharging is accomplished by importing soil and placing it on the footprint of a proposed building location in a tall pile (surcharge pile) and leaving the surcharge pile in place for an extended period of time (typically 12 to 24 months depending on local conditions). The soil beneath the surcharge pile compresses under the weight of the pile and results in a stronger load-bearing soil profile. Wick drains are typically installed in the area of the surcharge pile to allow for groundwater to more easily redistribute throughout the soil as the soil becomes compressed. A subsequent technical memo[25] recommends that findings from the CP study could be used as

[22] Geogrids are synthetic fabrics (fiberglass, polyester, treated steel, etc.) formed into nets with openings more than ¼ inch in size to allow the fabric to interlock with surrounding soil, rock, and other below-ground-level materials and to function as reinforcement.
[23] DDC utilizes impact energy from a large weight free falling from a significant height to densify the ground. The weight is repeatedly dropped in a specific grid pattern at a defined drop height. At impact with the ground, energy is transmitted at depth to densify loose material.
[24] ENGEO, Inc., *Evaluation of Deep Dynamic Compaction for Densification of Artificial Fill*, August 10, 2017.
[25] ENGEO, Inc., *Technical Memorandum to Daniel Hansen from Leroy Chan: Potential Constraints on Implementation of Deep Dynamic Compaction (DDC)*, December 14, 2017; revised December 21, 2017.

reference for HPS2, but that site-specific studies should be performed to determine the efficacy of DDC and static soil surcharging for mitigating liquefaction and settlement risks at HPS2.

I.D.3 Construction Methods and Equipment

Borehole Installation

The geothermal boreholes would be located in clusters throughout HPS2 where they could be installed without conflicting with other uses of the site and in areas with minimal soil contamination or other environmental restrictions to the extent possible. As noted previously in the section describing the Geothermal HVAC System, approximately 2,800 boreholes would be installed. Each borehole would be approximately 6 inches in diameter and drilled to a depth of approximately 600 feet. The final location of boreholes may be adjusted as necessary based on further-refined engineering and design plans. The analysis in Addendum 5 already considers these location adjustments as the same construction methods and mitigation measures would apply.

Installation of the boreholes would generate approximately 12,250 cy of excavated soil. The excavated soil would be retained on site, as much as practical, for the purposes of raising the grade (see Section I.D.2). The excavated soil would be managed on site in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) land use and activity restrictions that apply to the specific location where the soil is generated (see Section II.B.10 [Hazards and Hazardous Materials]). Specific techniques for installing the boreholes are discussed below.

Multiple drilling rigs would be operational at the site at one time, depending on the final construction phasing and the need to avoid conflicts with other contractors on site. Each rig should be capable of completing two boreholes per day. Drilling techniques are summarized here for noncontaminated areas and for contaminated areas, in case such areas are included in the final system design. A cross-section of a typical geothermal well is included in Figure 16, showing construction details.

Six-inch-diameter boreholes would be drilled through unconsolidated material and into bedrock. During the drilling process, a bentonite clay and water mixture (drilling fluid) would be used to form a filter cake on the borehole wall. This would prevent the borehole from collapsing. Once the borehole is drilled to the design depth, the geothermal heat exchanger and grout pipe would be installed and pressure tested. Following pressure testing of geothermal heat exchanger, the borehole would be grouted in a continuous operation from the bottom to the top, until the grout flows from the borehole at the ground surface. If grout backfill settling occurs within the first 12 hours, then grout would be topped off to ground surface.

Although the boreholes are proposed in areas that avoid known contamination zones, in the event contaminated soil is encountered during drilling, a 7-inch-diameter permanent steel casing would be advanced and cemented in place to seal off and isolate the potentially contaminated soil and groundwater zones. The steel casing would extend from ground surface through the unconsolidated

material to first encountered bedrock. Following placement of the casing, the drill stem and bits would be decontaminated and the boring would be advanced from the base of the casing to its target depth using a 6-inch-diameter mud rotary/polycrystalline diamond compact (PDC) drill bit. Soil and rock cuttings and drilling fluid would be collected, contained, and managed in a controlled manner. Soil and rock cuttings may be used elsewhere on the development site in accordance with the Risk Management Plan. Drilling fluids (around 150 gallons per boring) would be contained and disposed of off site.

Once the boring has reached its design depth, the geothermal heat exchanger piping and tremie pipe (grout pipe) are installed. The geothermal heat exchanger piping would be pressure tested and, upon successful completion of the testing, the hole would be grouted to the surface with a cement-bentonite slurry.

Trenching

Approximately 30,800 linear feet of trenching would be needed along roadways for the installation of the sanitary sewer and utility system. Trenches would vary in dimensions, netting approximately 16,600 cy (924 dump truck loads) of spoils, which would be handled in accordance with the CERCLA environmental restrictions that apply to the specific location where the soil is generated (see Section II.B.10 [Hazards and Hazardous Materials]), adopted mitigation measures, and any additionally applicable federal, state, and local regulatory requirements. It is anticipated that a majority of the spoils would be managed on site by placing the spoils either back in the trench as backfill or elsewhere on the site in accordance with the regulatory requirements. Any spoils that cannot be reused on site would be disposed off site in accordance with regulatory requirements for land disposal. Approximately 10,600 cy (590 dump truck loads) of sand would be imported to use as fill at the base of the trenches. Import backfill sand would be screened for contaminants in accordance with the soil import criteria that would be developed for the project to comply with the CERCLA environmental restrictions that would be applicable to the site and other federal, state, and local regulations.

Water Taxi

Infrastructure associated with the water taxi would involve construction activities related to the floating dock platform and castings, the access ramp and landing platform, guide piles, and safety rails that would be manufactured and fabricated off site. These items would be delivered to the site for final assembly.

On-site work would take approximately 6 weeks. This work would consist of (1) placement of the concrete or steel floating platform and castings and the access ramp and landing platform; (2) placement of rebar and concrete form work; (3) form up and pouring of the guide pile pads; (4) drilling and grouting of the hold down bolts; (5) general trades, including crane operation, rigging, electrical, carpentry, and steel; (6) final assembly of the components; and (7) installation of the waiting area. It would be necessary to demolish short sections of the existing curb at the edge of the dry dock to accommodate the castings and ramp landing.

It is expected that the majority of the construction work associated with the water taxi would utilize conventional tools and equipment. A mobile crane would be required to unload and install the main components of the dock system, specifically lifting the gangway and placing the guide piles.

During construction, it would also be necessary to provide a floating work platform within the water so that workers could gain access beneath the ramp to install the fastenings. Additionally, a small workboat would be used to move equipment and materials within the water. The workboat would remain at the site for the duration of construction of the water taxi elements.

Donahue Street Extension

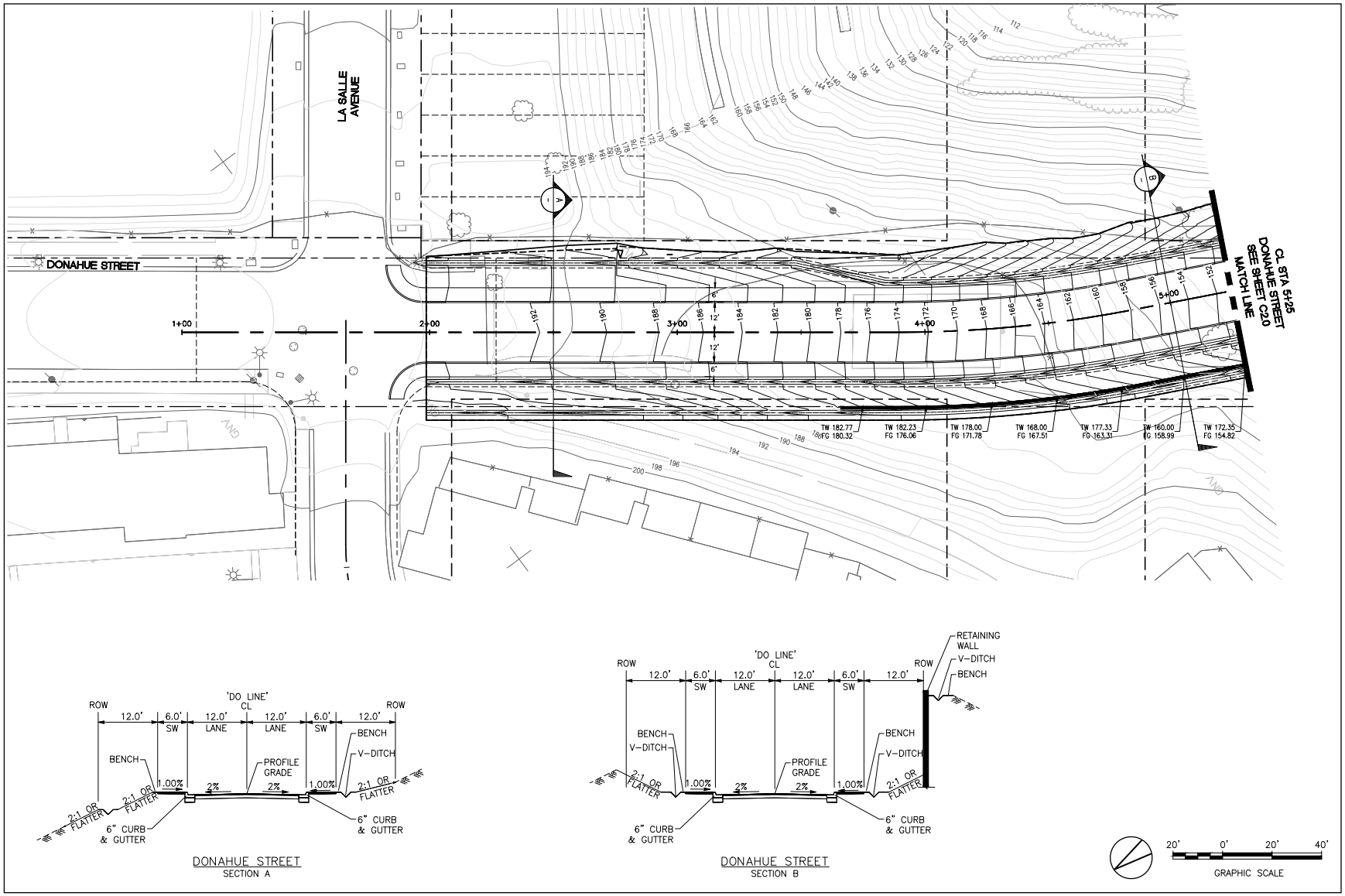
The 2018 Modified Project Variant would extend Donahue Street from La Salle Avenue/Kirkwood Avenue southwards to Crisp Road, pending dedication of land from Mariners Village to the City and determination that construction of the roadway extension is financially feasible. The length of the extension would be approximately 750 feet. The width of the right-of-way would be 60 feet, made up of two 12-foot-wide travel lanes, two 6-foot-wide sidewalks, and two 12-foot-wide grades accommodating the cut into the hillside. See Figure 21 (Donahue Street Extension—Conceptual Grading Plan [1 of 2]) and Figure 22 (Donahue Street Extension—Conceptual Grading Plan [2 of 2]). Other street infrastructure and utilities would be provided, including:

- Vertical curbs and gutters;
- Storm drain systems—12-inch and 18-inch high-density polyethylene [HDPE] pipe, v-ditch drains and inlets, curb inlets, manholes, bioretention, and sub-drains);
- Power—Single-phase power, 1.5-inch street light conduit, 17x30-inch SFPUC box, street light pull box, and street light poles, foundations, and luminaires;
- Landscaping—75x24-inch box trees, soil prep and finish grading, mulch topdressing, import soil, 2,200 1-gallon shrubs, and irrigation; and
- Potable Water Infrastructure—12-inch and 16-inch ductile iron pipe and associated appurtenances.

The road would slope downwards from a ground level of approximately 194 feet above sea level at La Salle Avenue to a ground level of approximately 106 feet above sea level at Crisp Road. A series of retaining walls extending a length of approximately 410 feet would be constructed to facilitate the road. The height of the retaining walls would vary from approximately 0.5 foot to 20 feet.

Construction activities associated with the road extension would include:

- Implementing stormwater pollution prevention and erosion control measures;
- Clearing all vegetation;
- Rough grading;
- Earthworks (excavation and backfill), retaining wall construction and fine grading;

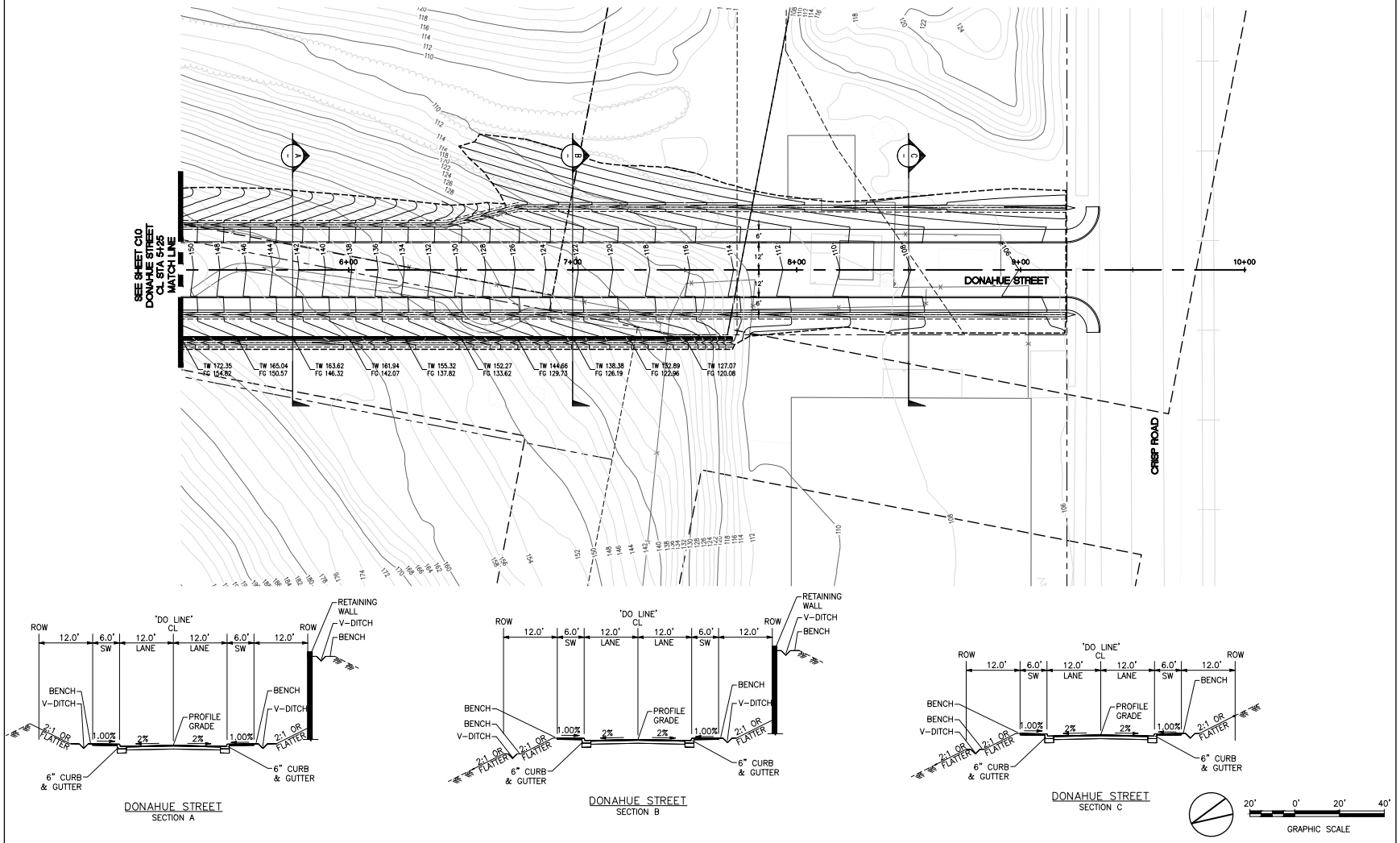


SOURCE: BFK, 2016.

FIGURE 21

Addendum 5 to the CP-HPS2 2010 FEIR

DONAHUE STREET EXTENSION — CONCEPTUAL GRADING PLAN [1 OF 2]



SOURCE: BFK, 2016.

FIGURE 22 Addendum 5 to the CP-HPS2 2010 FEIR

DONAHUE STREET EXTENSION — CONCEPTUAL GRADING PLAN [2 OF 2]

- Construction of 3 inches of asphalt concrete over 8 inches of road base; and
- Utility installation.

Pedestrian Bridges

Design and construction of both bridges at Dry Dock 4 would occur in a manner that is consistent with the Secretary of the Interior's Standards, as further discussed and described in Addendum 5 Section II.B.9 (Cultural Resources).

I.E CP and HPS2 Construction Phasing Plan

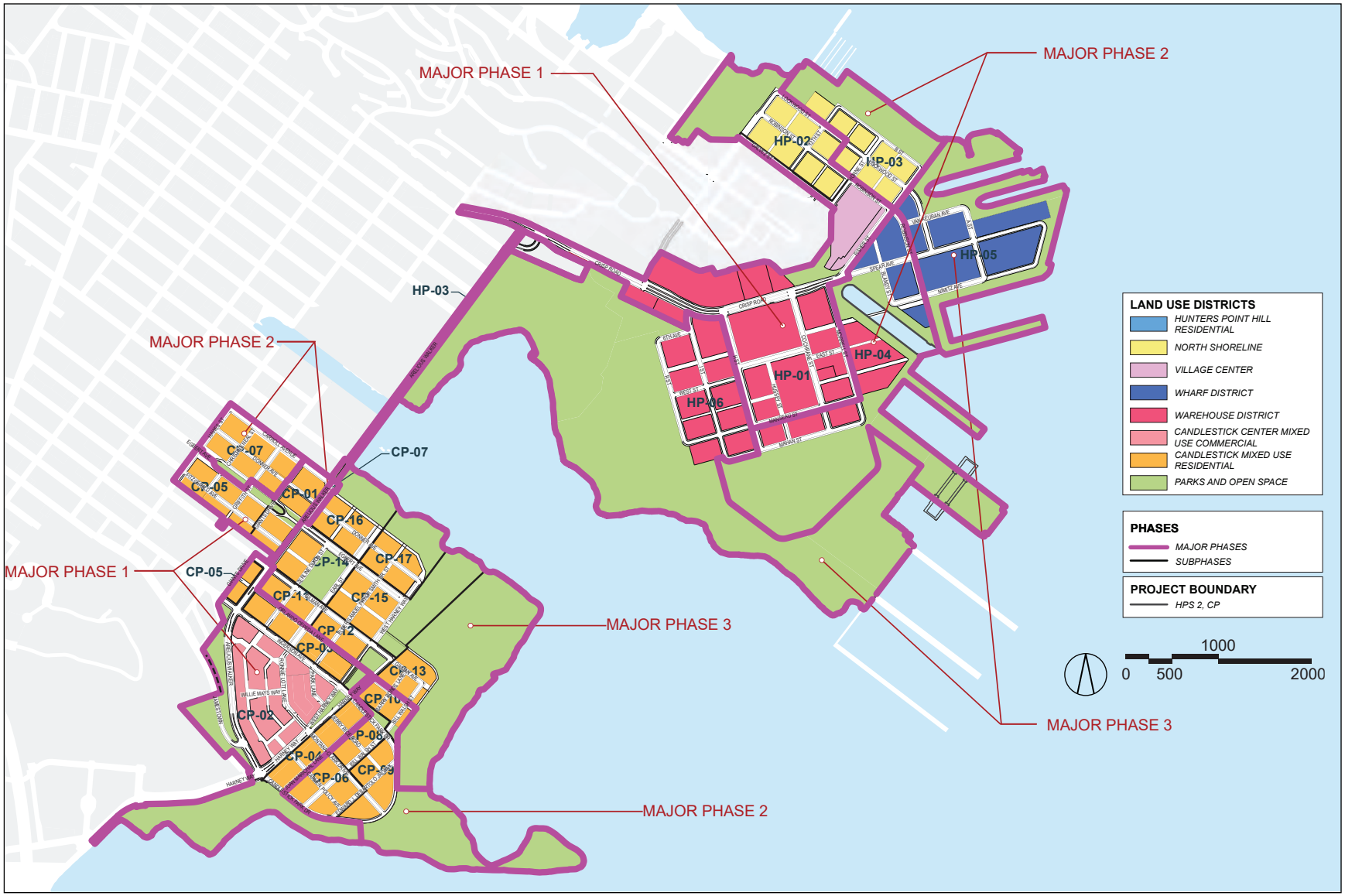
I.E.1 Amendments to Construction and Phasing Plan

The 2010 FEIR identified four major phases of development at both CP and HPS2. Each variant in the 2010 FEIR had a slightly different phasing and construction schedule. Addendum 1 also analyzed an updated phasing and construction schedule based on the Housing/R&D Variant (Variant 2A), which was approved with the Candlestick Point Major Phase 1 application. Addendum 5 proposes a new phasing and construction plan, which is described below. The construction schedule associated with the 2018 Modified Project Variant proposes that construction would begin later (in 2014, rather than 2011, as envisioned in the 2010 FEIR) and concludes later (in 2034, rather than 2031, as envisioned in the 2010 FEIR). Construction would continue to occur over a 21-year period.

HPS2 Phasing Plan

The HPS2 phasing plan under the 2018 Modified Project Variant would update the phasing and construction schedule for HPS2 by reducing the number of major phases from four to three, although it is anticipated that the three major phase applications would be submitted at the same time. Figure 23 (Construction Schedule) shows the delineation of the three major phases (1 through 3) and its six sub-phases (HP-1 through HP-06). Development would commence under Major Phase 1 with Sub-phases HP-01 and HP-02, followed by Major Phase 2 with Sub-phases HP-03 and HP-04, and Major Phase 3 with Sub-phases HP-05 and HP-06. Development of a sub-phase may begin before the development of a previous sub-phase is complete.

Phasing changes under the 2018 Modified Project Variant would distribute sub-phase development more evenly across the North Shoreline District and the Warehouse District than the previously approved phasing plan. This would allow for the concurrent development of a mix of uses, as well as the construction of infrastructure and circulation connections between the northern and southern portions of the Shipyard in the first and second sub-phases. By reducing the number of major phases and increasing the area of each sub-phase, development at the Shipyard would be accelerated.



SOURCE: FivePoint, 2018.

FIGURE 23 Addendum 5 to the CP-HPS2 2010 FEIR

CONSTRUCTION SCHEDULE

Sub-phase HP-01 includes the improvement of Fisher Street and Crisp Road, providing an infrastructure and transportation link between the northern and southern portions of the Shipyard. Sub-phase HP-01 also includes development blocks north and south of Crisp Road, as well as Buildings 813 and potentially Buildings 411 and 351, two existing buildings that would anchor the first sub-phase of development at the Shipyard. Sub-phase HP-02 includes development blocks along Robinson Street in the North Shoreline District and Sub-phase HP-03 includes the balance of development in that District. Sub-phase HP-04 includes the rehabilitation of Dry Dock 4 and the development of the surrounding blocks. Sub-phase HP-05 includes the development blocks in the Wharf District. Sub-phase HP-06 includes the balance of development in the southern portion of the Shipyard (Warehouse District).

CP Phasing Plan

The CP phasing plan under the 2018 Modified Project Variant would update the phasing and construction schedule for CP by reducing the number of major phases from four to three, consolidating Sub-phases CP-05 and CP-09 to advance the development of the Alice Griffith neighborhood and renumbering and resequencing the rest of the CP sub-phases to allow development to advance in an easterly rather than northern direction. The renumbering and resequencing reduces the number of sub-phases from 18 to 17.

I.F Project Approvals

The 2018 approvals required to implement the 2018 Modified Project Variant as addressed in Addendum 5 include the following:

	Project Approval	*Agency*
1	BVHP & HPS Redevelopment Plan Amendments	OCII Commission; Planning Commission; Board of Supervisors
2	HPS1 and CP-HPS2 Disposition & Development Agreement Amendments (including Phasing Plan & Schedule of Performance)	OCII Commission; Oversight Board; California Department of Finance
3	HPS2 D4D Amendments	OCII Commission; Planning Commission; Board of Supervisors
4	HPS2 Streetscape Master Plan & Signage Master Plan	OCII Commission; Art Commission; Board of Supervisors
5	Major Phases 1HP-3HP Application for Major Phases 1 through 3, submitted concurrently	OCII Commission
6	Sub-phases HP-01 to HP-06 Application(s)	OCII Commission
7	CP-HPS2 Transportation Plan	OCII Commission; SFMTA Board; Board of Supervisors
8	HPS2 Infrastructure Plan	Director of San Francisco Department of Public Works (SFDPW); SFMTA Board; Director of San Francisco Public Utilities Commission (SFPUC); Director of San Francisco Fire Department (SFFD); Board of Supervisors

	Project Approval	*Agency*
9	CP-HPS Below Market Rate Housing Plan	OCII Commission; Board of Supervisors
10	CP-HPS2 Parks, Open Space and Habitat Plan	OCII Commission; Board of Supervisor
11	CP-HPS2 Sustainability Plan	OCII Commission
12	General Plan Amendments: HPS Area Plan amended to remove the stadium; CP Sub-Area Plan amended to remove the Jamestown parcel; and CP Activity Node Special Use District amended to remove the Jamestown Parcel	Planning Commission; Board of Supervisors
13	Approvals Under 2011 Public Trust Exchange Agreement	State Lands Commission

I.G Future Approvals

The proposed amendments to the Hunters Point Shipyard Redevelopment Plan and the Bayview Hunters Point Redevelopment Plan provide limits of development within the respective plan areas consistent with the plan, plan documents, and applicable City regulations, limits that are analyzed in Addendum 5. The plans acknowledge that although these limits are the best estimates of development available at this time, the development program would be carried out over more than two decades, and to allow the ability to respond to future conditions, the plans include a provision that allows the OCII Commission to administratively approve future adjustments to the square footage limitations of individual land uses provided in the plans (with the exception of artists' and community use spaces) and attendant conversion of certain specified development uses to other allowed uses, provided that such adjustments do not exceed limits consistent with plan, plan documents, and applicable City regulations, and subject to any required additional environmental review. Additionally, the proposed plan amendments for both redevelopment plans include a provision allowing the OCII Commission to administratively approve a shift of R&D and office square footage from the Hunters Point Shipyard Redevelopment Plan area to those areas of Zone 1 of the Bayview Hunters Point Redevelopment Plan where such use is permitted, also subject to any require additional environmental review and subject to the limitation that the amount of square footage shifted would not exceed 10 percent, or 118,500 sf, of the maximum total nonresidential square footage permitted at CP, which is 1,185,000 sf. These provisions allow the Commission to consider and approve such future proposals without requiring an amendment of the plan sections that specify the square footage for various uses.

At this time, the developer has not made a specific proposal pursuant to these provisions. The provisions in the redevelopment plans provide a framework for future discretionary actions by the OCII Commission and require compliance with CEQA if and when an application is submitted pursuant to these provisions. Nonetheless, a programmatic analysis of the transfer of 118,500 sf of nonresidential uses from HPS2 to CP is provided in Addendum 5 for traffic, air quality, greenhouse gas emissions, and noise, as further described in Section II.A.2 (Approach to the Analysis, Analytic Method) and Appendix I (Transportation, Air Quality/Greenhouse Gas Emissions, and Noise

Analyses of the Transfer of Nonresidential Uses from HPS2 to CP). Section II.A.2 also describes why a programmatic evaluation of the other topical areas cannot be provided at this time.

II. ENVIRONMENTAL ANALYSIS

II.A Approach to the Analysis

As previously mentioned, the development plan analyzed in Addendum 5 is proposed by the Project Sponsor as a new variant, the "2018 Modified Project Variant," which includes revisions to land uses and some other changes from the Project and/or any of the land use variants proposed in 2010, and incorporates elements of the 2010 FEIR Candlestick Tower Variant 3D and certain components of the Utilities Variant 4. If approved, this new variant would be implemented instead of 2010 Project (the main, stadium project), R&D Variant (Variant 1), Housing Variant (Variant 2), or Housing/R&D Variant (Variant 2A), all of which were described and analyzed in the 2010 FEIR.

II.A.1 Authority for Use of an Addendum

CEQA Guidelines Section 15164 provides for the use of an addendum to document the basis for a lead agency's decision not to require a subsequent EIR for a project that is already adequately covered in a previously certified EIR. The lead agency's decision to use an addendum must be supported by substantial evidence that the conditions that would trigger the preparation of a subsequent EIR, as provided in CEQA Guidelines Section 15162, are not present. These conditions indicate that:

> (a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
>
> (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
>
> (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
>
> (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
>
> (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
>
> (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
>
> (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Addendum 5 has been prepared to identify and assess the anticipated environmental impacts of the 2018 Modified Project Variant. The document relies on previous environmental documents[26] prepared to address in detail the effects or impacts associated with the project, as well as updated analysis prepared by qualified technical experts to address the 2018 Modified Project Variant. This document has been prepared to satisfy CEQA, (Public Resources Code Sections 21000 et seq.) and the CEQA Guidelines (14 CCR Sections 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

Where, as here, an EIR addressing an earlier version of the project has been previously prepared and certified, the lead agency considers the adequacy of that prior EIR in light of the current modified version of the project and changed physical circumstances since the time of the preparation of the prior EIR. Pursuant to CEQA Guidelines Section 15164, if the agency finds no basis for requiring the preparation of either a subsequent EIR or an EIR supplement, an EIR addendum shall be prepared. Accordingly, Addendum 5 describes the potential environmental effects of the 2018 Modified Project Variant compared to the impacts identified in the 2010 FEIR and explains how the proposed modifications would not result in any new significant environmental impacts or a substantial increase in the severity of previously identified environmental impacts and would not require the adoption of any new mitigation measures or alternatives to reduce previously identified significant effects.

II.A.2 Analytic Method

Baseline for Analysis

In Addendum 5, the 2018 Modified Project Variant is primarily described and assessed in relation to the 2010 Project (as described in 2010 FEIR Chapter II, Project Description). However, certain impacts are assessed in comparison to the 2010 FEIR R&D Variant (Variant 1), 2010 FEIR R&D/Housing Variant (Variant 2A), 2010 FEIR Utilities Variant 4, and/or the changes evaluated in Addendum 4 and approved by the 2016 D4D and amendments to the CP Major Phase 1 Application, which occurred subsequent to the 2010 FEIR where the impacts are more comparable to those variants or approvals instead of the 2010 Project. This analysis reflects the analytical approach mandated by the applicable sections of the CEQA Guidelines (Sections 15162 through 15164) and comprehensively reviews and compares the effects of the 2018 Modified Project Variant to those disclosed in the 2010 FEIR.

[26] http://sf-planning.org/environmental-impact-reports-negative-declarations, accessed on November 30, 2017.

Utility Systems

As further described in Section I (Project Description), Addendum 5 proposes an alternative utility system, which would complement the City's conventional system and would include a ground source geothermal heating and cooling system as the primary source of heating and cooling for the development, as well as solar power, recycled water, and building-scale and utility-scale battery storage.

A conventional utility system was analyzed as part of the 2010 Project, R&D Variant (Variant 1), and Housing Variant (Variant 2). In addition, certain components of the alternative utility system were also analyzed as part of 2010 Utilities Variant 4 (i.e., solar power, recycled water, and district heating and cooling plants, the latter of which did not, however, assume the use of a geothermal heating and cooling system composed of a vertical bore heat exchange process). The alternative utility system described in Addendum 5 Section I (Project Description), which include some components that were evaluated in the 2010 FEIR, are evaluated in Addendum 5.

Transfer of Nonresidential Uses from HPS2 to CP

The BVHP and HPS Redevelopment Plans allow for the transfer of up to 118,500 sf of nonresidential uses from HPS2 to CP, which represents approximately 10 percent of the total nonresidential land use program at CP of 1,185,000 sf, subject to future discretionary approval and environmental review, as necessary. The transfer of this nonresidential square footage is evaluated in Appendix I (Transportation, Air Quality/Greenhouse Gas Emissions, and Noise Analyses of the Transfer of Nonresidential Uses from HPS2 to CP) for traffic, air quality, greenhouse gas emissions, and noise. This analysis is based on the AM and PM peak hour trip generation associated with a transfer of 118,500 sf of nonresidential uses from HPS2 to CP (as part of the 2018 Modified Project Variant) and comparing that trip generation (and associated impacts) to what was disclosed in the 2010 FEIR, as further described in Addendum 5 Section II.B.3 (Transportation and Circulation).

Impacts related to cultural and paleontological resources, geology and soils, hydrology and water quality, and biological resources are based on the area of land disturbance. Since the transfer of nonresidential uses from HPS2 to CP would not result in a change in the area of land disturbance at either location, the impacts associated with these topical areas are accurately analyzed in the 2010 FEIR and Addendum 5. No further analysis is necessary based on the currently available information related to the transfer of land uses.

Other topical areas, including land use, population and housing, aesthetics, shadows, wind, hazards and hazardous materials, public services, recreation, and utilities, are based on specific locational and development (i.e., land use) information in order assess impacts. Similarly, localized operational and construction-related impacts related to traffic, air quality, and noise would also require specific locational and development information to assess impacts. Therefore, no further analysis can be provided in Addendum 5 based on the currently available information related to the transfer of land uses.

Internal Adjustment of Land Uses within HPS2 and CP

The BVHP and HPS Redevelopment Plans allow for the adjustment of uses within the HPS2 and CP project sites (but not between sites, beyond the ten percent transfer described above). For both CP and HPS2, the Commission may approve, without amendment to either Plan, but subject to any necessary environmental review, the adjustment of the nonresidential square footages over time (except artist or community use space), including the conversion to other nonresidential uses allowed by these Plans, provided the overall square footage limits for nonresidential specified in each Plan are not materially exceeded. However, because there is no information related to any potential "intra-site" adjustments, there is no analysis provided in Addendum 5 to address such adjustments. Any future adjustment of uses would be subject to potential, future discretionary and environmental review and approval, as necessary.

Jamestown Parcel

The 2006 Program EIR identified the zoning for the Jamestown Parcel as RH-2 (Residential, House, Two-family) with a height limit of 40 feet and evaluated proposed development under these zoning controls (see 2006 Program EIR, Figures III.B-1, IIIB-2, III.B-3, and III.B-4). The Jamestown Parcel area was undeveloped in 2006. In the 2006 Program EIR, the Jamestown Parcel was identified as part of the larger South Basin Activity Node.

The 2006 Program EIR evaluated the following proposed development in the South Basin Activity Node: 30,000 sf of Management and Information Professional Services; 100,000 sf of Production, Distribution, and Repair; 40,000 sf of Retail and Entertainment; and 600 Dwelling Units. The residential land uses were proposed to be located in the northeastern and southeast portion of the South Basin Activity Node, which included the Jamestown Parcel. Since 2006, approximately 300 to 310 housing units (of the 600 analyzed in the 2006 Program EIR) have been developed in the South Basin Activity Node.

The proposed shift of the Jamestown Parcel from Zone 1 to Zone 2 of the BVHP Project Area B would mean that this parcel would no longer be subject to the land use controls under the BVHP Plan, which apply only in Zone 1. Zone 2 is regulated by the San Francisco Planning Code. Consequently, the Jamestown Parcel zoning would revert to the underlying zoning of RH-2 District (Residential, House, Two-family). Under the Planning Code, up to one unit per 1,500 sf of lot area is permitted in the RH-2 District with Conditional Use authorization. The 2006 BVHP height limit of 40 feet would be reassigned to the Jamestown Parcel. Given these density and height limits and other Planning Code site development standards (e.g., open space, setbacks, rear yard, and parking), it is reasonable to assume that a conservative estimate of 200 units could be developed on the Jamestown Parcel under Planning Code requirements. The proposed boundary change to shift the Jamestown Parcel from Zone 1 to Zone 2 of the BVHP Project Area B does not require additional environmental review, because the impacts associated with development in the Jamestown Parcel under the 2006 zoning controls were evaluated in the Bayview Hunters Point Redevelopment Projects and Rezoning Program Environmental Impact Report (2006 Program EIR).

The 2010 FEIR considered the estimated development under the BVHP Redevelopment Plan in its cumulative analysis. The 2010 CP-HPS2 FEIR cumulative analysis was based on full buildout of the adopted plans in the project area, including the BVHP Redevelopment Plan. The 2010 FEIR evaluated cumulative impacts "based upon a list of related projects identified by the City and neighboring jurisdictions and/or on full implementation of the City's General Plan and/or other planning documents depending on the specific impact being analyzed." (2010 CP-HPS2 FEIR, III.A-6.) The 2006 BVHP Redevelopment Plan was adopted prior to the 2010 FEIR. Thus, the CP-HPS2 FEIR cumulative analysis accounted for the buildout of the 2006 BVHP Plan, including the development of the Jamestown Parcel.[27] Given that the anticipated residential development in the Jamestown Parcel was evaluated in the 2006 BVHP Redevelopment Plan Program EIR and was accounted for in the cumulative analysis in the 2010 CP-HPS2 FEIR, no additional environmental review of this proposed change is required, and it is not further addressed in Addendum 5.

Recycled Water Facility

Impacts associated with the 976,000-gpd central recycled water treatment facility are evaluated in Addendum 5 in terms of its location (e.g., size, height, geographic location) and/or ground disturbance in land use, aesthetics, shadows, wind, air quality, noise, cultural and paleontological resources, hazards and hazardous materials, geology and soils, hydrology and water quality, biological resources, public services, recreation, and energy. In terms of population, housing, and employment, the facility would require only one employee and, therefore, would not account for any noticeable increase in population, housing, employment, or related operational traffic impacts (or related operation air quality or noise impacts). Odor impacts associated with the operation of the recycled water facility are evaluated in the air quality section in Impact AQ-8. Lastly, the recycled water facility would not generate the need for any water, or, therefore, wastewater, and no further analysis is required in the utilities section of Addendum 5.

II.A.3 Format of Analysis

The analysis provided in Addendum 5 covers each of the technical issue areas addressed in the 2010 FEIR, including:

- Land Use and Plans (Section II.B.1)
- Population, Housing, and Employment (Section II.B.2)
- Transportation and Circulation (Section II.B.3)
- Aesthetics (Section II.B.4)
- Shadows (Section II.B.5)
- Wind (Section II.B.6)
- Air Quality (Section II.B.7)
- Noise (Section II.B.8)

[27] In effect, the CP-HPS2 FEIR evaluated the development of Jamestown in both the project level analysis and the cumulative analysis.

- Cultural and Paleontological Resources (Section II.B.9)
- Hazards and Hazardous Materials (Section II.B.10)
- Geology and Soils (Section II.B.11)
- Hydrology and Water Quality (Section II.B.12)
- Biological Resources (Section II.B.13)
- Public Services (Section II.B.14)
- Recreation (Section II.B.15)
- Utilities (Section II.B.16)
- Energy (Section II.B.17)
- Greenhouse Gas Emissions (Section II.B.18)

Each of the technical sections addresses (1) changes in the project proposed in the 2018 Modified Project Variant that are relevant to that particular issue area and (2) impacts associated with construction and implementation of the 2018 Modified Project Variant as compared to the Project and/or variants analyzed in the 2010 FEIR. To provide context, each impact discussion includes a brief summary of the conclusions of the 2010 FEIR relative to that particular impact discussion, either as an introductory paragraph or woven into the impact analysis itself if a side-by-side comparison to the 2010 FEIR provides a more useful analytical tool.

For most topical areas, the analysis focuses on HPS2 since that is where the land use changes proposed by the 2018 Modified Project Variant occur; the land use program associated with CP is the same land use program as approved by the 2016 D4D. However, the transportation analysis considers the combined CP and HPS2 sites for construction traffic, project-related trips (vehicular, transit, bicycle, and pedestrian), parking and loading, air traffic, design features, and emergency access; similarly, the air quality, greenhouse gas emissions, and noise analysis also considers the combined CP and HPS2 sites for any impacts related to vehicle trips. All other topical areas assume that impacts associated with CP are covered in the 2010 FEIR, unless specifically described and analyzed otherwise.

Decision-makers have relied on prior addenda prepared subsequent to the certification of the 2010 FEIR to demonstrate that previously proposed changes to the 2010 Project, as evaluated in those addenda, could be implemented without changing the conclusions of the 2010 FEIR. Addendum 5 includes all prior changes that were both proposed and evaluated in previous addenda but now carried forward, as well as the additional changes proposed in 2018. It evaluates all of those changes against the 2010 FEIR, including analyses in the variants analyzed in that document. The Project proposed in Addendum 5 represents the "Project."

CEQA Guidelines Section 15162(a)(2) states that for an EIR that has been certified, no subsequent EIR shall be prepared if there are no physical changes in circumstances under which the project is undertaken that give rise to a new significant environmental effect or a substantial increase in the severity of previously identified significant effects. The physical changes in circumstances at CP and HPS2 do not give rise to new significant environmental effects or a substantial increase in the

severity of previously identified significant effects related to the 2018 Modified Project Variant. These physical changes include:

- Additional remediation activities at HPS2 performed by the Navy;
- Demolition of the commercial kitchen at HPS2, which was located along Robinson Street, north of Fisher Avenue;
- Construction of a new commercial kitchen at HPS2 along Fisher Avenue near the intersection of Spear Avenue;
- Excavation of the artist building/plaza at HPS2, with soil being stockpiled behind Buildings 808 and 813;
- Installation of water and storm drain utilities on Galvez Avenue, Horne Avenue, and Robinson Street (with subsequent grading and paving of these roadways anticipated in 2018); and
- Demolition of the stadium, construction of the new Alice Griffith residential buildings, and various civil works associated with the CP Center, all at CP.

For three topical sections—Population, Housing, and Employment; Transportation and Circulation; and Biological Resources—a section entitled "Changes in Circumstances" is provided where specific information, beyond the summary outlined above, better describes physical changes in circumstances related to those particular topics. Similarly, a section entitled "new regulations" is only provided for those topical sections where new regulations are applicable. Again, neither the specific changes in physical circumstances nor any new regulations give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to the 2018 Modified Project Variant.

The analytic methods for each topical section follows the same methods used in the 2010 FEIR. Where the methods vary, the reasons why that is necessary are provided in the topical sections of Addendum 5.

The impact statements presented in Addendum 5 include only those that relate to the changes proposed by the 2018 Modified Project Variant. There are other impact statements provided in the 2010 FEIR that are not included in Addendum 5 because they relate to elements of the 2010 Project or its subsequent modifications (prior to 2018) that have not changed, which primarily relate to CP. Addendum 5 Appendix C (Impacts Evaluated in Addendum 5) identifies each of the impact statements provided in the 2010 FEIR and indicates whether they are evaluated in Addendum 5.

Lastly, any project modifications and revised mitigation measures that were identified in the previous addenda and subsequently approved for the CP-HPS2 Project are assumed as part of Addendum 5, and are found in Table A-1 of Addendum 5 Appendix A.

II.B Analysis of Environmental Effects

Sections II.B.1 through II.B.18 describe the environmental effects of the 2018 Modified Project Variant and conclude that the proposed modifications would not result in any new significant environmental impacts or a substantial increase in the severity of previously identified environmental impacts and would not require the adoption of any new mitigation measures or alternatives. Some mitigation measures are recommended for revision or deletion to account for new construction methods, updated technical reports, increased technical clarity, and land use program changes.

For purposes of Addendum 5, and consistent with the general definition in the 2010 FEIR, the "Project Sponsor" is assumed to be FivePoint. The "Project Applicant" is the vertical developer. In Appendix B (MMRP), some of the requirements would be assumed by the Project Applicant rather than the Project Sponsor.

II.B.1 Land Use and Plans

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
10. Land Use and Planning. Would the project:					
B.a Physically divide an established community?	2010 FEIR p. III.B-33 (Impact LU-1); Addendum 1 p. 28; Addendum 4 p. 13	No	No	No	None
B.b Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	2010 FEIR p. III.B-37 (Impact LU-2); Addendum 1 p. 28; Addendum 4 p. 13	No	No	No	None
B.c Have a substantial adverse impact on the existing character of the vicinity?	2010 FEIR p. III.B-39 (Impact LU-3); Addendum 1 p. 28; Addendum 4 p. 13	No	No	No	None

Changes to Project Related to Land Use and Plans

The Project modifications related to land use and plans that are relevant to, and considered in, the discussion below include generally the proposed new uses, the density and intensity changes, the adjustment to district boundaries, revised configurations or locations of certain Project elements, the additional pedestrian and bicycle network improvements, the new circulation improvements and modifications, and the proposed recycled water facility.

Comparative Impact Discussions

Impact LU-1: Implementation of the Project would not physically divide an established community. ***[Criterion B.a]***

	2010 CP-HPS2 FEIR	2010 CP-HPS2 FEIR Addendum 5
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR determined the Project would have no impact with regard to the potential to physically divide an established community. The 2010 FEIR recognized the Project would change land uses in the area and increase the density and intensity of development on the Project site. Existing connections between the Project site and surrounding development, however, is limited. CP and HPS2 are physically isolated from nearby neighborhoods. Street connectivity between the CP and HPS2 and the surrounding neighborhoods is restricted. The limited access to CP and HPS2 interferes with access to the Candlestick Point State Recreation Area (CPSRA) and the shoreline.

The 2010 FEIR found the Project would develop new mixed-use districts, a new street grid, new pedestrian, transit, and bicycle access, public gathering places, and new open space and recreational uses that would facilitate connections between the Project site and the surrounding communities. The new land uses would provide services, recreational opportunities, and other amenities that would be used by the existing surrounding communities and the new Project residents. The 2010 FEIR found the Project would improve the connectivity of the site to the surrounding neighborhoods and the City. Consequently, the 2010 FEIR concluded the Project would not divide an established community.

Similar to the 2010 Project, the 2018 Modified Project Variant would develop a new mixed-use community with distinct districts accommodating a variety of residential uses, retail uses, research and development uses, open space, parks, and recreational uses, cultural uses, community uses, on- and off-street parking, and a marina. The 2010 Project included a new stadium in the Shipyard south area. Similar to the approved non-stadium land use Variants in the 2010 FEIR (R&D Variant [Variant 1] and Housing/R&D Variant [Variant 2A]), the 2018 Modified Project Variant would include housing and R&D uses in this area.

The addition of a hotel, school uses, regional retail use, and maker space would add to the diversity of uses in this new urban community and would serve and complement the planned residential and commercial uses at HPS2 and the surrounding neighborhoods. These uses would attract existing City residents and visitors to the site, thereby connecting the site to the larger surrounding community. The addition of maker space would accommodate a Citywide growing contemporary type of small-scale manufacturing uses that would be suitable for the mix of uses planned at HPS2. This use would complement the existing artists and artisans working at HPS2. None of these new uses would divide an established community.

Although the density and intensity of some of the uses proposed in the 2018 Modified Project Variant would vary from the Project, the overall balance of development uses generally would be maintained as square footage, as some uses would be reduced to accommodate the increase in other uses. Some residential units (172) and commercial space (71,000 sf) that were approved for HPS1, but were not constructed, would be accommodated in HPS2. These additional units and commercial space would be contained within and distributed throughout HPS2 and are accounted for in this analysis. Additionally, the changes in density and intensity of development would not interfere with the planned, new physical connections to surrounding neighborhoods, the improved vehicle, pedestrian, bicycle, and transit access to the site, or access to the shoreline. Thus, these Project modifications would not divide an established community.

The 2018 Modified Project Variant would modify the methodology for locating two high-rise towers within HPS2. Tower A would be on the same block as identified for the 2010 Project, but a flexible tower zone would be added to the entire block. Tower B would be moved one block north from the location shown in the 2010 FEIR for the 2010 Project and would include a flexible tower zone for the entire block. These towers would not be located adjacent to or near an existing community. The minor shift in the allowable location of the towers would not interfere with the planned, new physical

connections to surrounding neighborhoods, the improved vehicle, pedestrian, bicycle, and transit access to the site, or access to the shoreline. Thus, these Project modifications would not divide an established community.

The addition of a water taxi would expand transportation options to and from the site providing a service to the residents, commercial users, and visitors and generally increase the connectivity of the Project site to areas around the Bay. The proposed bridges across Dry Dock 4 would enhance the planned pedestrian/bicycle network along the shoreline area and Waterfront Promenade at HPS2. The proposed extension of Donahue Street would provide a new vehicle and pedestrian connection to HPS1 from the south and connect existing communities with future recreation area and services at HPS2. These proposed modifications would improve the connectivity of HPS2 to HPS1, surrounding neighborhoods, and nearby local communities.

The 2018 Modified Project Variant would include minor revisions to the boundaries of the land use districts to reflect the reconfigured limits of development and reconfigured parks and open space areas. In the North Shoreline District, development north of B Street has been removed, which would increase the size of the Waterfront Promenade in this area. The Waterfront Promenade would also increase due to the inclusion of a new civic square at the end of Dry Dock 4, known as the Water Room. These changes would increase the size of the Waterfront Promenade by approximately 4.4 acres. The Water Room would be a community gathering place, and Dry Dock 4 would include seating along the full extent of the dock.

As a result of retaining the existing street grid to reflect the historic shipyard configuration, the 2018 Modified Project Variant would remove three individual parks (Hunters Point Park Blocks, Hunters Point Wedge Park, and R&D Plaza) and provide a consolidated 8.1-acre publicly accessible private open space (POPOS) on Crisp Road, known as the Green Room. The Sports Field Complex would be relocated to the southern edge of the site. The Grasslands Ecology Park would be reconfigured due to changes in the Sports Field Complex and the street layout in the Warehouse District. The Hillside Open Space area would increase in size and would continue to create a pedestrian connection between the Hill Top Park (which is part of HPS1) and the proposed Water Room.

Overall, the amount of public or publicly accessible open space and park area at HPS2 would be 232.0 acres, an increase of 0.4-acre from the 2010 Project and an increase of 9.8 acres from the R&D Variant (Variant 1). These modifications would increase open space along the Waterfront Promenade and provide additional public amenities, including the Water Room. Compared with the 2010 Project, these proposed modifications would maintain or increase open space and public access opportunities to and within the site, particularly along the waterfront and, thus, would not divide an existing community.

The 2018 Modified Project Variant would include revisions to the roadway cross section dimensions and alignments at HPS2 and sidewalk widths. These modifications would maintain the multimodal nature of access to and through HPS2 and thereby increase connectivity with surrounding areas and

within the site over existing conditions by improving the quality of the facilities within the HPS2 site and the connections to the existing neighborhood streets. These modifications would be located within, and would facilitate circulation throughout, the Project site. Thus, these modifications would not divide an existing community.

The proposed reconfiguration of the street network within the Warehouse District would facilitate the sequence of development phasing based on the progressive transfer of parcels from the Navy and allow the retention of Buildings 351 and 411. Streets in the Hunters Point South neighborhood would be similar to what was proposed in 2010 FEIR Variant 1 (R&D) (2010 FEIR Figure IV 1, p. IV-7), but street alignments have been slightly modified to account for retention of these additional existing buildings. Overall, the size and density of the street grid in Hunters Point South is similar to what was originally approved in 2010 FEIR Variant 1 (R&D); therefore, transportation capacity is expected to be similar.

This reconfiguration would not interfere with or adversely affect the planned, new connections to the surrounding area or access to the Project site or shoreline. Additionally, the location of the Hunters Point Transit Center would shift from the south side of Spear Avenue near the intersection of Lockwood Street to the north side of Spear Avenue to near Dry Dock 2. The Transit Center would increase from 10 to 14 bays. The Transit Center would continue to be a Project element that would increase the connectivity of the Project to other neighborhoods throughout the City. The expanded number of bays would facilitate this connectivity. Thus, these modifications would not divide an existing community.

The 2018 Modified Project Variant includes a recycled water facility proposed to be located along Crisp Road. The 2010 FEIR Utilities Variant 4 analyzed on-site wastewater treatment at 11 decentralized facilities, four of which were located at HPS2 and found that these facilities would not divide an existing community. The proposed facility would be located within the Project HPS2 boundary at the edge of the development area in the Warehouse District and is not adjacent to surrounding off-site uses. Given its location, it would not interfere with new access to the Project site and would not divide an existing community.

The modification of the number of housing units proposed for CP, which includes a decrease of 632 units as compared to the 2010 Project, would be accommodated in the planned residential and mixed-use areas, excluding the Jamestown Parcel. This modification would be accommodated within the Project site and would not interfere with or reduce the new planned connections to the surrounding community or the new access to the CPSRA and the shoreline. Thus, this modification would not divide an existing community.

Similar to the 2010 Project, the 2018 Modified Project Variant would redevelop the largely vacant and underused Project site with an active urban community that would create greater connections within the site, with surrounding neighborhoods, and with the City as a whole. The existing site is isolated from surrounding neighborhoods and the City as a whole. Access to HPS2 remains restricted due to Navy remediation activities. Similar to the 2010 Project, the 2018 Modified Project

Variant would remove existing barriers to Project site access and circulation within the Project site. Vehicle, pedestrian, transit, water taxi, and bicycle access to the site would be provided. Access to the parks, open space, and shoreline would be provided. The mix of uses in the 2018 Modified Project Variant would draw people to the site and provide services, employment, entertainment, and recreational opportunities for those living in the Project site, the surrounding neighborhoods, and the city. There would continue to be no impact.

Impact LU-2: Implementation of the Project would not conflict with land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect. ***[Criterion B.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant.

The 2010 FEIR reviewed the Project's consistency with applicable land use plans and policies. The 2010 FEIR determined that the Project was generally consistent with applicable land use plans and recognized that various land use plans would be amended as part of the Project approval actions. No conflicts with plans, policies, or regulations adopted to avoid or mitigate environmental impacts were identified. This potential impact was determined to be less than significant.

At the time of Project approval in 2010, amendments to the Bayview Hunters Point Area Plan, Bayview Hunters Point Redevelopment Plan, Hunter Point Shipyard Redevelopment Plan and San Francisco Planning Code were adopted to reflect and accommodate the Project. Since 2010, the San Francisco Bay Plan, Map 5, Policy 22 (amended January 2012) and San Francisco Bay Area Seaport Plan (amended January 2012) were amended to reflect the redevelopment plans for the Project.

Additionally, as acknowledged in 2010 FEIR Addendum 4, the CPSRA General Plan was amended in 2013. The 2013 General Plan established goals and policies for the CPSRA consistent with the redevelopment of the CP and HPS2 sites. As noted in Addendum 4, the 2013 General Plan describes the vision and role of the park as "an urban state park" which would function as the intermediary between the shoreline and the adjacent large mixed-use development and provide "a green front lawn" for the planned community of townhomes, high rises, and shopping districts. There would be many more people visiting the park, looking to enjoy the incredible water's edge recreation, as well as contact with nature and respite from city life. Thus, future development of the park must carefully navigate this intermediary nature between the city and shoreline edges. CPSRA's spirit of place would continue to evolve, as a gradient of these urban and natural experiences" (CPSRA General Plan p. I-9).

The 2018 Modified Project Variant includes amendments to certain Project regulatory and entitlement documents, including, specifically, the BVHP Redevelopment Plan and HPS Redevelopment Plan, the HPS2 Design for Development, the CP-HPS2 DDA and exhibits thereto (Schedule of Performance, Phasing Plan, Design Review and Document Approval Procedure, Infrastructure Plan, Transportation Plan, Sustainability Plan, Parks and Open Space Plan, Community Benefits Plan, and Housing Plan), and revisions to certain trust boundaries pursuant to

the State Public Trust Boundary Agreement. Modifications are also being sought to remove a parcel from the CP boundary (the Jamestown Parcel, in CP-02) and shift this parcel from Zone 1 and include it in Zone 2 of the BVHP Redevelopment Plan. These document amendments would accommodate the 2018 Modified Project Variant development proposal to allow for changes in the arrangement, density and intensity of uses (including height and bulk limits), the addition of compatible uses, an alternative utility system, and other infrastructure and design changes as described in Addendum 5.

The potential environmental impacts of these proposed modifications are analyzed in Addendum 5. No conflicts with any plans, policies, or regulations necessary to address the environmental impacts of the proposed modifications have been identified. The 2018 Modified Project Variant would be implemented consistent with the Project Mitigation Monitoring and Reporting Program (including proposed amendments as described in Addendum 6) and applicable environmental regulations. The impact would remain less than significant, and no mitigation would be required.

Impact LU-3: Implementation of the Project would not have a substantial adverse impact on the existing character of the vicinity. ***[Criterion B.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR acknowledged the Project would substantially alter the land use character of the Project site by replacing the existing character of the site with new mixed-use development, including a range of residential, commercial, cultural, and entertainment uses, infrastructure, and parks and open space. Additionally, the 2010 FEIR acknowledged the scale of development proposed by the Project would contrast with nearby residential neighborhoods and industrial area. The 2010 FEIR concluded the Project would improve existing land use conditions at the Project site and would not have an adverse effect on the Project site. Additionally, with respect to HPS2, the 2010 FEIR stated "[w]ith the transition in scale and uses, the extension of the existing street grid, and the connectivity of new open space with existing shoreline open space, the Project would be compatible with surrounding land uses. The Project would not result in a substantial adverse change in the existing land use character at the Project site or vicinity" (2010 FEIR p. III.B-40). Based on this analysis, the 2010 FEIR concluded that the Project would result in a less-than-significant impact on the existing character of the vicinity.

The 2018 Modified Project Variant also would result in an overall improvement of the site, redevelopment of vacant underutilized areas with a new mixed-use community, extension of the street grid, and creation of new connections to the Project site including access to the new parks and the shoreline. The 2018 Modified Project Variant would continue the pattern of locating lower-density residential and mixed-uses in the northern area of the site with a transition to higher-density and more intense commercial uses in areas of HPS2 further from existing development. The 2018 Modified Project Variant would add to the mix of uses on the site, which would expand visitor-serving uses (e.g., the hotel, the water taxi, expanded Waterfront Promenade, new bridges), retail options (e.g., regional retail and maker space), and educational options available to the surrounding community.

Similar to the 2010 Project, the 2018 Modified Project Variant would increase vehicle, pedestrian, bicycle, and transit access to the various urban uses on the site and to the open space and recreational opportunities, including shoreline access. Although the 2018 Modified Project Variant would modify certain aspects of the development plan, the general scale and intensity of uses and general arrangement of land uses would be similar to the 2010 Project and R&D Variant (Variant 1). In general, the 2018 Modified Project Variant would improve conditions at the Project site and connect the site to the larger urban fabric of the surrounding area and the city.

Under the 2010 FEIR Utilities Variant 4, wastewater treatment facilities were distributed among 11 locations across the Project site, with four locations in HPS2. The estimated size of each plant was 36,250 sf and each plant included underground facilities. The 2010 FEIR concluded that these facilities were consistent with the overall Project uses and building characteristics and thus would result in less-than-significant land use impacts. In the 2018 Modified Project Variant, one recycled water facility would be located along the south side of Crisp and across from planned R&D uses on the north side of Crisp and across I Street from planned high-density uses in the Shipyard South district. Some aspects of the facility would be located outside the structure and below grade. Above-grade reuse water tanks would be constructed. Design and landscaping for the structure would be required to comply with the HPS2 Design for Development standards.

Existing residential areas to the north of the recycled water facility site would be separated from the facility by topography and distance. HPS1 hilltop residential uses are located approximately 700 feet from the site. Off-site residential uses near Griffith Street in India basin are located approximately 1,200 feet from the site. The distance to nearby residential uses and the applicable design and landscaping requirements would reduce the potential for an impact on the existing character of the vicinity to a less-than-significant level. The facility would be consistent with nearby off-site industrial uses.

The closest on-site residential use near I Street and Crisp road is approximately 50 feet from the facility site. Two of the four previously proposed plants would have been located immediately adjacent to residential development in Shipyard North. Similar to the Utilities Variant 4, the recycled water facility would be consistent with the type of uses associated with a large-scale urban redevelopment project (refer to Sections II.B.7 [Air Quality] and II.B.8 [Noise and Vibration] for a discussion of potential environmental impacts associated with odor and noise). The impact would remain less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to land use and plans impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a

substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to land use and plans, either on a project-related or cumulative basis.

II.B.2 Population, Housing, and Employment

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
13. Population, Housing, and Employment. Would the Project:					
C.a Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	2010 FEIR p. III.C-14 (Impact PH-1), p. III.C-20 (Impact PH-2); Addendum 1 p. 29; Addendum 4 p. 16	No	No	No	None
C.b Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing elsewhere?	2010 FEIR p. III.C-21 (Impact PH-3); Addendum 1 p. 29; Addendum 4 p. 16	No	No	No	None
C.c Displace substantial number of people, necessitating the construction of replacement housing elsewhere?	2010 FEIR p. III.C-21 (Impact PH-3); Addendum 1 p. 29; Addendum 4 p. 16	No	No	No	None

Changes to Project Related to Population, Housing, and Employment

The elements of the land use program evaluated in Addendum 5 that relate to population, housing, and employment are the number of residential uses, which relates to population and housing; the proposed land uses, which relates to Project employment; and the phasing plan and construction scenario, which relates to construction employment.

Population and Housing

The 2010 FEIR proposed 10,500 residential units over the entire Project site, including both CP and HPS. The current proposal includes 10,672 residential units.

The total number of units would be 172 units more than previously analyzed and disclosed in the 2010 FEIR, and the individual number of units on the CP and HPS sites would also change relative to the 2010 FEIR. The number of units at CP would decrease by 632 units (to 7,218 units), and the number of units at HPS would increase by 804 units (to 3,454 units); therefore, the population at CP would be 16,818[28] and the population at HPS would be 8,048,[29] resulting in 24,866 people.

The total projected population over HPS1 and HPS2 has not changed from what was analyzed and disclosed in the 2010 FEIR (for HPS2) and the 2000 Hunters Point Shipyard Reuse Final EIR[30] (for

[28] This assumes a conversation 2.33 people per household, as identified in 2010 FEIR Table III.C-6.
[29] This assumes a conversation 2.33 people per household, as identified in 2010 FEIR Table III.C-6.
[30] City and County of San Francisco, *Hunters Point Shipyard Reuse Final Environmental Impact Report,* February 8, 2000.

HPS1). But, the population from the addition of 172 units to HPS2 is being accounted for in Addendum 5 to reflect the 2018 Modified Project Variant.

Project Employment

The land use program that is evaluated in Addendum 5 is different than the land use program evaluated in the 2010 FEIR, as described in the Project Description. Accordingly, the number of permanent jobs created as a result of the Project has also changed, as shown in Table 7 (Employment by Land Use). In summary, as compared to 2010 Project and the R&D Variant (Variant 1), which is provided in Table 7, the total number of permanent employment opportunities at CP and HPS2 would increase from 10,730 jobs under the 2010 Project to 16,618 jobs under the 2018 Modified Project Variant; however, the R&D Variant (Variant 1) would result in 16,635 jobs, which is comparable to the 2018 Modified Project Variant. The increase in jobs under both the 2018 Modified Project Variant and the R&D Variant (Variant 1) is primarily due to an increase in retail and R&D/offices uses at HPS2.

Construction Employment

Table 8 (Construction Employment) shows the yearly distribution of workers associated with the 2018 Modified Project Variant. It shows construction initiating in 2014 and extending to 2034, for a total of 21 years.[31] This same table shows that the 2010 Project included construction initiating in 2011 and extending to 2031, also for a total of 21 years.

In summary, the 2018 Modified Project Variant starts approximately 3 years later than the Project evaluated under the 2010 FEIR and would take approximately the same amount of time. Over the course of the entire project, the total number of daily construction workers under the 2018 Modified Project Variant is higher than what was identified in the 2010 FEIR due to the proposed accelerated construction schedule for several sub-phases, modified project land use in HPS, additional accounting for field management workers, and other construction elements, which are clarified below. The following total worker calculation assumes that all the maximum and average workers identified in Table 8 of the 2018 Modified Project Variant and 2010 FEIR Table III.C-8 were working for the duration of each year specified and are summarized below:

- Combined Maximum Daily Workers would increase by 1,356 over the course of the entire project:
  - 2010 FEIR shows 6,971 workers; and
  - 2018 Modified Project Variant shows 8,327 workers.

[31] Addendum 5 evaluates construction of the 2018 Modified Project Variant over a 21-year period (through 2034). The Schedule of Performance shows construction ending in 2036, which allows for potential delays in the transfer of land from the Navy, as well as potential construction delays. The addendum's use of a construction timeline ending in 2034 provides a conservative estimate of potential impacts.

TABLE 7 EMPLOYMENT BY LAND USE

Land Use	Employment Factor[a]	Candlestick Point		HPS2		Total		2010 Project	R&D Variant 1
		Development Program[b]	Employment (jobs)	Development Program[b]	Employment (jobs)	Development Program[b]	Employment (jobs)[c]	Employment (jobs)[c]	Employment (jobs)[c]
Residential	25 units/job	7,218 units	289	3,454 units	138	***10,672 units***	***427***	420	420
Regional Retail	350 gsf/job	635,000 gsf	1,814	100,000 gsf	286	***735,000 gsf***	***2,100***	1,814	1,814
Neighborhood Retail/Maker Space	270 gsf/job and 400 gsf/job[d]	125,000 gsf	463	301,000 gsf	1,025	***426,000 gsf***	***1,488***	926	926
Office	276 gsf/job	150,000 gsf	543	0 gsf	0	***150,000 gsf***	***543***	543	543
Research and Development[e]	400 gsf/job	0 gsf	—	4,265,000 gsf	10,663	***4,265,000 gsf***	***10,663***	6,250	12,500
Hotel	700 gsf/job	150,000 gsf	214	120,000 gsf	171	***270,000 gsf***	***386***	214	214
Football Stadium	2,915 jobs/event	0 events	—	0 events	—	***0 events***	***—***	359	—
Arena	750 gsf/job[f]	75,000 gsf	100	0 gsf	0	***75,000 gsf***	***100***	87	87
Institutional/Schools	2,050 gsf/job[g]	0 gsf	0	410,000 gsf	200	***410,000 gsf***	***200***	N/A[k]	N/A[k]
Water Taxi[h]	4 jobs/day	0 trips/day	0	16 trips/day	4	***16 trips/day***	***4***	N/A[k]	N/A[k]
Community Use	355 gsf/job	50,000 gsf	141	50,000 gsf	141	***100,000 gsf***	***282***	N/A[k]	N/A[k]
Artists' Studios	850 gsf/job[i]	0 gsf	0	255,000 gsf	300	***255,000 gsf***	***300***	N/A[k]	N/A[k]
Public Parking	270 spaces/job[j]	2,736 spaces	10	7,152 spaces	26	***9,888 spaces***	***37***	32	46
Parks and Open Space	0.26 job/acre	105.7 acres	27	232.0 acres	60	***337.7 acres***	***88***	87	85
Total			***3,601***		***13,014***		***16,618[l]***	***10,730***	***16,635***

SOURCES: Economic and Planning Systems, Inc., *Fiscal Analysis of the Candlestick Point/Hunters Point Shipyard Redevelopment Project*, 2018.

NOTES:

N/A = not available

a. Employment factors are from City and County of San Francisco, *Transportation Impact Analysis Guidelines*, October 2002, as well as more current industry standards and EPS studies for individual land use types. The recycled water facility would only result in one employee and, therefore, is not included in this table as it would not change any analysis or conclusions.

b. Based on build-out floor areas provided in Table 2 (2018 Modified Project Variant Land Use Program) of Addendum 5 Section I (Project Description).

c. The total employment is subject to mathematical rounding and may reflect a higher number than the addition of employment for CP and HPS2 individually, each of which may have been rounded down.

d. Includes 351,000 gsf for neighborhood retail between CP and HPS2 (at 270 gsf/job) and 75,000 gsf for maker space at HPS2 (at 400 gsf/job).

e. The 2010 FEIR indicates that R&D uses are defined to include research and development, office, and light-industrial uses.

f. Because the type of performance venue has changed since 2010 from a concert hall to a center with a focus on the arena, the employment estimated is based on EPS's study of movie and theater centers and is based on building square footage instead of number of events as was done in 2010.

g. Based on generalized population density at institutions, such as schools.

h. Assumes capacity for 22 passengers plus captain and crew members.

i. Based on information about number of studios and artists provided by FivePoint.

j. Includes all off-street parking.

k. The value for this land use category was not provided in the 2010 FEIR.

l. Total employment calculated by adding individual totals for each land use category. This number may reflect a higher number than the addition of employment for CP and HPS2 individually, each of which may have been rounded down.

TABLE 8 CONSTRUCTION EMPLOYMENT

	Candlestick Point		*Hunters Point Shipyard*		*Field Management*		*2018 Modified Project Variant Combined*		*2010 Project*	
Year	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*
2011	—	—	—	—	—	—	—	—	95	76
2012	—	—	—	—	—	—	—	—	83	66
2013	—	—	—	—	—	—	—	—	223	178
2014	43	34	0	0	15	12	58	46	363	278
2015	58	46	0	0	15	12	73	58	617	494
2016	142	112	0	0	15	12	157	124	609	488
2017	146	116	30	24	15	12	191	152	440	357
2018	210	168	30	24	25	20	265	212	456	366
2019	292	232	212	168	25	20	529	420	470	376
2020	212	170	342	271	25	20	579	461	460	368
2021	161	129	364	288	25	20	550	437	258	206
2022	172	136	467	365	25	20	664	521	443	355
2023	307	244	687	539	25	20	1019	803	434	348
2024	423	336	501	399	25	20	949	755	295	235
2025	379	301	272	216	25	20	676	537	264	212
2026	398	316	174	140	15	12	587	468	278	235
2027	455	377	110	88	15	12	580	477	235	187
2028	407	324	30	24	15	12	452	360	320	255
2029	173	138	33	26	15	12	221	176	348	278
2030	78	61	137	110	12	10	227	181	195	156
2031	51	40	167	134	12	10	230	184	85	68
2032	109	85	114	92	25	20	248	197	—	—
2033	0	0	33	26	12	10	45	36	—	—
2034	0	0	15	12	12	10	27	22	—	—
Total	***4,216***	***3,365***	***3,718***	***2,946***	***393***	***316***	***8,327***	***6,627***	***6,971***	***5,582***

SOURCE: MACTEC, 2010; TRC, 2018.

NOTE: Number of daily workers includes on-site construction, off-site roadway improvements, and shoreline improvements and assumes construction of the alternative utility system. Construction employment information is not available in the 2010 FEIR for the R&D Variant (Variant 1).

- Combined Average Daily Workers would increase by 1,045 over the course of the entire project:
  - 2010 FEIR shows 5,582 workers; and
  - 2018 Modified Project Variant shows 6,627 workers.

The increase in daily construction workers is primarily due to the accelerated schedule for several sub-phases of the project, modified project land use in HPS, and additional accounting for field management

workers. Other factors that affected the increase were the addition of the following infrastructure construction elements as presented in the Project Description:

- Dry Dock 4 bridges;
- Geothermal heating and cooling system;
- Geotechnical ground improvements; and
- Recycled water treatment system.

Changes in Circumstances

Environmental Setting

Population and Housing

As disclosed in the 2010 FEIR, the population in the city as of January 1, 2008, was 824,525, its highest population on record at that time.[32] The population in the city as of 2014 was 829,072,[33] an increase of approximately about 0.6 percent between 2008 and 2014, a 6-year period. According to ABAG *Projections 2013*, the population is expected to increase steadily through Year 2040.[34]

The 2010 FEIR indicated that in in 2005, San Francisco had a total vacancy rate of approximately 4.9 percent (including owner-occupied and rental units). Approximately 62 percent of the total housing stock consisted of rental units. By 2007, the 2010 FEIR indicated that the total vacancy rate, was even lower, at about 3 percent.[35] The low vacancy rates indicated that the demand for housing in the city, at that time, remained strong.

According to the Housing Element of the San Francisco General Plan,[36] in 2010, vacancy rates were at 5.4 percent for rentals and 2.3 percent for homeownership, for a total of about 8 percent. This is considered a healthy fractional rate in most housing markets in the United States. By 2012, the vacancy rate rose to a vacancy rate of 9.3 percent, which may suggest an increase in time-shares and corporate homes used for employee housing. Even with the increase in vacancy rates, And, by January 2016, according the U.S. Department of Housing and Urban Development,[37] vacancy rates for rentals were 0.8 percent and vacancy rates for homeownership was 3.1 percent, for a total of 3.9 percent. In summary, the vacancy rates fluctuate between 3 percent and 9.3 percent according to market conditions and the use of housing for time-shares and corporate homes, with most years reflecting vacancy rates below 8 percent, which is considered a healthy rate.

[32] California Department of Finance, *E-1 Population Estimates for Cities, Counties, and the State with Annual Percent Change—January 1, 2008 and 2009*, 2009. Available at http://www.dof.ca.gov/research/demographic/reports/estimates/e-1_2006-07 (accessed June 12, 2009). Also cited by Economic and Planning Systems, Inc., *Fiscal Analysis of the Candlestick Point/Hunters Point Shipyard Redevelopment Project*, 2009.
[33] City and County of San Francisco, *India Basin Mixed Use Draft Environmental Impact Report*, September 13, 2017, Table 3.3-1.
[34] City and County of San Francisco, *Pier 70 Mixed-Use District Project Final Environmental Impact Report*, August 24, 2017, p. 4.C-2.
[35] San Francisco Planning Department, *Downtown San Francisco Market Demand, Growth Projections and Capacity Analysis,* May 2008, p. III-15.
[36] City and County of San Francisco, *San Francisco General Plan*, Housing Element, April 27, 2015, p. I.36.
[37] U.S. Department of Housing and Urban Development, *Comprehensive Housing Market Analysis, San Francisco-San Mateo-San Rafael*, as of January 1, 2016.

By the end of 2015, there were approximately 379,597 dwelling units in the city. While there was a net addition of 2,954 units to the city's housing stock in 2015, it represented a 16 percent decrease from 2014's net addition of 3,514 units.[38] While this 1-year increase is higher than the 10-year average of 2,244 units/year, it represents a slowed but continuing upward trend in net unit production from the lowest production point of 2011.[39]

In summary, the demand for housing remains high, and the supply has not been able to keep up with the demand, which results in low vacancy rates and high housing costs, a similar condition as in 2010.

Employment

San Francisco is a primary employment hub for the Bay Area and contains regional employment centers. According to ABAG Projections 2013, San Francisco had about 617,420 jobs in 2015.[40] The city is projected to have a total of approximately 671,230 jobs by 2020, approximately 707,670 jobs by 2030, and approximately 759,500 jobs by 2040, resulting in an approximately 23 percent increase (142,080 total jobs) over the 25-year period.[41] Between 2015 and 2040, the total number of jobs in the nine-county Bay Area is expected to increase by almost 835,240 jobs, a 22.8 percent increase. During this period, San Francisco's share of regional employment is expected to increase slightly, from 16.8 percent in 2015 to 16.9 percent in 2040.[42]

At the time of the 2000 Census, the 2010 FEIR indicated that about 55 percent of the workers holding jobs in San Francisco lived in the city, while the remaining 45 percent lived in other jurisdictions.[43] For this reason, the daytime population associated with local employment substantially exceeded the residential (nighttime) population according to the 2000 census.

As of 2010, commuters into San Francisco held 27.3 percent of the jobs in San Francisco,[44] meaning that approximately 73 percent of workers resided in the city, showing an increase in resident workers as compared to the 2000 census. However, the share of San Francisco jobs held by residents from other Bay Area counties is expected to increase as compared to 2010 to approximately 43 percent by 2020, 40 percent by 2030, and 42 percent by 2040,[45] likely the result a low supply of housing relative to demand and the subsequent increase in housing costs. As a regional job center, San Francisco will continue to have a larger share of commuters than other cities in the Bay Area.[46]

[38] San Francisco Planning Department, *2014 San Francisco Housing Inventory*, April 2015, p. 5.
[39] San Francisco Planning Department, *2015 Housing Inventory*, April 2015, p. 5.
[40] ABAG, *Projections 2013*, p. 22.
[41] ABAG, *Projections 2013*, p. 75.
[42] ABAG, *Projections 2013*, p. 22.
[43] U.S. Department of Transportation, *Census 2000 Transportation Planning Package*, 2006. It should be noted that a certain percentage of San Francisco residents also commute to other communities.
[44] City and County of San Francisco, *Pier 70 Mixed-Use District Project Final Environmental Impact Report*, August 24, 2017, p. 4.C-9.
[45] City and County of San Francisco, *Pier 70 Mixed-Use District Project Final Environmental Impact Report*, August 24, 2017, p. 4.C-9.
[46] City and County of San Francisco, *Pier 70 Mixed-Use District Project Final Environmental Impact Report*, August 24, 2017, p. 4.C-9.

Comparative Impact Discussions

Impact PH-1: Construction of the Project would not induce substantial direct population growth. ***[Criterion C.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As disclosed in the 2010 FEIR, there would be direct, but temporary, construction job growth at the Project site as a result of the Project. It was assumed that construction employees not already living in the Bayview Hunters Point neighborhood would commute from elsewhere in the Bay Area rather than relocate to the Bayview Hunters Point neighborhood for a temporary construction assignment, and construction hiring policies associated with the 2010 Project would aim to maximize hiring among local residents.

Table 8 shows the estimated average and maximum number of daily construction workers, for each Project year under the 2018 Modified Project Variant. The peak year for construction at CP is 2027, with 455 maximum daily workers (and 377 average daily workers), while the peak year for construction at HPS is 2023, with 687 maximum daily workers (and 539 average daily workers). The peak year for combined activities is in 2023, with 1,019 combined maximum daily workers (and 803 combined average daily workers), coinciding with the peak year at HPS.

The 2010 Project disclosed different peak years for CP and HPS. For CP, it was 2029 and for HPS it was 2015, with the peak combined year in 2015, also coinciding with the peak construction year at HPS.

Overall, the total number of daily construction workers (including all years of construction) has increased by approximately 27 percent when comparing the 2010 FEIR estimates to the 2018 Modified Project Variant estimates.

The increase in daily construction workers is primarily due to the accelerated schedule for several sub-phases of the project, modified project land use in HPS, and additional accounting for field management workers. Other factors that affected the increase were the addition of the following infrastructure construction elements as presented in the Project Description:

- Dry Dock 4 bridges;
- Geothermal heating and cooling system;
- Geotechnical ground improvements; and
- Recycled water treatment system and other green infrastructure elements.

If the conventional utility system were pursued, fewer construction workers would be required, which would likely be similar to the number of construction workers identified in the 2010 FEIR.

As assumed in the 2010 FEIR, it is anticipated that construction employees not already living in the Bayview Hunters Point neighborhood would commute from elsewhere in the Bay Area rather than relocate to the Bayview Hunters Point neighborhood for a temporary construction assignment, and

construction hiring policies associated would aim to maximize hiring among local residents. Thus, development of this Variant would not generate a substantial, unplanned population increase. Impacts associated with construction employment resulting from the 2018 Modified Project Variant would remain less than significant, and no mitigation would be required.

Impact PH-2: Operation of the Project would not induce substantial direct or indirect population growth. ***[Criterion C.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The total population would be 16,818 at CP and 8,048 at HPS2, for a total population of 24,866, an increase of 401 over the population of 24,465 disclosed in the 2010 FEIR. In addition, the number of permanent employment opportunities would increase by approximately 5,880, which is primarily due to an increase in neighborhood retail and R&D uses at HPS2.

Although the 2018 Modified Project Variant would result in an increase in population and employment at CP, growth in this area has long been the subject of many planning activities. The primary objective of the 2018 Modified Project Variant is to provide new housing and nonresidential uses in support of planned redevelopment. Planning activities pertaining to CP date to 1969, with initial adoption of the Hunters Point Shipyard Redevelopment Plan (later to be subsumed under the BVHP Redevelopment Plan). As discussed in Chapter I, development of CP was also anticipated in the BVHP Area Plan, and in a series of initiatives approved by San Francisco voters (Propositions D, E, and G).[47,48] The Hunters Point Shipyard Redevelopment Plan was updated in 2005, and uses approved for HPS1 under that plan are currently under construction. The 2018 Modified Project Variant, as proposed, was developed based on the land uses, number of housing units (10,672 units total at HPS2 and CP), and objectives approved by voters under Proposition G in 2008. In summary, the uses provided as part of the Project support planned growth at the Project site.

As a result of these ongoing planning activities, City service providers have been aware of, and have included future growth projections for CP, in their long-term operations plans. Planning department population projections[49] include the population growth associated with the Project and are the basis of the San Francisco Public Utilities Commission's *Water Supply Availability Study*. In addition, the Southeast Water Pollution Control Plant has capacity to treat wastewater from the Project site. The Project would provide all on-site infrastructure for connections to City mains, and would include on-site treatment of stormwater runoff. Refer to Section II.D (Project Objectives), Section III.O (Public Services), Section III.P (Recreation), Section III.Q (Utilities), and Section III.R (Energy) in the 2010 FEIR for further description of the Project's potential impacts on infrastructure and services. In summary,

[47] Candlestick Point is outside the boundaries of the HPS Redevelopment Plan.
[48] Proposition G repealed Propositions D and F.
[49] San Francisco Planning Department, Memorandum from Jon Rahaim, Director of Planning, to Michael Carlin, Deputy General Manager, San Francisco Public Utilities Commission, *Projections of Growth by 2030*, July 9, 2009.

the infrastructure needed to support the level of growth anticipated under the Project was planned based on population projections that included the housing and employment associated with the Project.

Employment growth would also be considered substantial if it resulted in housing demand that would exceed planned regional housing development. Table 9 (Housing Demand) estimates the number of housing units that would be needed to provide housing for employees of jobs created as a result of the Project. These calculations were derived from existing Census Bureau employment and U.S. Department of Transportation commuting pattern data.[50] The average household would be expected to have 1.36 workers. This rate is based on the Planning Department's projection of the number of workers in the average city household in 2025.[51] Utilizing the rate of 1.36 workers per dwelling unit, the Project, with a total employment of 16,618 workers, would require 0.74 housing unit per worker (calculated as 1 dwelling unit/1.36 workers equals the number of dwelling units per worker, which is 0.74). The calculations also assume a vacancy rate of 4.7 percent,[52] which requires an add-on demand to account for the vacancy rate (see footnotes c and d in Table 9). Based on these assumptions, and assuming the housing demand from other communities has remained relatively constant, the 2018 Modified Project Variant would result in a total demand for 12,791 housing units based on employee demand, and a total of 10,672 units would be provided.[53] However, as shown in Table 9, it is assumed that approximately 55 percent of the workers would seek housing in the city, consistent with existing commuting patterns.[54] As such, to meet housing demand of the 2018 Modified Project Variant within the City, approximately 7,035 housing units would be required. As discussed above, the 2018 Modified Project Variant would provide approximately 10,672 housing units, which would exceed estimated housing demand of 7,035 housing units. Therefore, the population increase associated with employment from the 2018 Modified Project Variant could be entirely accommodated. It is likely that some employees would elect to live elsewhere in the City or within surrounding Bay Area communities. Based on existing commuting patterns, the 2018 Modified Project Variant would generate a demand for about 5,756 units in surrounding Bay Area communities. This housing demand would be dispersed throughout the nine-county Bay Area, which would result in negligible potential increases in housing demand within the Bay Area. While the 2018 Modified Project Variant would generate more jobs than the CP-HPS2 Project (by approximately 5,880 jobs), it would generate fewer jobs than the R&D Variant (Variant 1) (by approximately 17 jobs). As with the R&D Variant (Variant 1), the total number of jobs generated by the 2018 Modified Project Variant would represent a fraction of the 748,100 jobs anticipated citywide in 2030 (the 2018 Modified Project Variant would represent 2.2 percent of the total jobs in the city in 2030 and the

[50] Census Bureau, 2009; US Department of Transportation, *Census 2000 Transportation Planning Package*, 2006.
[51] City and County of San Francisco, *General Plan Housing Element*, 2004, Table I-14.
[52] This rate is based on California Department of Finance, January 2008 Projections.
[53] It should be noted that one of the Project objectives is to provide employment opportunities for existing residents in the Bayview Hunters Point neighborhood; thus, it is anticipated that some of the future employees at Candlestick Point would include residents already living in the neighborhood. Although total housing demand could include existing households, this analysis conservatively assumes that all housing demand generated by the Project would need to be accommodated by new units.
[54] This assumption provides a conservative estimate of the housing demand that the Project would generate in other Bay Area communities, such as nearby cities in San Mateo County. Information pertaining to commuting trends was derived from US Department of Transportation, *Census 2000 Transportation Planning Package*, 2006.

R&D Variant (Variant 1) would also represent 2.2 percent of the total jobs in the city in 2030). Further, employment opportunities would be provided in an area that has been jobs-poor since WWII; it would provide a new employment center in the city, allowing commute patterns to be further dispersed into an area that has long been the subject of many planning activities. This variant, as with the R&D Variant (Variant 1), would provide all on-site infrastructure for connections to city mains and would include on-site treatment of stormwater runoff. Therefore, the 2018 Modified Project Variant would not encourage growth where appropriate infrastructure would not be available.

TABLE 9 HOUSING DEMAND

Analysis Area	*2018 Modified Project Variant Employment[a,b]*	*2018 Modified Project Variant Housing Demand, San Francisco[c]*	*2018 Modified Project Variant Housing Demand, Other Communities[d]*	*2018 Modified Project Variant Total Demand*	*2010 Project Total Demand*	*Variant 1 Total Demand*	*2018 Modified Project Variant Housing*	*2010 Project and Variant 1 Housing*
Candlestick Point	3,601	1,525	1,248	***2,773***	2,677	7,044	7,218	7,850
HPS2	13,014	5,510	4,508	***10,018***	5,586	5,763	3,454	2,650
Project Site Total	***16,618***	***7,035***	***5,756***	***12,791***	***8,263***	***12,807***	***10,672***	***10,500***

NOTES:

a. Does not include existing employment.

b. Project employment data are derived from Table 7, Employment by Land Use.

c. Calculated as the projected employment divided by 1.36, plus 4.7% additional housing units to account for vacancy rate, times 55% total demand in San Francisco.

d. Based on existing commuting patterns, housing demand in other communities is estimated to be 45% of total housing demand; calculated as projected employment divided by 1.36, plus 4.7% additional housing units to account for vacancy rate, times 45% total demand in other communities.

Therefore, the analysis and conclusions reached in the 2010 FEIR and the 2000 Hunters Point Shipyard Reuse Final EIR with respect to direct or indirect population growth would remain the same. The impact would be less than significant, and no mitigation would be required.

Impact PH-3: Implementation of the Project would not displace existing housing units or residents at HPS Phase II, necessitating the construction of new units elsewhere. ***[Criteria C.b and C.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

There are no existing housing units at HPS2, either when the 2010 FEIR was published or in 2018. Therefore, as with the Project, the 2018 Modified Project Variant would similarly not replace housing units with new uses, and no existing residents would be displaced. Because there would be no residential displacement at HPS, development of the 2018 Modified Project Variant would have no impact on displacement of housing and residents, and no mitigation would be required, which is the same conclusion reached in the 2010 FEIR.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to population, housing, and employment impacts. There is no new information of substantial

importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to population, housing, and employment, either on a project-related or cumulative basis.

II.B.3 Transportation and Circulation

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
17. Transportation and Circulation. Would the project:					
D.a Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	2010 FEIR p. III.D-69 (Impact TR-2), p. III.D-71 (Impact TR-3), p. III.D-81 (Impact TR-4), p. III.D-82 (Impact TR-5), p. III.D-83 (Impact TR-6), p. III.D-83 (Impact TR-7), p. III.D-84 (Impact TR-8), p. III.D-85 (Impact TR-9), p. III.D-85 (Impact TR-10), p. III.D-86 (Impact TR-11), p. III.D-90 (Impact TR-12), p. III.D-90 (Impact TR-13), p. III.D-94 (Impact TR-14), p. III.D-95 (Impact TR-15), p. III.D-96 (Impact TR-16), p. III.D-144 (Impact TR-51), p. IV-21 (Variant 1 Impacts); Addendum 1 p. 10; Addendum 4 p. 18	No	No	No	MM TR-2, MM TR-4, MM TR-6, MM TR-7, MM TR-8, MM TR-16, MM TR-17, MM TR-51, R&D Variant (Variant 1) Mitigation Measure
D.b Exceed, either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads or highways (unless it is practical to achieve the standard through increased use of alternative transportation modes)?	2010 FEIR p. III.D-71 (Impact TR-3), p. III.D-81 (Impact TR-4), p. III.D-82 (Impact TR-5), p. III.D-83 (Impact TR-6), p. III.D-83 (Impact TR-7), p. III.D-84 (Impact TR-8), p. III.D-85 (Impact TR-9), p. III.D-86 (Impact TR-11), p. III.D-90 (Impact TR-12), p. III.D-90 (Impact TR-13), p. III.D-94 (Impact TR-14), p. III.D-95 (Impact TR-15), p. III.D-144 (Impact TR-51), p. IV-21 (Variant 1 Impacts); Addendum 1 p. 10; Addendum 4 p. 18	No	No	No	MM TR-4, MM TR-6, MM TR-7, MM TR-8, MM TR-51, R&D Variant (Variant 1) Mitigation Measure
D.c Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that causes substantial safety risks?	2010 FEIR p. III.D-149 (Impact TR-56); Addendum 1 p. 10; Addendum 4 p. 18	No	No	No	No
D.d Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	2010 FEIR p. III.D-149 (Impact TR-57); Addendum 1 p. 10; Addendum 4 p. 18	No	No	No	No

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
D.e	Result in inadequate parking capacity that could not be accommodated by alternative solutions?	2010 FEIR p. III.D-118 (Impact TR-35), p. III.D-124 (Impact TR-36), p. III.D-148 (Impact TR-55); Addendum 1 p. 10; Addendum 4 p. 18	No	No	No	No
D.f	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.), or cause a substantial increase in transit demand that cannot be accommodated by existing or proposed transit capacity or alternative travel modes?	2010 FEIR p. III.D-97 (Impact TR-17), p. III.D-99 (Impact TR-18), p. III.D-101 (Impact TR-19), p. III.D-102 (Impact TR-20), p. III.D-147 (Impact TR-52); Addendum 1 p. 10; Addendum 4, p. 18	No	No	No	MM TR-17; MM TR-23.1

The transportation and circulation impact findings herein are also based on the following significance criteria used by the San Francisco Planning Department for the determination of impacts associated with a proposed project:[55]

D.g Traffic—In San Francisco, the threshold for a significant adverse impact on traffic has been established as deterioration in the LOS at a signalized intersection from LOS D or better to LOS E or LOS F, or from LOS E to LOS F. The operational impacts on unsignalized intersections are considered potentially significant if project-related traffic causes the level of service at the worst approach to deteriorate from LOS D or better to LOS E or LOS F and Caltrans signal warrants would be met, or causes Caltrans signal warrants to be met when the worst approach is already at LOS E or LOS F.

For an intersection that operates at LOS E or LOS F under existing conditions, there may be a significant adverse impact depending upon the magnitude of the project's contribution to the worsening of delay. In addition, a project would have a significant adverse effect if it would cause major traffic hazards, or would contribute considerably to the cumulative traffic increases that would cause the deterioration in LOS to unacceptable levels (i.e., to LOS E or LOS F).

The operational impacts on freeway mainline segments and freeway on-ramp merge and off-ramp diverge operations are considered significant when project-related traffic causes the level of service to deteriorate from LOS D or better to LOS E or LOS F, or from LOS E to LOS F. In addition, a project would have a significant effect on the environment if it would contribute substantially to congestion at unacceptable levels.

It should be noted that the City of San Francisco Planning Department no longer uses intersection LOS as a metric for identifying significant traffic impacts. However, this is an addendum to an FEIR that did use LOS. Furthermore, OCII is the lead agency for this project and OCII does use LOS as described above; therefore, intersection LOS is an appropriate metric for Addendum 5.

D.h Parking—Parking supply is not considered to be a part of the permanent physical environment in San Francisco.[56] Parking conditions are not static, as parking supply and demand varies due to seasonal and temporal factors. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, as parking changes over time as people change their modes and patterns of travel.

Parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. Environmental documents should, however, address the secondary physical impacts that could be triggered by a social impact (CEQA Guidelines § 15131(a)). The social inconvenience of parking deficits, such as having to find a parking space when parking

[55] Five of the study intersections are in the City of Brisbane. The level of service standard for all arterial streets within the City of Brisbane is LOS D, except for the intersections on Bayshore Boulevard at Old County Road and San Bruno Avenue, which shall not be less than LOS C.

[56] Under California *Public Resources Code*, Section 21060.5, "environment" can be defined as "the physical conditions which exist within the area which will be affected by a Project, including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance."

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant

spaces are scarce, is not an environmental impact, but there may be secondary physical environmental impacts, such as increased traffic congestion at intersections, air quality impacts, safety impacts, or noise impacts caused by congestion. Scarcity of parking spaces, combined with available alternatives to auto travel (e.g., transit service, taxis, bicycles or travel by foot), and a relatively dense pattern of urban development, may cause drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service in particular, would be in keeping with the City's "Transit First" policy. The City's Transit First Policy, established in the City's Charter Section 16.102 provides that "parking policies for areas well served by public transit shall be designed to encourage travel by public transportation and alternative transportation."

The transportation analysis accounts for potential secondary effects, such as cars circling and looking for a parking space in areas of limited parking supply, by assuming that all drivers would attempt to find parking at or near the project site and then seek parking farther away if convenient parking is unavailable.

D.i Transit—The project would have a significant effect on the environment if it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service; or cause a substantial increase in operating costs or delays such that significant adverse impacts in transit service levels could result.

The project would also have a significant effect on the environment if it would increase transit travel times on a particular route such that existing (or proposed) headways could not be maintained based on the existing (or proposed) vehicle fleet.

D.j Pedestrians—The project would have a significant effect on the environment if it would result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.

D.k Bicycles—The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.

D.l Loading—The project would have a significant effect on the environment if it would result in a loading demand during the peak hour of loading activities that could not be accommodated within the proposed on-site loading facilities or within convenient on-street loading zones, and if it would create potentially hazardous traffic conditions or significant delays affecting traffic, transit, bicycles or pedestrians.

D.m Emergency Vehicle Access—The project would have a significant impact on the environment if it would result in inadequate emergency vehicle access.

D.n Construction—Construction-related impacts generally would not be considered significant due to their temporary and limited duration. However, in circumstances involving large development plans where construction would occur over long periods of time, construction-related impacts may be considered significant.

Changes to Project Related to Transportation and Circulation

Compared to 2010 FEIR R&D Variant (Variant 1), the 2018 Modified Project Variant would relocate 632 residential dwelling units from CP to HPS, add a 175-room hotel in HPS, add 410,000 sf of institutional/educational uses in HPS, reduce R&D/Office in HPS from 5,000,000 sf to 4,265,000 sf, and increase the retail space in HPS from 125,000 sf to 391,000 sf. Furthermore, 71,000 sf of the new retail space and an additional 172 residential dwelling units at HPS would be space previously approved and no longer planned to be built as part of HPS1. This would result in changes to the overall site's vehicular traffic generation. In the AM peak hour, the 2018 Modified Project Variant would reduce trips in CP by 46 and in HP by 147, for a net increase of 101 trips. In the PM peak hour, the 2018 Modified Project Variant would reduce vehicle trips in CP by 31 and would increase vehicle trips in HP by 510, for a net increase of 479 vehicle trips. Increases in trips associated with the 2018 Modified Project Variant in the PM peak hour include approximately 100 AM peak hour and 200 PM peak hour vehicle trips for the 172 dwelling units and 71 ksf of retail space that was approved but not built, and no longer planned to be built, as part of the adjacent HPS Phase 1 project. These new trips would not affect the total amount of traffic in the area at Project buildout because they were previously included as part of a different project; however, they do represent an increase in the number of trips that are considered a

part of the 2018 Modified Project Variant. Although the 2018 Modified Project Variant's contribution in traffic is expected to increase by 101 vehicle trips in the AM peak hour and 510 vehicle trips in the PM peak hour, the total traffic volume in the area is expected to remain virtually unchanged in the AM peak hour and increase by approximately 280 vehicle trips in the PM peak hour, because the other vehicle trips were previously accounted for as part of Phase 1. The net increase would be nominal compared to the overall site's forecasted trip generation, and would likely to be dispersed among different roadways in the site, and is not likely to be perceptible to the public. The revised land uses would also result in a slight decrease in transit demand during both the AM and PM peak hours.

The 2018 Modified Project Variant would also include the potential for water taxi service at Dry Dock 4 in HPS2. As noted in the Project Description, the service would involve up to 8 trips in the AM peak hour and up to 8 trips in the PM peak hour, depending on demand. Vessels would accommodate up to 22 passengers each. To the extent this service affects any of the travel demand forecasts, it would serve to reduce vehicle trips and possibly accommodate travelers who would otherwise take transit, walk, or bike. In other words, the service would have relatively small effects on overall travel behavior at the site and, if anything, would tend toward easing traffic and transit congestion. Because the actual level of water taxi service is uncertain, and to ensure a worst-case assessment, this analysis conservatively assumes no effects associated with the water taxi service.

The 2018 Modified Project Variant would also include slight revisions to the construction phasing associated with the modifications to the land use program, which would change the way in which construction traffic demands are spread over time, and would include minor modifications to the phasing of roadway and transit infrastructure and service.

The 2018 Modified Project Variant would also include minor changes to roadway alignment and cross-sections in HP. Proposed changes in HPS South are associated with re-orientation of street grid in order to preserve some existing buildings on the site. Proposed changes in the R&D and HPS North areas are associated with improvements to the bicycle network to connect the proposed cycletrack through entire CP and HPS site. However, street design principles generally remain unchanged and facility capacity generally remains unchanged. Appendix D (Revised Roadway Cross-Sections) of Addendum 5 Appendix D (Analysis of Transportation Effects) includes the revised cross-sections. Changes within HP also include an optional extension of Donahue Avenue from its current terminus south to connect to Crisp Avenue as well as the provision of transit-only lanes along Lockwood Street and Donahue Street.

Bicycle and pedestrian facilities would be modified as a result of the roadway alignment and cross-sectional changes discussed above; however, changes would generally be minor. One exception is the proposed change to the proposed cycletrack. Changes are proposed in HP to realign the cycletrack away from Crisp Avenue, through the open space to the south, and to connect to a midblock break within HPS South. The cycletrack would continue through HPS South and across Dry Dock 4 as a two-way cycletrack, and then travel up Spear and Robinson Street as a directional separated bicycle facility to connect to the cycletrack planned in the Northside Park, west of Donahue Street.

The 2018 Modified Project Variant would also include changes to total parking supply associated with changes in land use and refinements to street and intersection designs. No changes to maximum parking rates by land use are proposed. Specifically, maximum parking supply (including on- and off-street supply) at CP would decrease by nearly 250 spaces and the maximum supply at HP would increase by approximately 750, resulting in a net site-wide increase of approximately 500 spaces. Generally, the 2018 Modified Project Variant would supply parking within or slightly above the range contemplated in the 2010 FEIR for R&D Variant (Variant 1) (3,000 to 23,000 on- and/or off-street parking spaces).

Changes in Circumstances

The transportation system in the vicinity of the project site has not substantially changed since certification of the 2010 FEIR, as there has been relatively little development in the study area. Exceptions to this are portions of HPS1 and the 267-unit Hunters View Project near the northern portion of the HPS site, which are minor.

Regional transportation demand has increased; as a result, traffic on regional transportation facilities, including public transit, regional freeways, and major local thoroughfares, has increased congestion and crowding somewhat on roadway facilities and transit service further from the project site.

However, the effects of regional growth were contemplated in the 2010 FEIR's cumulative analysis.

Comparative Impact Discussions

Impact TR-1: Construction of the Project would result in transportation impacts in the Project vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Project vicinity. ***[Criterion D.n]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that construction of the Project would result in transportation impacts in the Project vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Project vicinity. The 2010 FEIR concluded implementation of mitigation measure MM TR-1, which would require the Applicant to develop and implement a Construction Traffic Management Plan to reduce the impact of construction activity on transportation facilities, would reduce the impacts caused by construction, but not to a less-than-significant level.

The overall amount of construction anticipated to occur as part of the 2018 Modified Project Variant would be the same as or less than originally conceived and described for the 2010 Project, although the sequencing would be different. The 2010 Project analysis anticipated development phasing that would create more construction activities in the HPS in the early years of project build-out, with increased construction levels at CP during later phases. Additionally, the 2010 Project also included construction of a new NFL stadium in the early phases of development, which would have resulted in more intense construction activities than would likely ever occur during any of the non-stadium variants.

The revised phasing proposed for the 2018 Modified Project Variant would reverse this, with more construction activities in CP during the earlier years and more activity in the HPS site during later years. Further, because the 2018 Modified Project Variant does not include a new NFL stadium, the overall construction activities would be more spread out over time and well below the peak levels anticipated for the 2010 Project.

Although the latest proposed phasing at CP is different from previous analyses of accelerated construction at CP, such as the evaluation outlined in 2010 FEIR Addendum 1, the overall construction activities and general proposal is similar to what was analyzed in 2010 FEIR Addendum 1. Portions of the construction activities outlined in Addendum 1, including demolition of Candlestick Park, have already occurred. Postponement of construction in HPS is primarily a result of delays in transferring land from the US Navy to the City and County of San Francisco. An estimate of construction activities during the course of project build-out associated with the 2010 Project and the 2018 Modified Project Variant, as well as a chart illustrating the difference in terms of construction truck trips over time between the two, is provided in Appendix C (Construction Activities) of Addendum 5 Appendix D.

In summary, there are no changes in the Project that would require revisions of the 2010 FEIR; accordingly, the impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-2: Implementation of the Project would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, even with implementation of a Travel Demand Management Plan. ***[Criterion D.a]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that general traffic increases in the study area would be substantial compared to the existing setting and overall capacity of the street system. The 2018 Modified Project Variant would slightly increase forecasted traffic volumes from the Project, by approximately 2 percent in the AM peak hour and 6 percent in the PM peak hour. As noted earlier, although the 2018 Modified Project Variant's trip generation would be between 2 and 6 percent higher than contemplated in the 2010 FEIR in the AM and PM peak hours, it would include land uses that were previously approved but not built, and no longer planned to be built, at HPS Phase 1. Trips from these uses were previously included in the cumulative analysis in the 2010 FEIR, but were not associated with 2010 FEIR Variant 1 (R&D). The 2018 Modified Project Variant's vehicular trip generation would be between 2 and 6 percent than FEIR Variant 1 (R&D), which would cause a net increase to area-wide traffic of less than 3.5 percent. The Transportation Assessment conducted for the 2018 Modified Project Variant (p. 19), included as Appendix D, found that these types of fluctuations would be within the range of error of the overall project travel demand forecasts and would not likely to cause a perceptible difference to the public.

The 2010 FEIR's discussion of traffic impacts is based on project build-out. Refinements have been made to the internal roadway network, both to cross-section dimensions and roadway alignments. Refinements to roadway cross sections would be made to encourage slow-speed auto traffic, but also to better accommodate transit, bicyclists, and on-street parking based on recent SFMTA design guidance for travel lane widths. Some of these changes have been discussed in prior addenda. Specifically, Addendum 1 (p. 10) described some general categories of modifications, such as establishing consistent design principles, establishing a more consistent BRT alignment, the design of the Yosemite Slough Bridge, and reorientation of some streets in CP. These principles have not changed since Addendum 1, although some additional modifications to cross-sections have been proposed as a consequence of modification of some roadway alignments in HPS. Revised cross-sections associated with the 2018 Modified Project Variant are presented in Addendum 5 Appendix D.

However, other principles affecting the roadway designs described in Addendum 1, such as the revised bicycle network and the re-orientation of the street grid in Hunters Point South are no longer directly applicable, and additional modification is proposed as part of the 2018 Modified Project Variant. Those elements are described below:

- **Revised Bicycle Network.** Project modifications described in Addendum 1 included a new cycletrack facility that closed a gap in the bicycle network near the project's retail center. The cycletrack would extend west of the project site, along Harney Way toward US-101[57] replacing the originally proposed Class II bicycle lanes on both sides of the street. The cycletrack was also anticipated to travel along Crisp Road in HPS, before terminating near Spear Avenue. The modifications described in Addendum 1 related to the bicycle network revisions in CP remain unchanged since Addendum 1. Refer to Addendum 1, p. 26 for a comparison of the 2010 Project and the Addendum 1 refinements to the bicycle network. However, the 2018 Modified Project Variant proposes to realign the cycletrack through HPS such that it would traverse the open space to the south of Crisp Road, and then would use a neighborhood midblock break in Hunters Point South to travel parallel to Crisp Road. This modification is discussed in more detail in the bicycle impacts section.
- **Reorientation of Street Grid in the Warehouse District.** Streets in the Warehouse District neighborhood associated with the 2018 Modified Project Variant are similar to what was proposed in 2010 FEIR R&D Variant (Variant 1) (2010 FEIR Figure IV-1, p. IV-7), but street alignments have been slightly modified to account for retention of some additional existing buildings. Overall, the size and density of the street grid in Hunters Point South is similar to what was originally approved in 2010 FEIR R&D Variant (Variant 1); therefore, transportation capacity is expected to be similar.

[57] The EIR anticipated that Harney Way would be constructed in two phases. The first phase would construct two auto travel lanes in each direction (with two BRT lanes, on-street bicycle lanes, and a center turn lane). The changes proposed for the initial configuration of Harney Way do not affect auto capacity, but rather use land reserved for potential future expansion to extend the two-way Class I cycletrack from the project site west toward the Bay Trail. The Class I cycletrack would be removed if Harney Way were widened to its ultimate width because of the need for auto capacity. Under these circumstances, bicycle conditions along Harney Way would be identical to what was originally approved in the EIR.

- **Extension of Donahue Street South to Crisp Road.** Within Hunters Point, the 2010 Project provided one travel route to the north (via Donahue and Innes Avenue) and one travel route to the south (via Crisp Road and Palou Avenue). Travelers on the northern side of the HPS who wanted to travel south would have to travel through the entire Shipyard site to reach Crisp Avenue and Palou Avenue. Similarly, travelers in the southern part of Hunters Point who wish to travel north, would have to travel through the entire site to get to Innes Avenue. The extension of Donahue Street would provide a direct connection between Crisp Avenue and Innes Avenue, allowing for less circuitous travel and fewer vehicle trips through the center of the Shipyard site.

At build-out, project refinements, including both changes to land use that would slightly alter build-out traffic volumes and cause changes to internal roadway infrastructure, would result in very small changes to operating characteristics and would not cause this significant impact to be substantially more severe.

The 2010 FEIR also included an analysis of infrastructure phasing to ensure that the appropriate roadways were constructed along with land development to ensure adequate circulation. Although, for purposes of assessing transportation impacts, the 2018 Modified Project Variant would be similar to 2010 FEIR R&D Variant (Variant 1) at build-out, the project development phasing has changed. The initial phasing of traffic improvements was set forth in a memorandum included as 2010 FEIR Appendix A4 (Fehr & Peers, Roadway and Transit Phasing Plan, March 17, 2010).[58] An analysis of the 2018 Modified Project Variant phasing and infrastructure implementation timing was conducted to determine whether the 2018 Modified Project Variant would provide auto circulation and access at a level adequate to meet the travel demand throughout the build-out period.

Candlestick Point

As noted earlier, development at CP is anticipated to occur earlier than originally anticipated. As a result, and to respond to some of the changes in the order of development, revisions to the implementation phasing are proposed to better respond to land use phasing.[59] As shown in Table 10 (2018 Modified Project Variant Street Segment Improvements—Candlestick Point), most roadway improvements are scheduled to be implemented at the same triggers or sooner (relative to development levels) than proposed in the 2010 FEIR, with the exception of Jamestown Avenue and Ingerson Avenue and the automobile route around Yosemite Slough. However, Jamestown Avenue and Ingerson Avenue improvements are largely streetscape improvements, designed to improve the overall urban design of the streets, and would not affect vehicular capacity along the streets, so in terms of assessing traffic impacts, this modification is not material. Furthermore, the need for the auto route around Yosemite Slough is driven by the need for connection between HP and CP. Since development at HP is somewhat delayed compared to the forecasted schedule from the 2010 FEIR, these improvements are not needed as quickly, and technical analysis has shown that they could be postponed until Sub-phase CP-07 (see discussion below).

[58] Fehr & Peers, *Roadway and Transit Phasing Plan*, March 17, 2010.

[59] Although previous EIR addenda also considered revisions to the project phasing compared to what was analyzed in the EIR, the comparison in Addendum 5 compares the 2018 Modified Project Variant with the 2010 Project, and not to previously contemplated revisions.

TABLE 10 2018 MODIFIED PROJECT VARIANT STREET SEGMENT IMPROVEMENTS—CANDLESTICK POINT

		Original Non-Stadium Option[a]		*2018 Modified Project Variant*	
Intersection	*Improvement*	*Traffic Volume Trigger?*[b]	*Trigger*	*Traffic Volume Trigger?*[b]	*Trigger*[c]
Arelious Walker Drive, Shafter Avenue to Carroll Avenue	Construct Yosemite Slough Bridge[d]	No	Implementation of BRT	No	Implementation of BRT (HP-04)
Arelious Walker Drive, Carroll Avenue to Gilman Avenue	Interim Two-Lane Condition (see Addendum 2)		N/A	No	CP-01 (Adjacency)
	Ultimate Condition (see description above)	No	Implementation of BRT	Yes	CP-07 (approximately 3,900 PM Peak Hour Vehicle Trips CP) or Implementation of BRT
Arelious Walker Drive, Gilman Avenue to Harney Way	Construct two travel lanes in each direction with center median/turn lane	No	Implementation of BRT	No	CP-02 (Adjacency)
Harney Way Widening, Arelious Walker Drive to Thomas Mellon Drive	Near Term (see Addendum 2)	Yes	3,537 PM Peak Hour Vehicle Trips or Implementation of BRT[b]	No	CP-02 (Adjacency)
	Long-Term (see Addendum 2)	TBD[e]	Per MM TR-16 (as modified by Addendum 5)	TBD[e]	Per MM TR-16 (as modified by Addendum 5)
Jamestown Avenue, Arelious Walker Drive to Third Street	Resurface and Restripe	No	Demolition of Candlestick Park	No	CP-07
Ingerson Avenue, Arelious Walker Drive to Third Street	Resurface and Restripe	No	Demolition of Candlestick Park	No	CP-07
Gilman Avenue, Arelious Walker Drive to Third Street	Reconstruct or Resurface and Restripe	No	TBD	No	CP-02
Carroll Avenue, Arelious Walker Drive to Ingalls Street	See Figures 2.1.2A–2.1.2G	Yes	3,131 PM Peak Hour Vehicle Trips (CP & HP)[b]	Yes	CP-07 (Approximately 7,600 PM Peak Hour Vehicle Trips, CP & HP)[b]
Ingalls Street, Carroll Avenue to Thomas Avenue	See Figures 2.1.2A–2.1.2G	Yes	3,131 PM Peak Hour Vehicle Trips (CP & HP)[c]	Yes	CP-07 (Approximately 7,600 PM Peak Hour Vehicle Trips, CP & HP)[c]

NOTES:

a. As summarized in the 2010 FEIR (Comments and Responses, Appendix A4, Roadway and Transit Phasing Plan, Fehr & Peers, March 17, 2010. Note that the "Original Non-Stadium Option" as presented in the FEIR and replicated here is applicable to all non-stadium options.

b. Based on trip rates by land use used in the 2010 FEIR for R&D Variant (Variant 1) and currently proposed phasing. See Appendix D for LOS calculation showing that approximately 85% of project-related growth (corresponding to approximately 7,700 vehicle trips) could be accommodated at this intersection before significant LOS impacts would occur.

c. Where multiple triggers are provided, the trigger shall be whichever event occurs first. When a sub-phase is listed as the trigger, the improvement shall be fully constructed and operational prior to occupancy of the sub-phase.

d. The cross-section for Yosemite Slough Bridge has been modified from what is shown in the 2010 FEIR for the Non-Stadium alternative. However, at 45 feet in width, the structure would be smaller than the bridge approved in the Stadium scenario.

e. The isolated intersection analysis conducted for this study shows that the two intersections along Harney Way would operate acceptably with the near-term configuration even with full build-out of the project. However, because Harney Way is part of a complex series of roadway improvements and due to the inherent uncertainty in traffic forecasts, a study would be conducted prior to construction of each development phase to determine whether conditions are better or worse than projected. The results of that study would indicate whether additional development could be accommodated under the near-term configuration while maintaining acceptable LOS or whether widening.

The major connections between the CP development and the external transportation network are expected to be developed as part of the first Major Phase. These include Arelious Walker Drive, the four-lane internal spine roadway that connects the smaller internal streets to the external roadways connecting to the rest of the City via Carroll, Gilman, Ingerson, and Jamestown Avenues.

Within Major Phase 1 in CP, the development would occur in five sub-phases, CP-01 through CP-05. CP-01 is already constructed or under construction, and includes 337 residential dwelling units on the Alice Griffith site, which would generate approximately 100 PM peak hour auto trips, based on the methodology described in the 2010 FEIR. As part of this sub-phase, a portion of Arelious Walker has been constructed, between Gilman Avenue and Carroll Avenue. Ultimately, as noted earlier, Arelious Walker Drive would be constructed to provide two travel lanes in each direction, separated by a median. However, as part of CP-01, only the two lanes west of the median were constructed. During this initial period, this segment of Arelious Walker provides one travel lane in each direction. Then, during later phases of development, as noted below, the remaining half of Arelious Walker Drive would be constructed such that two auto lanes would be provided in each direction. The construction of this interim portion of Arelious Walker Drive is consistent with and supports the final configuration of Arelious Walker Drive. Refer to Addendum 1 (Appendix A, Sub-appendix D) for figures showing the interim and final configuration of Arelious Walker Drive.

As proposed, providing only one travel lane in each direction along Arelious Walker Drive is adequate for this small number of units comprising CP-01, and essentially serves to connect the four development blocks together and provide connections to Carroll Avenue and Gilman Avenue, two primary east/west connections to the greater Bayview neighborhood.

Sub-phase CP-02 would develop the 635,000 sf regional retail center, a 220-room hotel, 419 residential units, 150,000 sf of office, and the 10,000-seat arena. To support this new development, the key transportation infrastructure connecting CP to external routes would be constructed, including Harney Way between the retail center and Thomas Mellon Drive and Arelious Walker Drive, between Harney Way and Gilman Avenue. This portion of Arelious Walker Drive would be constructed to its ultimate width of four lanes, and would connect to the interim two-lane portion to the north of Gilman. Harney Way would be constructed to its initial configuration with four lanes, as described in the 2010 FEIR.[60] Additionally, Gilman Avenue, between Arelious Walker and Third Street would be reconfigured to provide one travel lane in each direction, center turn lanes, on-street

[60] EIR Addendum 4 discussed the potential for the initial phase of Harney Way to be constructed in two sequences corresponding to the need for information from SFMTA regarding the ultimate interim routing of the 28R BRT route. Addendum 4 concluded that since the sequenced construction would still result in the same auto capacity at all times and would still complete the exclusive right of way for the BRT in advance of service, there would be a less-than-significant impact of this sequencing. The same conclusions still apply to the 2018 Modified Project Variant.

parking, and would retain the existing sidewalks on both sides of the street. Intersections along Gilman Avenue would be signalized between Arelious Walker Drive and Third Street.[61]

Other than ensuring that other existing east/west streets connect to Arelious Walker Drive, none of the project-proposed improvements to Carroll Avenue, Ingerson Avenue, or Jamestown Avenue would be constructed as part of Sub-phase CP-02. Carroll Avenue is at the northernmost portion of the CP site, and therefore, would not likely to be a desirable route to the CP retail center, which sits at the southern end of the CP site. Further, improvements proposed for Ingerson Avenue and Jamestown Avenue are generally streetscape improvements designed to improve the attractiveness of the streets and not to increase auto capacity; therefore, for purposes of discussing traffic impacts, the timing of improvements to these streets is not critical and most of the auto capacity connecting the CP site to the external roadway network would be constructed as part of Sub-phase CP-02 with the described improvements to Harney Way and interim improvements to Arelious Walker Drive.

At this point, prior to occupancy of Sub-phase CP-02, with the exception of the interim portion of Arelious Walker Drive between Gilman Avenue and Carroll Avenue, all of the major auto traffic infrastructure in CP required to connect project-related traffic to the external roadway network would be constructed, as would most of the off-site capacity enhancements, including Harney Way and Gilman Avenue.

Sub-phase CP-03 involves construction of the blocks directly opposite the retail center across Ingerson Avenue. No additional transportation improvements are proposed as part of CP-03 because the major improvements needed to serve CP-03 would be constructed earlier, as part of CP-01 and CP-02.

With the opening of CP-04, the first four sub-phases would generate about 3,750 vehicle trips, which would exceed the trigger point identified in the 2010 FEIR of approximately 3,150 vehicle trips that would require improvements to the auto route around the Yosemite Slough, that includes Carroll Avenue, Ingalls Street, Thomas Avenue, and Griffith Avenue.[62] The analysis conducted for the 2010 FEIR was based on the original phasing, which as noted earlier, would develop in the HPS site faster than currently proposed. As a result, the automobile route around Yosemite Slough was identified as appropriate infrastructure to provide access to CP and US-101 from the development at HPS. The trigger in the 2010 FEIR was identified as the appropriate time when the improvements would be necessary.

However, based on current proposed phasing, the previously identified trigger point for the auto route around Yosemite Slough would be met with less development in the HPS and substantially more development in CP than originally anticipated. As a result, there would likely be less auto demand for travel between the Hunters Point site and US-101 or between the CP and HPS sites, making the auto route around Yosemite Slough less critical during an early stage.

[61] This is different from the EIR proposal for Gilman Avenue. The proposed changes were evaluated in EIR Addendum 4, which showed the revised design would operate similar to the originally proposed configuration, with less disruption to the neighborhood due to construction.
[62] Fehr & Peers, *Roadway and Transit Phasing Plan*, March 17, 2010, p. 5, Table 4.

The improvements around Yosemite Slough would be required when approximately 85 percent of the total forecasted increase in vehicle traffic at the intersection of Carroll Avenue and Ingalls Street would occur. Based on currently proposed phasing, this would occur around CP-07, which is also when the northern portion of Alice Griffith development adjacent to Carroll Avenue is scheduled to be constructed. Thus, the trigger for improvements to Carroll Avenue and the automobile route around Yosemite Slough has been modified based on the revised phasing.

The remaining auto capacity enhancements on Arelious Walker Drive, between Gilman Avenue and Carroll Avenue would also be required to be constructed prior to occupancy of Sub-phase CP-07. At the end of Sub-phase CP-06 in CP, which represents the condition at which the most traffic would be using the interim portion of Arelious Walker Drive, the intersection of Arelious Walker Drive and Gilman Avenue would operate within acceptable level of service; therefore, no significant impacts would occur as a result of providing this interim condition through Sub-phases CP-01 through CP-06.

As a result, the roadways that facilitate travel between the project site and the external roadway network would generally provide their full capacity prior to any new trips being generated from Major Phase 2, with the exception of the portion of Arelious Walker between Gilman and Carroll. This segment would be widened to its full capacity near the beginning of Major Phase 2, at which point all major roadways in the CP portion of the project site would be at their full capacity. Otherwise, as shown in Figures 3 to 5, Major Phases 2 and 3 would only add internal circulation roadways adjacent to new development parcels to connect to the major roadways built as part of Major Phase 1. As a result, auto capacity in the CP area would be greater than or similar to what was described in the 2010 FEIR throughout the development build-out.

Hunters Point Shipyard

As noted earlier, development at HPS is anticipated to occur later than originally anticipated. As a result, and to respond to some of the changes in the order of development, revisions to the 2010 FEIR improvement phasing requirements are proposed to better respond to land use phasing. As shown in Table 11 (2018 Modified Project Variant Street Segment Improvements—Hunters Point Shipyard), similar to the proposed changes at CP, all roadway improvements are scheduled to be implemented at the same triggers or sooner (relative to development levels) than proposed in the 2010 FEIR.

At build-out, the primary access routes to the HPS site include the four-lane Innes Avenue and the two-lane Palou Avenue. The main southern access route to the Shipyard Site, Crisp Avenue, would also be constructed as part of Major Phase 1. Improvements to Crisp Avenue, Spear Avenue, and a portion of Robinson Street, and associated internal streets to connect between them, would be constructed as part of Sub-phase CP-01, prior to any new trips generated by development in the HPS site. The remainder of Robinson Street, and improvements to Donahue Street and Innes Avenue would be reconstructed as part of HP-02, when the first nearby developments as part of HP-02 are constructed. With the improvements constructed in HP-02, the roadway network would provide a complete, continuous route from Innes Avenue to Crisp and Palou avenues. This access route would account for the total auto

capacity of the HPS site to connect with the surrounding neighborhoods and would be adequate to serve the development proposed as part of Major Phase 1 in HPS. Internal streets proposed as part of Major Phase 1 in HPS would connect between Donohue Street and Innes Avenue.

TABLE 11 2018 MODIFIED PROJECT VARIANT STREET SEGMENT IMPROVEMENTS—HUNTERS POINT SHIPYARD

		Original Non-Stadium Option[a]		*2018 Modified Project Variant*	
Intersection	*Improvement*	*Traffic Volume Trigger?*[b]	*Trigger*	*Traffic Volume Trigger?*[b]	*Trigger*[c]
Palou Avenue, Griffith Avenue to Third Street	Resurface and Restripe, Streetscape Amenities	Yes	TBD—Based on Transit Phasing	No	HP-05 or Based on Transit Phasing to coincide with improved service frequencies
Thomas Avenue, Ingalls Street to Griffith Street	Resurface and Restripe, Streetscape Amenities	Yes	3,131 PM Peak Hour Vehicle Trips (CP & HP)[d]	Yes	CP-07[e]
Griffith Street, Thomas Street to Palou Street	Resurface and Restripe, Streetscape Amenities	Yes	Reconstruction of Crisp Avenue	Yes	CP-07[e]
Innes Avenue, Donahue Street to Earl Street	Resurface and Restripe, Streetscape Amenities	Yes	1,000 PM Peak Hour Vehicle Trips	No	HP-02
Crisp Avenue, Palou Avenue to Fischer Street	Resurface, Restripe, Realign	No	Adjacency	No	HP-01
Innes Avenue/Hunters Point Boulevard/Evans Street, Earl Street to Jennings Street	Resurface and Restripe, Streetscape Amenities	Yes	1,000 PM Peak Hour Vehicle Trips	No	HP-02
Donahue Street, LaSalle Avenue/Kirkwood Avenue to Crisp Road	Extend Street		N/A	No	None; Optional Improvement

NOTES:

a. As summarized in the 2010 FEIR (Comments and Responses, Appendix A4, Roadway and Transit Phasing Plan, Fehr & Peers, March 17, 2010. Note that the "Original Non-Stadium Option" as presented in the 2010 FEIR and replicated here is applicable to all non-stadium options.

b. Based on trip rates by land use used in the 2010 FEIR for R&D Variant (Variant 1).

c. Where multiple triggers are provided, the trigger shall be whichever event occurs first. When a sub-phase is listed as the trigger, the improvement shall be fully constructed and operational prior to occupancy of the sub-phase.

d. Combined total from CP and HP

e. Although these two segments are technically part of the HP improvements, they are part of an overall strategy to provide increased auto capacity between HP and CP and should be implemented simultaneously with other improvements on Carroll Avenue and Ingalls Street that are triggered by development in CP.

Other than the optional extension of Donahue Street to Crisp Avenue, subsequent phases would build out the internal roadway network adjacent to individual development parcels, all of which would connect to the major access routes. Therefore, the major pieces of auto infrastructure connecting HPS with the external roadway network would be constructed as part of Major Phase 1 in HPS; therefore, auto capacity would be greater than (meaning more capacity would be provided) or similar to what was described in the 2010 FEIR during all phases of development.

As noted earlier, the 2018 Modified Project Variant includes an optional extension of Donahue Street to provide a better connection between the northern and southern portions of HPS. The technical

analysis conducted as part of this letter report does not include this extension and conclusions are not premised on its completion.

However, the decision to implement this extension would not alter impact conclusions. For example, under conditions without the extension, traffic from the southern portion of HPS destined for Innes Avenue and points north would drive through the site, "around the hill" (likely via Fischer Street, Robinson Street, and Donahue Street) to reach Innes Avenue. With the extension, this traffic could simply drive along Crisp Road to Donahue Street and drive directly "over the hill" to Innes Avenue. Traffic on external roadways would likely be similar, and traffic within the site would likely be less, as there would be less need for circuitous travel within the site. Thus, the extension of Donahue Street would likely reduce congestion within the site.

As a result of the analysis described above, no new or substantially increased significant traffic impacts are expected as a result of the 2018 Modified Project Variant or the modified phasing compared to the traffic impacts described in 2010 FEIR R&D Variant (Variant 1). Conditions would continue to operate similarly to conditions described in the 2010 FEIR. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

The 2010 FEIR also called for the Project to develop and implement a Transportation Demand Management Plan. This Plan is still applicable, and although it would reduce the severity of the Project's significant impact, the impact would remain significant and unavoidable.

Impact TR-3: Implementation of the Project would contribute traffic to significant cumulative impacts at intersections in the Project vicinity. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR identified significant project-specific impacts and considerable contributions to significant cumulative impacts at eleven study intersections projected to operate at acceptable LOS without the project and unacceptable LOS with the project, where no feasible mitigation was identified. This includes nine intersections that were identified for the 2010 Project, as well as two additional intersections (Ingalls/Carroll and Bayshore/Oakdale) that were identified specifically for 2010 FEIR R&D Variant (Variant 1). As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there continues to be no feasible mitigation measures to reduce the level of this impact.

Impact TR-4: At the intersection of Tunnel/Blanken, implementation of the Project would result in significant Project AM peak hour traffic impacts, and would contribute to cumulative PM peak hour traffic impacts. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR identified a significant project-specific impact and a considerable contribution to a significant cumulative impact at the intersection of Tunnel/Blanken. The 2010 FEIR identified mitigation measure MM TR-4, which consisted of striping changes at the intersection, to reduce the severity of the impact; however, the Mitigation Measure would not reduce the impact to less-than-significant levels. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-5: Implementation of the Project would contribute traffic at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR identified considerable contributions to significant cumulative impacts at 17 study intersections projected to operate at unacceptable LOS under conditions without the project, and where no feasible mitigation was identified. This includes 16 intersections that were identified for the 2010 Project, as well as one additional intersection (Evans/Jennings) that was identified specifically for 2010 FEIR R&D Variant (Variant 1). As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there continues to be no feasible mitigation measures to reduce the level of this impact.

Impact TR-6: Implementation of the Project could contribute traffic at the intersections of Geneva/US-101 Southbound Ramps and Harney/US-101 Northbound Ramps, which would operate at LOS F under 2030 No Project conditions. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR identified a significant project-specific impact and a considerable contribution to a significant cumulative impact at the intersections of Geneva/US-101 Southbound Ramps and Harney Way/US-101 Northbound Ramps. The 2010 FEIR identified mitigation measure MM TR-6, which called

for the Project to pay a fair-share contribution to construction of the Geneva Avenue extension and reconstruction of the Geneva Avenue/Harney Way/US-101 interchange; however, the impact would remain significant and unavoidable. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would increase traffic volumes slightly compared to 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, even with implementation of the identified mitigation measure.

Impact TR-7: Implementation of the Project could contribute traffic to the intersections of Amador/Cargo/Illinois, which would operate at LOS E under 2030 No Project. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR identified a significant project-specific impact and a considerable contribution to a significant cumulative impact at the intersection of Amador/Cargo/Illinois. The 2010 FEIR identified mitigation measure MM TR-7, which consisted of striping changes at the intersection, to reduce the severity of the impact; however, the impact would remain significant and unavoidable since its feasibility was uncertain. The 2010 FEIR noted that if it were found to be feasible, the Mitigation Measure would reduce the Project's impact at this intersection to less-than-significant levels. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-8: Implementation of the Project could contribute traffic to the intersections of Bayshore/Geneva, which would operate at LOS F under 2030 No Project. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR identified a significant project-specific impact and a considerable contribution to a significant cumulative impact at the intersection of Bayshore/Geneva. The 2010 FEIR identified mitigation measure MM TR-8, which called for the Project to contribute a fair share contribution toward improvements along Geneva Avenue associated with its extension to Harney Way, and would account for projected traffic volume increases to improve forecasted operations at the intersection. However, the impact would remain significant and unavoidable. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-9: Implementation of the Project would have less-than-significant Project and cumulative impacts at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR identified a number of intersections where the Project would have a less-than-significant impact. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. Furthermore, to be thorough in its assessment, that study conducted an analysis of intersection LOS at a subset of the 2010 FEIR study intersections to demonstrate whether the slight changes would affect intersection LOS. The study found that the slight increases would not create significant transportation-related impacts at the subset, which could reasonably be extrapolated to suggest that none of the study intersections that were forecasted to experience a less-than-significant impact due to the 2010 FEIR R&D Variant (Variant 1) would now experience a new significant impact associated with the 2018 Modified Project Variant. There would continue to be no impact.

Impact TR-10: Implementation of the Project would result in significant Project traffic spillover impacts and contribute to cumulative traffic spillover impacts. ***[Criterion D.a]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

In addition to the specific intersection impact analysis, the 2010 FEIR identified Impact TR-10, which noted that Project-related traffic may result in significant "spillover" traffic into neighborhood streets. Mitigation measures MM TR-2 and MM TR-17 were identified as likely to reduce the overall effects of traffic spillover by encouraging use of nonautomobile modes; however, the impacts were expected to remain significant and unavoidable with these mitigation measures. Note that minor modifications to mitigation measure MM TR-17 associated with changes to the Transit Operating Plan are included here. Those changes are discussed in greater detail in the discussion under Impact TR-17; however, the changes have minimal effect on the discussion of impacts associated with Impact TR-10.

As discussed Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public.

In summary, there are no changes in the Project that would require revisions of the 2010 FEIR; accordingly, the impact would remain significant and unavoidable even with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

MM TR-17: Implement the Project's Transit Operating Plan. The Project Applicant shall work with SFMTA to develop and implement the Project's Transit Operating Plan. Elements of the Project Transit Operating Plan shall include:

- Extension of the 24-Divisadero, the 44-O'Shaughnessy, and the 48-Quintara-24th Street into Hunters Point Shipyard.
- Increased frequency on the 24-Divisadero to ~~6~~10 minutes in the AM and PM peak periods. Extension of the 29-Sunset from its current terminus near the Alice Griffith housing development, near Gilman Avenue and Giants Drive, into the proposed Candlestick Point retail area. The 29-Sunset would operate a short line between Candlestick Point and the Balboa Park BART station. This would increase frequencies on the 29-Sunset by reducing headways between buses from 10 minutes to 5 minutes during the AM and PM peak periods between Candlestick Point and the Balboa BART station. Every other bus would continue to serve the Sunset District (to the proposed terminus at Lincoln Drive and Pershing Drive in the Presidio) at 10-minute headways.
- Convert T-Third service between Bayview and Chinatown via the Central Subway from one-car to two-car trains or comparable service improvement. Extension of the 28L-19th Avenue Limited from its TEP-proposed terminus on Geneva Avenue, just east of Mission Street, into the Hunters Point Shipyard transit center. The 28L-19th Avenue Limited would travel along Geneva Avenue across US-101 via the proposed Geneva Avenue extension and new interchange with US-101, to Harney Way. East of Bayshore Boulevard, the 28L-19th Avenue Limited would operate as BRT, traveling in exclusive bus lanes into the Candlestick Point area. The BRT route would travel through the Candlestick Point retail corridor, and cross over Yosemite Slough into the Hunters Point Shipyard transit center.
- The 28L-19th Avenue Limited would operate a short line to the Balboa Park BART station. This would increase frequencies on the 28L-19th Avenue Limited by reducing headways between buses from 10 minutes to 5 minutes for the segment between Hunters Point Shipyard and the Balboa Park BART station. Every other bus would continue to the Sunset District (to the proposed terminus at North Point Street and Van Ness Avenue) at 10-minute headways. If the TEP-proposed extension of the 28L has not been implemented by the SFMTA by the time implementation of this measure is called for in ~~the Transportation Study (Appendix D)~~ Addendum 5, based on the revised project phasing, the Project Applicant shall fund the extension of that line between its existing terminus and Bayshore Boulevard.
- New CPX-Candlestick Express to downtown serving the Candlestick Point site, traveling along Harney Way (with potential stops at Executive Park), before traveling on US-101 toward downtown, terminating at the Transbay Terminal.
- New HPX-Hunters Point Shipyard Express to downtown serving the Hunters Point Shipyard site, traveling from the Hunters Point Shipyard Transit Center, along Innes Avenue, with stops at the India Basin and Hunters View areas, before continuing

along Evans Avenue to Third Street, eventually entering I-280 northbound at 25th/Indiana. The HPX would continue non-stop to the Transbay Terminal in Downtown San Francisco.

Impact TR-11: Implementation of the Project would contribute to significant cumulative traffic impacts at four freeway segments. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR found that the Project would contribute to significant cumulative traffic impacts on freeway segments. No mitigation measures were identified to reduce the severity of these impacts. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there would continue to be no feasible mitigation measure to reduce the level of this impact.

Impact TR-12: Implementation of the Project would result in significant impacts at four freeway on-ramp locations. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR found that the Project would contribute to significant cumulative traffic impacts on freeway on-ramps. No mitigation measures were identified to reduce the severity of these impacts. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR Variant (R&D Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there continues to be no feasible mitigation measure to reduce the level of this impact.

Impact TR-13: Implementation of the Project would contribute to significant cumulative traffic impacts at 12 freeway ramp locations. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR found that the Project would contribute to significant cumulative traffic impacts on freeway ramps. No mitigation measures were identified to reduce the severity of these impacts. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there continues to be no feasible mitigation measure to reduce the level of this impact.

Impact TR-14: Implementation of the Project could result in significant impacts related to freeway diverge queue storage at the Harney/US-101 Northbound Off-ramp. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant traffic impact related to freeway diverge segment and queue storage at the off-ramp to Harney Way from northbound US-101. Mitigation measure MM TR-6, identified as part of the Project's impacts to the interchange intersections at Harney Way, would also serve to reduce impacts to the off-ramp diverge section and queue storage. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-15: Implementation of the Project could contribute to significant cumulative traffic impacts related to freeway diverge queue storage at some off-ramp locations (US-101 Northbound off-ramp to Harney Way, and US-101 Southbound Off-ramp to Harney Way/Geneva Avenue). ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would contribute to significant cumulative traffic impacts related to freeway diverge segment and queue storage at the off-ramps to Harney Way from northbound and southbound US-101. Mitigation measure MM TR-6, identified as part of the Project's impacts to the interchange intersections at Harney Way, would also serve to reduce impacts to the off-ramp diverge sections and queue storage capacities. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes slightly compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-16: Implementation of the Project would increase traffic volumes, but would not make a considerable contribution to cumulative traffic volumes on Harney Way. ***[Criterion D.a]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR found that the Project would increase traffic volumes along Harney Way from northbound and southbound US-101. Mitigation measure MM TR-16, identified as part of the Project's impacts to the interchange intersections at Harney Way, would also serve to reduce impacts to the off-ramp diverge sections and queue storage capacities.

Harney Way was proposed to be constructed in two phases. The first phase, shown in Figure 5 in the Project's Transportation Plan, approved as part of the Project in 2010, called for the BRT lanes, two travel lanes in each direction, on-street Class II bicycle lanes in each direction, and a landscaping strip on the southern edge of Harney Way, adjacent to the State Parks property. The 2010 FEIR identified mitigation measure MM TR-16, which called for conversion of a portion of the bicycle lanes and the landscape strip into a travel lane such that Harney Way would have two travel lanes in the eastbound and three travel lanes in the westbound direction, shown in Figure 7 in the Transportation Study.

The 2010 FEIR Addendum 1 refined the design of Harney Way Phase 1 to incorporate a two-way cycletrack on the south side of the street, but maintaining the two BRT lanes on the north side and the four auto travel lanes. Mitigation measure MM TR-16 was revised to reflect this modified cross-section for Phase 1. Phase 2 would remain the same as per the 2010 FEIR.

The 2010 FEIR Addendum 4 did not modify any of the cross-sections for Harney Way, but did note that Phase 1 would be constructed in two sub-phases, Phases 1A and 1B. Phase 1A would construct the segment between Arelious Walker Drive and Executive Park East, while Phase 1B would construct the segment between Executive Park East and Thomas Mellon Drive. The purpose for splitting construction of Phase 1 into two sub-phases was to reflect the potential that the San Francisco County Transportation Authority (Transportation Authority) may wish to refine the routing for the BRT, and if so, the design of the westernmost segment (between Executive Park East and Thomas Mellon Drive) may be revised. The 2010 FEIR Addendum 4 noted that since both sub-phases of Phase 1 would be required to be constructed prior to operation of the BRT service, which would cause a less-than-significant impact.

Because the phasing of the 2018 Modified Project Variant is different than the phasing analyzed in 2010 FEIR Addendum 4, when mitigation measure MM TR-16 was last modified, additional modifications are proposed as part of Addendum 5 to link the construction of Harney Way Phase 1B with the revised "trigger" point for implementation of the BRT. These proposed changes are reflected below. The full length of Harney Way Phase 1 would be completed prior to implementation of the BRT service under the new phasing and revised language for MM TR-16; therefore, the phasing plan for Harney Way would continue to have a less-than-significant impact.

Otherwise, at build-out, as discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would increase traffic volumes slightly compared to 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Mitigation Measure with Proposed 2018 Modifications

> **MM TR-16: Widen Harney Way as shown in Figure 5 in the Transportation Study.** The Project Applicant shall widen Harney Way as shown in Figure 5 in the Transportation Study with the modification to include a two-way cycle track, on the southern portion of the project right-of-way. The portion between Arelious Walker Drive and Executive Park East

(Phase 1-A) shall be widened to include a two-way cycle track and two-way BRT lanes, prior to issuance of an occupancy permit for Candlestick Sub-phase CP-02. The remaining portion, between Thomas Mellon Drive and Executive Park East (Phase 1-B), shall be widened prior to implementation of the planned BRT route which coincides with construction of ~~CP-07 and~~ HP-04 ~~in 2023~~, as outlined in the transit improvement implementation schedule identified in Addendum 1, based on the alignment recommendations from an ongoing feasibility study conducted by the San Francisco County Transportation ~~Agency~~ Authority.

Prior to the issuance of grading permits for Candlestick Point Major Phases 2~~,~~ and 3~~, and 4~~, the Project Applicant shall fund a study to evaluate traffic conditions on Harney Way and determine whether additional traffic associated with the next phase of development would result in the need to modify Harney Way to its ultimate configuration, as shown in Figure 6 in the Transportation Study, unless this ultimate configuration has already been built. This study shall be conducted in collaboration with the SFMTA, which would be responsible for making final determinations regarding the ultimate configuration. The ultimate configuration would be linked to intersection performance, and it would be required when study results indicate intersection LOS at one or more of the three signalized intersection on Harney Way at mid-LOS D (i.e., at an average delay per vehicle of more than 45 seconds per vehicle). If the study and SFMTA conclude that reconfiguration would be necessary to accommodate traffic demands associated with the next phase of development, the Project Applicant shall be responsible to fund and complete construction of the improvements prior to occupancy of the next phase.

Impact TR-17: Implementation of the Project would not exceed available transit capacity, because the Project and the Project's contribution to cumulative demand would be accommodated within the existing transit service, proposed TEP service, plus the service proposed as part of the Project. ***[Criterion D.f]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Similar to traffic impacts, the 2018 Modified Project Variant's transit impacts at build-out would be similar to what was described in the 2010 FEIR for R&D Variant (Variant 1), although two minor changes have been proposed. Specifically, the 2018 Modified Project Variant proposes minor changes to the proposed routes for the 29 Sunset in CP and to all routes in the HPS associated with a shift of the Hunters Point Shipyard Transit Center. As these routes were part of the Project's Transit Operating Plan, which was required as part of mitigation measure MM TR-17, the changes described below, are considered changes to the mitigation measure itself (although no changes to the text of the measure in the 2010 FEIR are required). Changes described herein have been developed in consultation with SFMTA. Refer to the original Transit Operating Plan, which was included as Appendix A to the Project's Transportation Plan, approved in 2010 as part of the 2010 Project for details on the original transit plan. Refer to the revised Transit Operating Plan, included as Appendix A to the 2018 Modified Project Variant's Transportation Plan, which has been prepared as part of the 2018 Modified Project Variant, for a more detailed presentation of the 2018 Modified Project Variant transit service plan.

The modification to the 29 Sunset was evaluated as part of 2010 FEIR Addendum 1 (pp. 19-24), which found that the revisions to the route would offer similar or better transit service levels to the route evaluated in the 2010 FEIR. The 29 Sunset routing proposed as part of the 2018 Modified Project Variant is identical to what was evaluated in Addendum 1 and approved by OCII and SFMTA.

The changes to routes in HPS involve moving the Hunters Point Transit Center two blocks to the north from the original EIR proposal. The 28R BRT route and the 23 Monterey/24 Divisadero would travel an additional two blocks along Spear Street to reach the center. Routes approaching the Transit Center from Innes Avenue would travel along Lockwood Street to reach the Transit Center instead of Robinson Street, as originally proposed in the 2010 FEIR. Land uses along Lockwood Street and Robinson Street are similar, so no change to transit mode share is expected as a result of this change. In Hunters Point South, transit (the 28R BRT and the 23 Monterey/24 Divisadero) would travel along Crisp Avenue along the northern edge of Hunters Point South. This is similar to the original EIR proposed routing in Hunters Point South.

The land use changes contemplated as part of the 2018 Modified Project Variant would not substantially change transit demand compared to 2010 FEIR R&D Variant (Variant 1). Furthermore, the proposed changes in routing would not likely have an effect on mode share. Therefore, the proposed modifications would not likely result in additional or substantially more severe significant impacts beyond those identified in the 2010 FEIR under build-out conditions as it relates to transit capacity impacts.

As noted above, the 2018 Modified Project Variant would increase traffic volumes within the Hunters Point Shipyard site, possibly increasing delays to transit serving the Hunters Point Shipyard site. However, the 2018 Modified Project Variant includes several features designed to ensure that transit within and around the Hunters Point Shipyard site is not adversely affected by increased traffic. Internal to the site, all transit would operate in transit-only lanes, as the 2018 Modified Project Variant includes new transit only lanes along Lockwood Avenue that were not part of the 2010 FEIR Variant 1 (R&D), as well as the transit lanes along Crisp Avenue that have always been a part of the project.

External to the site, mitigation in the form of transit-only lanes was identified for the Palou Avenue routes in the 2010 FEIR, and monitoring would be required to determine when or if the mitigation is needed. To the extent changes in Addendum 5 increase conflicts and delay to transit, the mitigation measure would simply be triggered sooner, as identified by the monitoring. Therefore, the delay to transit along Palou would not get worse than what the 2010 FEIR contemplated.

Similarly, the 2010 FEIR identified mitigation in the form of transit-only lanes along Evans Avenue. A similar monitoring program was established, such that if transit delays associated with the 2018 Modified Project Variant are greater (or materialize more quickly in the buildout stages of the 2018 Modified Project Variant) than identified in the 2010 FEIR, the mitigation measure would simply be implemented sooner, meaning that excessive transit delays would still be avoided.

Furthermore, although not required as part of the 2010 FEIR R&D Variant (Variant 1) or the 2018 Modified Project Variant, a nearby development project has been proposed, called the India Basin Mixed-Use Development Project, and would developed within India Basin along Innes Avenue, west of HPS2 site. A Draft EIR for the India Basin Mixed-Use Development Project has recently been published for public review and comment, although as of the preparation of this analysis, the India Basin Mixed-Use Development Project Draft EIR has not been certified nor has the associated project been approved. However, the India Basin Mixed-Use Development Project Draft EIR identified a significant impact to transit associated with movements into and out of the India Basin project's site. The India Basin Mixed-Use Development Project Draft EIR has called for conversion of one lane in each direction on Innes Avenue to be converted to transit-only as mitigation for that project's transit impacts. That mitigation measure, if approved, would ensure a continuous transit-only lane between the 2018 Modified Project Variant and Third Street, potentially resulting in increased traffic congestion and more efficient transit service.

While implementation of the India Basin Mixed-Use Development Project's mitigation measure for transit-only lanes along Innes Avenue would be an additional benefit to transit, the analysis herein does not assume that mitigation measure to be in place because it has not yet been approved. If those transit-only lanes are not implemented, transit conditions along the Innes Avenue corridor would be similar to those identified in the 2010 FEIR for Variant 1 (R&D) as the amount of traffic increase along Innes Avenue associated with the 2018 Modified Project Variant would be relatively small (i.e., less than 100) since the 2018 Modified Project Variant represents a net increase of only approximately 250 vehicle trips in the PM peak hour compared to 2010 FEIR Variant 1 (R&D), and only approximately half of those trips would occur along Innes Avenue, and only a fraction of the trips along Innes Avenue would occur in the peak direction. Therefore, the 2018 Modified Project Variant would not increase transit delays associated with traffic congestion, and mitigation measure MM TR-17, which calls for the Project Applicant to work with SFMTA to implement the proposed transit service increases, would still apply.

Similar to the Project's roadway infrastructure, the Project's transit network was proposed to be implemented at various levels throughout the development as described in the Transit Operating Plan. As a result of proposed changes to the development phasing, the transit phasing has been modified in order to ensure that the appropriate transit service is provided throughout the development as currently envisioned. Mitigation measure MM TR-17 notes that the transit operating plan may be modified from what was approved in the 2010 FEIR "to address changes in the operating environment and service demands" based on SFMTA's planning methodology and public input if modifications result in:

- Similar or higher transit mode share to what was projected in the 2010 FEIR
- Adequate capacity to serve projected transit ridership
- Similar or less severe traffic impacts to those identified in the 2010 FEIR

Although the changes to the Transit Operating Plan are not specifically to address current or observable changes in the operating environment and service demands, the Project Sponsor and SFMTA believe that the proposed changes to development phasing would affect the future operating environment and service demands, and are thus proposing changes to the Transit Operating Plan to better meet those future demands consistent with the provisions in mitigation measure MM TR-17.

The 2010 Project and 2018 Modified Project Variant transit phasing are shown in Table 12 (Transit Phasing). Generally, changes to the transit phasing delay the provision of transit service to the HPS site, due to the delay in development there. In response to the acceleration of planned development in CP, transit service at CP would be accelerated, compared to the 2010 FEIR phasing plan. Overall, the revised phasing has been developed in collaboration with SFMTA service planning staff to retain a relatively close approximation to the level of transit demand that would be generated for each level of transit service between the 2010 Project and 2018 Modified Project Variant, combined with engineering judgment to account for the unique development phasing currently proposed. Additionally, at build-out, slightly higher service frequency would be provided on the HPX Hunters Point Downtown Express Route, with slightly less frequent service on the 24 Divisadero. This minor change would provide a similar amount of service, but better target that service to serve expected market demands. These changes are expected to provide even better matches between service and demands, and thus, would not likely to decrease transit usage at the site or deteriorate the quality of transit service provided such that new significant impacts would occur.

Addendum 1 modified the Transit Operating Plan to include a privately funded shuttle, available complimentary for the general public, including existing neighbors, future residents, and shopping center patrons and employees, to provide service between the project site and the Balboa Park BART station, replicating service that will ultimately be offered by the 28R BRT route. This shuttle would be provided by the Project Sponsor or other on-site tenant. Service would be offered at 7.5-minute frequency with approximately 30-passenger vehicles. This service would provide interim service until the 28R BRT route, or other comparable transit service is implemented. Although the shuttle service would initially be oriented to the Balboa Park BART Station, the site's TDM coordinator would retain the ability to reroute the shuttle to other regional transit hubs to better match patron and employee demand, with the mutual agreement of the Environmental Review Officer. This shuttle service would remain in the Transit Operating Plan as part of the 2018 Modified Project Variant.

Addendum 1 also modified the Transit Operating Plan to include a temporary extension of the 56 Rutland route into the CP site to provide additional connections to Caltrain and other regional transit. However, that modification called for the extension to be implemented temporarily, only until such time as the CPX was implemented. Since the 2018 Modified Project Variant phasing includes implementation of the CPX early on, the 56 Rutland extension would no longer be necessary, and that would be removed from the Transit Operating Plan, consistent with the 2010 FEIR Transit Operating Plan.

TABLE 12 TRANSIT PHASING

Route	Frequency	2010 Project/Approved Transit Operating Plan		2018 Modified Project Variant	
		Major Phase	Approx. Year	Major Phase/ Sub-phase	Approx. Year
Hunters Point Shipyard					
Hunters Point Express (HPX)	20	1	2017	1 / HP-01	2021[d]
	10	1[a]	2019[a]	2 / HP-04	2025
	6	N/A	N/A	3 / HP-06	2026
23 Monterey	20	1	2017	1 / HP-01	2021
23 Monterey or 24 Divisadero[b]	15	2	2023	2 / HP-04	2025
	10	2	2025	3 / HP-06	2026
48 Quintara	15	1	2015	1 / HP-01	2021
	10	1	2019	2 / HP-03	2025
44 O'Shaughnessy	10	N/A	N/A	1 / HP-02	2022
	7.5	1	2017	2 / HP-03	2025
	6.5	1	2019	3 / HP-06	2026
Candlestick Point					
Privately Funded Shuttle[c]	7.5	N/A	N/A	1 / CP-02	2022
Candlestick Point Express (CPX)	20	2	2021	N/A	N/A
	15	2	2022	1 / CP-03	2021
	10	3	2027	1 / CP-02	2022
29 Sunset	10	2	2021	1 / CP-03	2021
	5	2	2022	1 / CP-02	2025
Routes Serving Both Sites					
28R/BRT (Includes Construction of Yosemite Slough Bridge)	8	2	2021	2 / HP-04	2025
	5	2	2022	3 / CP-07	2028
T Third	6	2	2020	No Change—Not triggered by project development	
	5	3	2025		

NOTES:

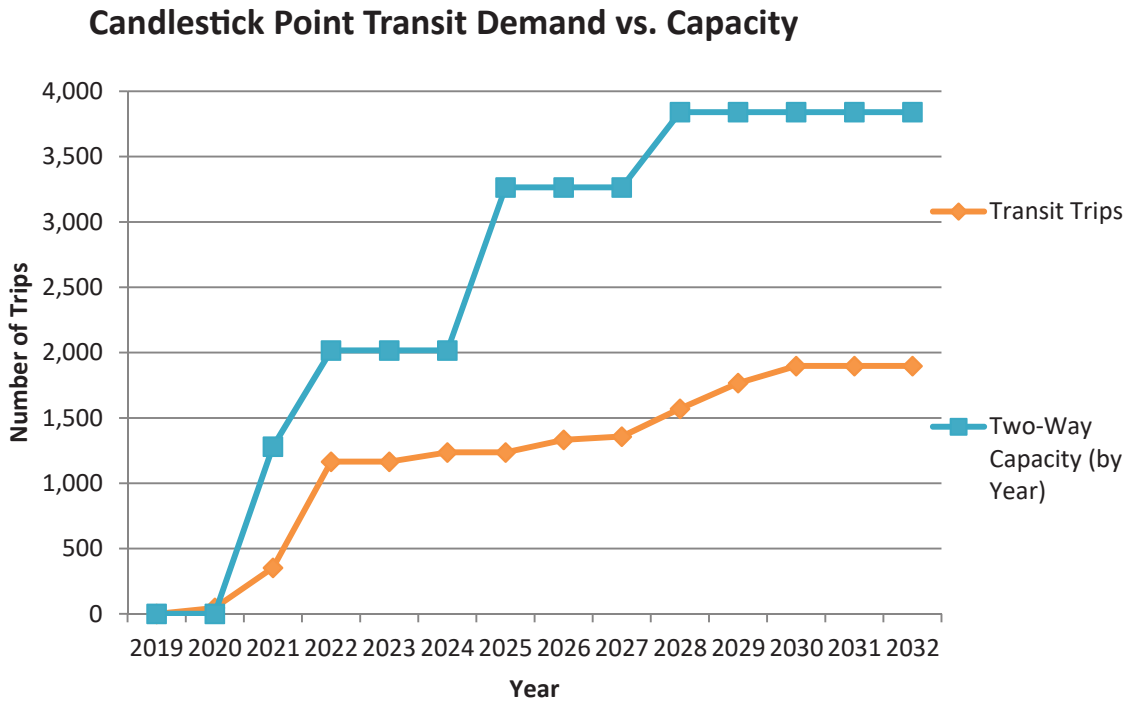
a. Approved Transit Operating Plan called for service increases to 12-minute headways. This has been revised to 10-minute headways as part of the 2018 Modified Project Variant.

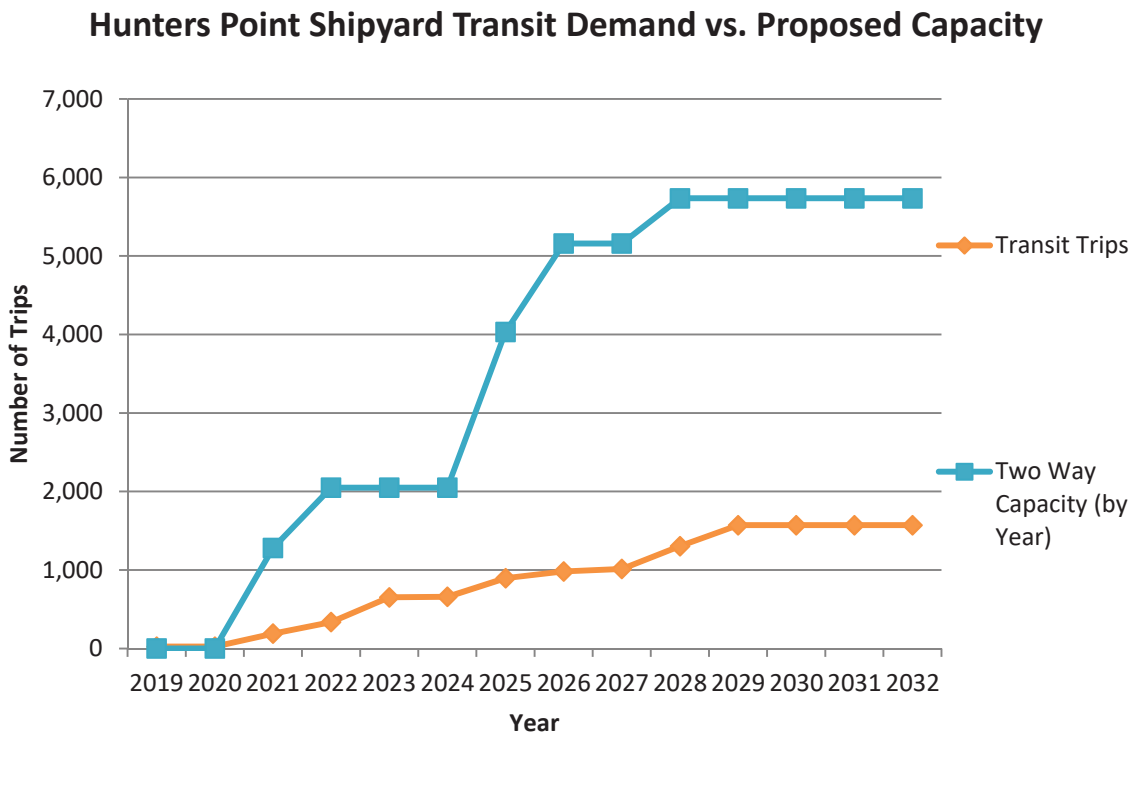
b. The 23 Monterey service may extend into HPS until SFMTA's fleet is modified to eliminate the need for an Overhead Contact System (OCS) wires extended into the HPS site, at which point the 24 Divisadero would be extended and the 23 Monterey would return to its original (existing) routing. Note that the Approved Transit Operating Plan also called for three levels of service, corresponding to 15-, 10-, and 7.5-minute frequencies. The Modified Transit Operating Plan has been changed to reduce service levels on this route and increase service levels on express bus routes based on direction from SFMTA staff.

c. Temporary until initiation of BRT.

d. Although the anticipated development schedule calls for the first portions of HP-01 to be complete in 2019, that portion is primarily reconstruction of existing artists' studios. The first portion of new development is scheduled to be complete by approximately 2021, which is when new transit service would likely be warranted.

Figure 24 (Transit Service Comparison) summarizes the level of transit supply proposed to be implemented over time relative to the expected transit ridership demand, based on the development phasing schedule and the transit implementation triggers described above, for CP and HPS. Whereas most of the transportation analysis compares the Modified Project to the R&D Variant





SOURCE: Fehr &Peers, 2018.

FIGURE 24 Addendum 5 to the CP-HPS2 2010 FEIR

TRANSIT SERVICE COMPARISON

(Variant 1), the assessment of changes to transit phasing compares the revised phasing to the phasing proposed and analyzed as part of Addendum 1 because the changes included as part of the Modified Project are relatively minor compared to Addendum 1. Transit service and phasing associated with the R&D Variant (Variant 1) was deemed to be an unrealistic base against which to compare Modified Project changes because SFMTA has been planning for the changes included as part of Addendum 1 since its approval.

The figures illustrate that with the proposed changes in development and transit phasing, the level of transit service proposed over time would increase generally proportionally to (and where possible, in advance of) increases in development and associated transit demand. The CP portion shown in Figure 24 illustrates that with the 2018 Modified Project Variant development schedule and transit phasing, the level of transit service relative to demand would remain substantially higher than the demand at the CP site. For example, the transit service capacity increases substantially in 2021 and 2022, coincident with substantial increases in demand over those same two years. Transit service increases again in 2025, in advance of increases in demand in years 2027 through 2030. The alignment of transit service increases with land use development throughout the development process and at build-out, which means the transit would remain an attractive option for travelers in the area.

The HPS half of Figure 24 similarly illustrates that transit service relative to development at HPS would generally increase along with, and where possible, in advance of development.

Therefore, transit capacity would be adequate to serve the expected demand, and the mode split (i.e., the percentage of trips made by transit) would remain similar, meaning that there would not be additional significant transit impacts beyond those described in the 2010 FEIR, nor would the 2018 Modified Project Variant substantially increase the severity of significant impacts identified in the 2010 FEIR. The impact would remain less than significant with implementation of the identified mitigation measure.

Mitigation Measure with Proposed 2018 Modifications

> **MM TR-17, Implement the Project's Transit Operating Plan**, was provided in full on p. 111 under Impact TR-10.

Impact TR-18: With full implementation of the Project with proposed transit improvements, the Project demand and the Project's contribution to cumulative demand would not exceed the proposed transit system's capacity at the study area cordons. ***[Criteria D.f, D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR found that the Project would cause a less-than-significant impact related to transit crowding, with implementation of the Project's Transit Operating Plan, identified as mitigation measure MM TR-17. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would very slightly decrease transit demand compared to 2010 FEIR R&D Variant (Variant 1); therefore,

transit capacity would continue to remain adequate to serve the 2018 Modified Project Variant. Impacts would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

MM TR-17, Implement the Project's Transit Operating Plan, was provided in full on p. 111 under Impact TR-10.

Impact TR-19: Implementation of the Project would add transit trips and the Project's contribution to cumulative transit trips to the Downtown Screenlines would not increase demands in excess of available capacity. ***[Criterion D.f, D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR found that the Project would cause a less-than-significant impact related to transit crowding at the Downtown Screenlines. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly decrease transit demand compared to the 2010 FEIR R&D Variant (Variant 1); therefore, transit capacity would continue to remain adequate to serve the 2018 Modified Project Variant. There would continue to be no impact.

Impact TR-20: Implementation of the Project would add transit trips and the Project's contribution to cumulative transit trips would not contribute significantly to Regional Screenlines conditions where overall ridership is projected to exceed available capacity. ***[Criterion D.f, D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR found that the Project would cause a less-than-significant impact related to transit crowding on regional transit providers. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would very slightly decrease transit demand compared to 2010 FEIR R&D Variant (Variant 1); therefore, transit capacity would continue to remain adequate to serve the 2018 Modified Project Variant. There would continue to be no impact.

Impact TR-21: Implementation of the Project could increase congestion and contribute to cumulative conditions at intersections along San Bruno Avenue, which would increase travel times and impact operations of the 9-San Bruno. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on the 9-San Bruno due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measures MM TR-21.1 and MM TR-21.2, which called for physical

improvements to improve transit speeds or, if not feasible, additional vehicles added to the route to maintain headways. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-22: Implementation of the Project would contribute traffic to cumulative conditions at intersections along Palou Avenue, which would increase travel times and impact operations of the 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on Palou Avenue due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measures MM TR-22.1 and MM TR-22.2, which called for physical improvements to improve transit speeds or, if not feasible, additional vehicles added to the route to maintain headways. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-23: Implementation of the Project would increase congestion at intersections along Gilman Avenue and Paul Avenue, which would increase travel times and would impact operations of the 29-Sunset. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on the 29-Sunset due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measures MM TR-23.1 and MM TR-23.2, which called for physical improvements to improve transit speeds or, if not feasible, additional vehicles added to the route to maintain headways. As part of 2010 FEIR Addendum 4, the proposed configuration of Gilman Avenue between Arelious Walker and Third Street was revised to retain a single traffic lane in each direction, with on-street parking, center turn lanes, and installation of new traffic signals at all intersections. The transportation analysis conducted as part of Addendum 4 showed that operations with this modification would be the same as or better than those forecasted to be in place under original 2010 Project conditions with mitigation measure MM TR-23.1 in place. Thus, mitigation measure MM TR-23.1 was revised as part of Addendum 4 to remove requirements for changes to Gilman Avenue between Arelious Walker and Third Street. Improvements to other portions of the corridor, such as Paul Avenue, remained in

mitigation measure MM TR-23.1. The impact was considered to remain significant and unavoidable because the feasibility of improvements to Paul Avenue was not certain.

As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-24: Implementation of the Project would increase congestion at intersections along Evans Avenue, which would increase travel times and impact operations of the 48-Quintara-24th Street. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on Evans Avenue due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measures MM TR-24.1 and MM TR-24.2, which called for physical improvements to improve transit speeds or, if not feasible, additional vehicles added to the route to maintain headways. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-25: Implementation of the Project would increase congestion at intersections in the study area, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the 54-Felton. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on the 54-Felton due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measure MM TR-25, which called for additional vehicles added to the route to maintain headways. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-26: Implementation of the Project would increase congestion at intersections along Third Street, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the T-Third. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on the T-Third due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measures MM TR-26.1 and MM TR-26.2, which called for physical improvements to improve transit speeds or, if not feasible, additional vehicles added to the route to maintain headways. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-27: Implementation of the Project could increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard. This would increase travel times and impact operations of the 28L-19th Avenue/Geneva Limited. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to transit service on the 28R-19th Avenue/Geneva Rapid due to delays associated with Project-related traffic congestion. The 2010 FEIR identified mitigation measures MM TR-27.1 and MM TR-27.2, which called for physical improvements to improve transit speeds or, if not feasible, additional vehicles added to the route to maintain headways. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable even with implementation of the identified mitigation measure.

Impact TR-28: Implementation of the Project would increase congestion on US-101 mainline and ramps, which would increase travel times and impact operations of the 9X, 9AX, 9BX-Bayshore Expresses, and 14X-Mission Express. The Project would also contribute to cumulative impacts on these transit routes on US-101. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR found that the Project would cause a significant impact related to transit service on the 9X, 9AX, 9BX-Bayshore Express and 14X Mission Express routes for the portions of those routes on US-101 due to delays associated with Project-related traffic congestion. (The 9X San Bruno

Express has been renamed the 9R San Bruno Rapid, and the 9AX and 9BX have been renamed the 8AX Bayshore A Express and the 8BX Bayshore B Express, respectively, with slight changes to routing and service since publication of the 2010 FEIR). For purposes of Addendum 5, the impacts previously identified for the 9 Bayshore Routes would apply to the 8 Bayshore routes.

The 2010 FEIR determined that no feasible mitigation existed to improve operations on these routes. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there would continue to be no feasible mitigation measures to reduce the level of this impact.

Impact TR-29: Implementation of the Project would not contribute to cumulative impacts on the 14X-Mission Express transit route when on I-280. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR found that the Project would cause a less-than-significant impact related to transit service on the 14X Mission Express routes on I-280 due to delays associated with Project-related traffic congestion. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. There would continue to be no impact.

Impact TR-30: Implementation of the Project would increase congestion and contribute to cumulative congestion on US-101 and on Bayshore Boulevard, which would increase travel times and adversely affect operations of SamTrans bus lines on these facilities. No feasible mitigation has been identified. ***[Criterion D.i]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2010 FEIR found that the Project would cause a significant impact related to regional transit service on Bayshore Boulevard and US-101. The 2010 FEIR determined that no feasible mitigation existed to improve operations on these routes. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there would continue to be no feasible mitigation measures to reduce the level of this impact.

Impact TR-31: During implementation of the Project, bicycle facilities would be expanded to serve additional users. This would be a beneficial impact of the Project. ***[Criterion D.k]***

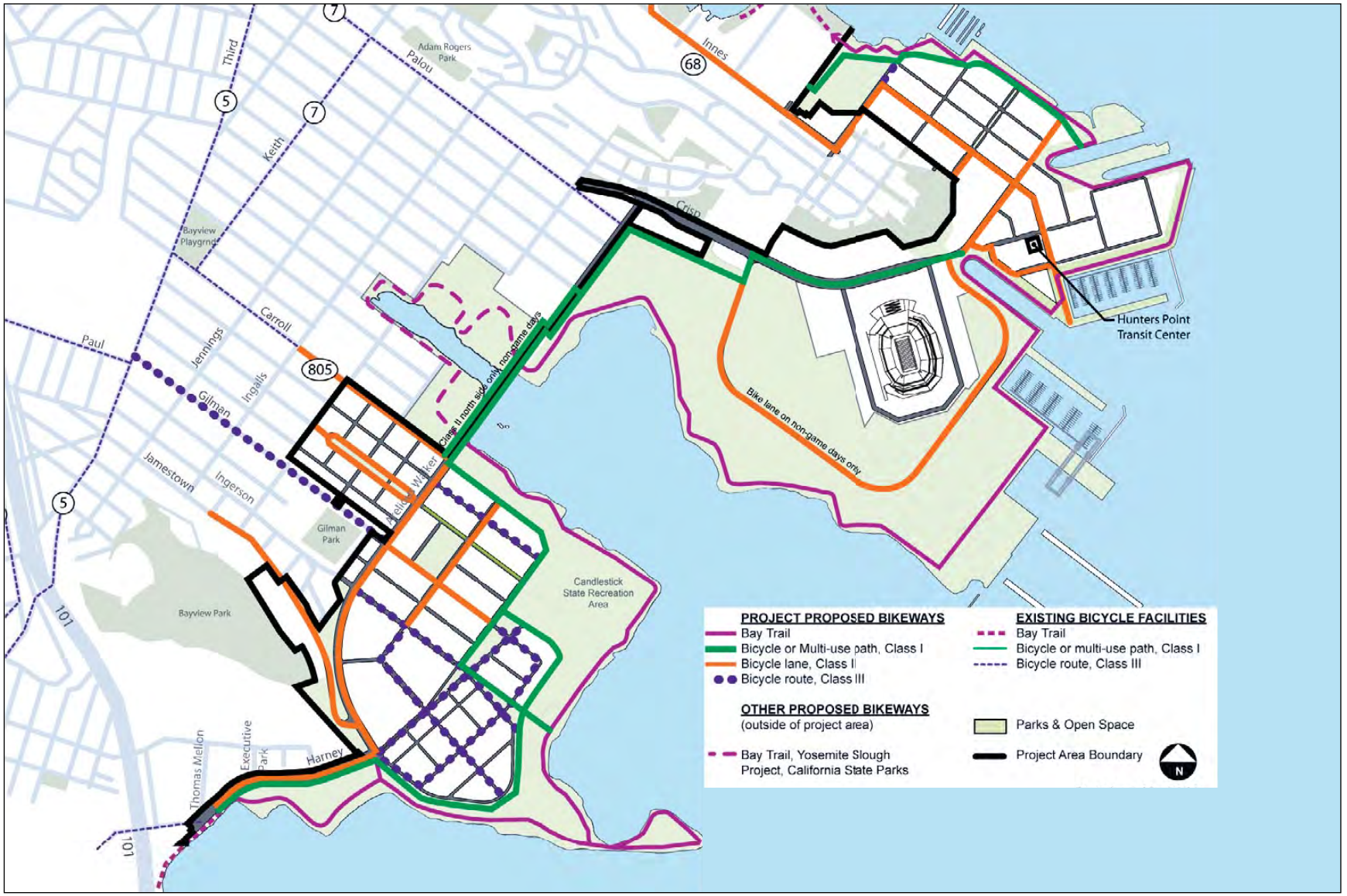
	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As shown in Figure 25 (2010 Project Bicycle Network Plan) and Figure 26 (2018 Modified Project Variant Bicycle Network Plan), the 2018 Modified Project Variant includes refinements to the proposed bicycle network. Many of these changes—particularly those in CP—were addressed in and approved as part of Addendum 1 (pp. 25–27), and would not be changed further as part of the 2018 Modified Project Variant being assessed herein. Therefore, they are not discussed further here.

The primary change to the bicycle network in the 2018 Modified Project Variant compared to the changes approved as part of Addendum 1 would be the re-alignment of the cycletrack in HPS South. One of the primary modifications approved as part of Addendum 1 was a new two-way cycletrack connecting the CP and HPS neighborhoods. Within HPS, the cycletrack was to travel along the northern side of Crisp Avenue.

However, the 2018 Modified Project Variant proposes an institutional/educational use and some R&D uses on the northern side of Crisp Avenue, which may require driveways or other curb cuts that may disrupt the cycletrack. Therefore, the 2018 Modified Project Variant proposes to align the cycletrack through the open space and park area south of Crisp Avenue, and along one of the midblock breaks in HPS South. From there, it would extend across the new bridges across Dry Dock 4, where it would connect to the planned portion of the Bay Trail traversing the perimeter of HPS and with proposed facilities on Robinson Street. The facility on Robinson Street would be constructed as a Class IV separated facility providing an additional buffer between cyclists and adjacent traffic. These changes would ensure a more direct route between HPS and CP, and would ensure a complete connection within HPS, and to proposed cycletrack facilities west of HPS, within the proposed India Basin Mixed-Use Development Project. As a result, the 2018 Modified Project Variant would provide a more complete and connected network of routes and facilities, and would penetrate through the center of HPS South, instead of along its northern edge as had previously been contemplated.

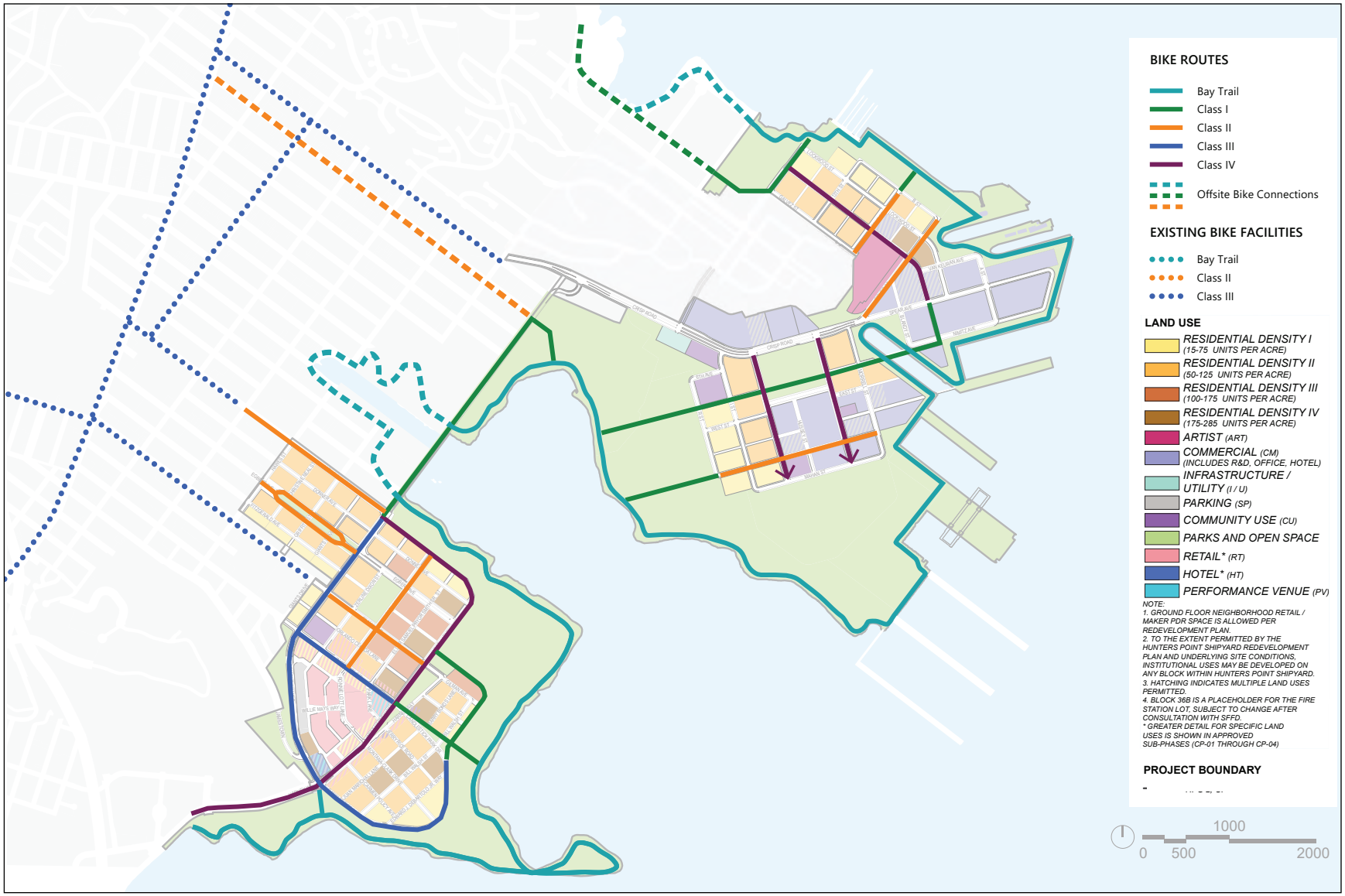
Overall, the project refinements would continue to improve the overall bicycle network in the study area and facilities would be adequate to meet bicycle needs, and Impacts TR-31 and TR-32 would remain unchanged. Mitigation measure MM TR-32 would also still apply, and as part of the requirements of MM TR-32, SFMTA has already initiated conversations with the Project Sponsor regarding a study to consider relocating the existing bicycle route on Palou Avenue to Quesada Avenue, immediately to the south, and part of the City's Green Connections project. As noted in the 2010 FEIR, this study must be complete prior to issuance of the grading permit for Major Phase 1 at HPS. No new significant impacts beyond those identified in the 2010 FEIR would result from the 2018 Modified Project Variant and the 2018 Modified Project Variant would not make bicycle impacts substantially more severe than identified in the 2010 FEIR, and therefore, there would continue to be no impact.



SOURCE: Lennar Urban, 2010

FIGURE 25 Addendum 5 to the CP-HPS2 2010 FEIR

2010 PROJECT BICYCLE NETWORK PLAN



SOURCE: FivePoint, 2018; Fehr & Peers, 2018.

FIGURE 26 Addendum 5 to the CP-HPS2 2010 FEIR

2018 MODIFIED PROJECT VARIANT BICYCLE NETWORK PLAN

Impact TR-32: Implementation of the Project's proposed transit preferential treatments and significant increases in traffic volumes on Palou Avenue could result in impacts on bicycle travel on Bicycle Routes #70 and #170 between Griffith Street and Third Street. ***[Criterion D.k]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

The 2010 FEIR found that the Project would cause a significant impact related to bicycle circulation related to traffic volume increases on Palou Avenue. The 2010 FEIR identified mitigation measure MM TR-32, which called for relocating the bicycle facility on Palou Avenue to another, less-congested, parallel street. Because the feasibility of relocating the facility was uncertain, the impact was considered significant and unavoidable. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain significant and unavoidable, and there would continue to be no feasible mitigation measures to reduce the level of this impact.

Impact TR-33: During implementation of the Project, pedestrian facilities would be expanded to serve additional users. This would be a beneficial impact of the Project. ***[Criterion D.j]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR noted that the Project would generally improve pedestrian conditions in the area by widening existing sidewalks and creating a pedestrian-oriented neighborhood within the project site, therefore creating a beneficial impact. The 2018 Modified Project Variant maintains the project's goals of prioritizing the pedestrian realm through provision of generous sidewalks with streetscape amenities and safety measures, such as bulbouts at key locations. Sidewalks would generally remain between 12 and 15 feet, within the range of sidewalks considered in the original plan.

Overall, the 2018 Modified Project Variant includes minor changes with respect to the pedestrian realm, such as slightly modified sidewalk widths and reoriented streets and the beneficial impact of the 2018 Modified Project Variant are expected to be similar to those identified for the 2010 FEIR R&D Variant (Variant 1). There would continue to be no impact.

Impact TR-34: Implementation of the Project would result in traffic volumes on area roadways that would not substantially affect pedestrian circulation and safety in the Project vicinity. ***[Criterion D.j]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR concluded that although the Project would be increasing conflicts between pedestrians, bicycles, and autos, the overall benefits to pedestrian safety associated with the project's

proposed improved pedestrian facilities would result in a less-than-significant impact. As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1); however, the slight increases would be generally imperceptible to the public. The impact would remain less than significant, and no mitigation would be required.

Impact TR-35: Implementation of the Project would not result in significant impacts associated with a lack of an adequate supply of parking that could not be accommodated within alternative modes. ***[Criteria D.e and D.h]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that although the Project would result in a shortfall of parking spaces compared to its projected demand, the Project's impacts to parking conditions would be less than significant. The 2018 Modified Project Variant would potentially result in slightly fewer parking spaces on-street than the maximum envelope anticipated as part of 2010 FEIR R&D Variant (Variant 1). Specifically, the 2010 FEIR identified that R&D Variant (Variant 1) would include approximately 3,000 on-street parking spaces (roughly evenly split between CP and HPS) and between zero and approximately 20,000 off-street spaces. Therefore, the 2010 FEIR concluded there would be a range of between approximately 3,000 spaces and 23,000 spaces in the entire development area.

The 2018 Modified Project Variant would reduce new on-street parking supply by up to several hundred spaces between CP and HPS based on more detailed designs prepared as part of sub-phase applications and the desire to provide separated bicycle facilities along Robinson Street (a precise count is unknown because the actual number of spaces that would have been provided cannot be determined until more detailed final designs are complete). Although the range of off-street parking spaces constructed was projected to be between zero and approximately 20,000 spaces in the 2010 FEIR, it is reasonable to expect that the 2018 Modified Project Variant would build at least as many off-street spaces as on-street spaces that would be removed through the minor design changes, such that with the loss of a few hundred on-street spaces, the 2018 Modified Project Variant would still contain between 3,000 spaces and 23,000 spaces.

Furthermore, as discussed in Addendum 5 Appendix D, there would be an overall increase in the maximum spaces allowed at Hunters Point Shipyard of 737 spaces and a corresponding decrease in the maximum amount of parking allowed at CP of 242 spaces. The resulting maximum total of parking allowed within the 2018 Modified Project Variant would be 495 spaces more than allowed under 2010 FEIR Variant 1 (R&D).

Therefore, since the 2018 Modified Project Variant would still provide parking within or slightly above the range identified in the 2010 FEIR, conclusions in the 2010 FEIR related to parking remain valid. The impact would remain less than significant, and no mitigation would be required.

Impact TR-36: Implementation of the Project roadway improvements would displace on-street parking spaces, and the existing demand could be accommodated in the nearby vicinity. ***[Criteria D.e and D.h]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that the Project would remove some existing on-street parking associated with project-proposed off-site improvements and with mitigation measures, particularly those geared toward transit priority treatments. However, the 2010 FEIR determined that those impacts would be less than significant as vehicles would be able to park in other nearby streets. The 2018 Modified Project Variant would not affect the off-street parking supply and thus, does not create any changes to this impact discussion. The impact would remain less than significant, and no mitigation would be required.

Impact TR-37: Implementation of the Project would not result in significant impacts associated with a lack of adequate supply of loading spaces. ***[Criterion D.l]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that the Project would provide adequate loading supply and, therefore, concluded that impacts related to loading would be less than significant, and no mitigation measures would be required. As the 2018 Modified Project Variant would not change the overall loading requirements, implementation of the 2018 Modified Project Variant would not result in any new significant impacts related to loading. The impact would remain less than significant, and no mitigation would be required.

Impacts TR-38 through TR-50: Transportation impacts related to the Proposed NFL Stadium.

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	N/A	N/A

The 2010 FEIR included a number of impacts related to operation of the proposed new NFL stadium in the HPS site. However, the stadium is not part of the 2018 Project Modification Variant, and these impacts and associated mitigation measures no longer apply.

Impact TR-51 through TR-55: Transportation impacts related to the proposed new arena. ***[Criteria D.a, D.b, D.e, D.f, D.g, D.h, D.i, D.j, D.k]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation (Impacts TR-51 and TR-52), Less than Significant (Impacts TR-53 to TR-55)	Significant and Unavoidable with Mitigation (Impacts TR-51 and TR-52), Less than Significant (Impacts TR-53 to TR-55)

The 2010 FEIR determined that the Project's proposed 10,000-seat Arena use would create new significant impacts associated with events at the arena not captured in the typical day-to-day operations at the site with no arena event. The 2018 Modified Project Variant does not propose any changes to the arena location, capacity, or operational characteristics compared to the 2010 FEIR. Therefore, the 2018 Modified Project Variant would not create any new significant impacts or substantially increase the severity of a significant impact associated with events compared to what was described in the 2010 FEIR. Therefore, impacts would remain significant and unavoidable with respect to Impacts TR-51 and TR-52, even with implementation of the identified mitigation measures. Impacts would remain less than significant with respect to Impacts TR-53, TR-54, and TR-55, and no mitigation would be required for these impacts.

Impact TR-56: Implementation of the Project would not impact air traffic. ***[Criterion D.c]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that the Project would have a less-than-significant impact on air traffic. The 2018 Modified Project Variant would contain the same overall land uses and general development form and would not change the 2010 FEIR's conclusion regarding air traffic. The 2018 Modified Project Variant would not create any new significant impacts with respect to air traffic and no additional mitigation measures are required. Impacts would remain less than significant, and no mitigation would be required.

Impact TR-57: Implementation of the Project would not create hazards due to any proposed design features. ***[Criterion D.d]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that the Project's transportation infrastructure would be designed in accordance with City standards, and would be reviewed and approved by the City prior to construction. As a result, the Project's impacts to hazards would be less than significant. The 2018 Modified Project Variant would also be designed accordance with City standards and would be reviewed and approved by the City. Therefore, the impact to design features would remain less than significant, and no mitigation would be required.

Impact TR-58: Implementation of the Project would not result in significant emergency access impacts. ***[Criterion D.m]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that the Project's transportation infrastructure would adequately facilitate emergency access and be designed to City standards, which include provisions that address emergency vehicles. The 2018 Modified Project Variant would also be designed accordance with City standards and would be reviewed and approved by the City. Therefore, the impact to emergency access would remain less than significant, and no mitigation would be required.

Additional Intersection Impacts for R&D Variant (Variant 1): The R&D Variant (Variant 2) and Housing/R&D Variant (Variant 2A) would worsen degraded traffic conditions at the intersection of Crisp and Palou. The R&D Variant (Variant 1) would cause acceptable traffic conditions to become unacceptable at the intersection of Innes and Earl. ***[Criteria D.a, D.b, D.g]***

	2010 CP-HPS Phase II FEIR	*2010 CP-HPS Phase II FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR identified a number of intersections where the 2010 Project would create significant impacts for which mitigation measures were available. The 2010 FEIR identified two additional intersections where R&D Variant (Variant 1) would create significant impacts and where mitigation measures were also available to reduce the R&D Variant (Variant 1) impacts to less-than-significant levels.

As discussed in Addendum 5 Appendix D, the 2018 Modified Project Variant would slightly increase traffic volumes compared to the 2010 FEIR R&D Variant (Variant 1). Although the slight increases in total volumes would be generally imperceptible to the public, the changes in specific movement volumes at the intersection of Crisp/Palou would require slight modification to the mitigation measure from the 2010 FEIR in order to ensure the mitigation measure continues to reduce the 2018 Modified Project Variant impact to a less-than-significant level at that intersection. With the modification shown below, the intersection of Crisp/Palou would continue to operate at acceptable level of service with implementation of the 2018 Modified Project Variant, and the impact at this intersection would be reduced to a less-than-significant level.

The intersection of Innes/Earl would also operate at acceptable levels with implementation of the 2018 Modified Project Variant and the associated mitigation measure (a new traffic signal) at that intersection from the 2010 FEIR without any modifications to the measure. Overall, these additional intersection impacts would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

R&D Variant (Variant 1)/Housing/R&D Variant (Variant 2A)/2018 Modified Project Variant Mitigation Measure MM TR-VAR1:

(a) Under the R&D and Housing/R&D Variants, the Project Applicant would be required to contribute its fair share to striping the southbound approach at Crisp and Palou to provide a dedicated left-turn lane and a shared through/right-turn lane and prohibiting on-street parking on Griffith Street between Palou and Oakdale Avenues. Under the 2018 Modified Project Variant, the Project Applicant would be required to contribute its fair share to striping the southbound approach at Crisp and Palou to provide a dedicated right-turn lane and a shared through/left-turn lane and prohibiting on-street parking on Griffith Street between Palou and Oakdale Avenues, and constructing the westbound approach on Crisp Avenue to provide two dedicated left-turn lanes and one shared through/right-turn lane. Implementation of this mitigation would reduce impacts from these variants to a less-than-significant level.

(b) Under the R&D Variant (Variant 1) and the 2018 Modified Project Variant, the Project Applicant would be required to fund the installation of a traffic signal at the intersection of Innes and Earl when warranted by traffic conditions. Implementation of this mitigation would reduce impacts from this variant to a less-than-significant level.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to transportation and circulation impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Conclusions from this analysis remain the same as those reached in the 2010 FEIR related to transportation and circulation, both on a project-related and cumulative basis.

II.B.4 Aesthetics

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
1. Aesthetics. Would the project:					
E.a. Have a substantial adverse effect on a scenic vista?	2010 FEIR p. III.E-50 (Impact AE-1), p. III.E-53 (Impact AE-4), p. III.E-65 (Impact AE-6b); Addendum 1 p. 34; Addendum 4 p. 30	No	No	No	None
E.b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment that contribute to a scenic public setting?	2010 FEIR p. III.E-50 (Impact AE-1), p. III.E-59 (Impact AE-5b); Addendum 1 p. 34; Addendum 4 p. 30	No	No	No	None
E.c. Substantially degrade the existing visual character or quality of the site and its surroundings?	2010 FEIR p. III.E-51 (Impact AE-2), p. III.E-60 (Impact AE-6); Addendum 1 p. 34; Addendum 4 p. 30	No	No	No	MM AE-2
E.d. Create a new source of substantial light or glare that would adversely affect day or night views in the area or that would substantially impact other people or properties?	2010 FEIR p. III.E-53 (Impact AE-3), p. III.E-74 (Impact AE-7b); Addendum 1 p. 34; Addendum 4 p. 30	No	No	No	MM AE-7b.1, MM AE-7b.2

Changes to Project Related to Aesthetics

The 2018 Modified Project Variant includes changes in the height and bulk of certain buildings at HPS2 (with some buildings increasing in height and others decreasing in height), and the specific location of buildings within HPS2, including adjustments to the two high-rise towers at HPS2. The visual simulations provided in Addendum 5 made reasonable assumptions about the bulk of the proposed buildings in order to achieve the identified heights.

HPS2 proposed modifications would also establish a water taxi service to and from HPS2 at Dry Dock 4. New infrastructure on the land and in the water would be constructed to accommodate the services. In addition, two bridges would be provided over Dry Dock 4.

The proposed heights at CP have remained the same since the CP height changes evaluated in Addendum 4 and approved by the 2016 D4D and amendments to the CP Major Phase 1 Application, which occurred subsequent to the 2010 FEIR. Therefore, there are no height changes at CP to evaluate in this section of Addendum 5.

Comparative Impact Discussions

Impact AE-1: Construction activities associated with the Project would not have a substantial adverse effect on a scenic vista or scenic resources. ***[Criteria E.a and E.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As with the 2010 Project, construction activities would occur under the 2018 Modified Project Variant. Demolition of existing buildings would occur, and site preparation, excavation, and grading would occur to accommodate new development. Construction workers and equipment would be parked and staged within the Project construction site. Construction-related visual impacts that would be seen with implementation of the 2018 Modified Project Variant, and similar to the 2010 Project, include exposed staging areas, on-site construction equipment, the inclusion of temporary structures throughout the duration of construction phases, exposed trenches, exposed soil, and debris/material piles. As with 2010 Project, a construction-related visual impact would occur on Project site. However, the change in visual conditions would be temporary and typical of construction activities in already developed areas. Scenic vistas of the Bay, the East Bay hills, and the San Francisco downtown skyline would not be impacted by construction activities. Consequently, as with the 2010 Project, the visual impact from construction activities under the 2018 Modified Project Variant would remain less than significant, and no mitigation would be required.

Impact AE-2: Construction activities associated with the Project would not result in temporary degradation of the visual character or quality of the site. ***[Criterion E.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As with the 2010 Project, construction activities would occur under the 2018 Modified Project Variant. Demolition of existing buildings would occur, and site preparation, excavation, and grading would occur to accommodate new development. Construction workers and equipment would be parked and staged within the Project construction site. As with the Project analyzed in the 2010 FEIR, construction-related visual impacts that would be seen with implementation of the 2018 Modified Project Variant include exposed staging areas, on-site construction equipment, the inclusion of temporary structures throughout the duration of construction phases, exposed trenches, exposed soil, and debris/material piles. To address these impacts, mitigation measure MM AE-2 is prescribed under the 2010 FEIR. MM AE-2 would require temporary screening of a particular construction or staging site, as outlined below. MM AE-2 would also require the Project Applicant to stage all construction equipment on the Project site and to keep all construction equipment egressing the Project site to be free of mud. Incorporation of MM AE-2 would ensure that impacts related to construction activities would not result in temporary degradation of the visual character or quality of the site. Consequently, as with the 2010 Project, the impact to the visual character or quality of the

site from construction activities under the 2018 Modified Project Variant would remain less than significant with implementation of the identified mitigation measure.

Impact AE-3: Construction activities associated with the Project would not create a new source of substantial light or glare that would adversely affect day or night views in the area or that would substantially impact other people or properties. ***[Criterion E.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As with the 2010 Project, construction activities would occur during daylight hours, generally between 7:00 a.m. and 8:00 p.m. or as otherwise allowed by the City (San Francisco Police Code Article 29, Section 2908). A negligible amount of glare could occur from reflection off windows of trucks but would not affect daytime views in the area. Security lighting comparable to the level of existing night lighting levels in urban areas would be provided after hours on all construction sites. Night lighting would be minimal and restricted to the Project site. Consequently, as with the 2010 Project, impacts from construction activities related to substantial light and glare adversely affecting day or night views in the area associated with the 2018 Modified Project Variant would remain less than significant, and no mitigation would be required.

Impact AE-4: Implementation of the Project would not have a substantial adverse effect on a scenic vista. ***[Criterion E.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2018 Modified Project Variant includes changes in the height of certain buildings at HPS2 (with some buildings increasing in height and others decreasing in height), and the specific location of buildings within HPS2, including adjustments to the location of two high-rise towers at HPS2. Under the 2010 FEIR Tower Variant (Variant 3), four different tower variants were introduced and analyzed. Each of these variants would have the same land use program as with the Project, but would have different locations, massings, heights, and number of residential towers at Candlestick Point.

Three of the tower locations were subsequently adjusted and analyzed in Addendum 4 to the 2010 FEIR. Tower G, at CP Center, would be moved west from the middle of the block to a location on Arelious Walker Drive. Towers J and K would be relocated in CP-04 immediately southeast of the previously approved locations. Refer to Exhibit C, Tower Location Analysis, of Addendum 4 for a graphical representation of the tower relocation.

Under the 2018 Modified Project Variant, Tower A would be located in the same location and on the same block as an encouraged tower location as shown in the 2010 FEIR; however, a flexible tower zone would be added to the remainder of the block. Tower B would be located one block north of its previously approved location, and a flexible tower zone would also be created for the balance of this

block. The establishment of a flexible tower location zone would provide flexibility in the geographic placement of Tower A and Tower B. If the zone is established, both Towers A and B could be located in any part of the flexible tower location zone. However, for purposes of this environmental analysis, the towers are proposed at the locations depicted in Figure 7 (Tower Locations: Towers A and B), p. 19. The heights of both towers would not change. While the heights of both towers would not change, the 2018 HPS D4D would allow screened mechanical equipment to be up to 10 percent of the total height of the building (within an area that represents 85 percent of the building floorplate).

HPS2 proposed modifications would also establish a water taxi service to and from HPS2 at Dry Dock 4. At Dry Dock 4, two bridges would be built over the water inlet to provide direct access to either side of the marina area. As with the project analyzed in the 2010 FEIR, views of Bayview Hill and Hunters Point Hill would be partially obstructed under the 2018 Modified Project Variant, but not to the extent to be considered significant. As with the 2010 Project, the two most prominent features under the 2018 Modified Project Variant would be the high-rise residential towers, which would represent a considerable change in the existing low-scale pattern of development on the Project site. As with the 2010 Project, implementation of the residential towers would be similar to other developed areas of San Francisco and would not substantially obstruct existing views of Bayview Hill and Hunters Point or other scenic vistas. Consequently, the 2018 Modified Project Variant would not have a substantial adverse effect on a scenic vista. The impact would remain less than significant, and no mitigation would be required.

Impact AE-5b: Implementation of the Project at HPS Phase II would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment that contribute to a scenic public setting. ***[Criterion E.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As with the 2010 Project, implementation of 2018 Modified Project Variant would include redevelopment of HPS and would remove old, deteriorating structures associated with ship repair, piers, dry docks, storage, and administrative uses. As noted in the 2010 FEIR, HPS2 currently contains limited landscaping and is primarily a degraded industrial area. There are several proposed components of the Project that would alter the overall aesthetics of the area, but no significant adverse impacts would occur.

As discussed above, views of Hunters Point Hill and Bayview Hill would remain largely intact with implementation of 2018 Modified Project Variant. Obstructed views of Bayview Hill would occur from close-in vantage points. The Project would demolish Building 253, which is not identified as a scenic resource, but some viewers may use the building as visual orientation. Structures at the potential HPS Drydock Historic District and the Re-gunning crane would remain intact.

Under the 2018 Modified Project Variant, and similar to the 2010 Project, development of HPS2 would result in new and renovated parkland and open space, along with shoreline improvements. The new and renovated open space would improve the scenic quality of the area by providing natural and landscaped parkland, sports fields, active urban recreational areas, and other public gathering places. Further, shoreline improvements would remove debris, reduce erosion, revegetate areas with marsh plantings, and would increase the visual quality of the shoreline. Overall, as also concluded in the 2010 FEIR, addition of new and renovated parkland and shoreline improvements would increase the scenic quality of the area.

Consequently, 2018 Modified Project Variant would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment that contribute to a scenic public setting. The impact would remain less than significant, and no mitigation would be required.

Impact AE-6b: Implementation of the Project at HPS Phase II would not substantially degrade the visual character or quality of the site or its surroundings. ***[Criterion E.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

Five visual simulation viewpoints from the 2010 FEIR where changes under the 2018 Modified Project Variant could be visible were selected: Views 14, 15, 18, 19, and 20. Figure 27 (Viewpoint Locations) illustrates the location of these viewpoints. Changes that would occur with implementation of the 2018 Modified Project Variant are not expected to be noticeably visible from the remaining viewpoints.

View 14

As shown in Figure 28 (Existing and Proposed Views from View 14: Southeast from CPSRA), under existing conditions, Yosemite Slough is seen in the foreground with shipyard structures (primarily the Re-gunning crane) in the background. The East Bay hills are visible in the long-range view from Candlestick Point State Recreation Area (CPSRA).

The proposed changes between existing conditions and the 2010 Project, as reflected in the 2010 FEIR, that would be seen from this viewpoint include the Yosemite Slough bridge, the new 49ers stadium, the new marina, residential towers at HPS2, the demolition of Building 253 (which was proposed to be demolished as part of the 2010 Project), and associated landscaping. Additionally, to the north, the development undergoing construction at HPS1 (not a part of this Project) would be visible. Short- and mid-range views of the Slough would be slightly altered with the inclusion of the Yosemite Slough bridge, but relatively unchanged when compared to current conditions. New structures would not obstruct existing views of the East Bay hills. Building 253 is prominently seen under existing conditions, but does not make a substantial contribution to the public scenic setting. The demolition of Building 253 would not degrade the existing visual character of the site. The 2010 FEIR concluded that the Project would not substantially degrade the existing visual character or quality of the site or its surroundings.

SOURCE: Clement Designs, 2009; ESA, 2018

FIGURE 27 Addendum 5 to the CP-HPS2 2010 FEIR

VIEWPOINT LOCATIONS

Under the 2018 Modified Project Variant, additional buildings are proposed to be added. These buildings are medium-height buildings, similar in height to the 2010 proposed building shown in Figure 28. These buildings would be seen most prominently in the mid-range viewshed, in the same viewshed as the Re-gunning crane. Under the 2018 Modified Project Variant, the Yosemite Slough bridge would remain in the same proposed location. New structures would not obstruct existing views of the East Bay hills or the Re-gunning crane. Overall changes between the 2010 Project and the 2018 Modified Project Variant would be minimal, mostly affecting the mid-range viewshed, as seen from View 14. The most notable difference between the 2010 Project and the 2018 Modified Project Variant would be the development of buildings in place of the stadium. The construction of newly proposed buildings and the Yosemite Slough Bridge would slightly alter mid-range views of the Slough, but not to an extent that would degrade the existing visual character or quality of the site or its surroundings; as such, the impact would remain less than significant.

View 15

As shown in Figure 29 (Existing and Proposed Views from View 15: Southeast from Palou Avenue), under existing conditions, residential streetscape with overhead utility lines dominate the short- and mid-range viewshed, with distant views of the Bay and the East Bay hills.

The proposed changes between existing conditions and the 2010 Project, as reflected in the 2010 FEIR, that would be seen from View 15 include streetscape improvements in the short- and mid-range viewshed. In the long-range viewshed, a part of the previously proposed 49ers stadium would be partially visible, but would not obstruct the view of the Bay or the East Bay hills. The streetscape improvements include parking improvements, bicycle lanes, pavement treatments, and street trees. Streetscape improvements proposed under the 2010 Project would be considered to improve the visual character of the Palou corridor. The 2010 FEIR concluded that the Project would not would not substantially obstruct, alter, or otherwise degrade the existing visual character or quality of the site or its surroundings.

Under the 2018 Modified Project Variant, there are few notable changes to the viewshed. In the short- and mid- range viewshed, proposed streetscape improvements to the Palou Corridor would remain, thus improving the visual character of the viewshed if implemented. The 49ers stadium is no longer proposed under the 2018 Modified Project Variant. However, new medium-height buildings are proposed under the 2018 Modified Project Variant in the same relative location as the previously proposed 49ers stadium, and are visible in the long-range viewshed, as seen from View 15. Implementation of the newly proposed medium-height buildings and the previously proposed streetscape improvements would not substantially obstruct, alter, or otherwise degrade the existing visual character or quality of the site or its surroundings; as such, the impact would remain less than significant.

2010 Existing

2010 Proposed

2018 Proposed

SOURCE: Lennar Urban, 2009; Square One Productions, 2018

FIGURE 28

Addendum 5 to the CP-HPS2 2010 FEIR

EXISTING AND PROPOSED VIEWS FROM VIEW 14: SOUTHEAST FROM CPSRA

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SOURCE: Lennar Urban, 2009; Square One Productions, 2018

FIGURE 29

Addendum 5 to the CP-HPS2 2010 FEIR

EXISTING AND PROPOSED VIEWS FROM VIEW 15: SOUTHEAST FROM PALOU AVENUE

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View 18

As show in Figure 30 (Existing and Proposed Views from View 18: South from Hilltop Open Space), existing conditions are shown from hilltop open space that would be implemented as a result of HPS1 (not a part of this Project). Existing conditions show existing buildings, shipyard structures, and the Re-gunning crane to the south in the mid-range viewshed. In the long-range viewshed are the Santa Cruz Mountains.

The proposed changes between existing conditions and the 2010 Project, as reflected in the 2010 FEIR, that would be seen from View 18 include the 49ers stadium and associated parking area and dual-use fields. These previously proposed developments would be seen in the short-, mid-, and long-range viewshed. The stadium would partially obstruct the view of the Santa Cruz Mountains. The waterfront area near the Re-gunning crane would become a new recreation area. The Re-gunning crane and the new marina would be visible, with mid-range views of currently degraded and unmaintained areas. These mid-range views would be replaced with modern, aesthetically pleasing development. As concluded in the 2010 FEIR, the Project would not substantially degrade the existing visual character or quality of the site or its surroundings.

Under the 2010 R&D Variant (Variant 1), which did not include a stadium, development would be visible in the short-, mid-, and long-range viewshed. Ornamental trees and grass would be lined along roadways and would be seen from the short- and mid-range viewshed. Mid-range views of the Regunning crane would be partially obstructed, although views of the Regunning crane would remain largely intact, distinct, and preserved. Long-range views of the Santa Cruz Mountains would remain unobstructed. A visual simulation showing views from the Hilltop Open Space under the 2010 R&D Variant (Variant 1) is provided in the 2010 FEIR on p. IV-29, Figure IV-6 (R&D Variant South from Hilltop Open Space).

Under the 2018 Modified Project Variant, views from View 18 looking toward the exact same direction as previously analyzed in the 2010 FEIR would be substantially different. Existing views would be largely blocked by newly proposed development that would be located where the stadium would have been located, with partial views of the Re-gunning crane and surrounding area remaining. Newly proposed development would include new medium-height buildings although taller and closer in to the open space area than would have occurred under the various land use variants analyzed in 2010, along with and ancillary open space, landscape improvements, and a portion of the water taxi docking area. To the south, in the long-range viewshed, the uppermost portion of the Re-gunning crane is visible, but not the Santa Cruz Mountains.

The 2010 View 18 from the yet-to-be-constructed hillside open space area (in HPS1) was from a point a few feet south of the now existing and newly constructed path that is part of the hillside open space (and off the path). The view presented includes the Re-gunning crane and distant South Bay mountains and is looking southwest toward South Basin. Dry Dock 4 and the Water Room, although just to the left of the edge of the photo, were not included in the baseline photograph.

Since 2010, the hillside park associated with HPS1 (not a part of this project) has been constructed, which includes a pathway. As a result, the baseline condition on the site have changed. The 2010 FEIR View 18 location is now on an unimproved slope (within the Hilltop Park) that is not intended as the main public access. Further, this area is intended for native plants that would provide natural character and habitats; therefore, not only would the original viewpoint location be unimproved, but it is intended for native plants, further rendering the location unsuitable for viewing purposes. And, the constructed pathway leads to an overlook that is specifically intended for views of the Bay and other locations. To account for this, two alternative viewpoints were proposed and analyzed under the 2018 Modified Project Variant from the new pathway: View 18 Alternative A and View 18 Alternative B. These alternatives are better suited to analyze the proposed development program because they represent views from the location where pedestrians access is provided. Further, beyond views from this particular location (whether from View 18, or Alternative A or B), there are other locations within the CP-HPS2 project site that provide aesthetically pleasing views of the Bay, the city, and surrounding points of visual interest. The locations and viewsheds of the View 18 alternatives are shown in Figure 31 (Locations and Viewsheds of View 18 and View 18 Alternatives A and B).

View 18 Alternative A

This alternative viewpoint is shown in Figure 32 (Existing and Proposed Alternative A Views from View 18: South from Hilltop Open Space) and as View 18 Alternative A on Figure 31. This alternative viewpoint presents baseline conditions as they are currently, and is taken from the currently existing path that did not exist in 2010 and is in a more easterly direction than View 18. View 18 Alternative A is taken 45 feet to the north of the 2010 View 18, and is 3 feet higher in elevation. It provides a more complete version of the Dry Dock 4 viewshed, framing the Re-gunning crane, Dry Dock 4, and the East Bay hills.

As shown in Figure 32, 2010 views show unmaintained remnants of the shipyard in the short- and mid-range viewshed. To the south, in the long-range viewshed, is the Re-gunning crane. Across the bay, the East Bay hills can be seen in the distance.

As shown from View 18 Alternative A, existing shipyard structures and buildings would be replaced with medium-height buildings on either side of the water taxi docking area. These medium-height buildings in the short- and mid- range viewshed would not substantially obstruct views of the Bay, the Re-gunning crane, or the East Bay hills. In the mid-range viewshed, two bridges would be built over the water inlet to provide direct access to either side of the marina area. Under the 2018 Modified Project Variant, views of the East Bay hills would be partially obstructed by the proposed medium-height buildings. Views of the Regunning crane would be partially obstructed by the new development, but would remain largely intact, similar to Variant 1. Thus, overall views of the Bay, the Re-gunning crane, and the East Bay hills would remain largely intact, distinct, and preserved. Implementation of the 2018 Modified Project Variant would not substantially obstruct, alter, or otherwise degrade the existing visual character or quality of the site or its surroundings. The impact remains less than significant, and no mitigation would be required.

SOURCE: Lennar Urban, 2009; Square One Productions, 2018

FIGURE 30

EXISTING AND PROPOSED VIEWS FROM VIEW 18: SOUTH FROM HILLTOP OPEN SPACE

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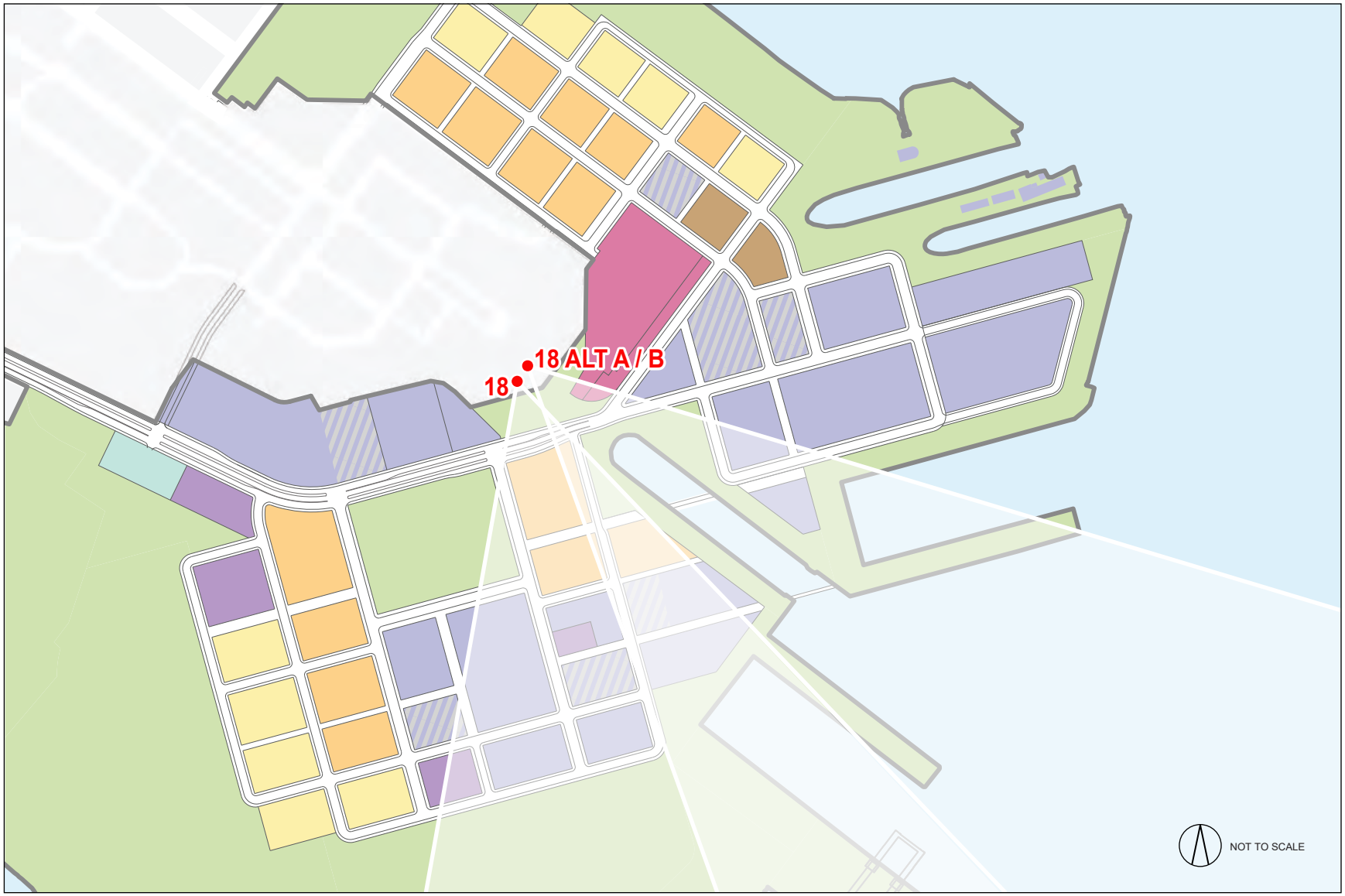


SOURCE: FivePoint, 2018.

FIGURE 31

Addendum 5 to the CP-HPS2 2010 FEIR

LOCATIONS AND VIEWSHEDS OF VIEW 18 AND VIEW 18 ALTERNATIVES A AND B

View 18 Alternative B

This alternative viewpoint is shown from Figure 33 (Existing and Proposed Alternative B Views from View 18: South from Hilltop Open Space) and on Figure 31. This alternative viewpoint presents baseline conditions as they are currently, and is taken from the currently existing hilltop open space Hilltop Park viewing overlook that did not exist in 2010. It is a standout vantage point from which one would look onto the scenic vista of Dry Dock 4 and the Re-gunning crane. View 18 Alternative B is taken 45 feet to the north of the 2010 View 18, and is 15 feet higher, as it is taken from the hilltop open space overlook. It provides a more complete version of the viewshed, framing the Re-gunning crane, Dry Dock 4, the mountains in the south bay, and the mountains in the east bay.

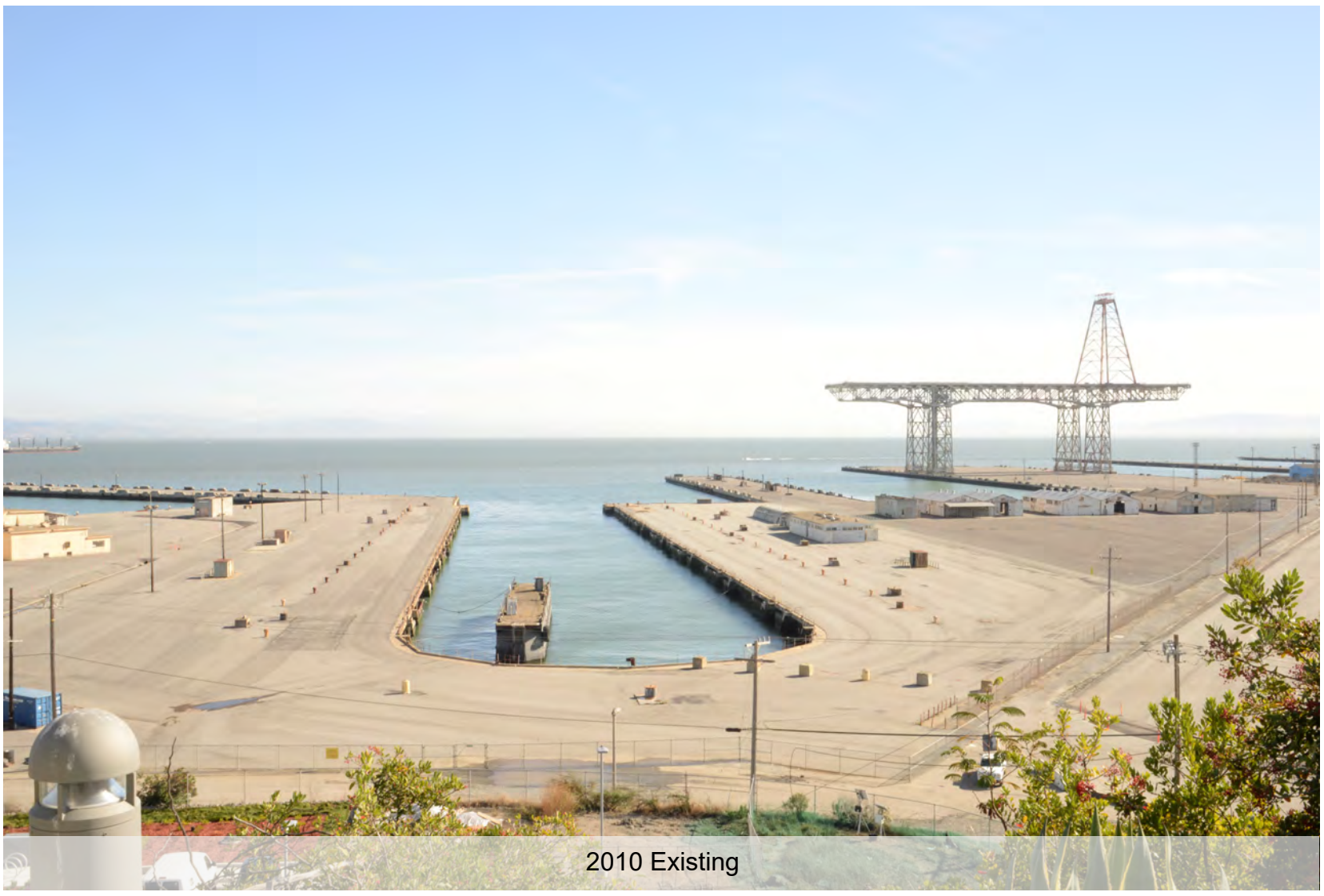
As shown in Figure 33, existing views show unmaintained remnants of the shipyard in the short- and mid-range viewshed. To the south, in the long-range viewshed, is the Re-gunning crane. Across the bay, the East Bay hills can be seen in the long-range viewshed.

View 18 Alternative B is substantially similar to View 18 Alternative A. However, due to the fact that View 18 Alternative B is taken at a higher elevation than View 18 Alternative A, the Bay, the Re-gunning crane, and the East Bay hills are slightly more visible in Alternative B as compared to Alternative A.

As shown from View 18 Alternative B, existing shipyard structures and buildings would be replaced with medium-height buildings on either side of the water taxi docking area. These medium-height buildings in the short- and mid- range viewshed would not substantially obstruct views of the Bay, the Re-gunning crane, or the East Bay hills. In the mid-range viewshed, two bridges would be built over the water inlet to provide direct access to either side of the marina area. Under the 2018 Modified Project Variant from View 18 Alternative B, overall views of the Bay, the Re-gunning crane, and the East Bay hills would remain largely intact and preserved. Views of the Re-gunning crane would be partially obstructed by the new development, but would remain largely intact, similar to 2010 Project Variant 1. Implementation of the 2018 Modified Project Variant would not substantially obstruct, alter, or otherwise degrade the existing visual character or quality of the site or its surroundings. The impact would remain less than significant, and no mitigation would be required.

View 19

As shown in Figure 34 (Existing and Proposed Views from View 19: East from Hunters Point Hill Open Space), existing conditions are seen from an area of open space on Northridge Road on Hunters Point Hill looking southeast. From this viewpoint, existing structures and open area at HPS Phase I can be seen in the short- and mid-range viewshed. Across the Bay is the East Bay hills.



Note: The bridges and seating plan are illustrative only (for environmental review purposes). No final designs have been prepared.

SOURCE: Square One Productions, 2018

FIGURE 32

Addendum 5 to the CP-HPS2 2010 FEIR

EXISTING AND PROPOSED ALTERNATIVE A VIEWS FROM VIEW 18: SOUTH FROM HILLTOP OPEN SPACE

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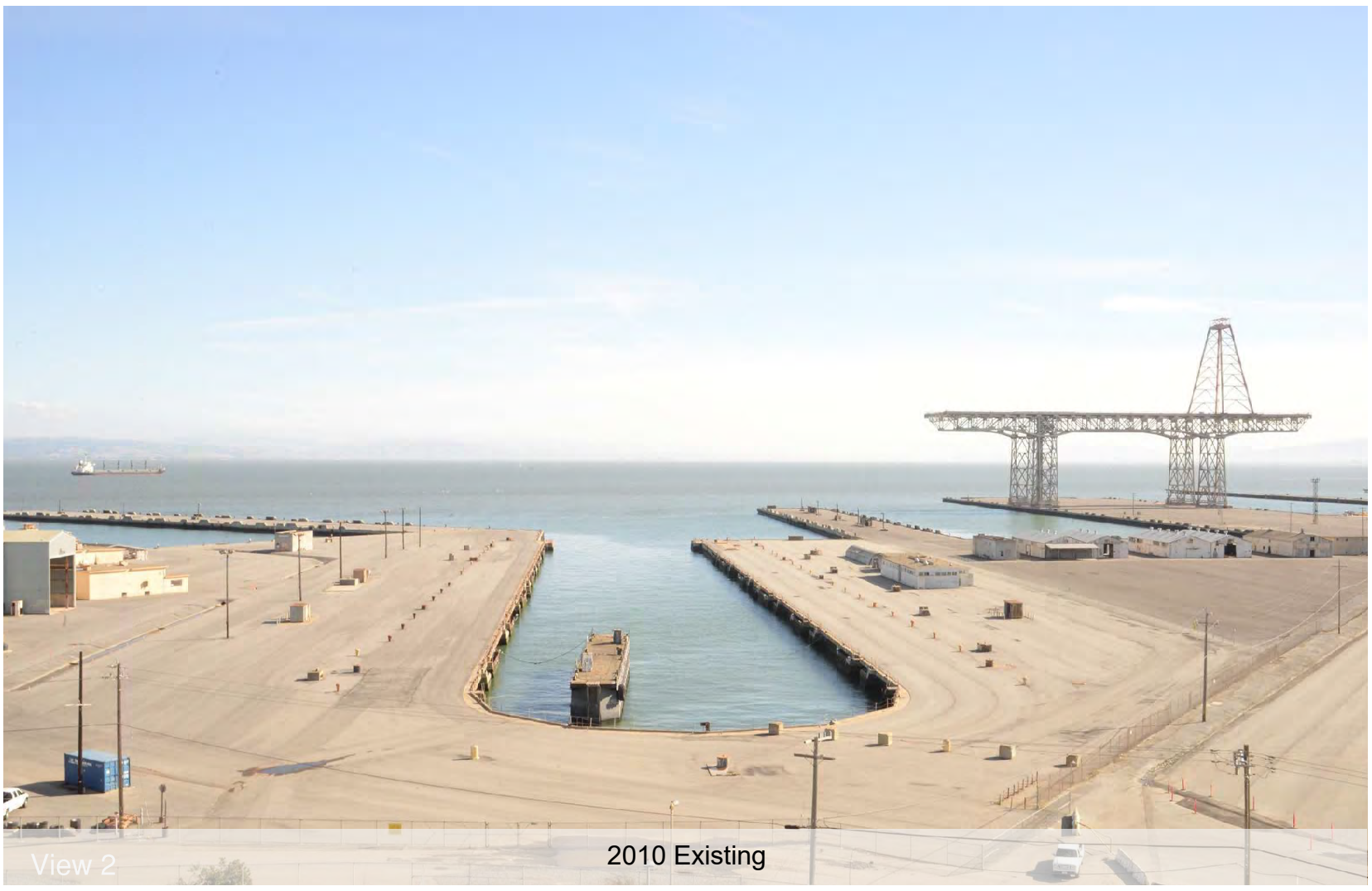

Note: The bridges and seating plan are illustrative only (for environmental review purposes). No final designs have been prepared.

SOURCE: Square One Productions, 2018

FIGURE 33 Addendum 5 to the CP-HPS2 2010 FEIR

EXISTING AND PROPOSED ALTERNATIVE B VIEWS FROM VIEW 18: SOUTH FROM HILLTOP OPEN SPACE

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2010 Existing

2010 Proposed

2018 Proposed

SOURCE: Lennar Urban, 2009; Square One Productions, 2018

FIGURE 34 Addendum 5 to the CP-HPS2 2010 FEIR

EXISTING AND PROPOSED VIEWS FROM VIEW 19: EAST FROM HUNTERS POINT HILL OPEN SPACE

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The proposed changes between existing conditions and the 2010 Project, as reflected in the 2010 FEIR, that would be seen from View 18 would be the two residential towers, one tower up to 270 feet in height, and one tower up to 370 feet in height, along with new open space at the Shipyard. Development from HPS1 (not a part of the Project and currently under construction) would be seen in the mid-range viewshed. The 2010 FEIR concluded that the Project would not substantially degrade the existing visual character or quality of the site or its surroundings.

Under the 2018 Modified Project Variant, the proposed maximum building heights are similar in height to the HPS1 development in the mid-range viewshed. The height of the two residential towers remains unchanged, while their locations have been shifted. Views of the Bay and the East Bay hills remain intact. Implementation of the building heights and ancillary landscaping would not substantially obstruct, alter, or otherwise degrade the existing visual character or quality of the site or its surroundings. The impact would remain less than significant, and no mitigation would be required.

View 20

As shown in Figure 35 (Existing and Proposed Views from View 20: Southeast from Heron's Head Park), existing conditions are seen from Heron's Head Park, looking southeast, towards the Shipyard. From this viewpoint, wetlands are seen in the short-range viewshed, Shipyard structures including the Re-gunning crane are seen in the mid-range viewshed, and the Bay and the East Bay hills are seen in the long-range viewshed.

The proposed changes between the 2018 Modified Project Variant and the 2010 Project, as reflected in the 2010 FEIR, that would be seen from View 20 would primarily be the residential towers, up to 370 feet in height. These residential towers are seen distinctly and clearly as two separate buildings. Additional Project-related medium-height structures would be seen, along with HPS1 development. Views of the Re-gunning crane would remain intact. Mid-range views of degraded, vacant, and unmaintained areas would be replaced with well-designed development. Long-range views of the Bay and the East Bay hills would remain intact. The 2010 FEIR concluded that the Project would not substantially degrade the existing visual character or quality of the site or its surroundings.

Under the 2018 Modified Project Variant, there are relatively few changes from Viewpoint 20 with the exception of the proposed changes to the high-rise tower locations. Under the 2018 Modified Project Variant, view of the residential towers as modeled in the preferred tower location within the allowable tower zone would overlap, and, as such, previously analyzed impacts to the visual character of the mid-range viewshed would be less than previously determined. However, the flexible tower zones allow the two residential towers to be located anywhere on their respective development blocks. As such, it is possible that when the design and development process for the towers proceeds, and more information is known about their particular sites, the two towers may be located in such a way that they are seen as distinct buildings from the vantage of View 20, as they were in the 2010 Project (refer to Figure 35). Consequently, impacts to the visual character of the mid-range viewshed would be consistent with those previously determined to be less than significant in the 2010 FEIR. Short-range

views of the wetlands and long-range views of the Bay and East Bay hills remain intact. Implementation of the 2018 Modified Project Variant would not substantially obstruct, alter, or otherwise degrade the existing visual character or quality of the site or its surroundings. The impact would remain less than significant, and no mitigation would be required.

Height Changes

Figure 36 (Height Changes: 2018 Modified Project Variant vs. 2010 Project), p. 167, compares the 2018 Modified Project Variant to the 2010 Project. Under the 2018 Modified Project Variant, when compared to the 2010 Project, proposed building heights change throughout HPS2, as discussed below.

In the North Shoreline District, the maximum height of waterfront buildings would generally decrease to 40 feet from an approved 2010 height of 65 feet, with the exception of one Agency Lot, which would remain at 65 feet. The maximum height of buildings along Galvez and Robinson Streets in 2010 was 65 to 85 feet, depending on location. Heights in this area would remain at 65 feet or below, with the exception of Lots 14 and 15, which would have a maximum height of 85 feet. In 2010, Lot 14 had a maximum height of 85 feet. The height of Tower A would remain at 370 feet.

In the Wharf District, the height of Tower B would remain at 270 feet. The remaining blocks (or portions thereof) within this district would generally increase in height. Height increases would be from a previous maximum height of 65 feet to 85 and 120 feet in height, and from 85 and 105 feet to 120 feet. Although a number of blocks would remain at 85 feet. Existing buildings would remain at 120 feet.

The area now known as the Warehouse District was proposed to only contain a stadium with a maximum height of 156 feet. North of Crisp Road, the maximum building height was proposed to be 85 feet with small portions of land with a maximum building height of 65 feet. South of Crisp Road, but north of the stadium, the maximum building height was proposed to be 65 feet at two portions of land directly abutting Crisp Road. Generally, the maximum height of the community use and residential blocks along the waterfront, west of H Street, would be 40 feet on some blocks and would be 85 feet on some blocks. Generally, the maximum height of the commercial blocks (which include R&D) and some residential blocks would be 75, 85, 100, or 120 feet. For Lots 1, 2, 3, 55, and 56, which abut Crisp Road, maximum building heights would be 65 feet, with an interspersed existing building within this height parameter.

SOURCE: Lennar Urban, 2009; Square One Productions, 2018

FIGURE 35 Addendum 5 to the CP-HPS2 2010 FEIR

EXISTING AND PROPOSED VIEWS FROM VIEW 20: SOUTHEAST FROM HERON'S HEAD PARK

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Public Trust Views

Although the 2010 FEIR did not provide visual simulations specifically from public trust view vantage points, as it is not required for CEQA compliance, such visual simulations were provided separately in support of the State Lands Commission decision-making process. These simulations have been updated to illustrate the 2018 Modified Project Variant and are now voluntarily provided in Addendum 5 Appendix E (Public Trust View Corridors Visual Simulations) for informational purposes only. The following discussion identifies the separate public trust viewpoint process in order to provide context associated with the visual simulations that are provided in Appendix E.

To maintain and protect view corridors of San Francisco Bay for visitors to the Hillside Open Space (which is located outside of the CP-HPS2 Project Site, but on public trust lands), the construction of new buildings within HPS2 shall conform to height limits identified in the *Hunters Point Shipyard/Candlestick Point Title Settlement, Public Trust Exchange and Boundary Line Agreement*, recorded June 27, 2011. Deviations from the building height limits may be allowed if approved by the State Lands Commission. Visual simulations for the three public trust viewpoint locations that were prepared in connection with the 2010 Project (but submitted to the State Lands Commission separately from the 2010 FEIR) have also been prepared for the 2018 Modified Project Variant and are included in Addendum 5 Appendix E for informational purposes only.

Impact AE-7b: Implementation of the Project at HPS Phase II would not create a new source of substantial light or glare that would adversely affect day or night views in the area or that would substantially impact other people or properties. ***[Criterion E.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant

As with the Project analyzed in the 2010 FEIR, implementation of 2018 Modified Project Variant would include lighting for public areas that would increase ambient lighting. These new sources of light would be typical of urban development seen in San Francisco and would not generate obtrusive lighting that would adversely affect day or night views or negatively affect other neighborhoods.

The 2010 Project originally included a new proposed San Francisco 49ers stadium. Under the 2010 FEIR, stadium lighting occurring from stadium uses and parking uses was extensively analyzed, and two mitigation measures were prescribed to mitigate light and glare impacts from the proposed stadium.

Under the 2018 Modified Project Variant, the 49ers stadium is no longer proposed. As such, stadium lighting is no longer a consideration. Under the 2018 Modified Project Variant, impacts would be less than the analyzed impacts in the 2010 FEIR. The impact would subsequently be less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to aesthetics impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to aesthetics, either on a project-related or cumulative basis.

II.B.5 Shadows

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
16. Shadows. [The City and Agency have not formally adopted significance standards for impacts related to wind.] Would the project:					
F.a Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	2010 FEIR p. III.F-26 (Impact SH-1b); Addendum 1 p. 34; Addendum 4 p. 33	No	No	No	None

Changes to Project Related to Shadows

The 2018 Modified Project Variant includes the following activities related to shadows:

- Changes in the height of certain buildings (with some buildings increasing in height and others decreasing in height); and
- The specific location of buildings, including adjustments to the two high-rise towers at HPS2.

Comparative Impact Discussions

Impact SH-1b: Implementation of the Project at HPS2 would not result in new structures with the potential to cast shadows on existing or proposed parks and open space in a manner that would have an adverse effect on the use of the open space. ***[Criterion F.a]***

	2010 CP-HPS2 FEIR	2010 CP-HPS2 FEIR Addendum 5
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR determined that construction of the Project features would not create adverse shadow effects on existing open space. Construction activities and equipment would not cast substantial shadows on existing open spaces under the jurisdiction of the San Francisco Recreation and Parks Department (SFRPD) that are near HPS2. Some construction equipment, such as cranes, would exceed 40 feet in height, but would not cause substantial shadow casting due to the crane's lack of bulk. Additionally, use of equipment in excess of 40 feet would be limited to the period of construction.

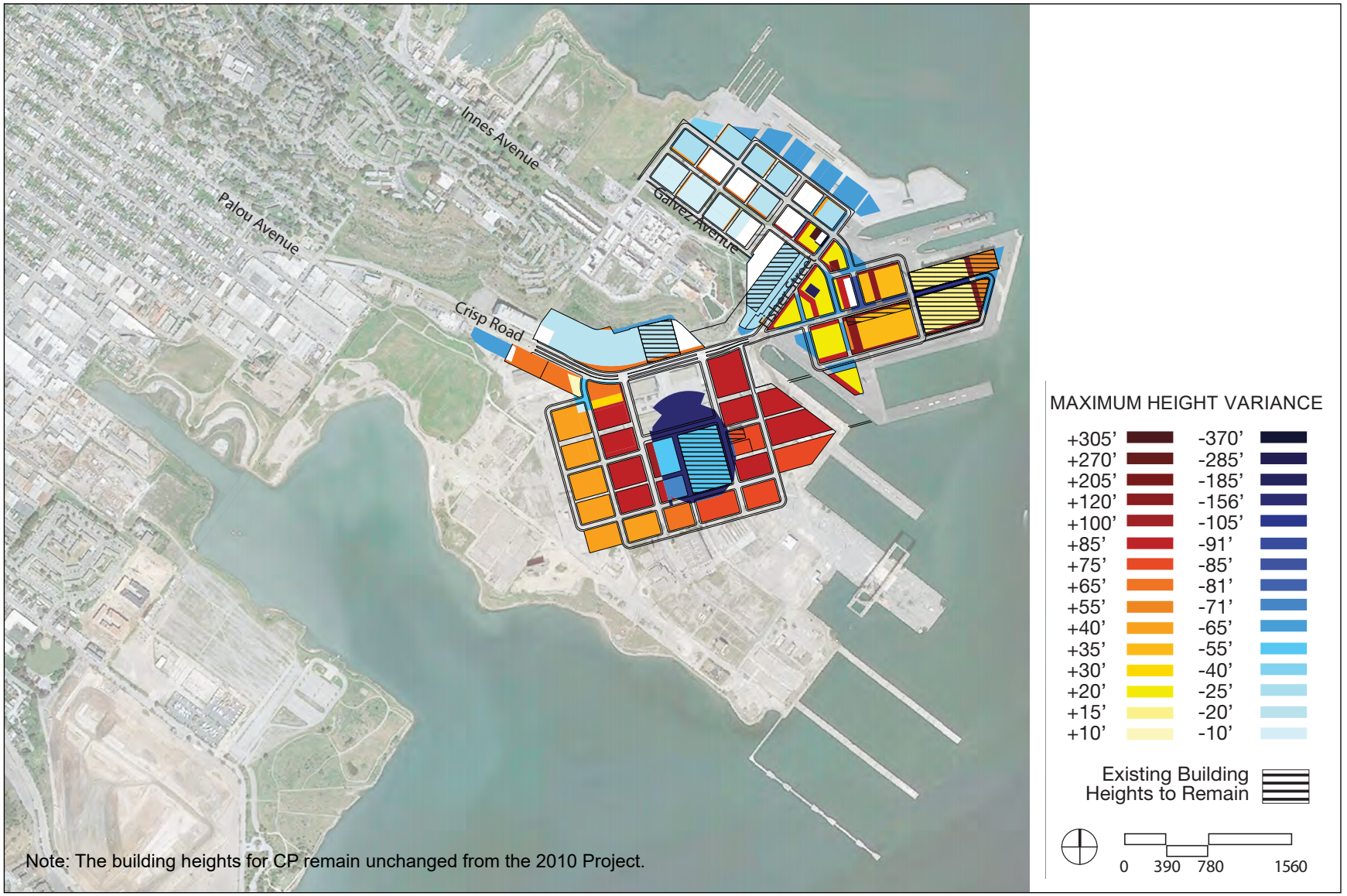
The 2010 FEIR also concluded that implementation of the Project at HPS2 would result in less-than-significant shadow impacts to SFRPD public open space in the Project vicinity, which include India Basin Shoreline Park and India Basin Flats. These parks, subject to Planning Code Section 295, are located northwest of Earl Street and generally north of Crisp Road, just outside of the Project boundaries. The 2010 FEIR determined that no Project building or structure in excess of 40 feet in height would be nearby these parks so as to create shadow effects. Additionally, there are no changes in height at CP, and the less-than-significant conclusions of the 2010 FEIR remain unchanged.

Building heights at HPS2 would change under the 2018 Modified Project Variant, as shown in Figure 36 (Height Changes: 2018 Modified Project Variant vs. 2010 Project). India Basin Flats and India Basin Shoreline park, the closest Section 295 parks to HPS2, are located northwest of Earl Street and north of Crisp Road, beyond Northside Park (a park proposed as part of the CP-HPS2 Project). The buildings closest to both of these Section 295 parks would be reduced in height from between 10 feet to 40 feet. While some buildings along Galvez Avenue would increase in height by about 15 feet, they would not extend shadow lengths beyond what was disclosed in the 2010 FEIR. The most substantial height increases (from 40 feet to 120 feet) are proposed to occur south of Crisp Road, with interspersed proposed height decreases (from 10 feet to 120 feet). The 2010 FEIR R&D Variant (Variant 1) identified two high-rise towers at HPS2. Tower A was shown in a fixed location within the North Shoreline District on the corner of Fisher Avenue and Lockwood Street (with maximum height of 370 feet), and Tower B was shown in a fixed location within the Wharf District on the corner of Fisher Avenue and Galvez Avenue (with maximum height of 270 feet). The 2018 Modified Project Variant would modify the location of Towers A and B, as illustrated in Figure 7 (Tower Locations: Towers A and B).

Tower A would be located in the same location and on the same block as an encouraged tower location shown in the 2010 FEIR; however, a flexible tower zone would be added to the remainder of the block. Tower B would be located one block north from the approved location shown in the 2010 FEIR. A flexible tower location zone would also be created for the balance of this block. The heights of both towers would not change. While the heights of both towers would not change, the 2018 HPS D4D would allow screened mechanical equipment to be up to 10 percent of the total height of the building (within an area that represents 85 percent of the building floorplate). Due to the minor change in location for Tower B, and even allowing for a change in tower locations within a limited flexible tower zone, the proposed or potential modifications to tower locations would not result in changes to shadow effects.

With respect to Planning Code Section 295 parks, and as concluded in the 2010 FEIR, HPS2 would not add shade to existing SFRPD (Section 295) open space due to the provision of reduced building heights nearest to those parks as compared to the 2010 Project and variants (Variants 1 and 2).

As shown in Figure 9 (HPS2 Parks and Open Space), the 2010 Project would develop new parks and open space, including neighborhood parks, destination parks, boulevard parks, and waterfront trails. These parks are not subject to Planning Code Section 295. The parks would include a range of passive and active recreation facilities, playgrounds, walks, and other features. The majority of these proposed public open spaces would experience little to no new shade throughout the year, but would not adversely affect the public's use of the open spaces. While new Project buildings and proposed height variances could add shade to new Project open space, at certain times of the year, over certain hours, and only in locations were building heights are increased (largely, south of Crisp Road), the Project would increase overall open space in the area, when compared to existing conditions, as well as R&D Variant (Variant 1) and the Housing/R&D Variant (Variant 2A).



SOURCE: FivePoint, 2018.

FIGURE 36

Addendum 5 to the CP-HPS2 2010 FEIR

HEIGHT CHANGES: 2018 MODIFIED PROJECT VARIANT VS. 2010 PROJECT

Proposed open space would be beneficial to Project residents, visitors, and employees. Shading of sidewalks along street corridors in the Project area could increase in certain areas, but in other areas would decrease, but not in excess of that which would be expected in a highly urban area.

As with the 2010 FEIR, the impact on existing and proposed open space from shadow effects as a result of construction and implementation at HPS2 under the 2018 Modified Project Variant would remain less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to shadows impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to shadows, either on a project-related or cumulative basis.

II.B.6 Wind

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
19. Wind. [The City and Agency have not formally adopted significance standards for impacts related to wind.] Would the project:					
G.a Alter wind in a manner that substantially affects public areas?	2010 FEIR p. III.G-8 (Impact WI-1b); Addendum 1 p. 35; Addendum 4 p. 35	No	No	No	MM W-1a

Changes to Project Related to Wind

The 2018 Modified Project Variant includes the following activities related to wind:

- Changes in the height of certain buildings (with some buildings increasing in height and others decreasing in height); and
- The specific location of buildings, including adjustments to the two high-rise towers at HPS2.

Comparative Impact Discussions

Impact W-1b: Implementation of the Project at HPS Phase II would not include tall structures that would result in ground-level equivalent wind speed exceeding 26 mph for a single hour of the year in pedestrian corridors and public spaces. ***[Criterion G.a]***

	2010 CP-HPS2 FEIR	2010 CP-HPS2 FEIR Addendum 5
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR acknowledged that buildings near or greater than 100 feet in height could affect pedestrian-level conditions such that the wind hazard criteria of 26-mph-equivalent wind speed for a single hour of the year would be exceeded. In the 2010 FEIR, the proposed building heights at HPS would range from 65 feet to 105 feet. Two towers, ranging from 370 feet (Tower A) to 270 feet (Tower B), were included at HPS. The 2010 Project also included the proposed 156-foot-high stadium, which is no longer included in the Project. The 2010 FEIR noted that the degree of changes in pedestrian-level wind conditions would be influenced by building design, such as building height, shape, massing, setbacks, and location of pedestrian area. Mitigation measure MM W-1a requires a wind study for structures over 100 feet in height to assess whether a building would exceed the wind hazard threshold and, if so, requires design changes to mitigate the adverse wind impact. The 2010 FEIR concluded, with the implementation of MM W-1a, the potential adverse wind impacts at HPS would be reduced to a less-than-significant level.

The 2018 Modified Project Variant proposes building heights at HPS that range from 45 feet to 120 feet (refer to Project Description Figure 8 [Building Heights]). Thus, some areas of HPS would have slightly lower heights and some slightly higher heights than the 2010 Project. The tower heights have not

changed. Tower A has a maximum height of 370 feet and Tower B has a maximum height of 270 feet. Both Towers would be located on blocks that have a flexible tower zone, rather than a fixed location. Tower B would be located one block north of the location shown in the 2010 FEIR.

Mitigation measure MM W-1a has been adopted for the Project and would require wind studies for buildings over 100 feet and implementation of design changes to ensure the wind hazard threshold would not be exceeded. Under both the 2010 Project and the 2018 Modified Project Variant, there would be buildings over 100 feet, including the two towers (with unchanged heights of 270 feet and 370 feet). Consequently, there would be no new impacts or a substantial increase in the severity of previously identified impacts related to wind. As such, the impact would remain less than significant with implementation of the identified mitigation measure.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to wind impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to wind, either on a project-related or cumulative basis.

II.B.7 Air Quality

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
3. Air Quality. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
H.a. Conflict with or obstruct implementation of the applicable air quality plan?	2010 FEIR p. III.H-33 (Impact AQ-4), p. III.H-38 (Impact AQ-9); Addendum 1 p. 36; Addendum 4 p. 37	No	No	No	None
H.b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	2010 FEIR p. III.H-25 (Impact AQ-1), p. III.H-35 (Impact AQ-5); Addendum 1 p.36; Addendum 4 p. 37	No	No	No	MM HZ-15
H.c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	2010 FEIR p. III.H-33 (Impact AQ-4); Addendum 1 p. 36; Addendum 4 p. 37	No	No	No	None
H.d. Expose sensitive receptors to substantial pollutant concentrations?	2010 FEIR p. III.H-25 (Impact AQ-1), p. III.H-29 (Impact AQ-2), p. III.H-31 (Impact AQ-3b), p. III.H-36 (Impact AQ-6), p. III.H-37 (Impact AQ-7); Addendum 1 p. 36; Addendum 4 p. 37	No	No	No	MM AQ-2.1, MM AQ-6.1, MM AQ-6.2, MM HZ-15
H.e. Create objectionable odors affecting a substantial number of people?	2010 FEIR p. III.H-38 (Impact AQ-8); Addendum 1 p. 36; Addendum 4 p. 37	No	No	No	None

Changes to Project Related to Air Quality

The 2018 Modified Project Variant includes the following activities related to air quality:

- Modifications to the land use program;
- Changes in traffic volumes and traffic distribution;
- Inclusion of the central energy plants and recycled water facility; and
- Changes in construction activity, including the use of deep dynamic compaction (DDC) and the installation of geothermal boreholes.

Comparative Impact Discussions

Impact AQ-1: Construction activities associated with the Project would not result in short-term increases in emission of criteria air pollutants and precursors that exceed BAAQMD CEQA significance criteria. ***[Criteria H.b and H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2018 Modified Project Variant would not change the conclusions of the 2010 FEIR. As discussed in the 2010 FEIR, heavy construction activity on dry soil exposed during construction would cause emissions of dust. As also discussed in the 2010 FEIR, heavy-duty equipment, material transport, and employee commutes would result in emissions of criteria air pollutants (e.g., CO) and precursors (e.g., ROG and NO_x). However, these are included in regional emissions inventory, which serves as the basis for air quality plans, and BAAQMD had not adopted mass emissions thresholds for construction at the time of the 2010 FEIR. Thus, conclusions were based on fugitive PM_{10} dust. Implementation of MM HZ-15 reduced the impacts caused by construction dust to a less-than-significant level in the 2010 FEIR. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact AQ-2a: Construction at Candlestick Point would not result in impacts to off-site populations from Project-generated emissions of DPM. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As disclosed in the 2010 FEIR, construction impacts at CP would not exceed BAAQMD CEQA thresholds for cancer risk or chronic noncancer health indices (HI) after mitigation. DPM emissions were modeled for operation of off-road construction equipment and on-road hauling trucks. Risk was assessed at off-site sensitive receptors, workers, and potential on-site residents at the Alice Griffith parcels. The maximum exposed individual (MEI) cancer risk would be 3.3 in one million, while the maximum chronic noncancer HI would be 0.007, well below the BAAQMD significance thresholds of 10 in one million and 1.0, respectively.

Land use at CP is the same for the 2018 Modified Project Variant as was analyzed in the 2010 FEIR; thus, construction activity will be the same as analyzed in the 2010 FEIR. Therefore, construction impacts for CP will not change for the 2018 Modified Project Variant.

Impact AQ-2b: Construction at HPS Phase II would not result in impacts to off-site populations from Project-generated emissions of DPM. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As disclosed in the 2010 FEIR, construction impacts at HPS2 would not exceed BAAQMD CEQA thresholds for cancer risk or chronic noncancer health indices (HI) after mitigation. DPM emissions were modeled for operation of off-road construction equipment and on-road hauling trucks. Risk was assessed at off-site sensitive receptors, workers, and potential on-site residents at the Alice Griffith parcels. The maximum exposed individual (MEI) cancer risk would be 3.8 in one million, while the maximum chronic noncancer HI would be 0.01, well below the BAAQMD significance thresholds of 10 in one million and 1.0, respectively.

Revised construction modeling and health risk assessments were performed for the 2018 Modified Project Variant. Because the major changes to construction occur on the HPS section of the Project, the revised construction HHRA is focused only on this portion of the Project. Impact AQ-2a evaluated impacts at CP. The 2018 Modified Project Variant reduces the land use of CP and thus would reduce construction impacts. Therefore, construction at CP was not evaluated quantitatively.

Detailed assumptions and results are described in Appendix F1 (Air Quality Construction Methods Memorandum). Because the construction of HPS begins after the phase in of the emission control device requirement in MM AQ-2.1, 100 percent of equipment was assumed to meet USEPA Tier 2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent).

The MEI cancer risk for the 2018 Modified Project Variant is 3.5 in one million at a worker location. This is less than the MEI for the 2010Project. The revised construction schedule resulted in cleaner off-road construction equipment than modeled for the 2010 Project and moved more equipment away from the perimeter of the site. Because the construction impacts from HPS have decreased and construction at CP is similar to what was analyzed previously, the combined impact of HPS and CP construction is expected to be lower than reported in the 2010 FEIR.

Due to the decrease in cancer risk with the 2018 Modified Project Variant and the minimal impact of the chronic HI, the chronic HI would also continue to be below thresholds. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact AQ-2c: Construction activities associated with the Project would not result in impacts to the existing Alice Griffith Public Housing from Project-generated emissions of DPM. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As disclosed in the 2010 FEIR, the cancer risk at the MEI inside Alice Griffith would be 4.5 in one million. Due to its proximity, Alice Griffith would be most impacted by construction at CP. Since the construction at CP is not changing from the 2010 Project and impacts from HPS have generally decreased, the impact at Alice Griffith would not change as a result of the 2018 Modified Project Variant.

Impact AQ-2: Construction activities associated with the Project would not result in impacts to on-site and off-site populations from Project-generated emissions of DPM. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, the maximum inhalation cancer risk at the on-site and off-site MEI would be 4.5 in one million. Construction at CP is not changing with the 2018 Modified Project Variant. Impacts at the MEI for HPS would be lower for the 2018 Modified Project Variant than for the 2010 Project. Thus, the combined impact from CP and HPS would not change with the 2018 Modified Project Variant.

Impact AQ-3: Construction activities associated with the Project would not result in impacts to off-site and Alice Griffith populations from emissions of TACs bound to soil-PM_{10}. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, historical operations within the site have increased the concentrations of certain metals and/or organic compounds in the on-site soils, and construction activities could release these chemicals into the air. The 2010 Project included an evaluation of the health impact of the release of these chemicals in fugitive dust as a result of construction activity. This evaluation was based on all organic chemicals detected within the 0- to 10-foot depth in Navy environmental investigations of the soil. The analysis in the 2010 FEIR assumed soil disturbance on the entirety of every parcel.

The 2018 Modified Project Variant covers the same land area as analyzed in the 2010 FEIR. Thus, the evaluation and mitigation measures for the 2010 Project still apply, which include mitigation measure MM HZ-15 (Asbestos Dust Mitigation Plans and Dust Control Plans). The impact would remain less than significant with implementation of the identified mitigation measure.

Impact AQ-4: Operation of the Project would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out. ***[Criteria H.a and H.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

As discussed in the 2010 FEIR, project operational emissions for HPS2 and CP would exceed the BAAQMD CEQA significance threshold for ROG, NO_X, PM_{10}, and $PM_{2.5}$. The 2010 FEIR reports daily emissions of ROG and NO_X under summer conditions since ozone concentration is highest during this season, and it reports daily emissions of PM_{10} and $PM_{2.5}$ under winter conditions when ambient concentrations of pollutants are highest. The estimated daily ROG emissions were 921 lb/day, above the BAAQMD significance threshold of 80 lb/day. Primary sources of ROG include area sources like natural gas combustion for heating/cooling purposes, consumer product use in residences etc. The total daily NO_X emissions for the project were 384 lb/day, exceeding the BAAQMD threshold of 80 lb/day. Daily PM_{10} emissions were 1,453 lb/day higher than the BAAQMD threshold of 80 lb/day. Daily $PM_{2.5}$ emissions were 278 lb/day. BAAQMD did not have a threshold for $PM_{2.5}$ emissions at the time of the 2010 FEIR. Mobile sources contribute a large fraction of PM_{10}, $PM_{2.5}$, and NO_X for the Project. However, no additional feasible mitigation measures were identified for the 2010 Project that would reduce the Project's operational emissions below the BAAQMD thresholds.

Emissions of the operation of the 2018 Modified Project Variant were estimated, as described in Appendix F2 (Air Quality Operational Emissions Data). CalEEMod was used to estimate operational emissions because tools used for the 2010 FEIR analysis are no longer available. CalEEMod incorporates new regulations such as California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation and CARB Statewide Truck and Bus Regulation as well as CARB's Advanced Clean Cars (ACC) program from 2012.

Consistent with the 2010 Project, daily ROG and NO_X emissions are reported under summer conditions, and daily PM_{10} and $PM_{2.5}$ emissions are reported under winter conditions. Daily ROG emissions for the 2018 Modified Project Variant are 428 lb/day, which is lower than the ROG emissions in the 2010 FEIR. Daily NO_X emissions for the 2018 Modified Project Variant are 340 lb/day, which is lower than the NO_X emissions in the 2010 FEIR. While NO_X emissions at HPS2 increase, total NO_X emissions are lower for the 2018 Modified Project Variant compared to the 2010 Project. Daily PM_{10} and $PM_{2.5}$ emissions are, 397 lb/day and 125 lb/day, respectively, which are all below the emissions reported for the 2010 Project.

Emissions have decreased from those disclosed for the 2010 Project largely due to the delay in implementation of the Project, land use and vehicle trip generation changes and updated calculations methodology for mobile emissions that incorporate new regulations (e.g., EMFAC2007 emission factors in the 2010 FEIR and EMFAC2014 emission factors in the addendum). For most pollutants, the majority of emissions are from vehicular travel. Newer vehicles tend to emit less pollutants than older vehicles, so the vehicle fleet would emit less when the Project is built out

compared to the build-out assumed for the 2010 Project. Emissions from the 2018 Modified Project Variant continue to exceed the BAAQMD significance threshold for all criteria air pollutants, but are below emission levels estimated for the 2010 Project. Results comparing the 2010 Project and Addendum 5 are shown in Table 13 (Emissions Comparison). The impact would remain significant and unavoidable, and there continues to be no feasible mitigation measure to reduce the level of this impact.

TABLE 13 EMISSIONS COMPARISON

	2010 Project (Operational Emissions for Project, Build-Out 2030)[a]				*Addendum 5 (Operational Emissions for 2018 Modified Project Variant, Build-Out 2032[b]*			
Analysis Area	*ROG (lb/day)*	*NO_x (lb/day)*	*PM_{10} (lb/day)*	*$PM_{2.5}$ (lb/day)*	*ROG (lb/day)*	*NO_x (lb/day)*	*PM_{10} (lb/day)*	*$PM_{2.5}$ (lb/day)*
Candlestick Point	666	265	1,029	197	215	164	203	66
HPS2	255	119	424	81	213	176	193	59
Project Site Total	***921***	***384***	***1,453***	***278***	***428***	***340***	***397***	***125***

Daily ROG and NO_X emissions are calculated under summer conditions and daily PM_{10} and $PM_{2.5}$ emissions are calculated under winter conditions.

ROG = reactive organic gases; NO_X = nitrogen oxides; PM_{10} = particulate matter less than 10 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter.

a. Emissions from *Candlestick Point–Hunters Point Shipyard Phase II Development Plan EIR*, Section III.H (Air Quality), Table III.H-5 (2009).

b. Operational emissions calculated with CalEEMod® version 2016.3.2.

c. Emissions were calculated for the entire project for operational year 2032, although construction goes to 2034. Construction after 2032 only includes parks. Using an earlier operational year is more conservative because emissions tend to decrease with time.

Impact AQ-5: Operation of the Project would not cause local concentrations of CO to exceed State and federal ambient air quality standards due to motor vehicles trips. ***[Criterion H.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As discussed in the 2010 FEIR, localized CO emissions were modeled using CALINE4 dispersion modeling at four intersections. These intersections were selected because they represent the locations where Project traffic would produce the greatest change in traffic level of service associated with the Project (and, therefore, the greatest increase in congestion, which would produce the greatest increase in CO emissions) and/or the highest total traffic volumes of all intersections in the Project vicinity. Modeling of the localized CO concentration was completed for the existing (2009), future baseline (2030), and future project (2030) cases and then added to the background CO concentrations for San Francisco.

The maximum 1-hour CO concentration (including the background concentration) of the four modeled intersections was 3.1, 3.0, and 3.2 ppm for the existing, future baseline, and future project cases, respectively. The maximum 8-hour CO concentration (including the background concentration) of the four modeled intersections was 2.0, 2.0, and 2.1 ppm for the existing, future baseline, and future project cases, respectively. These are all below the state and federal ambient air quality standards due to motor vehicle trips of 20 ppm and 35 ppm, respectively for 1-hour concentrations and 9 ppm for 8-hour concentrations.

Revised concentrations for the 2018 Modified Project Variant were calculated by scaling the previous concentrations by the percent change in traffic at the selected intersections. The existing and future baseline cases have not changed with the 2018 Modified Project Variant so those CO concentrations remain the same when compared to the 2010 Project. For the future project case, traffic at the selected four intersections increased on a range of 1 percent to 32 percent compared to the 2010Project.

The maximum future project 1-hour and 8-hour CO concentrations (including the background concentration) of the four modeled intersections was 3.2 ppm and 2.1 ppm, respectively. These values are below the state and federal ambient air quality standards due to motor vehicle trips. Table 14 (CO Concentration Comparison—Future Project) shows the comparison of the 1-hour and 8-hour CO concentrations at the four intersections for the 2010 Project and 2018 Modified Project Variant. The impact would remain less than significant, and no mitigation would be required.

TABLE 14 CO CONCENTRATION COMPARISON—FUTURE PROJECT

	1-hour Average CO Concentration (ppm)				*8-hour Average CO Concentration (ppm)*		
Analysis Area	*2010 Project*[a]	*2018 Modified Project Variant*[b]	*State Standard*	*Federal Standard*	*2010 FEIR*[a]	*2018 Modified Project Variant*[b]	*State and Federal Standard*
Arelious Walker Dr/Gilman Ave	3.1	3.1	20	35	2.0	2.0	9
Third St/Gilman Ave	3.2	3.2			2.1	2.1	
Griffith St/Palou Ave	2.8	2.9			1.8	1.9	
Evans Ave/Jennings St	3.0	3.1			2.0	2.1	

a. FEIR CO concentrations are from 2010 FEIR Table III.H-6
b. 2018 Modified Project Variant CO concentrations are scaled EIR values based on the traffic study changes.

Impact AQ-6: Implementation of HPS Phase II would not expose nearby receptors to an increase in local concentrations of toxic air contaminants due to the operation of Research and Development uses. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR included an evaluation of toxic air contaminants (TACs) released in R&D buildings to determine health impact on nearby receptors. The combined impact of each R&D area was modeled to determine the combined impact of the R&D areas. Due to the number of facilities that could emit TACs, this impact was considered potentially significant, but an explicit analysis of unmitigated impacts was not performed. The analysis was based on the assumption that no individual TAC emission source could exceed 10 in a million cancer risk (1×10^{-5}) or a 1.0 chronic noncancer HI for a receptor at the boundary of each site, which is consistent with MM AQ-6.2. This scenario is consistent with BAAQMD requirements for sources equipped with best available control technology for toxics (T-BACT), and would be a requirement for sources in the R&D areas. With this mitigation measure, the impact in the 2010 FEIR (for the 2010 Project) was less than significant as estimated risk at residential locations were below thresholds.

The 2018 Modified Project Variant contains less R&D square footage as compared to R&D Variant (Variant 1) and does not introduce new locations for R&D as compared to the R&D Variant (Variant 1) land use plan. Figure 3-1b-of 2010 FEIR Appendix H1 Attachment III shows the areas analyzed to have TAC emissions from R&D in the 2010 FEIR and the R&D areas proposed now. As shown in Figure 4-1a of 2010 FEIR Appendix H1 Attachment III, cancer risk from TAC emissions from R&D is below the threshold of 10 in a million at all proposed residential locations, except the north eastern portion of HPS-5. Mitigation measure MM AQ-6.2 of the Development Agreement restricts land uses with TAC emissions within 300 feet of any residence. This mitigation measure reduced risk to below thresholds in this area. The 2018 Modified Project Variant does not propose R&D in any locations that were not previously analyzed and does not place residences in any new areas that were not previously analyzed. Thus, the analysis in the 2010 FEIR (for the 2010 Project) would be inclusive of the 2018 Modified Project Variant. The evaluation and conclusion in the 2010 FEIR would still apply, and the 2018 Modified Project Variant would not pose a human health risk as a result of hazardous air emissions within 0.25 mile of a school. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact AQ-7: Operation of the Project would not expose receptors to concentrations of $PM_{2.5}$ above a 0.2 $\mu g/m^3$ action level for $PM_{2.5}$ and, therefore, would not substantially affect the health of nearby receptors as a result of an increase in local concentrations of vehicle emissions ($PM_{2.5}$) associated with vehicle use attributable to operation of the Project. ***[Criterion H.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As disclosed in the 2010 FEIR, operational traffic impacts would not exceed the SFDPH $PM_{2.5}$ localized concentration threshold for potential health effects of 0.2 $\mu g/m^3$. $PM_{2.5}$ concentration levels were evaluated at nearby roadways and intersections that Project-related traffic would use to access neighboring freeways and other areas of San Francisco. The maximum $PM_{2.5}$ concentration would be 0.2 $\mu g/m^3$, which would not exceed the SFDPH's threshold.

Revised $PM_{2.5}$ concentrations for the 2018 Modified Project Variant were calculated by scaling the 2010 Project $PM_{2.5}$ concentrations by the respective percent change in annual average daily traffic (AADT) along each of the previously modeled road sections and also by the change in emission factors. The change in the AADT was determined using traffic volumes provided by Fehr & Peers and is different for each modeled road segment. AADT generally increased along Innes, Palou, and Gilman Avenues, but AADT generally decreased on Third Street. The change in emission factors take into account the reduction in exhaust emissions that have been realized from emissions control requirements since the 2010 FEIR was published. Figure 4-3 of 2010 FEIR Appendix H3 Attachment IV shows the roadways and receptors modeled.

The resulting maximum $PM_{2.5}$ concentration is 0.211 $\mu g/m^3$, 0.011 $\mu g/m^3$ over the threshold used in the 2010 FEIR. This maximum occurs on Innes Avenue, near the intersection with Arelious Walker

and is on the roadway segment with the maximum percent increase in AADT. There are three total points with a concentration greater than the 2010 FEIR threshold of 0.2 μg/m^3, with 0.211 μg/m^3 as the maximum and all points are located on Innes Avenue, near the intersection of Arelious Walker. All other locations are below the threshold.

The SFDPH $PM_{2.5}$ localized concentration threshold for potential health risks of 0.2 μg/m^3 was used as a health protective proxy in the 2010 FEIR due to the absence of a threshold established by the BAAQMD for this type of analysis at the time of the 2010 FEIR. However, impacts to a person's health better correlate with the cumulative total impact from all sources rather than impacts from one individual source. Accordingly, the City of San Francisco now evaluates a project's significance for health impacts on a cumulative basis in combination with nearby sources. The City performed citywide modeling in 2012 to determine the cumulative impact of all sources known at the time and created thresholds based on cumulative $PM_{2.5}$ concentrations. The threshold used in the 2010 FEIR was a temporary proxy due to the lack of a threshold established by BAAQMD, The City now uses a cumulative approach, which is based on the scientific evidence discussed below. The City of San Francisco's current cumulative threshold approach is more appropriate to use to determine significance here, and the 2018 Modified Project Variant effects are assessed below using this approach.

San Francisco Modeling of Air Pollution Exposure Zones and Thresholds

In an effort to identify areas of San Francisco most adversely affected by sources of TACs, the City and County of San Francisco (the Planning Department and Department of Public Health) partnered with BAAQMD to conduct a citywide health risk assessment based on an inventory and assessment of air pollution and exposures from mobile, stationary, and area sources within San Francisco. Citywide dispersion modeling was conducted using AERMOD[63] to assess emissions from the following primary sources: roadways, permitted stationary sources, port and maritime sources, and Caltrain. Emissions of DPM (which represent PM_{10} exhaust emissions from diesel-fueled engines), $PM_{2.5}$ (including brake and tire wear), TOG, and other TACs from stationary sources were modeled on a 20-by-20-meter receptor grid covering the entire city. The results represent a comprehensive assessment of existing cumulative exposures to air pollution throughout the city. The methodology and technical documentation for modeling citywide air pollution are available in the document titled *The San Francisco Community Risk Reduction Plan: Technical Support Documentation*.[64] Model results were used to identify areas in the city at the lot level with poor air quality, termed the Air Pollutant Exposure Zone (APEZ), based on the following health-protective criteria:

[63] AERMOD is the USEPA's preferred or recommended steady state air dispersion plume model. For more information on AERMOD and to download the AERMOD Implementation Guide, see https://www3.epa.gov/ttn/scram/7thconf/aermod/aermod_implmtn_guide_3August2015.pdf.

[64] BAAQMD, San Francisco Department of Public Health, and San Francisco Planning Department, *The San Francisco Community Risk Reduction Plan: Technical Support Documentation*, December 2012.

- **Excess Cancer Risk.** The 100 per one million persons (100 excess cancer risk) criterion is based on USEPA guidance for conducting air toxic analyses and making risk management decisions at the facility- and community-scale level.[65]
- **Fine Particulate Matter.** In April 2011, USEPA published *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*. In this document, USEPA staff concludes that the then-current federal annual $PM_{2.5}$ standard of 15 $\mu g/m^3$ should be revised to a level within the range of 13 to 11 $\mu g/m^3$, with evidence strongly supporting a standard within the range of 12 to 11 $\mu g/m^3$. APEZ designations within San Francisco are based on the health-protective $PM_{2.5}$ standard of 11 $\mu g/m^3$, as supported by USEPA's Particulate Matter Policy Assessment, but then the standard is lowered further to 10 $\mu g/m^3$ to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.
- **Health Vulnerable Locations.** Also included in the APEZ were lots within San Francisco ZIP codes that were in the lowest 20 percent of Bay Area Health Vulnerability scores (ZIP codes 94102, 94103, 94105, 94124, and 94130). For lots within both an APEZ and Health Vulnerability ZIP code, the standard for identifying areas as being within the zone was lowered to (1) excess cancer risk from the contribution of emissions from all modeled sources greater than 90 per one million persons, and/or (2) cumulative $PM_{2.5}$ concentrations greater than 9 $\mu g/m^3$.[66]

The thresholds of significance used to evaluate health risks from new sources of TACs are based on the potential for the project to substantially affect the extent and severity of an existing APEZ at sensitive receptor locations or create a new APEZ. The Project site is not within the APEZ (as mapped by the San Francisco Planning Department), but is in a Health Vulnerability zone (ZIP code 94124). Therefore, the relevant threshold would be cumulative $PM_{2.5}$ concentration of 9 $\mu g/m^3$, which is the standard for becoming an APEZ in a Health Vulnerability ZIP code. While the Project is not in an APEZ, the intersection of Third Street and Gilman Avenue is within an APEZ. The relevant threshold for this area for the Project impact would be 0.2 $\mu g/m^3$.

As discussed in Appendix F2, the maximum cumulative $PM_{2.5}$ concentration near the maximum impact from the Project would be 8.8 $\mu g/m^3$, which includes ambient concentrations, nearby sources, and the 2018 Modified Project Variant. This concentration is below the cumulative threshold of 9 $\mu g/m^3$ for the health protective ZIP code, which applies to this area.

The maximum concentration due to the 2018 Modified Project Variant inside the APEZ would be 0.17 $\mu g/m^3$, which is below the APEZ threshold of 0.2 $\mu g/m^3$. According to the CRRP, the maximum concentration along Third Street from the existing sources is just below the APEZ threshold of 9 $\mu g/m^3$. However, traffic along Third Street from the 2018 Modified Project Variant would be lower than traffic analyzed in the 2010 FEIR (for the 2010 Project). Thus, this area would not have an

[65] BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, p. 67.
[66] San Francisco Planning Department and San Francisco Department of Public Health, 2014 Air Pollutant Exposure Zone Map (Memo and Map), April 9, 2014. These documents are part of San Francisco Board of Supervisors File No. 14806, Ordinance No. 224-14, Amendment to Health Code Article 38.

increased impact from what was analyzed in the 2010 FEIR for the 2010 Project. Therefore, the $PM_{2.5}$ concentration from the 2018 Modified Project Variant would be below this threshold.

Furthermore, proposed mitigation measures for the nearby India Basin project, should it be approved and implemented, would reduce the number of travel lanes on the nearby roads to provide for bus rapid transit along Innes, indirectly reducing the amount of traffic and, therefore, further reducing the localized $PM_{2.5}$ concentrations. The Project impact would remain less than significant, and no mitigation would be required.

Impact AQ-8: Implementation of the Project would not generate objectionable odors affecting a substantial number of people. ***[Criterion H.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

In the 2010 FEIR, this impact was considered less than significant, and mitigation was not required. The 2010 Project assumed a large mixed-use development containing residential, office, retail, R&D, recreational, entertainment uses, and a large centralized recycled water facility. The 2010 FEIR concluded that although there may be some potential for small-scale, localized odor issues to emerge around Project sources such as solid waste collection or food preparation, substantial odor sources and consequent effects on on-site and off-site sensitive receptors would be unlikely and/or would be resolved by appropriate and effective intervention after receipt of any complaints. The 2018 Modified Project Variant includes most of the same land uses, but adds a hotel, schools, and a geothermal heating and cooling system. Hotels and schools are not expected to be significant sources of odors. The primary source of odors from hotels and schools would be from solid waste collection and food preparation; however, these source of potential odors would be collected in closed containers and would be disposed of on a regular basis.

The recycled water facility, which was proposed as part of the 2010 FEIR Utilities Variant 4, is also proposed as part of the 2018 Modified Project Variant. Under Utilities Variant 4, four decentralized treatment plants were proposed at HPS2 and seven decentralized treatment plants were proposed at CP, each with a capacity of approximately 100,000 gallons per day (gpd) of wastewater, totaling 1.1 million gpd. The 2018 Modified Project Variant, by comparison, proposes one 976,000 gpd centralized treatment plant at HPS2. This plant has been designed to minimize and/or eliminate perceptible odors to nearby sensitive uses. All exhaust air associated with the recycled water treatment process would be conveyed to a granular-activated carbon scrubber system before being released to the environment. Water would enter the facility through a screen box, which would remove any large solid materials from the water flow. The large solid materials would go straight to an enclosed container and exhaust air would be routed to the carbon scrubber system. The water then would enter a series of tanks, all of which would be completely enclosed. The air in the area above the water line in the tanks would be captured via a suction blower and conveyed to the carbon scrubber system.

Raw sewage would be conveyed to equalization tanks. The tanks would be covered and exhaust air would go through the carbon scrubber system. The anoxic tank would treat water at low oxygen concentrations. Mixing would occur in this tank, which would have air going through the scrubber system. The water then would enter the aeration and membrane tanks where air would pass through the tank to activate the biological process and to scour membranes. These tanks would be covered and all exhaust air would go through the carbon scrubber. Sludge that is generated as part of the treatment would be directly released into the San Francisco Public Utilities Commission (SFPUC) sewer system in enclosed pipes. None of the sludge would be processed on site. The treated water would be conveyed to finished water tanks, which typically do not have an odor, but would be enclosed in an abundance of caution.

The design of the recycled water facility thus substantially minimizes the potential for waste-related odors using the odor control technologies described above and in Table 15 (Odor Control Technologies Used for Waste-Related Odors).

TABLE 15 ODOR CONTROL TECHNOLOGIES USED FOR WASTE-RELATED ODORS

Technology	*Description of Technology*
Enclosed tank/systems	All treatment unit processes and raw sewage process tanks would be located in enclosed buildings or under covers, limiting the amount of waste that comes into contact with the ambient environment and reducing the potential for odors to escape from the system.
Negative pressure	Tank headspace would be kept under negative pressure, which reduces the amount of air that can escape from the tank and reduces the potential for odors to be released.
Sludge would not be processed on site	By processing the sludge off site, the potential for odors would be reduced.
Carbon Scrubber	All captured air would be routed through granular-activated carbon air scrubbers. Carbon scrubbers use activated carbon as the adsorption medium to remove odors, gases, and other VOCs. Activated carbon has a complex pore structure with a very large surface area. As the air is forced through the carbon bed, odorous compounds are transferred from the air to the surface of the carbon though a physical attraction called adsorption. The odor compounds would continue to adsorb onto the surface of the carbon until all the pore space in the carbon is saturated, at which point the carbon would be replaced (or reused after regeneration, which restores the adsorption capacity of the saturated activated carbon). The system would be monitored to determine when replacement of carbon is necessary. Scrubbed air would be discharged to the atmosphere.
Monitoring and Maintenance	Monitoring and maintenance would be part of the system operations to reduce and address odors in a timely manner. The operators would manage the facility to minimize odors and address odor complaints, if any.

Addendum 5 Appendix F3 (Recycled Water Facility Location and Odor Control) confirms that the proposed HPS2 recycled water facility would not have any objectionable or detectable odor at the perimeter of the facility that would be noticed by the public. Appendix F3 states that odor has not been an issue at other facilities that Natural Systems Utilities has previously completed. Three example facilities, noted below, have a similar design to but are somewhat smaller than the recycled water facility that is proposed at HPS2. All are in close proximity to residences and businesses and have been in operation for over 15 years without any odor complaints:

- **Battery Park, New York City, New York:** Six complete water reuse systems located inside the buildings of high-end residential apartment complexes with a total capacity of 165,000 gpd.
- **Queset Commons, North Eaton, Massachusetts:** Wastewater treatment plant for a mixed-used development located directly adjacent to homes and commercial establishments with 150,000 gpd capacity;
- **Gillette Stadium, Foxboro, Massachusetts:** On-site water reuse facility for the New England Patriots with the treatment facility located within the commercial district and immediately adjacent to surrounding restaurants with 250,000 gpd capacity; and

Addendum 5 Appendix F4 (Recycled Water Facility Odor Control Measures) describes the design features of the recycled water facility that would reduce odors.

The recycled water facility at HPS2 would be designed and constructed with the same standards and design principles as the three example facilities. The recycled water facility at HPS2 would be constructed as separate modules, each about the size of the Queset Commons facility. Due to the modular design and similar capacity, the lack of odor complaints at these facilities are representative of what would be expected at HPS2.

Due to the enclosed design and the use of a granular activated carbon system, the recycled water facility would not would not generate objectionable odors affecting a substantial number of people.

Furthermore, the recycled water facility would comply with the 2010 FEIR conclusion that effects "would be resolved by interventions after receipt of any complaints." The HPS Redevelopment Plan requires that any recycled water treatment facility comply with additional odor control measures established in the D4D, which requires the establishment of a point of contact for odor control complaints, post-contact information for such point of contact, and implement additional odor control measures until odor issues are addressed. In addition, complaints could be addressed to BAAQMD to be handled under BAAQMD Regulation 7 (Odorous Substances), which establishes general limitations on odorous substances and specific emission limitations on certain odorous compounds. The enforcement of these limitations is provided on a complaint-based system. If the Air Pollution Control Officer (APCO) receives odor complaints from 10 or more complainants within a 90-day period alleging odors are perceived at or beyond the property line and are deemed to be objectionable by the complainants in the normal course of their work, travel, or residence, Regulation 7 provides for a collection, analysis, and evaluation process to determine whether there are, in fact, odors and/or whether they exceed established discharge concentrations. The monitoring mandated by the Regulation shall remain effective until such time as no citizen complaints have been received by the APCO for one year. The limits of this Regulation shall become applicable again when the APCO receives odor complaints from five or more complainants within a 90-day period.

The impact would remain less than significant, and no mitigation would be required.

Impact AQ-9: The Project would conform to the current regional air quality plan. *[Criterion H.a]*

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

In the 2010 FEIR, the Project was compared against the Bay Area 2005 Ozone Strategy and the then draft 2009 Clean Air Plan. The Project was determined to conform to the 2005 Plan in that it promotes the use of alternative transportation modes, such as transit, biking and walking. In addition, it puts housing in close proximity with jobs and retail establishments, reducing the length of trips and further reducing reliance on single-occupancy vehicles. The project characteristics are the same for the 2018 Modified Project Variant, so the 2018 Modified Project Variant would also conform to the 2005 Plan.

The 2010 FEIR also contained a comparison to the then draft 2009 Clean Air Plan (CAP). The comparison focused on transportation control measures and land use and local impact measures. As discussed above for the 2005 Plan, the 2018 Modified Project Variant does not change transportation goals. The 2018 Modified Project Variant continues to improve transit services by adding and expanding certain transit routes, improve system efficiency and encourages sustainable travel behavior by locating residences near jobs and services, and support focused growth. The 2018 Modified Project Variant also does not change conformity with the land use and local impact measures. As discussed in the analysis for other impacts above, the 2018 Modified Project Variant does not increase exposure to air pollution compared to the analysis for the 2010 Project.

Since the 2010 FEIR was certified, the Bay Area Air Quality Management District (BAAQMD) developed the 2017 CAP. The 2017 CAP is an update to the 2010 Clean Air plan and is the most recently adopted strategy by the Bay area to meet air quality standards. The 2017 plan serves to protect public health and the environment by using a multipollutant air quality plan with new measures in sectors including transportation, energy, buildings, water, and natural working lands.

The proposed project supports the primary goals of the Clean Air Plan, in that it proposes to reduce impacts by implementing transportation control measures, energy and building measures and water conservation measures. The proposed extension supports the development of transit ways that would encourage use of local bus routes (MUNI bus lines to downtown) and promotes the development of multi-use pathways encouraging pedestrian and bicycle usage. *This would help reduce vehicle trips, vehicle usage and traffic congestion.* The proposed project would result in decarbonizing buildings by using geothermal HVAC systems reducing the need for use of natural gas fired boilers and in turn reducing overall energy consumption by 65 percent, which are consistent with the building control measure goals delineated in the 2017 CAP. In addition, the generation of on-site renewable energy through solar photovoltaics to supplement on-site power supply from SFPUC, and the use of lithium-ion batteries for storing surplus energy generated by PV systems supports the plan to decarbonize electricity production. Surplus energy stored in the batteries would also be discharged back into the grid in place of the electricity imported from the PG&E grid.

Finally, the proposed project also improves water efficiency and supports water conservation, thus resulting in an overall GHG emissions reduction and water conservation. In particular, use of a centralized treatment plant for sanitary sewer water to be used for nonpotable uses as opposed to multiple decentralized treatment systems would result in limiting methane emissions from the treatment facilities. The impact would remain less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to air quality impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to air quality, either on a project-related or cumulative basis.

II.B.8 Noise and Vibration

	Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
12.	**Noise and Vibration.** Would the project result in:					
I.a	Result in exposure of persons to or generation of noise levels in excess of standards established in the Environmental Protection Element of the *San Francisco General Plan* or San Francisco Noise Ordinance (Article 29, *San Francisco Police Code*)?	2010 FEIR p. III.I-30 (Impact NO-1b); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	MM NO-1a.1, MM NO-1a.2
I.b	Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	2010 FEIR p. III.I-32 (Impact NO-2), p. III.I-40 (Impact NO-5); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	None
I.c	Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	2010 FEIR p. III.I-39 (Impact NO-4), p. III.I-40 (Impact NO-6); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	None
I.d	Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	2010 FEIR p. III.I-36 (Impact NO-2c), p. III.I-38 (Impact NO-3), p. III.I-44 (Impact NO-7); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	MM NO-1a.1, MM NO-1a.2, MM NO-2a
I.e	For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the Project expose people residing or working in the area to excessive noise levels?	2010 FEIR p. III.I-51 (Impact NO-8); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	None
I.f	For a project located in the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?	2010 FEIR p. III.I-51 (Impact NO-8); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	None
I.g	Be substantially affected by existing noise levels	2010 FEIR p. III.I-51 (Impact NO-8); Addendum 1 p. 37; Addendum 4 p. 40	No	No	No	None

Changes to Project Related to Noise and Vibration

The 2018 Modified Project Variant includes the following activities related to noise and vibration:

- Modifications to the land use program, including a decrease in R&D uses, an increased number of residential units, and the addition of a hotel and schools that were not envisioned in the 2010 FEIR;
- Changes in traffic volumes and traffic distribution;
- Revised design details on central energy plants and recycled water plant and the addition of a ground source geothermal heating and cooling system; and
- Changes in construction activity and methods, including the use of deep dynamic compaction (DDC) at CP and HPS2 and the installation of geothermal boreholes at HPS2.

Comparative Impact Discussions

Noise impacts associated with the 2018 Modified Project Variant are evaluated in this section. An assessment of noise impacts at CP is not provided because the 2018 Modified Project Variant results in fewer noise-sensitive receptors at CP as compared to both the 2010 Project and the R&D Variant (Variant 1); the number of dwelling units are decreased and there are no additional sensitive receptors or sensitive receptors provided in different locations. Further, there are no changes to the land use program relative to the 2010 Project at CP that would result in different noise impacts. Therefore, the potential for noise impacts at CP would either be the same or less than was identified in the 2010 FEIR.

The 2018 Modified Project Variant includes an assessment of noise from new construction techniques at HPS2 that were not previously analyzed in the 2010 FEIR, including the use of a drill rig truck during the installation of geothermal boreholes. The assessment of vibration impacts for the 2018 Modified Project Variant includes HPS2 and CP as it relates to the use of deep dynamic compaction (DDC) to stabilize loose soils throughout the site, which represents a new source of vibration that was not previously analyzed in the 2010 FEIR.

Impact NO-1b: Construction at HPS Phase II would generate increased noise levels for both off-site and on-site sensitive receptors; however, the Project's construction noise impacts would be temporary, they would also not occur during recognized sleep hours, and would be consistent with the requirements for construction noise that exist in Sections 2907 and 2908 of the *Municipal Code. [Criterion I.a]*

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The potential for construction noise related impacts is based on comparison with the San Francisco Noise Ordinance, as summarized in Sections 2907 and 2908. Further, construction activities would occur during daylight hours, generally between 7:00 a.m. and 8:00 p.m. or as otherwise allowed by the City (i.e., no nighttime construction work is anticipated). Because construction of the 2018 Modified Project Variant would occur during daytime hours it would be subject to a limit of 80 dBA at 100 feet

for individual, non-impact construction equipment. The following assessment provides a summary of expected noise levels from construction equipment, and the potential for construction noise impact at existing off-site and future on-site receivers. Illustrations of the 2018 Modified Project Variant's sensitive land uses are provided in Figure 37 (Locations of Noise-Sensitive Receptors at HSP2) and Figure 38 (Locations of Noise-Sensitive Receptors at CP). While the 2018 Modified Project Variant proposes a modification of the land use program, it would not place noise-sensitive receptors closer to sources of construction noise and vibration than were evaluated in the 2010 FEIR.

Table 16 (Construction Equipment Noise Emission Levels) provides a list of powered equipment that would be used during construction, and includes typical noise levels as measured at 50 and 100 feet from each source. The equipment and noise levels in Table 16 are similar to those identified in the 2010 FEIR and are based FTA noise guidance.[67] Additional equipment not identified previously include drill rig trucks that would be used when installing boreholes. As in the 2010 FEIR, these sound levels are considered representative of the equipment that would be used during construction of the 2018 Modified Project Variant. See Addendum 5 Appendix G (Noise Data) Table G-1 (Project Related Construction Equipment) for a full list of the construction equipment, quantities, construction phases, and noise levels used for this assessment.

TABLE 16 CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS

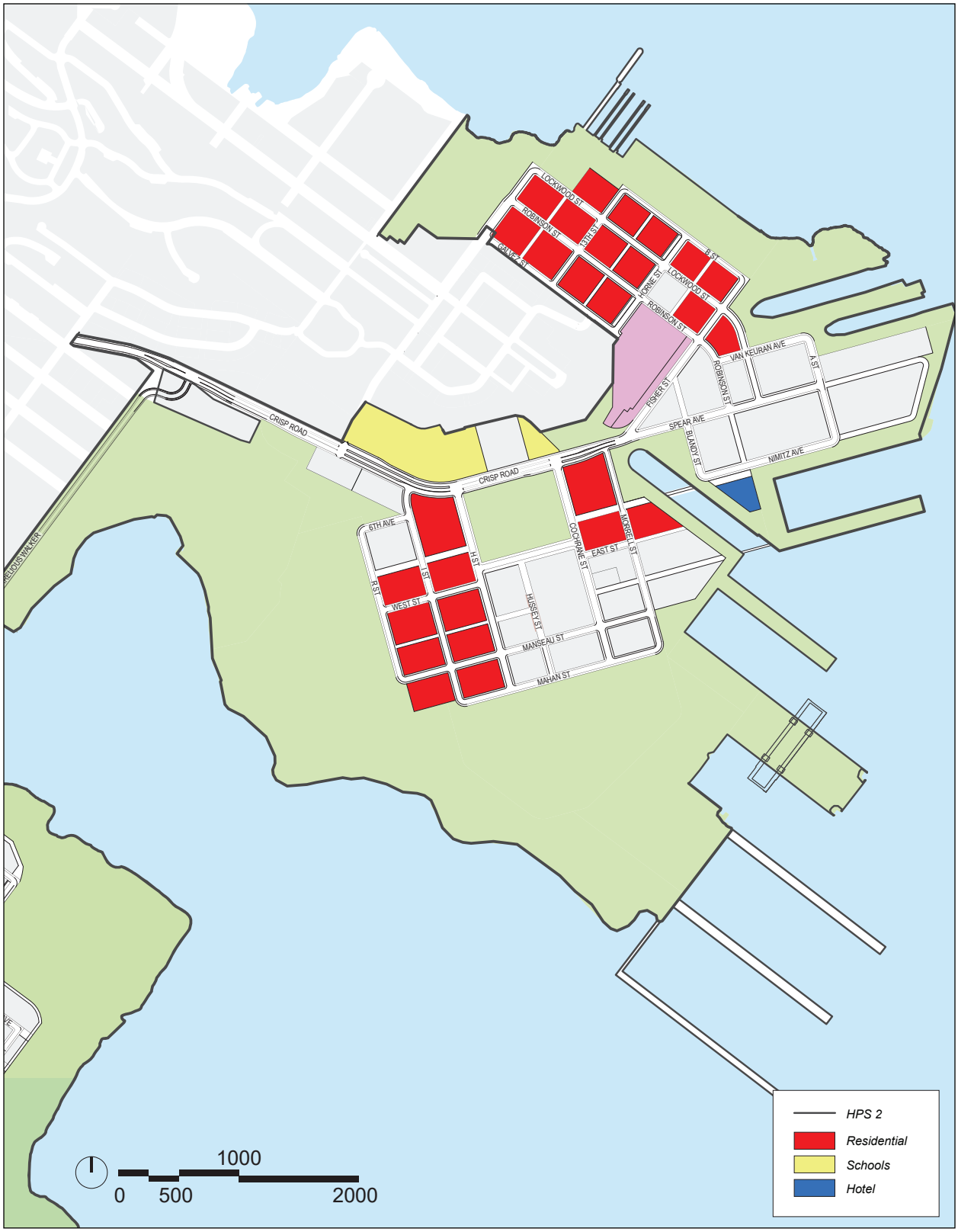
Equipment	*Typical Noise Level (dBA) 50 Feet from Source*	*Typical Noise Level (dBA) 100 Feet from Source*
Compactor	82	76
Concrete Mixer	85	79
Concrete Pump	82	76
Crane, Mobile	83	77
Dozer	85	79
Grader	85	79
Loader	85	79
Paver	89	83
Pile-driver (Impact)	101	95
Drill Rig Truck[a]	79	73
Roller	74	68
Scraper	89	83
Truck	88	82

SOURCE: FTA, *Transit Noise and Vibration Guidance Handbook*, May 2006.

NOTE:

[a] "Drill Rig Truck" noise level not found in FTA manual; sound level data from Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). Sound level data found online at https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm.

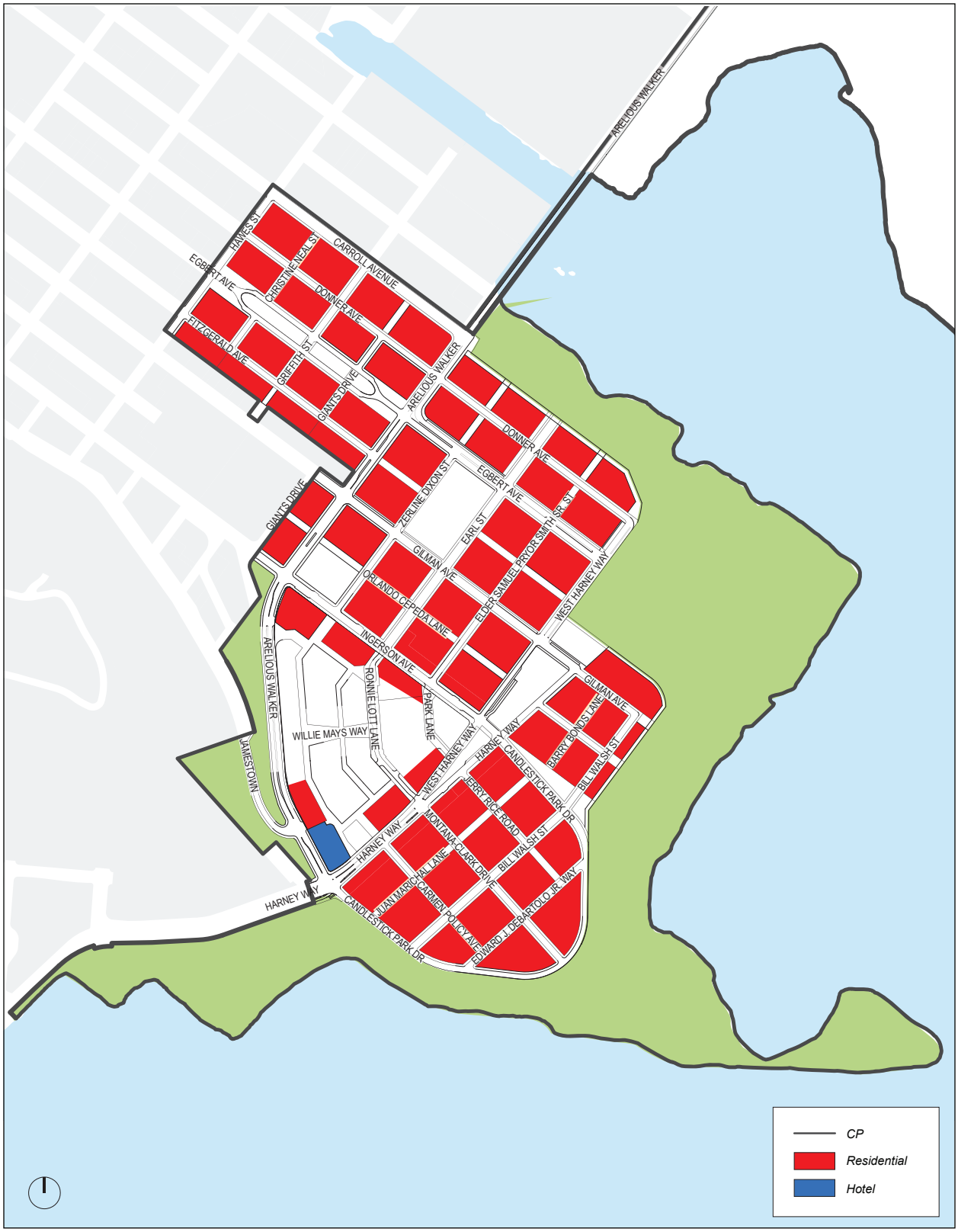
[67] U.S. Federal Transit Authority, *Transit Noise and Vibration Impact Assessment*, May 2006. Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf.



SOURCE: Ramboll. 2018; FivePoint, 2018.

FIGURE 37 Addendum 5 to the CP-HPS2 2010 FEIR

LOCATIONS OF NOISE-SENSITIVE RECEPTORS AT HPS2



SOURCE: FivePoint, 2018.

FIGURE 38 Addendum 5 to the CP-HPS2 2010 FEIR

LOCATIONS OF NOISE-SENSITIVE RECEPTORS AT CP

Construction Noise Impacts at Off-Site Receivers

Existing off-site noise-sensitive receivers near the HPS2 developments, such as the residences in HPS1, the surrounding Bayview and Hunters Point neighborhoods, including existing and proposed residences adjacent to the proposed Northside Park along Innes Avenue, could be exposed to elevated levels of noise during some construction activities.

During grading of the Northside Park, residences along Innes Avenue may experience noise levels of up to 91 dBA when both graders and scrapers operate at the same time, approximately 50 feet from these residences (nearest and worst-case construction noise levels).

At existing off-site residences and places of worship that are within 25 feet of the proposed Donahue Extension, or the Palou and Innes Avenue improvements, exposure to activity from graders and from pavement crushers could result in noise levels of up to 91 dBA under worst-case operating conditions.

At the geothermal borehole locations, drill rigs would be used to drill approximately 2,800 boreholes for the proposed geothermal heat exchange system. The 2010 FEIR did not assume installation of boreholes; noise emissions from this new construction activity has been included in assessment of the 2018 Modified Project Variant. The boreholes would be located in areas where environmental restrictions are minimal and where interference with other subsurface infrastructure are limited. Specifically, clusters of boreholes would be located below public parks and open space areas, playground or athletic fields, parking structures, and commercial buildings with ground floor or basement level parking. The borehole cluster locations would avoid other areas, as feasible, that have unsuitable administrative and/or sub-surface conditions, such as beneath public roads, State Trust lands, radiological restricted areas, and other areas of extensively restricted soil and groundwater contamination. The nearest off-site receptors that would be exposed to drilling noise are located to the north, at the Hunters Point neighborhood. Based on the noise levels presented in Table 16 and in Addendum 5 Appendix G Table G-1 (Project Related Construction Equipment) for a "drill rig truck," a drill rig truck operating 200 feet from a noise sensitive receptor would result in a noise level of 67 dBA.

The above construction noise levels would represent the worst-case construction noise levels that would be experienced at these off-site receivers. During most of the 2018 Modified Project Variant construction program, noise from construction activities, as received off site, would be lower as equipment operates farther from these receiving areas. In addition, all project-related construction equipment would be required to adhere to the noise limits identified in Section 2907, limiting individual, non-impact construction equipment noise to 80 dBA at 100 feet.

The equipment that would generate impact-type noise emissions identified in Table 16, and which are exempted from the noise limits provided in Section 2907 of the City's Municipal Code, include pile drivers. Note that DDC is considered an impact-type activity, however the impact from weight drops result in noticeable levels of vibration, but not noise. That is, weights generally land on soils that absorb the impact and sound of the weight drop (i.e., impact noise from dropping of a weight is

a low-level "thud" sound). Steady noise emissions from DDC is emitted at relatively low levels from mobile cranes that move and drop weights during DDC activities, and this activity has been included in the assessment of construction noise. Mobile cranes were evaluated in the 2010 FEIR, although not associated with DDC. Vibration emissions from DDC have been evaluated for the 2018 Modified Project Variant under Impact NO-2c.

A detailed summary of off-site construction impacts is found in Addendum 5 Appendix G Table G-2 (Construction-related Noise Results, by Activity and Area).

Construction Noise Impacts at On-Site Receivers

The 2018 Modified Project Variant would include additional on-site noise-sensitive receivers, including 802 new residential units, a 175-room hotel, and potentially schools, which may include live-in dormitories. The hotel could be occupied as early as 2022, and the schools, constructed under Sub-phase HP-01, may be occupied as early as 2021.

Depending on the location of the potential schools, the loudest construction activities would occur during use of pile drivers for installation of foundation piles. Pile driving would occur during development of structures and rough-in construction of the Shipyard Hillside Open Space and Green Room park developments. Pile driving activities at the Shipyard Hillside Open Space could be located as close as approximately 50 feet from a school and pile-driving activities at the Green Room could be located as close as approximately 150 feet from a school. Based on FTA noise levels for impact pile driving, the potential school use may be exposed to noise levels of 101 and 91 dBA, respectively. However, note that these sound levels would be lower as pile-driving equipment are located farther from the schools. As noted, impact equipment, such as noise from pile drivers, is not subject to the limits in Noise Ordinance Section 2907. However, noise from pile driving would be subject to the mitigation measures identified in the 2010 FEIR under MM NO-1a.2 (reduce noise during pile driving).

Residential units developed for the 2018 Modified Project Variant would be constructed in various phases. As units are developed, they may be exposed to construction noise from development of subsequent phases. Residential units are proposed within all sub-phases except Sub-phase HP-05, however the 175-room hotel to be located in Sub-phase HP-05 is considered a noise-sensitive receiving location. At all proposed residential units (with the exception of residential units constructed in Sub-phase HP-06) and the hotel, there is potential for noise impact during use of impact pile driving and heavy equipment operated during construction of adjacent sub-phases, constructed after residences or hotel units are occupied. As summarize in Table 16, noise from impact pile driving could reach 101 dBA at a distance of 50 feet, or as high as 107 dBA assuming a distance of 25 feet (similar to what was presented in the 2010 FEIR).

Construction activities, including abatement, demolition, grading, and structural finishes would result in noise levels from individual equipment that would range from between 82 dBA and 95 dBA at the nearest adjacent on-site noise-sensitive receivers. Of these activities using non-impact equipment,

grading is expected to result in the highest levels of construction noise, specifically when scrapers are used, resulting in a noise level of 95 dBA at distance of 25 feet. However, as noted above, sound levels during most construction activities would be lower as equipment are located farther from impacted residential area. Also, noise from standard construction equipment would be subject to the limits in Noise Ordinance Section 2907 and would be required to meet these standards, if necessary through the mitigation measures identified in the 2010 FEIR within MM NO-1a.1 (reduce noise during construction).

Construction of Tower A, which would be located adjacent to Tower B under the 2018 Modified Project Variant, could be completed up to 5 years before the completion of Tower B. Pile driving equipment are anticipated during construction of Tower B foundations, and could result in noise levels at Tower A of approximately 95 dBA from Tower B (based on a distance of approximately 100 feet between Towers A and B). Noise from pile driving would be subject to the mitigation measures identified in the 2010 FEIR under MM NO-1a.2.

A detailed summary of on-site construction impacts is found in Addendum 5 Appendix G Table G-2 (Construction-Related Noise Results, by Activity and Area). The impact would remain less than significant with implementation of the identified mitigation measures in MM NO-1a.1 and MM NO-1a.2.

Impact NO-2c: Construction at HPS Phase II would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before Project construction activity on adjacent parcels is complete. Although the Project's construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 & 2908 of the Municipal Code, vibration levels would be significant. ***[Criterion I.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

Construction-related vibration impacts that are disclosed in the 2010 FEIR would result primarily from pile driving activities, specifically when pile driving occurs within 50 feet of a building, and from heavy equipment such as trucks and bulldozers, when operating very near a structure or sensitive receiving location. The potential for vibration-related impacts from these activities would remain under the 2018 Modified Project Variant, and the mitigation measures that are referenced within Impact NO-2c would continue to apply, including MM NO-1a.1, MM NO-1a.2, and MM NO-2a. Under the 2018 Modified Project Variant, DDC, a construction technique not specifically analyzed in the 2010 FEIR, but identified by mitigation measure MM GE-5a as one of several techniques to reduce impacts related to liquefaction, could also have vibration impacts on structures as discussed below. The 2010 FEIR concluded vibration impacts would remain significant and unavoidable to off-site sensitive receptors even with implementation of all mitigation measures. Noted adjustments to MM NO-2a, specific to the 2018 Modified Project Variant, are described below.

Pile Driving

The 2018 Modified Project Variant would require the use of impact pile driving similar to what was disclosed and analyzed in the 2010 FEIR. Pile driving would be required for new development in the 2018 Modified Project Variant, such as buildings and shoreline improvements, and perhaps the water taxi docks and the pedestrian bridge, and/or pedestrian/bicycle bridges, depending on final design.

The potential for significant and unavoidable impacts relative to distance from a pile driving vibration source would be the same for the 2018 Modified Project Variant. Specifically, vibration from impact pile drivers would range from 103 VdB at 50 feet to 85 VdB at 100 feet. The threshold established in the 2010 FEIR is 80 VdB for vibration-related impacts at residences and buildings where people normally sleep and is based on infrequent events (less than 30 vibration events per day of the same source). To mitigate the potential for structural damage from vibration related to pile driving activities associated with the 2018 Modified Project Variant, MM NO-2a, as established in the 2010 FEIR, requires that vibration monitoring be conducted when impact pile driving occurs within 50 feet of new or existing structures. This mitigation measure would continue to apply for the proposed Addendum 5 revisions to the Project.

Deep Dynamic Compaction

The 2018 Modified Project Variant uses DDC as a means to densify soils in the project area to reduce the risk of liquefaction during an earthquake. As summarized by ENGEO, DDC "utilizes impact energy from a large weight free falling from a significant height to densify the ground. The weight is repeatedly dropped in a specific grid pattern at a defined drop height; the number of drop times at each location is determined based on using the principles of transforming potential energy to kinetic energy. At impact with the ground, the energy is transmitted at depth to densify loose material. The drop height and weight is initially determined by empirical formulas based on material types and the desired depth of improvement and then modified as appropriate during the process based on observed craters that form during the DDC process. Since the impact force is at the surface, the effective depth of improvement is typically limited to the upper 20 to 30 feet. The height and weight for the test section were selected by the ground improvement contraction, Hayward Baker."[68]

DDC currently is considered for most of the project area, including both HPS2 and CP, as a means to densify soils prior to construction of project buildings. DDC could generate high levels of vibration in the immediate vicinity of the compaction event, and there is potential for vibration impacts at existing and new structures. Distances at which vibrations from DDC may result in damage or perception are provided in Table 17 (Deep Dynamic Compaction Vibration Impact Distance Thresholds). Note that Table 17 details vibration levels in PPV, or peak particle velocity, and not VdB, as were evaluated in the 2010 FEIR and above for pile driving. PPV is often is used to evaluate the potential for temporary vibration impacts from construction-related activities.

[68] ENGEO Incorporated, *Evaluation of Deep Dynamic Compaction for Densification of Artificial Fill*, August 10, 2017, p. 4.

TABLE 17 DEEP DYNAMIC COMPACTION VIBRATION IMPACT DISTANCE THRESHOLDS

Building Category	*PPV (in/sec)*	*Min. Distance from DDC (feet)*
Reinforced-concrete, steel, or timber (no plaster)	0.5	125
Engineered concrete or masonry (no plaster)	0.3	150
Non-engineered timber and masonry buildings	0.2	225
Buildings extremely susceptible to vibration damage	0.12	275
Perception in occupied building	0.04	400

SOURCE: ENGEO Incorporated, *Evaluation of Deep Dynamic Compaction for Densification of Artificial Fill*, August 10, 2017, Table 3.3.3-1 (Vibration Impacts), p. 9.

As noted in Table 17, the distance at which vibration impacts may occur from DDC depends on the materials used to construct the impacted building and the distance between the building and the locations where DDC would be used. Where DDC is proposed closer to existing or proposed structures than the distances identified in Table 17, MM NO-2a is proposed to be modified to identify measures that would be implemented to protect structures from structural damage caused by DDC-related vibration impacts.

In areas where soil compaction is required, but DDC is not proposed, alternate methods of compaction would be implemented. A list of alternate compaction methods is summarized in Section III.L (Geology and Soils) on pp. III.L-41 to III.L-42 as mitigation measure MM GE-5a. As provided in Section III.L, compaction methods, such as vibro-compaction, stone columns, soil-cement columns, and deep displacement grout columns do not require use of excessive vibration-generating equipment or activities, and no structural damage would be anticipated at nearby structures. The impact would remain significant and unavoidable even with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

MM NO-2a: Pre-construction Assessment to Minimize Pile Driving and Deep Dynamic Compaction Impacts. The Project Applicant shall require its geotechnical engineering contractor to conduct a pre-construction assessment of existing subsurface conditions and the structural integrity of nearby buildings subject to pile driving and deep dynamic compaction (DDC) impacts prior to receiving a building permit. The building surveys will review existing conditions and confirm whether fractures in building footings or walls existed prior to pile driving and/or DDC activities.

If recommended by the geotechnical engineer, for structures or facilities within 50 feet of pile driving, the Project Applicant shall require groundborne vibration monitoring of nearby structures. Such methods and technologies shall be based on the specific conditions at the construction site such as, but not limited to, the following:

- Pre-pile driving surveying of potentially affected structures
- Underpinning of foundations of potentially affected structures, as necessary

- The construction plan shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of an excavation. Monitoring results shall be submitted to DBI. In the event of unacceptable ground movement, as determined by DBI inspections, all pile driving work shall cease and corrective measures shall be implemented. The pile driving program and ground stabilization measures shall be ~~reevaluated~~ reviewed and approved by ~~DBI~~OCII.

For DDC work, the Project Applicant shall prepare and implement a construction plan that includes a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of DDC activity. Structures in the vicinity of DDC work shall be defined as reinforced-concrete, steel, or timber structures within 125 feet, engineered concrete or masonry structures within 150 feet, non-engineered timber and masonry structures within 225 feet, or other structures that are extremely susceptible to vibration damage within 275 feet of DDC activities as determined by the Project Applicant's geotechnical engineer or structural engineer. The DDC program shall be evaluated and approved by DBI and results of the monitoring program shall be submitted to OCII. In the event of unacceptable ground movement, as determined by DBI inspection and review, all DDC work shall cease and corrective measures shall be implemented. A geotechnical engineer approved by OCII shall determine which of the following ground stabilization measures or alternate measures would be necessary to avoid structural impacts related to DDC activities:

- Underpinning of foundations of potentially affected structures, as necessary to avoid structural impacts
- If deemed necessary by the geotechnical engineer, based either on proximity of DDC to a structure and/or on potential for damage to a structure, a cutoff trench shall be installed between the DDC activity and the structure. The cutoff trench should be at least 10 feet deep and 2 feet wide.[69] The trench should be long enough to effectively shield the structure from DDC vibrations.

Impact NO-3: Construction activities associated with the Project would result in a substantial temporary or periodic increase in ambient noise levels. ***[Criterion I.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable with Mitigation	Significant and Unavoidable with Mitigation

Noise generated during construction of the 2018 Modified Project Variant would result in substantial increases in the ambient noise environment at both off-site and on-site receivers when construction equipment operate nearest these noise-sensitive uses. Construction noise levels would vary by construction equipment type and proximity to nearby noise-sensitive uses. As identified in Impact NO-1b, noise from construction activities may substantially exceed the existing ambient sound levels that are summarized in 2010 FEIR Table III.I-3 (Existing Day-Night Noise Levels [L_{dn}]). In some locations, use of multiple equipment at any one time could result in combined noise levels

[69] ENGEO Incorporated, *Potential Constraints on Implementation of Deep Dynamic Compaction*, December 14, 2017, p. 1.

that would exceed those identified in Table 16. The highest level of construction noise for the 2018 Modified Project Variant are anticipated to occur from pile driving activities, as was similarly concluded in the 2010 FEIR.

Construction of the 2018 Modified Project Variant is anticipated to last approximately 14 years. Off-site receivers that are exposed to multiple years of construction, even if sound level from construction vary over time, may experience increased sensitivity and thus perceived noise impacts, due to the length of the construction program.

As in the 2010 FEIR, noise mitigation measures MM NO-1a.1, MM NO-1a.2, and MM NO-2a (as proposed for revision in Addendum 5) have been identified to reduce overall construction noise, and the potential for noise impact at nearby off-site and on-site noise-sensitive receivers but the impact to human receptors would remain significant and unavoidable even with mitigation. As previously mentioned, while the 2018 Modified Project Variant proposes a modification of the land use program, it would not place noise-sensitive receptors closer to sources of construction noise and vibration than were evaluated in the 2010 FEIR; nonetheless, the impact would remain significant and unavoidable even with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

> **MM NO-2a, Pre-construction Assessment to Minimize Pile Driving Impacts**, is provided in full on p. 195 under Impact NO-2c.

Impact NO-4: Implementation of the Project, including the use of mechanical equipment or the delivery of goods, would not expose noise-sensitive land uses on or off site to noise levels that exceed the standards established by the City. ***[Criterion I.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

Utility Systems

Sources of operational noise that were identified in the 2010 FEIR included mechanical cooling systems (i.e., HVAC), deliveries of retail and commercial products and activities such as trash collection. As stated in the 2010 FEIR, noise levels from these activities and systems would be similar throughout the entire Project site on a daily basis, and the daily noise environment would be typical of an urban area with average noise levels ranging between 60 and 70 dBA.

The 2018 Modified Project Variant would include features not previously evaluated in detail in the 2010 FEIR. Modifications include three central energy plants (CEPs) to provide heating and cooling for the entire district. The CEPs would include essential plant and operational system infrastructure, including circulation pumps, chillers, and heat exchangers associated with the geothermal HVAC system, and lithium ion batteries associated with the electricity storage system. It is important to note that all components of the CEPs would be located entirely within each building footprint where

a CEP is housed, and screened to avoid being visible. The CEPs would have acoustic treatment applied to ensure noise does not exceed 40 dBA at adjacent, nearby noise-sensitive outdoor use areas, following a detailed noise assessment to be completed upon final design.

Electric power for the utilities network of the 2018 Modified Project Variant would be provided by solar photovoltaic (PV) systems located throughout the 2018 Modified Project Variant to supplement SFPUC's power supply to the site. Power generated by the PV system would be stored in batteries. Operation of PV panels and batteries are not anticipated to generate noise that would be audible at any nearby noise-sensitive area. Occasional noise may be generated from cleaning of PV panels, possibly through use of pressure washers. Noise from pressure washers would include noise from gasoline-powered motors and from water striking the panels. These activities, however, would be infrequent and would be exempted from the limits in Noise Ordinance Section 2909 Appendix C (Exceptions), identified as "landscaping and property maintenance equipment."

Battery storage within the 2018 Modified Project Variant would replace the need for emergency generators assumed as part of the 2010 FEIR analysis. The battery storage would reduce the potential for noise generated during emergency power use and during testing of generators. Batteries would be stored within CEPs enclosed within parking structures and in other buildings. Ancillary equipment supporting battery storage would include, among others, HVAC units to maintain an adequate climate within the battery storage room. HVAC units would be required to operate in compliance with Noise Ordinance Section 2909.

Use of geothermal heating would negate the need for natural-gas-fired boilers, therefore removing the potential for noise emissions from boiler exhausts. The principal source of noise associated with the geothermal heating system is related to electric pumps that pump water through a closed-loop system, including pumps for a network of vertical boreholes extending several hundred feet underground, and pumps to pump the heated water through the distribution system to each of the project buildings. All electric pumps would be located within the CEPs, and noise from this equipment would be shielded by the acoustical treatment described above. All piping would be located underground; therefore, noise from fluid moving through these pipes would not be audible.

Heating and cooling distribution to the project buildings would be provided by fluid pumped from the geothermal boreholes, through the CEP, to the buildings. Water-water or water-air heat exchangers would provide hot and cold water, as well as comfort heating and cooling. Heat exchangers, which could include HVAC systems, are expected to be located on building rooftops, and would be subject to Noise Ordinance Section 2909.

The modifications also include an on-site recycled water system capable of treating 976,000 gallons of water per day, diverting water from the sanitary sewer system for treatment using membrane bioreactor (MBR) technology. The treated water would be used for irrigation, toilet flushing, and other nonpotable uses. The recycled water system would be located within a central treatment plant, to be located southwest of Crisp Road and north of project 6th Avenue, as illustrated in Section I (Project

Description) Figure 18 (Location of Recycled Water Facility), p. 48. The treatment plant would include an anoxic treatment facility, aerobic tanks, membrane filters, OV/Ozone disinfection, storage tanks, a water return distribution system, and a thermal recovery system. All blowers, pumps, treatment systems, and process controls would be located inside the treatment building, a completely enclosed building with a 17-foot-tall ceiling, which would result in a building of approximately 20 feet to 35 feet in height and range in footprint area between 10,000 and 30,000 square feet. Outside of the treatment building would be located various tanks, but no pumps or other sources of noise.

Noise from equipment inside the recycled water treatment building is anticipated to result in exterior noise levels that are at or below existing ambient conditions in the immediate vicinity of this building. The recycled water treatment building would be required to comply with Noise Ordinance Section 2909(b), which limits increases in noise levels at adjacent property lines to less than 8 dBA, and with Noise Ordinance Section 2909(d), which would require control of noise so that interior noise levels at the nearest residential receptor are less than 45 dBA.

As stated in the 2010 FEIR, large HVAC systems associated with the residential, retail and commercial buildings could result in noise levels that average between 50 and 65 dBA L_{eq} at 50 feet from the equipment. HVAC systems associated with the heat exchange system described above may generate similar or lower levels of noise. Noise from mechanical equipment associated with operation of the 2018 Modified Project Variant would be required to comply with California Building Code Title 24 requirements pertaining to noise attenuation, requiring that residential units achieve an interior noise level of 45 dBA during nighttime hours. HVAC equipment would not be anticipated to produce noise levels that would be 5 dBA above the ambient noise level, the threshold under Noise Ordinance Section 2909(a).

Servicing

The 2018 Modified Project Variant, as with the 2010 FEIR, would include servicing of commercial and retail operations associated with the project including delivery of goods and food stuffs, as well as refuse pick up for both the commercial and residential project components. The 2018 Modified Project Variant would include residential units, a hotel, and two schools that also would require servicing of goods and food stuffs.

Delivery of goods and food stuffs would be provided by truck delivery. Noise from truck operations, including diesel engine noise and backup alarms, would be similar to what was evaluated in the 2010 FEIR, and would be temporary, typically lasting no more than 5 minutes. As with the 2010 FEIR, loading docks associated with the 2018 Modified Project Variant would be screened from sensitive receptors both on site and off site by intervening structures and design of the loading spaces. In addition, as noted in the 2010 FEIR, noise generated by authorized City of San Francisco refuse collectors would be limited to 75 dBA per Noise Ordinance Section 2904.

In general, noise associated with servicing residential, hotel, schools, retail and commercial facilities would be similar to what was identified in the 2010 FEIR, comparable to a typical urban environment.

Transit

The 2018 Modified Project Variant would include extensions to four existing MUNI-bus lines, including Route 44-O'Shaughnessy, Route 48-Quintara, BRT Route 28R-19th, and Route 24-Divisidero. Buses traveling along these routes would access the 2018 Modified Project Variant transit center, located on the north side of Spear Avenue, near Dry Dock 2. Buses would drive along new on-site roadways, primarily along two main routes: the North Transit Route, from Innes Avenue to Donahue Street to Lockwood Street to the new transit center (including the 44-O'Shaughnessy, 48-Quintara, and Hunters Point Express routes), and the South Transit Route from Palou Avenue to Crisp Road to Spear Avenue to the new transit center (including 24-Divisadero and San Francisco Rapid Transit routes).

On-site traffic noise from the proposed transit line extensions was evaluated to determine the potential for impacts at future on-site noise-sensitive receiving locations (residences). On-site travel speeds were assumed at 30 mph. Transit noise modeling was completed using the same noise model described in Impact NO-6, the FHWA TNM Lookup tool, version 2.1 (TNM Lookup). Hourly L_{eq} data from TNM Lookup were converted to L_{dn} using the methodology summarized in Impact NO-6.

Future L_{dn} levels along the North Transit route are anticipated to reach up to 62.2 dBA at the nearest residential receivers, assumed to be as near as 30 feet to the center of the roadway at Donahue Street. Actual sound levels may be lower if actual residential setback are farther, or if transit does not reach speeds of 30 mph along this stretch of road.

Future L_{dn} levels along the South Transit route are anticipated to reach up to 60.0 dBA at the nearest residential receivers, assumed to be as near as 50 feet to the center of the roadway at Crisp Road. Actual sound levels may be lower if actual residential setbacks are farther, or if transit does not reach speeds of 30 mph along this stretch of road.

Noise from transit activity may exceed general plan compatibility criteria for residential use at locations nearest the north and south transit routes. However, noise impacts identified above would be at the exterior use areas of the affected residences (e.g., balconies, if applicable). New residential units would be required to adhere to Title 24 noise insulation standards, ensuring indoor noise levels do not exceed 45 dBA L_{dn} with window and doors closed.

Indoor Noise Environments: Noise-Sensitive Uses

Noise-sensitive uses associated with the 2018 Modified Project Variant include residential units, a hotel, and schools. At all locations where people may reside or sleep, such as residential units, the hotel, and school residences, interior noise levels are required to comply with California Building Code Title 24 requirements pertaining to noise attenuation, requiring that interior noise levels do not exceed 45 dBA L_{dn}, and Noise Ordinance Section 2909, which limits noise from fixed sources, as received at interior sleeping or living spaces, to 45 dBA during nighttime hours. There are no major sources of nighttime noise expected as part of the 2018 Modified Project Variant, and future ambient

noise levels are expected to be typical of an urban environment. Further, the 2018 Modified Project Variant would not exacerbate noise conditions for future residents relative to the 2010 FEIR.

The impact would remain less than significant, and no mitigation would be required.

Impact NO-5: Implementation of the Project would not generate or expose persons on or off site to excessive groundborne vibration. ***[Criterion I.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2018 Modified Project Variant does not introduce new operational activities or equipment that would expose persons, either on or off site, to excessive groundborne vibration. As summarized under Impact NO-4, operational equipment associated with 2018 Modified Project Variant CEPs and related infrastructure would be located inside the CEP buildings, and shielded from exposure to sensitive receivers. Further, pumps, blowers, and other equipment associate with the CEPs would not generate substantial levels of vibration, even within the CEP buildings.

The 2018 Modified Project Variant also would include trucks for deliveries and servicing of retail and other commercial facilities, the hotel, and schools. In addition, buses would be present, accessing the project's proposed transit center located on the north side of Spear Avenue, near Dry Dock 2. The transit center would service four existing MUNI-bus lines, including Route 44-O'Shaughnessy, Route 48-Quintara, BRT Route 28R-19th, and Route 24-Divisidero.

In general, and as described in the 2010 FEIR, vibration levels from trucks and buses are relatively low and generally consistent with existing vibration levels in the project area, as well as what would be expected in the project during operation of the 2018 Modified Project Variant. Vibration from trucks and buses would be well below the FTA vibration impact criteria of 80 VdB for human annoyance, as described in the 2010 FEIR, and below the Caltrans perceptibility standards, as defined in Table 16. No other substantial sources of vibration are anticipated with the 2018 Modified Project Variant. The impact would remain less than significant, and no mitigation would be required.

Impact NO-6: Operation of the Project would generate increased local traffic volumes that could cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes. ***[Criterion I.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Significant and Unavoidable	Significant and Unavoidable

The 2018 Modified Project Variant would not change the 2010 FEIR's findings of significant and unavoidable impact with respect to operational traffic noise in existing residential areas along the major Project site access routes. Additionally, the operational traffic noise cumulative impact conclusions would similarly not be altered.

The 2010 FEIR documented a significant increase in traffic noise at selected area roadways due to project-related traffic volume increases. The 2010 FEIR analysis was based on the FTA noise impact criteria that evaluate the existing and future noise environments, and allowed increases in traffic noise based on comparisons between future baseline (i.e., 2030 without project) and future baseline plus project, as well as existing and existing plus project conditions.

Similar to the traffic impact discussion in the 2010 FEIR, the 2018 Modified Project Variant would add to existing traffic volumes along roadways in the project vicinity. Project-related traffic volumes would increase slightly when compared to the 2010 FEIR due to the addition of residential units, retail spaces, and schools, as well as additional parking capacities. Traffic Report Table 2 specifically compares the 2018 Modified Project Variant to the 2010 Project and the R&D Variant (Variant 1) in terms of both vehicle trips and transit trips.

The 2010 FEIR evaluated impacts along ten roadway segments, including near the Candlestick Point and the Hunters Shipyard regions of the 2010 FEIR study area. For the 2018 Modified Project Variant, a smaller set of intersections was evaluated, focusing on roadways in the immediate vicinity of the 2018 Modified Project Variant area that would be most affected by Project-related changes in traffic compared with the 2010 FEIR. The roadway segments evaluated for this project included Innes Avenue south of Earl Street, Palou Avenue east of Third Street, Gilman Avenue east of Third Street, Jamestown Avenue north of Harney Way, and Harney Way west of Jamestown Avenue.

The following impact analysis compares traffic noise based on existing and future traffic volumes identified in the 2010 FEIR (i.e., based on 2009 existing data, and on 2030 future baseline data) with traffic noise based on project-related traffic volumes identified in the 2018 Modified Project Variant Traffic Report. Traffic Noise levels were calculated using the FHWA Traffic Noise Model (TNM) Lookup tool, version 2.1 (TNM Lookup).[70] Traffic compositions were assumed to be 97 percent light-duty vehicles, 2 percent medium duty vehicles, and 1 percent heavy duty vehicles, based on existing uses in the project area. The 2018 Modified Project Variant was conservatively assumed to result in similar future traffic compositions along area roadways. Existing area speed limits were derived through site observations and/or though review of Google Earth Street View. Setback distances from roadway centerline to the nearest affected noise-sensitive receiver were based on the same distance setbacks provided in the 2010 FEIR. A detailed summary of traffic data used for this assessment is provided in Addendum 5 Appendix G Table G-3 (Traffic Volumes, Composition, and Speeds Assumed for Operational Impact Assessment).

Buses were included in the traffic noise assessment for 2018 Modified Project Variant traffic volumes. Existing transit volumes were included in existing and future traffic scenarios.[71] As noted,

[70] Note that the 2010 FEIR employed the full version of the FHWA TNM noise model, Version 2.5 (TNM 2.5), which is based on the same traffic noise calculation algorithms that are used in TNM Lookup. The 2018 Modified Project Variant employed TNM Lookup in lieu of TNM 2.5 because TNM Lookup allowed for a more streamlined assessment of traffic noise through increased flexibility and ease of use during assessment of traffic data.

[71] San Francisco Municipal Transportation Agency, Muni System Map. Available at https://www.sfmta.com/maps/muni-system-map, accessed December 20, 2017.

the 2018 Modified Project Variant would include extension of four existing MUNI-bus lines, including Route 44-O'Shaughnessy, Route 48-Quintara, BRT Route 28R-19th, and Route 24-Divisidero.

Afternoon peak-hour L_{eq} traffic noise levels, as determined using the TNM Lookup model, were converted to 24-hour L_{dn} values using the same procedure identified in the 2010 FEIR. That is, L_{dn} values were computed through comparison of peak-hour L_{eq} noise model data and the nearest long-term sound level measurement data. The relative change in existing diurnal sound levels over a 24-hour period was used to calculate hourly L_{eq} over a 24-hour period, and then to compute the L_{dn}. The long-term measurement data and locations are documented in the 2010 FEIR Appendix I1 (Wilson Ihrig San Francisco 49ers Stadium Operational Noise Study, October 15, 2009).

The 2010 FEIR applied FTA noise impact criteria to determine traffic noise impacts at nearby receivers. Therefore, these same criteria were applied for the 2018 Modified Project Variant, applying the modeling methods described above. Results of this modeling assessment, compared with 2010 FEIR impact determinations, are provided in Table 18 (Modeled Traffic Noise Levels Compared with the 2010 FEIR). A summary of cumulative impacts, compared with 2010 FEIR impact determinations, is provide in Table 19 (Modeled Traffic Noise Levels Compared with the 2010 FEIR, Cumulative).

The FTA impact criteria (i.e., allowable increase) are based on either existing sound levels, or future 2030 baseline sound levels (as identified in Table 18 and Table 19, respectively). Noise modeling results of existing sound levels and future 2030 baseline sounds levels, for the *same* roadway segments identified in the 2010 FEIR, yielded generally higher sound levels for the 2018 Modified Project Variant, and may be due to differing traffic compositions. Regardless, the 2018 Modified Project Variant's higher existing and future baseline sound levels result in lower (i.e., more stringent) FTA impact criteria at four of the five roadways segments identified in Table 18. In addition, Project-related noise is predicted to increase more than was assumed in the 2010 FEIR at the three roadway segments identified in Table 18 (due to revised project-related traffic projections), resulting in a significant impact along roadway segments where the previous analysis indicated there would not be a significant impact. Therefore, more roadway segments would be expected to experience noise impacts than predicted in the 2010 FEIR under Project conditions (see Table 18). Impact NO-6, however, broadly found that there would be a significant and unavoidable permanent noise impact "in existing residential areas along the major Project site access routes," rather than individual locations. Additionally, the 2030 buildout date for the Project, which was used above in Table 18 to identify 2018 Modified Project Variant project-level contributions to the noise impacts at selected locations along the Project access routes, coincides with the cumulative buildout year of 2030. As shown in Table 19, below, all of the selected study locations were identified in the 2010 FEIR and in Addendum 5 as significant and unavoidable under the 2030 cumulative plus Project scenario.

TABLE 18 MODELED TRAFFIC NOISE LEVELS COMPARED WITH THE 2010 FEIR

Roadway[a]	*Existing Noise Level*	*2030 Without Project (as modeled in 2018)*	*2030 With Project (as modeled in 2018)*	*2018 MPV Increase over Future Background (as modeled in 2018)*	*Allowable Increase*[b]	*2018 MPV Significant Impact?*	*2010 Project Increase over Future Background (as modeled in 2010)*	*2010 Project Significant Impact?*
Innes Avenue south of Earl Street[c]	65.9	74.6	76.5	1.9	0	**Yes**	N/A	N/A
Palou Avenue east of Third Street	61.9	65.5	67.3	1.8	1	**Yes**	0.5	No
Gilman Avenue east of Third Street	61.4	64.3	68.0	3.7	2	**Yes**	4.0	**Yes**
Jamestown Avenue north of Harney Way	58.3	64.9	66.6	1.7	1	**Yes**	5.7	**Yes**
Harney Way west of Jamestown Avenue	57.1	67.8	70.6	2.8	1	**Yes**	0.6	No

NOTES:

1. All sound levels are L_{dn}, dBA.
2. Noise modeling was completed for the 2010 FEIR and separately for the 2018 Modified Project Variant. This table includes a summary of results from both modeling studies, indicated as either "as modeled in 2010" or "as modeled in 2018."
3. Noise levels calculated for the 2018 Modified Project Variant were computed using TNM Lookup based on traffic volumes provided within the Project traffic assessment report. L_{dn} computed through comparison with existing sound level measurements reported in 2010 FEIR Appendix I1 (Wilson Ihrig San Francisco 49ers Stadium Operational Noise Study, October 15, 2009). Note that traffic noise levels calculated for the 2010 FEIR were computed using the FHWA Traffic Noise Model, Version 2.5, which is based on the same traffic noise calculation algorithms that are used in TNM Lookup.
4. Traffic composition for the 2018 Modified Project Variant assumes 97 percent light duty vehicles, 2 percent medium duty vehicles, and 1 percent heavy duty vehicles.

a. The 2010 FEIR evaluated impacts along ten roadway segments, including near the Candlestick Point and the Hunters Shipyard regions of the 2010 FEIR study area. For the 2018 Modified Project Variant, the analysis focuses on roadways in the immediate vicinity of the Project area (CP and HPS2) that would be most affected by changes in Project-related traffic when compared with the 2010 FEIR.

b. Allowable increase thresholds based on FTA criteria specified in Table III.1-9 of the Transit Noise Impact and Vibration Assessment, May 2006.

c. Previous study included "Innes north of Carroll Avenue." However, because these two streets do not meet, Ramboll analyzed the next closest intersection on Innes to the Hunter's Point Development.

As noted in Table 19, cumulative plus Project increases in traffic noise over existing conditions range from 5.4 to 13.5 dBA. Cumulative increases in traffic noise over existing conditions is approximately consistent with the range of increases identified for most roadway segments identified in the 2010 FEIR. For Harney Way west of Jamestown Avenue, the cumulative noise increase over existing conditions increased from 7.0 dBA in the 2010 FEIR to 13.5 dBA for 2018 Modified Project Variant. The higher increase in noise is due to a combination of increases in cumulative background traffic and Project-related traffic above what was predicted for the 2010 FEIR.

TABLE 19 MODELED TRAFFIC NOISE LEVELS COMPARED WITH THE 2010 FEIR, CUMULATIVE

Roadway[a]	*Existing Noise Level*	*2030 Without Project (as modeled in 2018)*	*2030 With Project (as modeled in 2018)*	*2018 MPV Cumulative + Project Increase over Existing (as modeled in 2018)*	*Allowable Increase*[b]	*2018 MPV Significant Impact?*	*2010 Cumulative + Project Increase over Existing (as modeled in 2010)*	*2010 Significant Cumulative Impact?*
Innes Avenue south of Earl Street[c]	65.9	74.6	76.5	10.6	1	**Yes**	7.6	**Yes**
Palou Avenue east of Third Street	61.9	65.5	67.3	5.4	2	**Yes**	5.3	**Yes**
Gilman Avenue east of Third Street	61.4	64.3	68.0	6.6	2	**Yes**	6.9	**Yes**
Jamestown Avenue north of Harney Way	58.3	64.9	66.6	8.3	3	**Yes**	9.8	**Yes**
Harney Way west of Jamestown Avenue	57.1	67.8	70.6	13.5	3	**Yes**	7.0	**Yes**

NOTES:

1. All sound levels are L_{dn}, dBA.
2. Noise modeling was completed for the 2010 FEIR and separately for the 2018 Modified Project Variant. This table includes a summary of results from both modeling studies, indicated as either "as modeled in 2010" or "as modeled in 2018."
3. Noise levels calculated for the 2018 Modified Project Variant were computed using TNM Lookup based on traffic volumes provided within the Project traffic assessment report. L_{dn} computed through comparison with existing sound level measurements reported in 2010 FEIR Appendix I1 (Wilson Ihrig San Francisco 49ers Stadium Operational Noise Study, October 15, 2009). Note that traffic noise levels calculated for the 2010 FEIR were computed using the FHWA Traffic Noise Model, Version 2.5, which is based on the same traffic noise calculation algorithms that are used in TNM Lookup.
4. Traffic composition assumes 97 percent light duty vehicles, 2 percent medium duty vehicles, and 1 percent heavy duty vehicles

a. The 2010 FEIR evaluated impacts along ten roadway segments, including near the Candlestick Point and the Hunters Shipyard regions of the 2010 FEIR study area. For the 2018 Modified Project Variant, the analysis focuses on roadways in the immediate vicinity of the Project area that would be most affected by changes in Project-related traffic when compared with the 2010 FEIR.

b. Allowable increase thresholds based on FTA criteria specified in Table III.1-9 of the Transit Noise Impact and Vibration Assessment, May 2006.

c. Previous study included "Innes north of Carroll Avenue." However, because these two streets do not meet, Ramboll analyzed the next closest intersection on Innes to the Hunter's Point Development.

Note that the 2010 FEIR states that "Project operations would create a substantial permanent increase in traffic noise levels that would affect existing and future residential uses along all Project site access roads" (2010 FEIR, p. III.I-53). Thus, a conclusion of significant unavoidable impacts for residential uses along all Project site access roads was identified in the 2010 FEIR and that conclusion remains unchanged with the 2018 Modified Project Variant. Additionally, there would continue to be no feasible mitigation measures to reduce the level of this impact.

Impact NO-8: Implementation of the Project would not expose residents and visitors to excessive noise levels from flights from San Francisco International Airport such that the noise would be disruptive or cause annoyance. ***[Criteria I.e, I.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR describes the location of the project as being well outside of the San Francisco International Airport's (SFO) existing and foreseeable future 65 dBA CNEL noise contour. The 65 dBA CNEL noise contour is described by the Federal Aviation Authority (FAA) as the impact threshold level for noise-sensitive land use such as residences.

New buildings constructed for the 2018 Modified Project Variant, including where people may sleep (residences, hotel, school dormitories), must be constructed according to the Title 24 Noise Insulation Standards. These standards require that interior spaces do not exceed 45 dBA L_{dn} (or CNEL, depending on which descriptor is used in the applicable general plan noise element) in any habitable room, with all doors and windows closed. Therefore, proposed noise-sensitive uses where aircraft may be audible would require sufficient noise insulation to meet the Title 24 requirements.

In summary, there are no changes to the Project that would require revisions of the 2010 FEIR; accordingly, the impact would remain less than significant, and no mitigation would be required.

II.B.9 Cultural Resources and Paleontological Resources

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
5.	**Cultural Resources.** Would the project:					
J.a	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5, including those resources listed in Article 10 or Article 11 of the *San Francisco Planning Code*?	2010 FEIR p. III.J-33 (Impact CP-1b); Addendum 1 p. 39; Addendum 4 p. 42	No	No	No	MM CP-1b.1, MM CP-1b.2
J.b	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	2010 FEIR p. III.J-39 (Impact CP-2b); Addendum 1 p. 39; Addendum 4 p. 42	No	No	No	MM CP-2a
J.c	Disturb any human remains, including those interred outside of formal cemeteries?	2010 FEIR p. III.J-35 (Impact CP-2a); Addendum 1 p. 39; Addendum 4 p. 42	No	No	No	MM CP-2a
J.d	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature as defined in CEQA Guidelines Section 15064.5 (3)?	2010 FEIR p. III.J-41 (Impact CP-3b); Addendum 1 p. 39; Addendum 4 p. 42	No	No	No	MM CP-3a

Changes to Project Related to Cultural Resources and Paleontological Resources

The 2018 Modified Project Variant would include new construction in and around Dry Dock 4, an individually eligible historical resource. These Project changes, analyzed below, include construction of Water Room, including seating surrounding Dry Dock 4, two bridges (including the Water Room Bridge and Eastern Bridge), and a water taxi service at Dry Dock 4.

Comparative Impact Discussions

Impact CP-1b: Construction at HPS Phase II could result in a substantial adverse change in the significance of an historical resource. ***[Criterion J.a]***

	2010 CP-HPS2 FEIR	2010 CP-HPS2 FEIR Addendum 5
Significance after Mitigation	Significant and Unavoidable with Mitigation	Less than Significant with Mitigation

The 2018 Modified Project Variant would include new construction in and around Dry Dock 4, an individually eligible historical resource. These Project changes include construction of Water Room, including seating surrounding Dry Dock 4, two bridges including the Water Room Bridge and

Eastern Bridge, and a water taxi ramp at Dry Dock 4. These Project changes are currently conceptual and their design is under development. However, the Project changes would not adversely impact Dry Dock 4 because the Project would adhere to the Secretary of the Interior's Rehabilitation Standards (SOI Standards) and would, thereby, protect the historic significance of Dry Dock 4. Project conformance with the SOI Standards would be governed by Preservation Guidelines that have been prepared by a qualified preservation consultant and would be required by the proposed amended DDA. The Preservation Guidelines are supported by substantial information on the history, eligibility, character-defining features, and condition of Dry Dock 4, and are provided in Addendum 5 Appendix H (Historic Resources Memorandum). Therefore, with incorporation of the Preservation Guidelines as a Project Design Feature, the Project would conform to the SOI Standards and would have a less-than-significant impact on Dry Dock 4, and after Project completion, the historic significance of Dry Dock 4 would be retained and would be materially unimpaired.

As described on 2010 FEIR p. III.J-21, two historical resources are situated within the vicinity of the HPS2 project site, including the Hunter's Point Commercial Dry Dock and Naval Shipyard Historic District (District), and Dry Dock 4 that is an individual resource.

The District, described in greater detail in Addendum 5 Appendix H, consists of 11 contributing buildings, structures, and objects associated with the area's "transition from early commercial dry-dock operation to high tech naval repair and Radiological research" (Circa Historic Property Development, *Hunter's Point Commercial Dry Dock and Naval Shipyard Historic District DPR Form*, October 31, 2008).

Dry Dock 4 and six buildings and structures in the District were previously determined eligible for the National Register of Historic Places (National Register) by consensus through the Section 106 process and are, therefore, automatically listed in the California Register of Historical Resources by act of law (Bonnie I. Baumberg, Urban Programmers, *Historical Overview of Hunters Point Annex, Treasure Island Naval Base and Descriptions of Properties that Appear to Qualify for Listing in the National Register of Historic Places*, 1988; Letter, Louis S. Wall, Department of the Navy to Lee Keatings, Advisory Council on Historic Preservation, October 15, 1998—findings of May 29, 1998, letter from SHPO to Navy are stated in this letter). Later, five additional structures were identified as contributors to the District in the 2008 survey.

Of these, only Dry Dock 4, as shown in Table 20 (Identified Historical Resources) and discussed below, would be potentially impacted by the 2018 Modified Project Variant. However, the Project would include Preservation Guidelines for Dry Dock 4 that would ensure the proposed improvements would conform to the SOI Standards; therefore, potential impacts would be less than significant pursuant to CEQA.

TABLE 20 IDENTIFIED HISTORICAL RESOURCES

Structure	*Date*	*CRHR Status Code*	*Eligibility*	*Resources Affected under Addendum 5*
140	1918	2D2*	NR/CR District Contributor	No Adverse Impact
204	1901	2D2*	NR/CR District Contributor	No Adverse Impact
205	1901	2D2*	NR/CR District Contributor	No Adverse Impact
207	ca. 1930 (remod. 1942)	2D2*	NR/CR District Contributor	No Adverse Impact
208	ca. 1930 (remod. 1942)	3CD**	CR District Contributor	No Adverse Impact
211	1942	3CD**	CR District Contributor	No Adverse Impact
224	1944	3CD**	CR District Contributor	No Adverse Impact
231	1942–45	3CD**	CR District Contributor	No Adverse Impact
253	1947	3CD**	CR District Contributor	No Adverse Impact
Dry Dock 2	1903	2D2*	NR/CR District Contributor	No Adverse Impact
Dry Dock 3	1918	2D2*	NR/CR District Contributor	No Adverse Impact
Dry Dock 4	1943	2S2***	NR/CR Individual Property	Potential Impact that is Less than Significant

* Contributor to district determined eligible for NR by consensus through Section 106 process. Listed in the CR.
** Appears eligible for CR as a contributor to a CR eligible district through survey evaluation.
*** Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR.

Dry Dock 4

Dry Dock 4 is a graving dock that has been determined eligible for listing in the National Register of Historic Places by consensus through the Section 106 process and is listed in the California Register of Historical Resources under for its association with the events and patterns identified in the defense of the United States during World War II and as a significant marine engineering entity. It is significant under Criterion A of the National Register and Criterion 1 of the California Register for its association with events related to the defense of the United States during World War II, and under Criterion C of the National Register and Criterion 3 of the California Register as a significant marine engineering entity. The period of significance is October 1942 when construction began, through August 15, 1945, the end of World War II. In the context of marine architecture, Dry Dock 4 is the largest graving dry dock on the Pacific Coast and is one of the largest in the world. Within the context of stateside Naval facilities of World War II, Dry Dock 4 was one of the more important structures constructed and one of the largest topographical alterations undertaken during the 1940s to expand a naval facility. Despite recent removal of adjacent mobile cranes and trackage, Dry Dock 4 retains a high degree of integrity of materials, design, workmanship, setting, feeling, location and association (California Department of Parks and Recreation, Building, Structure, Object Record, June 2008). The structure has been documented for the Historic American Engineering Record (HAER) by Steven R. Black in 1994, and the records are held by the Library of Congress.

Dry Dock 4 Character-Defining Features

This description of character-defining features is based upon the Dry Dock 4 National Register nomination form, HAER Report, and a site visit conducted by ESA's qualified architectural historian, Dr. Margarita Jerabek, on Thursday, November 2, 2017.

- Dry Dock 4 is a reinforced-concrete graving dock measuring 1,096 feet long, 171 feet wide, and 53 feet deep. Completed in June 1943, it includes a floating caisson and underground pump and control rooms.
- The land or deck immediately adjacent to the dry dock is dominated by wide expanses of concrete or asphalt with embedded crane tracks (covered with asphalt), steel bollards, and capstans along the perimeter of the dry dock.
- Coping protrudes over the top portion of the dry-dock wall; service galleries with trapezoidal faces, and stairwells are built into the coping.
- Cleats are placed at even intervals along the curb.
- Chain handrails run along the curb and down the concrete stairwells.
- Crane tracks surround the dry dock (covered with asphalt).
- A series of mooring bollards border the perimeter and some of the original 13 electrically powered capstans are also present around the perimeter, outside the location of the nonvisible crane tracks.
- Two entrances to the pump room are sited on the south side of the east end of the dry dock, each with a descending staircase and sliding grates covering the opening.

Nonvisible contributing character-defining features of Dry Dock 4 include:

- The cross section profile of Dry Dock 4 reveals a relatively simple reinforced concrete design. Rather than having multiple altars (steps in the wall of a dry dock) like nearby Dry Docks 2 and 3, it has one altar a few feet beneath the service galleries. Walls descend at an angle from the altar to the thin reinforced concrete slab dry-dock floor.
- Drainage tunnels beneath the floor extend along both sides of the dry dock. A utility tunnel, beneath the coping and behind the service galleries, runs along the perimeter. Dry Dock 4 floods through two 8-foot valves installed in flooding culverts, located on either side of the dry dock near the entrance. Once the valves were opened, it took 1 hour to flood the dry dock through the culverts. Both valves were accessible through manholes and controlled from the pump room.
- The underground pump room for Dry Dock 4 is located south of the dry dock, near the entrance (east) end. The pump and control rooms are constructed of reinforced concrete formed integrally with the bedrock and dry-dock wall. The design allowed cranes to lift equipment in and out of the rooms through a flush-to-grade concrete roof made of removable sections. Three S. Morgan Smith axial flow pumps powered by General Electric synchronous motors could dewater Dry Dock 4 in 2.5 hours, if all three pumps operated at

full capacity. Byron Jackson, 150-horsepower, deep-well, turbine-type drain pumps, located in the lower level of the pump room, could be operated manually or automatically.

Noncontributing alterations include:

- Dry Dock 4 has received few major alterations over its 66-year history, the most notable include the filling of bilge block slots and drainage trenches in the dry-dock floor (date unknown), addition of three steel pipes in the south-side utility tunnel in 1957 when the crane track was extended on that side of the dry dock, addition of six small service galleries and the lengthening of four original service galleries in 1972, and construction of additional salt water and electrical services to accommodate larger ships in the 1980s.

Project Description (Related to Historic Resources)

The 2010 Project, as approved, proposes to retain the buildings and structures in the District and Dry Dock 4 that were determined eligible for listing in the National Register and are listed in the California Register. Dry Docks 2, 3, and 4 and Buildings 140, 204, 205, and 207 would be rehabilitated in conformance with the SOI Standards. Rehabilitation of the dry docks would include repair of concrete surfaces and addition of guardrails along their perimeter.

Buildings that were later identified as contributors to the District in the 2008 survey and are eligible for the California Register (i.e., not determined eligible for the National Register and not listed in the California Register), Buildings 211, 224, 231, and 253 were identified for preservation under Subalternative 4a, CP-HPS Phase II Development Plan with Historic Preservation. The 2010 FEIR found that the project, with the adoption of Subalternative 4a, would not result in a significant adverse impact to the District that would affect its eligibility for inclusion in the California Register. The decision-makers adopted the preservation alternative when they approved the 2010 CP-HPS2 Project. In addition, two mitigation measures were included in the 2010 FEIR, provided below, to minimize impacts to historic resources.

The 2018 Modified Project Variant would include project modifications that may impact Dry Dock 4, including the addition of two bridges over the dry dock, provision of water taxi service from Dry Dock 4, and creation of the Water Room surrounding the dry dock that would be programmed to serve as a central community gathering point and new seating.

The 2018 Modified Project Variant includes new construction related to Dry Dock 4 that was not included in the 2010 FEIR and, therefore, is the focus of the analysis related to historic resources. Previously, the only scope related to Dry Dock 4 in the 2010 FEIR was to repair the concrete and replace a fence. Under the 2018 Modified Project Variant, new construction would occur in the vicinity of Dry Dock 4 including regrading of the site, construction of the Water Room with seating around Dry Dock 4, construction of two new bridges over Dry Dock 4 including the Water Room Bridge and the Eastern Bridge, and installation of a water taxi ramp at Dry Dock 4. Although Dry Dock 4 would be retained intact under the 2018 Modified Project Variant, potential adverse impacts may occur to the character-defining features, materials, and contributing setting of Dry Dock 4 that

could result in a potentially significant impact if they do not avoid direct physical impacts to Dry Dock 4 including its visible, subsurface, and submerged features or indirect impacts to the associated setting. Current project plans are conceptual and are expected to evolve as the project progresses through design development and construction plans are finally prepared. Therefore, to project the historic integrity and significance of Dry Dock 4, Preservation Guidelines shall govern the project including the proposed landscape improvements, bridges, and taxi ramp to ensure they are designed and constructed in conformance with the SOI Standards as the project develops. The Preservation Guidelines have been prepared by a qualified preservation consultant and are supported by substantial available information on the history and condition of Dry Dock 4. The Preservation Guidelines include guiding principles outlined in Table 21 (Dry Dock 4 Preservation Guidelines) that would ensure conformance with the SOI Standards.

TABLE 21 DRY DOCK 4 PRESERVATION GUIDELINES

Secretary of the Interior's Standards for Preservation (Applicable Provisions)
1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
Dry Dock 4: Guiding Principles
● The proposed treatment of Dry Dock 4 shall follow the requirements outlined in the Memorandum of Agreement (MOA) between the United States Navy, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer regarding the interim leasing and disposal of historic properties on the former Hunters Point Naval Shipyard in San Francisco, California, under which the lease agreements require tenants to follow the recommended practices of the SOI Standards in maintaining or adapting these historic properties for use.
● Proposed treatment of Dry Dock 4 shall follow the treatment plan and methods developed for CP-HPS2 that has been previously found to conform to the SOI Standards (Lada Kocherovsky and Richard Sucre, Memorandum regarding Secretary of the Interior's Standards Evaluation of Proposed Treatments for Dry Docks 2, 3, and 4, October 5, 2009, prepared by Page & Turnbull for Therese A. Brekke, Lennar Urban) and are outlined by Moffatt & Nichol in a series of reports: ○ Moffatt & Nichol, *Candlestick Point/Hunter's Point Redevelopment Project, Proposed Shoreline Improvements* (September 2009); ○ Moffat & Nichol, *Hunter's Point Shoreline Structures Rapid Reconnaissance Investigation* (June 2009); and ○ Moffat & Nichol, *Hunters Point Shoreline Structures Assessment* (August 2009).
● Dry Dock 4 is identified in the National Register of Historic Places as a structural resource under the applicable criteria of "event: architecture engineering" and, more specifically, with an area of significance related to military engineering. The Standards for Preservation and Guidelines for Preserving Historic Buildings apply not only to historic buildings, but also to a variety of historic resource types eligible to be listed in the National Register of Historic Places, including buildings, sites, structures, objects, and districts. Accordingly, proposed modifications to Dry Dock 4 shall comply with the Standards for Preservation outlined in the

TABLE 21 DRY DOCK 4 PRESERVATION GUIDELINES

SOI's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*,[72] which require conformance with the above Standards for Preservation.

Dry Dock 4: Preservation Guidelines

Preservation Guidelines for Dry Dock 4 have been developed to guide the preliminary design of the improvements associated with Dry Dock 4. These guidelines may be refined as part of the final design provided the following occurs:

- All character-defining features, materials, finishes, and construction techniques or examples of craftsmanship of Dry Dock 4 would be permanently retained;
- The bridge and abutment design and construction process would not permanently and irreversibly remove character-defining features or materials of the dry dock or its setting;
- The two bridge spans would not permanently and irreversibly alter character-defining features of the dry dock;
- The open visual character of Dry Dock 4 and the spaces and spatial relationships between the water-filled dry dock and adjacent deck around the dry dock whose outer limits are defined by the location of the bollards that surround the dry dock would be permanently retained;
- Grading required to protect the site from sea level rise may require that the bollards surrounding the dry dock would be temporarily removed, but they would be returned to a location that retains the horizontal, spatial relationship between the bollards and the dry dock;
- The installation of seating around the dry dock would occur on top of the land surface and would be provided in a manner that integrates the seating with a gradual raise in the proposed grade of the surrounding dry dock to accommodate sea level rise and would not permanently and irreversibly remove any character-defining materials or features;
- The seating would preserve the open visual character of the landscape and the spaces and spatial relationships between the dry dock and its setting;
- While the open visual character of the landscape and the spaces and spatial relationships between the dry dock and its setting would be preserved, the design would still allow for active and passive recreational uses;
- The design would be modern in character and differentiated from the historic structure, and no changes would be made that would create a false sense of historical development or add conjectural features;
- The design would be differentiated from the old and would be contemporary and industrial in aesthetic and utilitarian in the use of materials;
- The design would be compatible with the historic materials, features, size, scale and proportion, and massing protect the integrity of the dry dock and setting;
- The design would not obscure the character-defining features, spaces, spatial relationships, or views of the dry dock; and
- The design would be reversible to allow the new construction to be removed in the future, which would ensure that the integrity and significance of Dry Dock 4 would not be materially impaired.

With inclusion of the Preservation Guidelines as part of the 2018 Modified Project Variant, project conformance with the SOI Standards would be ensured, the historic significance of Dry Dock 4 would be protected, and the eligibility of the historical resource after project completion would remain unimpaired.

The 2018 Modified Project Variant was reviewed for conformance with the Standards for Rehabilitation (Department of Interior regulations, 36 CFR 67). Generally, a project that follows the SOI Standards shall be considered mitigated to a less-than-significant impact on the historical resource, pursuant to CEQA. With incorporation of the Preservation Guidelines as a Project Design Feature, the proposed modifications included in the 2018 Modified Project Variant were found to be in full conformance with the SOI Standards, as discussed in detail in Addendum 5 Appendix H. The impact would remain less than significant with implementation of mitigation measures MM CP-1b.1 and MM CP-1b.2 and conformance with the previously discussed SOI Standards.

[72] U.S. Department of the Interior, 2017.

Impact CP-2b: Construction at HPS Phase II would not result in a substantial adverse change in the significance of archaeological resources, including prehistoric Native American resources, Chinese fishing camps, and maritime related resources. ***[Criterion J.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, records indicate that three, and possibly four, prehistoric archaeological sites are located within HPS2, including CA-SFR-11, CA-SFR-12, CA-SFR-13, and CA-SFR-14. All of the sites are reported to be shellmounds or shell midden sites. In addition, previous archaeological investigations have shown that prehistoric archaeological sites in the HPS2 project area tend to be located along the original shoreline. Therefore, it was determined in the 2010 FEIR it was possible that project-related construction activities may encounter previously unknown prehistoric archaeological resources anywhere within the development footprint.

Research cited in the 2010 FEIR indicated that two possible locations for a Chinese fishing camp were identified at HP. By 1910, five of the nineteen remaining Chinese fishing camps were located at HP. At least eleven fishing camps were observed along HP shoreline in the 1930s. In addition to Chinese fishing camps, HP had numerous maritime-related industries, including dry docks and boarding houses. There were also several historically-documented large offshore "rocks" that presented navigational hazards before the land surrounding them was reclaimed. Therefore, it is possible that historic archaeological resources, including Chinese fishing camps, remains of maritime-related industries, and buried shipwrecks may occur within the HPS2 project area.

Mitigation measure MM CP-2a from the 2010 FEIR would reduce the potentially significant effects of construction-related activities to the archaeological resources in the HPS2 project area to a less-than-significant level by mitigating for the permanent loss of the adversely affected archaeological resources through implementation of the *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*. This measure would reduce the impact to a less-than-significant level by ensuring that an archaeological testing program is performed and that any discovered resources are appropriately handled, and documented.

The 2018 Modified Project Variant includes a number of Project components described in detail in Section I (Project Description) that would result in ground disturbance that could potentially impact archaeological resources. These components include: adjusted locations for two high-rise towers; reconfiguration of the design and sizes of parks and open space areas; revisions to the number of housing units proposed by the Project Sponsor; revisions to the street network and roadway cross-section dimensions and alignments; the provision of water taxi infrastructure and two bridges; and revisions to the proposed utility network and systems. As with the 2010 FEIR Utilities Variant 4, the 2018 Modified Project Variant would include a solar system, a recycled water facility, and district heating and cooling plants; in addition, the 2018 Modified Project Variant would also include a geothermal heating and cooling system (as a component of the district heating and cooling plants)

and utility-scale and building-scale battery storage systems. Most of these Project changes are currently conceptual and their design is under development.

Analysis in the 2010 FEIR determined it was possible that any Project-related construction activities could encounter previously unknown archaeological resources anywhere within the development footprint. The 2010 FEIR mitigation measure MM CP-2a reduced the impact to archaeological resources to less than significant by requiring a comprehensive archaeological sensitivity analysis of the entire Project footprint and implementation of an archaeological testing program in archaeologically sensitive areas. Therefore, although 2018 Modified Project Variant components listed above would include extensive ground disturbance, there are no changes to the Project that would result in new significant impacts to archaeological resources because the 2010 FEIR already analyzed the entire Project footprint and determined that any Project-related construction activities could impact archaeological resources, and the 2010 FEIR included mitigation to reduce the potential impact to less than significant.

All of the proposed modifications in the 2018 Modified Project Variant were previously analyzed in the 2010 FEIR except for the ground source geothermal heating and cooling system. This system would include approximately 2,800 geothermal boreholes installed to a depth of approximately 600 feet, with diameters of up to 6 inches, and have the potential to impact archaeological resources. However, the 2,800 geothermal boreholes would be within the original CP-HPS2 Project footprint and are, therefore, within the area analyzed by the 2010 FEIR. Some of the geothermal borehole locations would be located within archaeologically sensitive areas, but mitigation measure MM CP-2a is sufficient to reduce the potential impact from the boreholes to archaeological resources to a less-than-significant level. Mitigation measure MM CP-2a requires a comprehensive archaeological testing program guided by an approved archaeological testing plan that identifies the property types of the expected archaeological resource(s) that could potentially be adversely affected by the Project, the testing method to be used, and the locations recommended for testing. The archaeological testing program would determine to the extent possible the presence or absence of archaeological resources and to identify and to evaluate whether any archaeological resource encountered on the site constitutes an historical resource under CEQA. If the testing program identifies an archaeological resource that constitutes a historical resource under CEQA, mitigation measure MM CP-2a would ensure that such resource would be appropriately documented through data recovery and reporting. Mitigation measure MM CP-2 is a comprehensive requirement to mitigate impacts to significant archaeological resources, and as a result, there would be no changes to the Project that would result in new significant impacts to archaeological resources.

Fulfilling the requirements of mitigation measure MM CP-2a is already underway for the 2018 Modified Project Variant. An archaeological sensitivity assessment and testing plan has been prepared to address mitigation measure MM CP-2a from the 2010 FEIR and was approved by the San Francisco Planning Department Environmental Planning Division (EP) in June 2017. The document provides a detailed analysis of archaeological sensitivity in HPS2, including all areas incorporated within the 2018

Modified Project Variant, and it requires archaeological testing to identify both prehistoric and historic archaeological resources to be conducted in archaeologically sensitive areas. The archaeological testing plan includes a series of 142 archaeological cores to test areas determined sensitive for prehistoric archaeological resources, and up 32 test trenches to investigate areas of historic archaeological sensitivity. Fieldwork to implement the archaeological testing plan is scheduled to be conducted in 2018.

To assess the adequacy of the approved June 2017 archaeological testing plan to address potential impacts from the proposed geothermal boreholes proposed for the 2018 Modified Project Variant, the planned geothermal borehole locations were overlaid onto a map of archaeological sensitivity and planned archaeological core locations prepared for the 2018 Modified Project Variant. The results indicate that the planned geothermal borehole locations would straddle areas that range from highest to lowest archaeological sensitivity. The archaeological testing plan identifies a number of archaeological cores within the footprint of the geothermal boreholes that would overlap with areas of highest and high archaeological potential. There are several areas where the proposed geothermal boreholes would overlap with areas of highest and high archaeological potential where no archaeological cores are planned. However, additional archaeological cores may be necessary to augment the approved archaeological testing plan in the areas where geothermal boreholes may be installed to adequately test for the presence of buried archaeological resources. This assessment is reflected in revisions to 2010 FEIR mitigation measure MM CP-2a. The archaeological consultant shall prepare and submit to the ERO for review and approval an addendum to the approved HPS2 archaeological testing plan (ATP), which shall identify the archaeological resource(s) that potentially could be adversely affected by ground-disturbing components of the 2018 Modified Project Variant. The impact would remain less than significant with implementation of the identified mitigation measure.

Mitigation Measure with Proposed 2018 Modifications

MM CP-2a: Mitigation to Minimize Impacts to Archaeological Resources at Candlestick Point. Based on a reasonable presumption that archaeological resources may be present within the Project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the Project on buried or submerged historical resources.

Overview: The Project Applicant shall retain the services of a qualified archaeological consultant having expertise in California prehistoric and urban historical ~~archeology~~ archaeology. The archaeological consultant shall ~~undertake an~~ augment the approved archaeological testing program as specified herein. In addition, the archaeological consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure and with the requirements of the Project Archaeological Research Design and Treatment Plan (Archeo-Tec~~.~~, *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*, 2009) at the direction of the City's Environmental Review Officer (ERO). In instances of inconsistency between the

requirement of the Project Archaeological Research Design and Treatment Plan and of this archaeological mitigation measure, the requirement of this archaeological mitigation measure shall prevail. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the Project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce potential effects on a significant archaeological resource as defined in CEQA Guidelines Section 15064.5(a)(c) to a less-than-significant level.

Archaeological Testing Program: The archaeological consultant shall prepare and submit to the ERO for review and approval an addendum to the approved HPS2 archaeological testing plan (ATP). The archaeological testing program shall be conducted in accordance with the approved ATP addendum. The ATP addendum shall identify the property types of the expected archaeological resource(s) that potentially could be adversely affected by ground-disturbing components of the 2018 Modified Project Variant, including ground source geothermal heating and cooling system geothermal boreholes~~,~~; the testing method to be used; and the locations recommended for testing. The purpose of the archaeological testing program will be to determine to the extent possible the presence or absence of archaeological resources and to identify and to evaluate whether any archaeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings for submittal to the ERO. If, based on the archaeological testing program, the archaeological consultant finds that significant archaeological resources may be present, the ERO (in consultation with the archaeological consultant) shall determine if additional measures are warranted. Additional measures that may be undertaken include, but are not necessarily limited to, additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. If the ERO determines that a significant archaeological resource is present and that the resource could be adversely affected by the Project, the Project Applicant shall either:

a. Re-design the Project so as to avoid any adverse effect on the significant archaeological resource; or

b. Implement a data recovery program, unless the ERO determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archaeological Monitoring Program: If the ERO, in consultation with the archaeological consultant, determines that an Archaeological Monitoring Program (AMP) shall be implemented, the AMP shall include the following provisions, at a minimum:

- The archaeological consultant, Project Applicant, and ERO shall meet and consult on the scope of the AMP prior to the commencement of any Project-related soils-disturbing activities. The ERO, in consultation with the archaeological consultant,

shall determine what Project activities shall be archaeologically monitored. In most cases, any soils--disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), and site remediation, shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context.

- The archaeological consultant shall train all Project construction personnel who could reasonably be expected to encounter archaeological resources of the expected resource(s), how to identify the evidence of the expected resource(s), and the appropriate protocol in the event of apparent discovery of an archaeological resource.
- The archaeological monitor(s) shall be present on the Project site according to a schedule agreed upon by the archaeological consultant and the ERO until the ERO has, in consultation with the archaeological consultant, determined that Project construction activities could have no effects on significant archaeological deposits.
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archaeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be authorized to temporarily halt demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If, in the case of pile driving activity (foundation, shoring, etc.), the archaeological monitor has cause to believe that the pile driving activity may affect an archaeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archaeological consultant shall immediately notify the ERO of any encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit and present the findings of this assessment to the ERO as expeditiously as possible.
- Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archaeological Data Recovery Program: The archaeological data recovery program shall be conducted in accord with an Archaeological Data Recovery Plan (ADRP). The archaeological consultant, Project Applicant, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archaeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely

affected by the Project. Destructive data recovery methods shall not be pursued if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.
- Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures.
- Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies.
- Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.
- Security Measures. Recommended security measures to protect the archaeological resource from vandalism, looting, and other potentially damaging activities.
- Final Report. Description of proposed report format and distribution of results.
- Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects: The treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity shall comply with applicable state and federal laws~~. This shall include~~ including immediate notification of the ~~Coroner~~ Office of the Chief Medical Examiner of the City and County of San Francisco and in the event of the ~~Coroner's~~ Medical Examiner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC), which shall appoint a Most Likely Descendant (MLD) (PRC Sec. 5097.98). The ERO shall also be immediately notified upon discovery of human remains. The archaeological consultant, Project ~~Applicant~~ Sponsor, ERO, and MLD shall have up to but not beyond six days after the discovery to make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines Sec. 15064.5(d)). The agreement ~~shall~~ should take into consideration the appropriate excavation, removal, recordation, analysis, ~~custodianship,~~ curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the Project Sponsor and the ERO to accept recommendations of an MLD. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement if such an agreement has been made or, otherwise, as determined by the archeological consultant and the ERO. If no agreement is reached, state regulations shall be followed including the reinternment of the human remains and

associated burial objects with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC Sec. 5097.98).

Final Archaeological Resources Report: The archaeological consultant shall submit a Draft Final Archaeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s). Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than presented above.

Impact CP-3b: Construction at HPS Phase II would not result in a substantial adverse change in the significance of a paleontological resource. ***[Criterion J.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, sedimentary rocks of the Franciscan Complex have a low sensitivity to impacts from project-related construction because in the project vicinity they have been reported as nonfossiliferous. Sedimentary rocks of the Franciscan Complex have produced significant fossils important for understanding the age, depositional environments, and tectonic history of the San Francisco area and additional fossil remains discovered in rocks of the Franciscan Complex during Project construction could be scientifically important and significant. Although no fossils have been reported from the Project area, the presence of Franciscan sedimentary rocks (sandstone, shale, chert, and greenstone) on the flanks of HP in the Project area indicates the possibility of fossils being discovered during construction-related excavation.

Using SVP criteria, the colluvium (slope debris, minor landslides), serpentinite, and artificial fill located within the project area is not expected to have sensitivity to impacts from project construction because it is not likely that artificial fill would contain paleontological resources; however, the Bay mud underlying portions of the fill at depth is expected to have a high sensitivity because it is possible, and even likely, that those materials would contain paleontological resources. Fossil fragments from the Bay mud have been recovered near Islais Creek northwest of the Project area. The presence of the Bay mud under the fill around HP in the Project area indicates the possibility of fossils being discovered during construction-related excavation.

Mitigation measure MM CP-3a from the 2010 FEIR would reduce the effects of construction-related activities to paleontological resources at HPS2 to a less-than-significant level by mitigating for the permanent loss of the adversely affected resources through implementation of a Paleontological Resources Monitoring and Mitigation Program. The SVP considered scientific recovery, preparation, identification, determination of significance, and curation to mitigate impacts to paleontological resources adequately in most circumstances. Consequently, the implementation of this measure would reduce the potentially significant adverse environmental impact of Project-related ground disturbance on paleontological resources to a less-than-significant level.

The proposed modifications in the 2010 Modified Project Variant, including the ground source geothermal heating and cooling system, have the potential to impact paleontological resources. However, all proposed modifications, including the 2,800 geothermal boreholes, would be located within the original CP-HPS2 Project footprint and are, therefore, within the area analyzed by the 2010 FEIR. Mitigation measure MM CP-3a would be sufficient to reduce potential impacts from the proposed modifications, including the boreholes, to paleontological resources to a less-than-significant level. As such, the impact to paleontological resources would remain less than significant with implementation of the identified mitigation measure.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to cultural resources and paleontological resources impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to cultural resources and paleontological resources, either on a project-related or cumulative basis.

II.B.10 Hazards and Hazardous Materials

	Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
8.	**Hazards and Hazardous Materials.** Would the project:					
K.a	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	2010 FEIR p. III.K-108 (Impact HZ-20), p. III.K-111 (Impact HZ-22), p. III.K-113 (Impact HZ-23); Addendum 1 p. 40 Addendum 4 p. 44	No	No	No	None
K.b	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	2010 FEIR p. III.K-55 (Impact HZ-1b), p. III.K-59 (Impact HZ-2b), p. III.K-62 (Impact HZ-3b), p. III.K-64 (Impact HZ-4b), p. III.K-66 (Impact HZ-5b), p. III.K-68 (Impact HZ-6b), p. III.K-71 (Impact HZ-7b), p. III.K-72 (Impact HZ-8), p. III.K-81 (Impact HZ-10b), p. III.K-85 (Impact HZ-11), p. III.K-86 (Impact HZ-12), p. III.K-88 (Impact HZ-13), p. III.K-92 (Impact HZ-14b), p. III.K-96 (Impact HZ-15), p. III.K-102 (Impact HZ-16b), p. III.K-103 (Impact HZ-17b), p. III.K-107 (Impact HZ-19), p. III.K-110 (Impact HZ-21b); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-5a, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1
K.c	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	2010 FEIR p. III.K-105 (Impact HZ-18b), p. III.K-115 (Impact HZ-24); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	MM AQ-6.1, MM AQ-6.2, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-15

	Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
K.d	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to *Government Code* Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	2010 FEIR p. III.K-55 (Impact HZ-1b), p. III.K-59 (Impact HZ-2b), p. III.K-62 (Impact HZ-3b), p. III.K-64 (Impact HZ-4b), p. III.K-66 (Impact HZ-5b), p. III.K-68 (Impact HZ-6b), p. III.K-71 (Impact HZ-7b), p. III.K-72 (Impact HZ-8), p. III.K-81 (Impact HZ-10b), p. III.K-85 (Impact HZ-11), p. III.K-86 (Impact HZ-12), p. III.K-92 (Impact HZ-14b), p. III.K-103 (Impact HZ-17b), p. III.K-107 (Impact HZ-19), p. III.K-110 (Impact HZ-21b); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-5a, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1
K.e	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area?	2010 FEIR p. III.K-116 (Impact HZ-25); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	None
K.f	For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	2010 FEIR p. III.K-116 (Impact HZ-26); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	None
K.g	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	2010 FEIR p. III.K-116 (Impact HZ-27); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	None
K.h	Expose people or structures to a significant risk of loss, injury, or death involving fires?	2010 FEIR p. III.K-116 (Impact HZ-27); Addendum 1 p. 40; Addendum 4 p. 44	No	No	No	None

Changes to Project Related to Hazards and Hazardous Materials

The 2018 Modified Project Variant includes the following activities related to hazards and hazardous materials:

- For HPS2, the use of a proposed ground source geothermal heating and cooling system that would require approximately 2,800 geothermal boreholes to meet heating and cooling demands. As described in Section I (Project Description), boreholes are anticipated to be drilled as deep as 600 feet and would typically be 4 to 6 inches in diameter and spaced at least 15 to 20 feet apart. The boreholes would be located in the Warehouse District (see Figure 2 [CP-HPS2 Land Use Districts], p. 8) in areas where environmental restrictions are minimal and where interference with other subsurface infrastructure are limited. Specifically, clusters of boreholes will be located below public parks and open space areas, playground or athletic fields, parking structures, and commercial buildings with ground floor or basement level parking. Generally, the environmental restrictions in these areas require regulators to approve workplans prior to disturbing existing fill soil and require maintenance of soil cover once work is completed. The borehole cluster locations would avoid other areas, as feasible, that have unsuitable administrative and/or sub-surface restrictions, such as beneath public roads, State Trust lands, radiological restricted areas, and other areas of additional soil or groundwater restrictions such as areas with groundwater monitoring wells or soil vapor mitigation beneath building foundations.
- Import of soil up to 2,546,300 cy of imported fill for raising grade due to sea-level rise (SLR) and for surcharge compaction to improve geotechnical conditions of the soil in the developed areas and open space areas. Approximately 10,600 cy (590 dump truck loads) of sand would be imported to use as fill at the base of the trenches. Import backfill sand would be screened for contaminants in accordance with the Soil Import criteria specified in the Risk Management Plan.
- The 2018 Modified Project Variant proposes modifications to the land use program and associated additional construction activity, including use of different geotechnical stabilization methods, specifically Deep Dynamic Compaction.
- As with the Project analyzed in the 2010 FEIR, HPS2 construction activities under the 2018 Modified Project Variant would be subject to land use and activity restrictions that are put in place by the United States Department of the Navy (Navy) and regulatory agencies as components of the remedy. The 2018 Modified Project Variant would be subject to the updated regulatory framework that has been developed through the recent conveyance of Parcels UC-1 and UC-2.

Updated Regulatory Framework

The Navy has conducted environmental investigations, feasibility studies, removal actions, and remedial actions at HPS2. These activities have been conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986 (CERCLA), the Clean Water Act (CWA), a 1992 Federal Facilities Agreement (FFA) (Navy 1992) between the Navy and federal and

state regulatory agencies, and state-specific environmental programs. The Navy work is being implemented in consultation with the United States Environmental Protection Agency (USEPA), California Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (RWQCB), as specified in the FFA for HPS2. These federal and state regulatory agencies, along with the Navy are referred to as the FFA Signatories.

In accordance with the final Records of Decision (RODs) for HPS2, the Navy is responsible for implementing remedial actions to provide for protection of human health and the environment prior to transfer of the property to OCII. All necessary remedial actions required by CERCLA, the FFA, or other applicable law must be completed to the satisfaction of the relevant regulatory agencies, and those agencies must determine that the site is suitable for its intended use, whether those remedial activities take place before or after the Navy transfers ownership of the property. The remedy specified in the RODs includes land use controls and activity restrictions (collectively referred to as "environmental restrictions") to provide for long-term protectiveness of the site. The Navy has prepared Land Use Control Remedial Design documents (LUCRDs) and Operation and Maintenance (O&M) Plans, which specify requirements for all future landowners that are appropriate for complying with the land use controls and activity restrictions (collectively referred to as environmental restrictions). The environmental restrictions will be documented in a Covenant Restricting the Use of Property (CRUP), which is a legal instrument that is approved by the FFA Signatories and is recorded on the property deed.

The LUCRDs require preparation of a Risk Management Plan (RMP) and states, "An RMP will set forth certain requirements or protocols that, if followed, will allow certain activities that are otherwise restricted to be performed without additional approval by FFA signatories." The OCII, in conjunction with CP Development Company L.P. (CP DevCo), and in consultation with the FFA Signatories, will have prepared a RMP, for those areas where the LUCRDs require such.

Where required by the LUCRDs, the RMP will be submitted for approval by the FFA Signatories, prior to any development occurring on the site. The approved RMP authorizes the Owner to perform certain restricted activities on the site without further FFA Signatory approval, referred to as Restricted Activities Authorized with Conditions, provided that the Owner follows the environmental procedures and protocols set forth in the RMP. The RMP will provide criteria, protocols, and procedures that must be followed to preserve the integrity of the Navy's remedy. In general, the RMP addresses FFA Signatory notification requirements, worker health and safety, soil management protocol, groundwater management protocol, soil vapor mitigation, dust control protocol, asbestos dust management protocol, stormwater controls, specifications for destroying and installing groundwater monitoring wells, criteria for screening the quality of imported soil, protocol for responding to unexpected conditions that may be encountered in the field, and annual monitoring and reporting requirements.

A CRUP has been recorded and an RMP[73] has been prepared and approved by the FFA Signatories for already transferred Parcels UC-1 and UC-2. As more parcels transfer, the same RMP may be amended from time to time and will apply to the newly transferred parcels, as required. The RMP would be amended to incorporate environmental restrictions along with any additional provisions that might be needed to address unique environmental restrictions in those specific parcels. For parcels with radiological restrictions, before any development activities occur, the developer will prepare a separate activity-specific work plan for approval by the FFA Signatories.

Comparative Impact Discussions

Impact HZ-1b: Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil and/or groundwater with known contaminants from historic uses. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As with the Project analyzed in the 2010 FEIR, HPS2 construction activities under the 2018 Modified Project Variant would involve site preparation that would include ground improvements to support building foundations, raising the grade to accommodate SLR, deep excavations for large structures such as residential towers, installation of foundation piles, trenching for utility lines, and other earth-disturbing activities.

The 2018 Modified Project Variant proposes to implement DDC and static soil surcharging as the preferred ground improvement techniques beneath proposed building foundations. DDC is accomplished by repeatedly dropping a heavy weight onto the existing ground surface to pound the ground into a consolidated state. Surcharging is accomplished by importing soil and placing it on the footprint of a proposed building location in a tall pile (surcharge pile) and leaving the surcharge pile in place for an extended time period. The soil beneath the surcharge pile compresses under the weight of the pile and results in a stronger load-bearing soil profile. During DDC and surcharge activities, "wick drains" are typically installed that allow groundwater to redistribute within the soil beneath the surcharge piles or DDC impacts to allow adequate compaction. Soil vapor in the compaction zone may also redistribute within the soil or vent to the atmosphere through the ground surface.

To accommodate SLR and account for required cover over pipes as defined by the SFPUC and the CP-HP subdivision regulations, the 2018 Modified Project Variant would raise the site by an average of about 4.25 feet across the graded areas, compared to an average of approximately 3 feet as analyzed by the Project in the 2010 FEIR. The grade would be raised by importing fill soil, placing it on the existing ground surface, and grading to a final design elevation that is required to meet city requirements for SLR elevation. In areas where static soil surcharging is being implemented, the soil

[73] Geosyntec, *Risk Management Plan, Hunters Point Naval Shipyard, Parcels UC-1 and UC-2, San Francisco, California*, March 2015

pile will be removed and graded to the final design elevation. The removed soil will be relocated to another surcharge pile or used elsewhere for raising the grade.

To the extent that the soil, soil vapor, and groundwater in the areas that will be improved with DDC and surcharging contains hazardous materials at the time of development, potentially significant impacts could result from exposure to such hazardous materials by workers, occupants, and visitors if controls are not in place to manage the risks from such exposure. All ground improvement work conducted on HPS2 will be conducted in accordance with the RMP or site-specific work plan, where applicable. In addition to the protocol in the RMP, worker exposure as well as environmental impacts would be controlled through MM HZ-1b and MM HZ-2a (HASP requirement). Exposure to impacts from redistributed groundwater would also be controlled through MM HZ-1a.3 (GW dewatering plans). To the extent that groundwater may migrate to the ground surface, it will be captured, treated, if necessary, and discharged as allowed by local or state discharge permits. To the extent that soil vapors migrate to the ground surface and vent into the atmosphere, it will be monitored and controlled as allowed by Bay Area Air Quality Management District regulations for volatile organic compound emissions. Dust generated during ground improvement activities will be controlled as required in MM HZ-1b and San Francisco Health Code Article 22b.

The 2018 Modified Project Variant would require the import of up to 2,546,300 cy of imported fill for raising grade for SLR, surcharge compaction for geotechnical purposes, and trench backfill in utility trenches (up to 10,600 cy or 590 dump truck loads of sand) in the developed areas and open space areas. Import fill soil and backfill sand would be screened for contaminants in accordance with soil import criteria identified in the RMP that would be developed for the project to comply with the regulatory requirements that will be applicable to the site through the CERCLA process, RMP where applicable, and other federal, state, and local regulations.

In addition, development of a proposed HPS2 geothermal system could also result in impacts from construction worker exposure to contaminants in the soil. The geothermal system would require approximately 2,800 geothermal boreholes to meet heating and cooling demands. The boreholes would be located in the Warehouse District in areas where environmental restrictions are minimal and where interference with other subsurface infrastructure are limited (see I.C.1 [HPS2 Proposed Modifications]). Installation of the 2,800 geothermal boreholes would require excavation of 12,250 cy of soil, which would be reused on site (for raising grade, surcharge compaction, or trench backfill), in accordance with the CERCLA land use controls, activity restrictions, and RMP requirements where applicable, that apply to the specific location where the soil is generated. Any soil that is not allowed to be reused on site would be disposed off site in a manner consistent with federal, state, and local soil disposal and handling requirements.

As described in the 2010 FEIR, the Navy is engaging in a remediation process at HPS2, which is independent of the 2010 and 2018 Projects (referred to as the "Project" for purposes of this hazardous materials discussion), and property could be permanently transferred after completion of remediation activities or temporarily leased or temporarily accessed for limited activities, such as

installation of infrastructure, before completion of remediation activities. As with the Project analyzed in the 2010 FEIR, to the extent that the property under development under the 2018 Modified Project Variant contains hazardous materials at the time of development, potentially significant impacts could result from exposure to such hazardous materials by workers, occupants, and visitors if controls are not in place to manage the risks from such exposure.

As discussed in the 2010 FEIR, the FFA Signatories would, independent of the Project, require that before any Project development activity occurs at HPS, appropriate and legally enforceable restrictions on uses and activities at the Project site be in place and applicable to that activity, whether in the form of a recorded covenant, deed provision, easement, lease term, or RMP, such as currently exists for Parcels UC-1 and UC-2, noted above. Although the restrictions and enforcement mechanisms would be established independent of the Project, as with the Project analyzed in the 2010 FEIR, mitigation measure MM HZ-1b, would provide redundant protection by requiring that all Project development activities and uses conducted after the completion of development be in compliance with the CRUP and the protocols specified in the approved RMP, where applicable.

Consequently, implementation of mitigation measure MM HZ-1b would reduce impacts related to exposure to known contaminants from construction activities, including the geothermal boreholes required for development of the geothermal heating and cooling system on the HPS2 site and the compaction surcharging for geotechnical purposes. The impact would remain less than significant with implementation of the identified mitigation measure and adherence to the CERCLA requirements, including the RMP, which includes soil import criteria where applicable, and other federal, state, and local regulations.

Impact HZ-2b: Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil and/or groundwater with previously unidentified subsurface contaminants from historic uses. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR determined that the potential exists for unidentified, old, or abandoned subsurface structures (e.g., USTs, utility lines) to be present at sites to be developed in HPS2. As with the Project analyzed in the 2010 FEIR, if an unidentified UST were discovered during construction activities, including excavation of the approximately 2,800 geothermal boreholes required for development of the geothermal heating and cooling system on the HPS2 site, it would have to be closed in place or removed in accordance with federal, state, and local regulations. The RMP for Parcels UC-1 and UC-2 includes an Unexpected Conditions Response Plan, which specifies protocol in the event that such conditions are encountered during construction activities. The updated RMP for future transferred land will contain such a plan, where applicable, that will provide for the safe response to unexpected conditions that may be encountered. The installation of the geothermal boreholes would

be in areas subject to environmental restrictions and RMP protocol, including the Unexpected Condition Response Plan, where applicable.

Encountering unexpected conditions could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Similarly, the discovery of buried debris that could be hazardous could also present an increased risk of adverse health or environmental effects. The likelihood that significant adverse effects from the discovery of previously unidentified subsurface features would occur is minimal because there are multiple existing requirements in place to address such effects, such as the RMP for Parcels UC-1 and UC-2, and the SFDPH Article 31 requirements, implementation of contingency monitoring procedures and RWQCB notification (as necessary).

As with the Project analyzed in the 2010 FEIR, implementation of mitigation measure MM HZ-2a.1 would require the development of an Unknown Contaminant Contingency Plan to describe procedures to follow in the event unexpected contamination is encountered during construction activities, including procedures for ensuring compliance with the above laws and regulations, in conjunction with implementation of mitigation measure MM HZ-2a.2, which would require the preparation of a site-specific HASP prepared in accordance with federal and state OSHA and other applicable regulations. Implementation of those mitigation measures would ensure that potential adverse impact on human health and the environment from unidentified subsurface hazards would remain less than significant.

Impact HZ-3b: Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of off-site transport and disposal of contaminated soil and groundwater. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR determined that construction activities in HPS2 could involve extensive construction to accommodate new development. Site preparation could include deep excavations for large structures such as residential towers; cut material may be used elsewhere as fill, subject to any restrictions on reuse of soil imposed by the FFA signatories; installation of foundation piles; trenching for utility lines; grading and compaction; and other earth-disturbing activities.

In addition, development of a proposed HPS2 geothermal system, which was not a component the Project analyzed in the 2010 FEIR, would require approximately 2,800 geothermal boreholes to meet heating and cooling demands.

As with the Project analyzed in the 2010 FEIR, for those locations within HPS2 where construction under the 2018 Modified Project Variant would require off-site transport of contaminated soil, the grading and earthwork contractor would be required, as necessary and where required, to follow state and federal regulations for manifesting (including transportation and disposal) the wastes, using

licensed hazardous waste haulers, and disposing the materials at a permitted disposal or recycling facility. The approved RMP would set forth the process for approval or specific approved methods for disposal of excavated soils during grading or removal of groundwater during dewatering.

Likewise, the approved RMP would establish a process for regulatory agency approval that would describe the procedure that must be followed to ensure that extraction of groundwater that may be necessary to accommodate trenching for utilities would not alter the physical or chemical characteristics of contaminant plumes. If dewatering were required, the groundwater could be discharged to the City's combined storm and sanitary sewer system provided the discharged water complied with the Industrial Waste Ordinance, *Public Works Code*, Article 4.1, and Order No. 158170 of the DPW (refer to Section III.M for a discussion of Article 4.1 and Order No. 158170 and with SFPUC discharge guidelines). The discharged water may be required to be sampled both prior to and during dewatering to demonstrate that discharge limitations in the ordinance are met. If the pumped groundwater would not meet discharge requirements, on-site pretreatment would be required before discharge to the sewer system. If standards could not be met with on-site treatment, the SFPUC may allow the discharger to pay a premium to discharge the wastewater to the system, or the discharger may need to transport the wastewater off site using a certified waste hauler. In addition, as with the Project analyzed in the 2010 FEIR mitigation, measure MM HY-1a.3 would require the Project Applicant to prepare and implement a dewatering plan and comply with applicable standards to protect receiving water quality and anticipated RWQCB permit compliance provisions. Thus, compliance with the protocols specified in the approved RMP, where applicable, the Industrial Waste Ordinance, and implementation of MM HZ-1b and would ensure that potential adverse impact on human health and the environment from disposal of dewatered groundwater would remain less than significant.

Impact HZ-4b: Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels hazardous materials as a result of improvements to existing and installation of new underground utilities. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As with the Project analyzed in the 2010 FEIR, utility trenches in HPS2 under the 2018 Modified Project Variant have the potential to create a horizontal conduit for chemical contaminants contained in soil vapors or shallow groundwater to migrate along the permeable soils that would be placed as trench backfill. As with the Project analyzed in the 2010 FEIR, the areas of the site that require vapor or groundwater utility cutoffs and the performance standard for these systems would be identified in the remedial design documents that must be prepared under the CERCLA process before these activities can be carried out. In addition, compliance with protocols specified in the approved RMP, where applicable, and implementation of mitigation measures MM HZ-1b, MM HZ-2a.1, and MM HZ-2a.2 would avoid or minimize the potential for horizontal migration of

contaminants in HPS2, which would reduce effects to less-than-significant levels. Those measures would ensure the safe handling of potentially contaminated materials encountered during improvement or installation of underground utilities. The impact would remain less than significant with implementation of the identified mitigation measures and adherence to the identified compliance measures.

Impact HZ-5b: Construction activities associated with the Project would not create vertical conduits for hazardous materials that could contaminate groundwater as a result of installation of foundation support piles. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR determined that piles installed in locations at HPS2 where contaminants have been identified could, under certain soil conditions, create a vertical conduit for chemicals occurring in shallow groundwater to move along the pile to deeper groundwater zones, causing degradation of the deeper groundwater. As with the Project analyzed in the 2010 FEIR, mitigation measure MM HZ-5a would be implemented under the 2018 Modified Project Variant to require pre-drilling pilot boreholes before pile driving in non-engineered fill material to avoid potential contaminant transport. In addition, as with the Project analyzed in the 2010 FEIR, restrictions that would apply upon transfer would dictate where pile driving would be permitted under the 2018 Modified Project Variant and under what circumstances. If permitted, all excess fill or native soil materials generated during pile driving would be managed consistent with the protocols specified in the approved RMP, where applicable, as described above. Compliance with those restrictions through mitigation measures MM HZ-1b and MM HZ-5a would reduce potential groundwater quality impacts. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-6b: Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of handling, stockpiling, and transport of soil that may contain contaminants. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR determined that movement of soil (including grading, trenching, and excavating) that contains hazardous materials could result in impacts from human exposure to chemicals in the soil from dust and impacts to water quality and the environment if hazardous constituents were to migrate to the Bay. In addition, the 2010 FEIR determined that movement of nonhazardous soils also could result in impacts to air quality and water quality from the release of particulate matter to the air or sediment in storm water.

Development of a proposed HPS2 geothermal system, which was not a component the Project analyzed in the 2010 FEIR, could also result in impacts from human exposure to contaminants in the soil during construction.

As with the Project analyzed in the 2010 FEIR, restrictions on handling, stockpiling and transport of soil earthmoving activities at HPS2 under the 2018 Modified Project Variant would be a component of the legally-enforceable restrictions on uses and activities at the Project site, which the FFA Signatories would, independent of the Project, require to be in place before any Project development activity occurs at HPS2. Although these restrictions would be imposed independent of this EIR through independent environmental regulatory processes, to ensure compliance with these restrictions prior to development activities, mitigation measure MM HZ-1b would require SFDPH to verify, before any development activity at HPS2 occurs, that it would be done in compliance with all restrictions imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOST, FOSET or FOSL, or License Agreement, including restrictions imposed in deeds, covenants, leases, and LIFOCs, and requirements set forth in LUCRD documents, RMP, and health and safety plans applicable to the area of the work. Those legally enforceable environmental restrictions incorporate dust control measures to reduce the potential for spreading material from one area to another or requiring that soil be sufficiently moist to prevent dust generation during transport. Further, whenever workers could be exposed to hazardous levels of chemicals, a site-specific HASP would be prepared by the contractor prior to construction and would contain a section regarding decontamination of both personnel and equipment. The restrictions would also address the potential for trespassers or visitors to gain access to construction sites and come into direct contact with contaminated soils by specifying measures to prevent unauthorized entry into the construction site and provide appropriate monitoring/enforcement procedures to ensure the effectiveness of site security.

Soil handling, stockpiling, and transport activities have the potential to create erosion and potential migration of soils into the Bay during rainstorms, absent implementation of management measures. Soils could contain contaminants such as metals and organic compounds, which could degrade water quality in the Bay. Implementation of measures to control stormwater runoff during construction would also control discharge of potential chemicals adhered to soil in the runoff. Mitigation measures MM HY-1a.1 and MM HY-1a.2 would require preparation of a SWPPP would be required to identify the specific measures and BMPs that are applicable to HPS2 construction activities in the event of a spill of construction materials or exposure of hazardous materials. The SWPPP would identify the specific measures that are applicable to HPS2 construction.

As a result of these controls and mitigation measures, including mitigation measures MM HZ-1b, MM HY-1a.1, and MM HY-1a.2, impacts related to handling, stockpiling, and transport of contaminated soil would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-7b: Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials that could be present in stormwater runoff. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR concluded that, with the implementation of mitigation measures, construction activities at HPS2, such as the compaction and installation of fill, grading, and other geotechnical work, would result in a less-than-significant impact.

Development of a proposed HPS2 geothermal system would require approximately 2,800 geothermal boreholes to meet heating and cooling demands. The locations of boreholes would typically be located in the Warehouse District in areas where environmental restrictions are minimal and where interference with other subsurface infrastructure are limited (see I.C.1 [HPS2 Proposed Modifications]). With implementation of the 2010 Project mitigation measures, excavation of the approximately 2,800 geothermal boreholes would not result in erosion or movement of soils from the Project site and into surface waters during rain storms.

Static soil surcharge activities planned under the 2018 Modified Project Variant will result in large soil piles exposed to potential surface water erosion for extended periods of time, if not properly managed. Although not contaminated, erosion of soil from the surcharge piles could degrade surface water quality by increasing the suspended sediment load in the runoff water. Mitigation measures MM HY-1a.1 and MM HY-1a.2 would require preparation of a SWPPP to identify the specific measures and BMPs that are applicable to managing erosion of soil from surcharge piles. Implementation of mitigation measures MM HY-1a.1, MM HY-1a.2 would ensure that potential adverse effects on surface water quality would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

As with the Project analyzed in the 2010 FEIR, implementation of measures to control stormwater runoff during construction at HPS2 under the 2018 Modified Project Variant would also control discharge of potential chemicals if present in the runoff. Mitigation measures MM HY-1a.1 and MM HY-1a.2 would require preparation of a SWPPP to identify the specific measures and BMPs that are applicable to HPS2 construction activities in the event of a spill of construction materials or exposure of hazardous materials. The SWPPP would identify the specific measures that are applicable to HPS2 construction. Implementation of mitigation measures MM HY-1a.1, MM HY-1a.2, MM HZ-1b, and MM HZ-2a.1 would ensure that potential adverse effects on human health and the environment would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-8: Project occupants or visitors in or near portions of HPS Phase II where remediation has not been fully completed would not be exposed to unacceptable levels of hazardous materials. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, comprehensive basewide and parcel-specific investigations have shown that chemicals and radioactive materials are present in soil and groundwater in various locations throughout HPS2 at levels that require remediation. The Navy has completed substantial investigation and remediation of the site and the FFA Signatories overseeing the remediation program have required interim measures to be put in place in areas that still require remediation.

As with the Project analyzed in the 2010 FEIR, to the extent this impact could still be potentially significant despite the Navy's implementation of protective measures, it would be reduced to less than significant through implementation of Mitigation Measure MM HZ-1b, which requires compliance with restrictions in cleanup and transfer documents. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact HZ-10b: Construction in the shoreline areas at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of sediment or soil that is radiologically affected or that may contain chemical contaminants. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, with implementation of the identified 2010 FEIR mitigation measures, construction of the shoreline improvements, including pile driving, construction of rock buttresses, dredging, riprap installation, marina construction and installation of natural-looking shoreline protection using fill and articulated concrete block (ACB) mats, would not disturb sediment or soil containing chemical contaminants at levels that could expose construction workers, the public, or the environment to hazardous materials.

The HPS2 proposed modifications include establishment of a water taxi service to and from HPS2 at Dry Dock 4. The establishment of the infrastructure associated with the water taxi would involve construction activities both in the water and on the landside of Dry Dock 4 related to the floating dock platform and castings, the access ramp and landing platform, guide piles, and safety rails.

Under the 2018 Modified Project Variant, construction of the shoreline improvements, including infrastructure associated with the water taxi, would be required to the 2010 FEIR mitigation measures and, thus, would not disturb sediment or soil containing chemical contaminants at levels that could expose construction workers, the public, or the environment to hazardous materials.

As with the Project analyzed in the 2010 FEIR, implementation of mitigation measures MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1, MM HY-1a.1, MM HY-1a.2, and MM HZ-10b, along with applicable regulations and permits, potential impacts related to exposure to hazardous materials releases from contaminated sediments that could be disturbed during proposed shoreline improvements in HPS2 would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-11: Construction activities associated with the Project on Navy-owned property, including improvements to existing utilities and installation of new underground utilities, would not expose occupants, construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil, sediment, or groundwater that may contain contaminants from historic uses, including radiological contaminants. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, it is expected that development of properties the Navy has transferred would require underground utilities to be installed and geotechnical ground improvements initiated across land the Navy still owns that may still be undergoing remediation. Utility trenches have the potential to create a horizontal conduit for chemical contaminants contained in soil vapors or shallow groundwater to migrate along the permeable soils that would be placed as trench backfill. Ground improvement techniques such as DDC and static soil surcharging have the potential to alter subsurface conditions that could interfere with soil vapor and groundwater remediation being implemented by the Navy. The easement or other legal instrument providing a right to access the Navy property would require underground utility excavation and ground improvement activities to be conducted in accordance with a Navy-approved workplan that would require implementation of measures to prevent such impacts.

As with the Project analyzed in the 2010 FEIR, mitigation measure MM HZ-1b would apply to the 2018 Modified Project Variant development activities that take place before remediation is complete (e.g., if the property is subject to an early transfer or LIFOC) or accessed through a license or easement. MM HZ-1b requires the Project Applicant submit documentation to the SFDPH that the work would be undertaken in compliance with all restrictions imposed pursuant to the transfer documents, RMP, and any approved site-specific work plans, where applicable.

The general requirement of mitigation measure MM HZ-9 would also apply to underground utility construction and ground improvement activities by requiring that such activities be conducted only after approval of a workplan by the Navy, and if required, by the other FFA Signatories. This mitigation measure would also require such underground utility construction and ground improvement activities be conducted in accordance with applicable health and safety plans, DCPs, SWPPPs, or any other documents or plans required under applicable law or laws. As a result of these Project controls and mitigation measures, the potential for exposure to hazardous materials

during underground utility construction and ground improvement activities at HPS2 would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-12: Remediation activities conducted on behalf of the City or Project Applicant at the HPS Phase II parcels transferred prior to completion of remediation in an "early transfer" would not expose remediation and construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil, sediment, and/or groundwater that may contain contaminants from historic uses. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, although the ongoing remediation activities conducted by the Navy under the FFA are not part of the Project, if any of the parcels are transferred prior to completion of remediation in an "early transfer" as described in the Regulatory Framework, the Agency or the Project Applicant may instead implement the remaining remediation activities in conjunction with development activities with appropriate regulatory oversight. Such remediation activities conducted by or on behalf of the Agency or Project Applicant are considered part of the Project.

As with the Project analyzed in the 2010 FEIR, mitigation measure MM HZ-12 would require the Agency or the Project Applicant and their contractors to incorporate all applicable requirements into remedial design documents, work plans, health and safety plans, DCPs and any other document or plan required under the AOC or other applicable law, as a condition of development within HPS2. With the implementation of these mitigation measures, potential impacts from remediation activities conducted in conjunction with development activities at HPS2 early transfer parcels would be reduced. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact HZ-13: Construction of off-site roadway improvements would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil or groundwater that may contain contaminants. ***[Criterion K.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As described in the 2010 FEIR, the Project would improve existing roadways to serve CP and HPS2 and surrounding Bayview and Hunters Point neighborhoods. The majority of the off-site roadway improvements are bayward of the mean high tide line and thus subject to the requirements of *San Francisco Health Code* Article 22A, including, if required, the preparation and implementation of a site mitigation plan. As with the Project analyzed in the 2010 FEIR, compliance with Article 22A would ensure that impacts from exposure to hazardous materials associated with off-site roadway

improvements for the 2018 Modified Project Variant would remain less than significant, and no mitigation would be required.

Impact HZ-14b: Construction at HPS Phase II would not expose ecological receptors to unacceptable levels of hazardous materials as a result of the disturbance of soil, sediment, and/or groundwater that may contain with contaminants from historic uses. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, stockpiling and on-site soil movement during general site construction at HPS2 create potential pathways through which fish and wildlife species could be exposed contaminants in HPS2 site soils. As with the Project analyzed in the 2010 FEIR, with implementation of mitigation measures MM HZ-1a, MM HZ-1b, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM BI-4a.1, MM BI-4a.2, and MM BI-12b.1, potential construction ecosystem impacts related to handling, stockpiling, and transport of contaminated soil (including shoreline sediments) and groundwater would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-15: Construction and grading activities associated with the Project would not disturb soil or rock that could be a source of naturally occurring asbestos in a manner that would present a human health hazard. ***[Criterion K.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, asbestos is a naturally occurring mineral found in serpentinite rocks. Naturally occurring asbestos is a potential health hazard. If large amounts are inhaled or swallowed over many years, it increases the risk that a person may develop cancer or other health problems. During grading in areas potentially containing naturally occurring asbestos, airborne asbestos could be released to the environment via air emissions that could present an inhalation or ingestion hazard to exposed populations.

As with the Project analyzed in the 2010 FEIR, the 2018 Modified Project Variant would include implementation of mitigation measure MM HZ-15, which would require the preparation of an ADMP approved by BAAQMD and a DCP approved by SFDPH before commencing grading activities and any other activity that could disturb potential sources of naturally-occurring asbestos (including Bay Fill areas with the potential to contain previously-disturbed serpentinite fragments). The mitigation measure would also require implementation of all the mitigation measures, and compliance with all the requirements, set forth in the ADMP and DCP. Implementation of this mitigation measure would reduce the impact related to naturally occurring asbestos exposure

during construction activities. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact HZ-16b: Construction at HPS Phase II would not result in a health hazard to construction workers, the public, or the environment as a result of the demolition or renovation of existing structures that could include asbestos-containing materials, lead-based paint, PCBs, or fluorescent lights containing mercury. ***[Criterion K.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As described in the 2010 FEIR, existing buildings in HPS2 would be demolished to accommodate new development. Hazardous building materials are likely to be present in older structures. Building materials could include asbestos-containing materials, lead-based paint, PCBs, and fluorescent lights containing mercury vapors. Demolition or renovation of existing structures could result in potential exposure of workers or the community to hazardous building materials during construction, without proper abatement procedures, and future building occupants could be exposed if hazardous building materials are left in place and not properly contained. Soil around a structure could also become contaminated by hazardous building materials if these materials were inadvertently released to the environment.

As with the Project analyzed in the 2010 FEIR, implementation of applicable regulations and standards would ensure that potential health and environmental hazards associated with asbestos, lead, or PCBs in buildings and structures to be demolished under the 2018 Modified Project Variant would be minimized to the extent required by law. Therefore, the impact would remain less than significant, and no mitigation would be required.

Impact HZ-17b: Construction at HPS Phase II would not expose construction workers to unacceptable levels of hazardous materials in soil, sediment, or groundwater in a manner which would present a human health risk. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, potential worker health and safety impacts from exposure to hazardous materials could occur during excavation, dewatering, construction of improvements, site investigations, site remediation, and underground storage tank removal at HPS2. The potential for these impacts to occur would be minimized by implementing legally required health and safety precautions. For workers at sites where they would encounter hazardous waste, federal and Cal/OSHA regulations mandate an initial training course and subsequent annual training. Site-specific training may also be required for some workers.

Although existing worker safety regulations would require preparation and implementation of a HASP independent of the EIR and work would be conducted in accordance with site-specific work plans, and if applicable, any RMP requirements, to ensure compliance with these requirements, as with the Project analyzed in the 2010 FEIR mitigation measure MM HZ-2a.2 would be implemented under the 2018 Modified Project Variant and would require a permit applicant to prepare, submit to SFDPH, and implement a site-specific HASP for any affected location in compliance with applicable federal and state OSHA requirements and other applicable laws to minimize impacts to public health and the environment. The plan would include identification of chemicals of concern, potential hazards, personal protective equipment and devices, and emergency response procedures. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact HZ-18b: Construction at HPS Phase II would not result in a human health risk involving the disturbance of naturally occurring asbestos, demolition of buildings that could contain hazardous substances in building materials, or possible disturbance of contaminated soils or groundwater within one-quarter mile of an existing school. ***[Criterion K.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, Muhammad University of Islam, a year-round elementary school, is located adjacent to the Hillside portion of HPS1 development.

The 2010 FEIR determined that, with the implementation of the 2010 FEIR mitigation measures, construction activities would not result in a human health risk involving the disturbance of naturally occurring asbestos, demolition of buildings that could contain hazardous substances in building materials, or possible disturbance of contaminated soils or groundwater within 0.25 mile of an existing school. As with the Project analyzed in the 2010 FEIR, the 2018 Modified Project Variant would be required to implement an enhanced dust control program in accordance with the City's Dust Ordinance in accordance with mitigation measure MM HZ-15. In addition, implementation of mitigation measures MM HZ-2a.1 and MM HZ-2a.2 for development in HPS2 would also control dust emissions at the HPS2 boundary, which would also ensure airborne asbestos emissions do not present a health risk to the off-site school.

Further, if any of the on-site schools are occupied at the time construction activities occur within 0.25 mile of those schools, the mitigation measures described above (MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, and MM HZ-15) would also be implemented. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-19: Simultaneous construction activities at the Project site would not pose a human health risk from the release of contaminants from historic uses or fill. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As with the Project analyzed in the 2010 FEIR, construction impacts associated with the potential to encounter hazardous materials or hazardous conditions during construction under the 2018 Modified Project Variant anywhere in the Project site, whether at CP or HPS2 would for the most part be site specific and not additive because development activities at one site would be localized and would not combine with activities at another site to create a greater, combined effect. In addition, development would be sequenced, so only portions of each area would be expected to be under development at the same time.

As described in the 2010 FEIR, one activity that could affect areas outside of the immediate work area is movement of soil from one location to another. As with the Project analyzed in the 2010 FEIR, mitigation measures MM HZ-1a, MM HZ-1b, MM HZ-9, and MM HZ-15 would ensure that before development occurs within the Project site and vicinity that appropriate soil management plans and DCPs have been developed to address both soil movement and reuse within the Project site and off-site reuse and disposal. In addition, it is expected that for soil in the HPS2 area, FFA-approved site specific work plans, and, if applicable, requirements in an RMP will further dictate how any excavated soil may be moved and reused on site. As with the Project analyzed in the 2010 FEIR, under the mitigation measures, compliance with the requirements of these plans is a condition of development. With the implementation of these mitigation measures, the impact from soil movements within and outside of the entire Project site under the 2018 Modified Project Variant would be reduced. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-20: Construction activities associated with the Project would not result in adverse impacts to construction workers, visitors, or the environment from the routine use, storage, transportation, and disposal of hazardous materials. ***[Criterion K.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As described in the 2010 FEIR, construction activities related to the proposed Project would require the use and transportation of hazardous materials (e.g., fuels, cement products, lubricants, paints, adhesives, and solvents). In addition, construction vehicles would be used on-site that could accidentally release hazardous materials such as oils, grease or fuels. These hazardous materials and vehicles would remain on the Project site during the period of construction activities. Accidental releases of hazardous materials during demolition and construction activities could impact soil and/or groundwater quality, which could result in adverse health effects to construction workers, the public, and the environment. As with the Project analyzed in the 2010 FEIR, the contractor's

compliance with requirements related to DPH's Hazardous Materials Unified Program Agency (HMUPA) certificate of storage for hazardous materials during construction under the 2018 Modified Project Variant would reduce these potential impacts related to inadvertent release of hazardous materials to less-than-significant levels. In addition, the Project contractors would be required to comply with the requirements of San Francisco Public Works Code Article 4.1, which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) (described in the Hydrology and Water Quality section), which would further reduce potential impacts related to inadvertent release of hazardous materials during construction.

Compliance with the SWPPP and HMUPA requirements would ensure that the impact from potential releases from the transport and use or disposal of hazardous materials during project construction activities would be reduced. The impact would remain less than significant, and no mitigation would be required.

Impact HZ-21b: Implementation of the Project at HPS Phase II would not result in adverse impacts to residents, visitors, or the environment from periodic maintenance requiring excavation of site soils to maintain or replace utilities, repair foundations, or make other subsurface repairs. ***[Criteria K.b and K.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described in the 2010 FEIR, during occupancy, it is likely that the City or others would from time to time need to excavate site soils to maintain or replace utilities, repair foundations, or make other subsurface repairs. Prior to occupancy, sites for which soil remediation would be necessary would either be remediated by excavation, in-situ treatment, capped with an impervious engineered system (as in the case of landfills), or covering with a durable cover, such as hardscape or layer of clean soil that is at least 2 feet thick. Based on transfers to date, it is anticipated that all subsurface activities after transfer would be regulated either under an FFA-approved RMP, or site-specific work plans, where applicable. Therefore, contact with unremediated soil by construction workers, or inhalation of soils by workers or the public, is not expected to pose a substantial human health risk. The requirement to do work in conformance with an approved RMP or site-specific work plans would be enforced through deed restrictions and restrictive covenants. These processes would ensure risks to human populations are minimized.

The proposed 300-slip marina along the east shoreline of HPS2, north of the Gun Mole Pier would require creation of a 34-acre basin. The current water depths of the proposed basin are adequate for recreation craft. The basins would not require initial dredging, but maintenance dredging would be required in the future. The proposed marina is in Parcel F, adjacent to Parcel C; however, this area is not identified as an investigation/remediation subarea in which sediments are known to be contaminated.

As with the 2010 Project, implementation of mitigation measures MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-9, and MM HZ-12 would require compliance with restrictions set forth in transfer documents that require the preparation and implementation of an Unknown Contaminant Contingency Plan and HASPs, as well as compliance with RMPs or site-specific work plans, where applicable, to ensure that impacts during occupancy from routine maintenance activities under the 2018 Modified Project Variant would be reduced to a less-than-significant level. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HZ-22: Implementation of the Project would not result in a significant impact involving the routine use, storage, transportation, and disposal of hazardous materials. ***[Criterion K.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As described in the 2010 FEIR, nearly all Project uses would involve the presence of hazardous materials (or products containing hazardous materials) at varying levels, and this would represent an increase in hazardous materials use compared to existing conditions. It would also increase the number of people who could be exposed to potential health and safety risks associated with routine use. The following summarizes the general types of hazardous materials that would be expected in the Project, based on the proposed land use designations.

As indicated in the 2010 FEIR, there is an established, comprehensive framework independent of the CEQA process, which is intended to reduce the risks associated with hazardous materials use (and generation of hazardous waste). The San Francisco Department of Public Health (DPH), HMUPA has been granted authority by the State to enforce most regulations pertaining to hazardous materials in the City, including permitting for hazardous materials storage, underground storage tanks, and hazardous waste generation under the DPH Certificate of Registration Program.

Facilities where hazardous materials would be used during Project operation would be constructed in accordance with current laws and regulations, which require storage that minimizes exposure to people or the environment, and the potential for inadvertent releases. In addition, these materials would be labeled to inform users of potential risks and to instruct them in appropriate storage, handling, and disposal procedures. Employers are required by law (Cal/OSHA) to ensure employee safety by properly identifying hazardous materials and adequately training workers. The use of hazardous materials and generation of wastes would continue to be regulated under the authority of the DPH HMUPA under a compliance certificate, with additional oversight by other agencies (RHB, CDHS). Transporters of hazardous materials and wastes are required to comply with federal laws and regulations that are monitored and enforced by the CHP.

As with the Project analyzed in the 2010 FEIR, under the 2018 Modified Project Variant, SFDPH HMUPA would continue to conduct periodic inspections to ensure that hazardous materials and wastes are being used and stored properly. For these reasons, hazardous materials uses and waste

generation for project operations would not pose a substantial public health or safety hazard to the surrounding area. The impact from the routine transport, use or disposal of hazardous materials (including radiological, hazardous and medical wastes) from operation of the proposed project would remain less than significant, and no mitigation would be required.

Impact HZ-23: Implementation of the Project would not pose a human health risk and/or result in an adverse effect on the environment from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. ***[Criterion K.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As described in the 2010 FEIR, with increased routine use of hazardous materials compared to existing conditions, exposure of future occupants, visitors, and employees to hazardous materials could occur by improper handling or use of hazardous materials or hazardous wastes during operation of the Project, particularly by untrained personnel, environmentally unsound disposal methods, or fire, explosion, or other emergencies, all of which could result in adverse health effects. Accidents involving the transportation of hazardous materials to, from, or within the Project could also occur.

As with the Project analyzed in the 2010 FEIR, no industrial manufacturing or processing activities using large amounts of hazardous materials or acutely hazardous materials, which typically pose a greater accident or upset risk, are proposed under the 2018 Modified Project Variant. Major hazardous materials accidents associated with retail-commercial uses, including restaurants, theaters, and stores are extremely infrequent. The San Francisco Fire Department (SFFD) responds to hazardous materials incidents within the city, and additional emergency response capabilities are not anticipated to be necessary to respond to the potential incremental increase in the number of incidents that could result from operation of the Project.

As with the Project analyzed in the 2010 FEIR, potential impacts from upset and accident conditions involving the release of hazardous materials and wastes would also be less than significant, because the project would be required to comply with DPH requirements for hazardous materials and waste management.

As with the Project analyzed in the 2010 FEIR, the transportation of hazardous materials under the 2018 Modified Project Variant is required to comply with federal and state laws and regulations. These regulations identify proper labeling and packaging, transfer, and documentation requirements. State law prescribes requirements for through-transport of hazardous materials on roadways under state control.

As described in the 2010 FEIR, there is a comprehensive and ongoing hazardous materials emergency response program in the city. San Francisco has an Emergency Response Plan (ERP) that was developed to ensure allocation of and coordination of resources in the event of an emergency in the City and County of San Francisco. The ERP describes at a high level what the City's actions

would be during an emergency response. A separate Hazard Mitigation Plan (HMP) assesses risks posed by natural and human-caused hazards and set forth a mitigation strategy for reducing the City's risks. The specific departmental responsibilities for responding to hazardous materials incidents in the city are outlined in the "Emergency Support Function #10 Oil and Hazardous Materials Response Annex" to the ERP. San Francisco Fire Department (SFFD) is the first responder in responding to hazardous materials emergencies for the city and county. This impact would remain less than significant, and no mitigation would be required.

Impact HZ-24: Areas designated for research and development uses within HPS Phase II would not pose a human health risk as a result of hazardous air emissions within one-quarter mile of a school. ***[Criterion K.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR evaluated the health risk assessment for R&D uses using the excess lifetime cancer risk and chronic noncancer hazard index resulting from the combined TAC emissions from the R&D areas at any surrounding receptor location within HPS2. The estimated excess lifetime cancer risks and hazard indices within areas designated for residential use were found not to exceed the BAAQMD's current significance thresholds for carcinogenic and noncarcinogenic health risks with the Project with implementation of 2010 FEIR mitigation measures MM AQ-6.1 and MM AQ-6.2. These mitigation measures identify steps that would be taken to ensure numerical thresholds are not exceeded, and impacts were determined to be less than significant. Figure 3-1b of 2010 FEIR Appendix H1 Attachment III shows the areas analyzed to have TAC emissions from R&D uses associated with the 2010 FEIR. As shown in Figure 4-1a of 2010 FEIR Appendix H1 Attachment III, cancer risk from TAC emissions from R&D uses is below the threshold of 10 in a million at all proposed residential locations, except the northeastern portion of HP-05. Mitigation measure MM AQ-6.2 of the Development Agreement restricts land uses with TAC emissions within 300 feet of any residence. This mitigation measure reduced risk to below thresholds in this area.

As described in Impact AQ-6 of Addendum 5, the 2018 Modified Project Variant contains less R&D square footage as compared to R&D Variant 1, does not introduce new locations for R&D as compared to the R&D Variant 1 land use plan and does not place residences in any new areas that were not previously analyzed. Thus, the analysis in the 2010 FEIR would be inclusive of the 2018 Modified Project Variant. The evaluation and conclusion in the 2010 FEIR would still apply, and the 2018 Modified Project Variant would not pose a human health risk as a result of hazardous air emissions within 0.25 mile of a school. The impact would remain less than significant with implementation of the identified mitigation measures (MM AQ-6.1 and MM AQ-6.2).

Impact HZ-25: The Project site is not within the San Francisco Airport Land Use Policy Plan and the Project would not result in a safety hazard for people residing or working in the Project site. ***[Criterion K.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As with the Project analyzed in the 2010 FEIR, the Project site is approximately six miles north of the San Francisco International Airport. The Project site is not located within any of the "restricted zones." There would be no impact related to safety hazards for people residing or working in the Project site.

Impact HZ-26: Implementation of the Project would not occur within the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the Project site. ***[Criterion K.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As with the Project analyzed in the 2010 FEIR, no private airstrips exist in the Project site or vicinity. There would be no impact related to safety hazards for people residing or working in the Project site.

Impact HZ-27: Implementation of the Project would not expose people or structures to a significant risk of loss, injury, or death involving fires or conflict with emergency response or evacuation plans. ***[Criteria K.g and K.h]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As described in the 2010 FEIR, development of the Project would increase numbers of residents and employees in the Project site who, in turn, could result in congestion in the event of an emergency evacuation. San Francisco ensures fire safety primarily through provisions of the *San Francisco Building Code* and *San Francisco Fire Code*. Existing buildings are required to meet standards contained in these codes. In addition, the building plans for any new residential project greater than two units are reviewed by the SFFD and DBI in order to ensure conformance with these provisions. Project buildings and structures would be required to conform to these standards, which (depending on building type) may also include development of an emergency procedure manual and an exit drill plan.

In addition, hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment. And *Hazardous Materials Management Act* requires that businesses handling or storing certain amounts of hazardous materials prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee-training program. The

information required under the HMBP is available to fire and hazardous materials incident responders. Facilities where hazardous materials would be used during Project operation would be constructed in accordance with current laws and regulations, which require storage that minimizes exposure to people or the environment, and the potential for inadvertent releases that would require emergency response. The use of hazardous materials and generation of wastes would continue to be regulated under the authority of the DPH HMUPA under a compliance certificate, with additional oversight by other agencies (RHB, CDHS). Transporters of hazardous materials and wastes are required to comply with federal laws and regulations that are monitored and enforced by the CHP.

As with the Project analyzed in the 2010 FEIR, the existing street grid provides ample access for emergency responders and egress for residents and workers, and the Project would neither directly nor indirectly alter that situation to any substantial degree. All new development at would be built to *San Francisco Fire Code* standards, which would help to minimize demand for future fire protection services. All development, including high-rise residential buildings up to forty stories, would meet standards for emergency access, sprinkler and other water systems, and other requirements specified in the *San Francisco Fire Code*. Standards pertaining to equipment access would also be met. Plan review for structures at CP for compliance with *San Francisco Fire Code* requirements, to be completed by DBI and the SFFD, would minimize fire-related emergency dispatches, reducing the demand for fire protection services at the Project site. Therefore, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Finally, for the reasons just set forth, the Project would not directly or indirectly result in any additional exposure of residents or workers to fire risk, as the Project site is in a fully urbanized area that lacks the "urban-wildland interface" that tends to place new development at risk in undeveloped areas of California. The Project would also include expansion of the Auxiliary Water Supply System (AWSS), to provide water for firefighting services. Expansion of the AWSS would make the Project site more defensible against fire and reduce the need for fire protection services. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving fires.

Compliance with the *San Francisco Building Code* and *San Francisco Fire Code* through the City's ongoing permit review process would ensure that potential fire hazards related to redevelopment activities (including those associated with hillside development, hydrant water pressure, and emergency access) would be minimized during the permit review process and that future projects would not interfere with an existing emergency response or emergency evacuation plan. Therefore, this impact would remain less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to hazards and hazardous materials impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as

compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to hazards and hazardous materials, either on a project-related or cumulative basis.

II.B.11 Geology and Soils

	Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
6.	**Geology and Soils.** Would the project:					
L.a	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to California Geological Survey Special Publication 42) ii. Strong seismic groundshaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides?	2010 FEIR p. III.L-39 (Impact GE-4b), p. III.L-44 (Impact GE-5b), p. III.L-48 (Impact GE-6b), p. III.L-61 (Impact GE-12); Addendum 1 p. 42; Addendum 4 p. 45	No	No	No	MM GE-4a.1, MM GE-5a
L.b	Result in substantial soil erosion or the loss of topsoil?	2010 FEIR p. III.L-32 (Impact GE-1b); Addendum 1 p. 42; Addendum 4 p. 45	No	No	No	MM HY-1a.1
L.c	Be located on a geologic or soil unit that is unstable, or that would become unstable as a result of the Project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	2010 FEIR p. III.L-34 (Impact GE-2b), p. III.L-49 (Impact GE-7b), p. III.L-51 (Impact GE-8b), p. III.L-54 (Impact GE-9b), p. III.L-61 (Impact GE-11b); Addendum 1 p. 42; Addendum 4 p. 45	No	No	No	MM GE-2a, MM GE-5a, MM GE-6a, MM GE-11a, MM HY-12a.1, MM HY-12a.2
L.d	Be located on expansive soil, as defined in Section 1802.3.2 of the 2007 SFBC, creating substantial risks to life or property?	2010 FEIR p. III.L-58 (Impact GE-10b); Addendum 1 p. 42; Addendum 4 p. 45	No	No	No	MM GE-10a

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
L.e	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	2010 FEIR p. III.L-62 (Impact GE-13); Addendum 1 p. 42; Addendum 4 p. 45	No	No	No	None
L.f	Change substantially the topography or any unique geologic or physical features of the site?	2010 FEIR p. III.L-62 (Impact GE-14); Addendum 1 p. 42; Addendum 4 p. 45	No	No	No	None

Changes to Project Related to Geology and Soils

The 2018 Modified Project Variant includes the following activities related to geology and soils:

- In areas of the site containing loose artificial fill with a greater risk of liquefaction and settlement, a range of ground improvement techniques could be used to densify the fill and reduce seismically induced settlement risk, including, but not limited to, deep dynamic compaction (DDC),[74] vibro-compaction, and stone columns, as described in 2010 FEIR mitigation measure MM GE-5a, as well as drilled displacement columns, vibro-densification, deep soil mixing (DSM), and grout columns.
- The use of locally excavated and imported fill to add 5 to 10 feet of additional fill over existing ground surface, raising the site grade such that finished floor elevations would be 5.5 feet above the Base Flood Elevation (BFE) (as compared to 3.5 feet as analyzed by the Project in the 2010 FEIR), to complete surcharging and ground improvement, to elevate the site in compliance with new requirements for SLR planning, and to provide the SFPUC with required freeboard and cover for utility systems.
- For HPS2, the use of a proposed ground source geothermal heating and cooling system that would require approximately 2,800 geothermal boreholes to meet heating and cooling demands. The boreholes would be located below parks and open space areas in the Warehouse neighborhood and would avoid other areas, as feasible, such as beneath public roads, State Trust lands, RAD restricted areas, and other areas of soil and groundwater contamination.
- For the 2018 Modified Project Variant, total excavation needed at the HPS2 site is estimated to be approximately 100,000 cubic yards (as compared to 82,500 cubic yards (cy) assumed for 2010 Project), with the increase primarily due to additional utility trenching, installation of the boreholes, and more-refined information regarding construction activities. Excavation

[74] DDC utilizes impact energy from a large weight free falling from a significant height to densify the ground. The weight is repeatedly dropped in a specific grid pattern at a defined drop height. At impact with the ground, energy is transmitted at depth to densify loose material.

associated with the boreholes would result in approximately 12,250 cy of soil, which would be reused on site in a manner consistent with the Soil Import Plan and Risk Management Plan.

- As with the 2010 Project, the 2018 Modified Project Variant would require up to 2,546,300 cy of imported fill for the developed areas and open space areas. Of this, up to 10,600 cy (590 dump truck loads) of sand would be imported to use as fill at the base of the trenches. Imported backfill sand would be screened for contaminants in accordance with the soil import criteria specified in the Risk Management Plan.

Various site-specific design-level geotechnical studies[75] of the Project site have been completed by ENGEO to address the 2018 Modified Project Variant. These studies include previous site-specific geotechnical investigations, subsurface exploration, geological mapping, review of aerial photographs, observation of existing soil conditions behind existing shoreline structures, and review of published geologic reports and maps. Descriptions of geologic conditions and evaluations of geotechnical risks pertinent to the planned development at the Project site are also discussed in these reports.

New Regulations

The following new regulations would apply to the analysis of geology and soils impacts.

California Building Code and the San Francisco Building Code. The 2016 *California Building Code* CBC, effective January 1, 2017, is based on the (2015) International Building Code (IBC).[76] San Francisco adopted the 2016 CBC as the basis for its Building Code through Ordinance No. 53-17, on March 17, 2017. The full 2016 San Francisco Building Code (SFBC) consists of the 2015 IBC, as amended by the 2016 CBC, and as further modified by San Francisco amendments designed to be used in conjunction with the 2016 CBC. The SFBC amendments were adopted by the Board of Supervisors on December 22, 2016, through Ordinances 225-16 and 226-16, effective January 1, 2017.

Comparative Impact Discussions

Impact GE-1b: Construction at HPS Phase II would not result in the loss of topsoil caused by soil erosion. ***[Criterion L.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR described the potential for the loss of topsoil caused by soil erosion at the HPS2 site, which would be controlled during and after Project construction through the requirements of mitigation measure MM HY-1a.1. Adverse effects on the soil, such as soil loss from wind erosion and stormwater runoff, would be avoided or reduced to less-than-significant levels.

[75] ENGEO, Inc., *Preliminary Geotechnical Report, Hunters Point Shipyard Phase II Infrastructure Improvements, San Francisco, California*, April 2017.
ENGEO, Inc., *Geotechnical Exploration and Shoreline Conditions Report, Hunters Point Shipyard Redevelopment – Phase II, San Francisco*, May 2017.
[76] California Building Standards Commission, *2016 California Building Code*, California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, effective January 1, 2017.

Nothing has changed with the 2018 Modified Project Variant that would change this conclusion. With implementation of mitigation measure MM HY-1a.1, construction of the 2018 Modified Project Variant would not result in the loss of topsoil caused by soil erosion. The impact would remain less than significant (or would be avoided) with implementation of the identified mitigation measure.

Impact GE-2b: Construction at HPS Phase II would not result in damage to structures caused by settlement from lowering of groundwater levels. ***[Criterion L.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR described how Project construction activities, including potential dewatering procedures during excavation, construction, and operation of foundations and buried utilities, have the potential to affect groundwater levels, and could cause settlement of adjacent soil that could damage the overlying foundations of existing buildings. San Francisco Building Code (SFBC) Section 1803.1, which requires that excavations for any purpose not remove support from adjacent or nearby structures without first protecting them against settlement or lateral movement, would be applicable. Implementation of mitigation measure MM GE-2a would ensure protection during dewatering where adjacent or nearby structures exist, and settlement hazards related to dewatering would be less than significant.

For the 2018 Modified Project Variant, construction activities would be similar, and the requirements of SFBC Section 1803.1 would continue to apply to dewatering activities. Operation of the geothermal system would not affect groundwater levels because it is a closed system that uses its own fluid and does not use or have a hydrological connection with groundwater. With implementation mitigation measure MM GE-2a, settlement hazards related to dewatering would remain less than significant.

Impact GE-4b: Implementation of the Project at HPS Phase II would not expose people and structures to substantial adverse effects caused by seismically induced groundshaking. ***[Criterion L.a(ii)]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR acknowledged the potential for exposure to adverse effects caused by seismically induced groundshaking to the development at the HPS2 site, due to active faults near the Project site. To address groundshaking, required design-level geotechnical investigations include site-specific seismic analyses to evaluate the peak ground accelerations for design of Project components, as required by Chapter 16 (Structural Design) and Chapter 18 (Soils and Foundations) of the SFBC. Accordingly, mitigation measure MM GE-4a.1 would be implemented for development of HPS2. Based on the seismic analyses, structure designs would be modified or strengthened and

constructed to the highest feasible seismic safety standards, consistent with the requirements of the SFBC, as deemed appropriate by the Project engineer and verified by the San Francisco Department of Building Inspection (DBI), if the anticipated seismic forces (calculated peak vertical and horizontal ground accelerations caused by groundshaking) were found to be greater than anticipated. Implementation of this mitigation measure would ensure that potential impacts from groundshaking would be less than significant.

The 2018 Modified Project Variant would not result in changes to the overall location of the HPS2 development, the overall extent of construction or operational activities, or the nature of the Project land uses. For the 2018 Modified Project Variant, nothing has changed with respect to the potential exposure to seismically induced groundshaking, and with adherence to SFBC design requirements and implementation of mitigation measure MM GE-4a.1, the potential impacts from groundshaking would remain less than significant.

Impact GE-5b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by seismically induced ground failure such as liquefaction, lateral spreading, and settlement. ***[Criterion L.a(iii)]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR acknowledged the potential for exposure of HPS2 structures to seismically induced ground failure, including liquefaction hazards, due to the existing geology of the site. Design and construction of the structures and facilities in the HPS2 site would incorporate appropriate engineering practices to ensure seismic stability, as required by Chapter 16 (Structural Design) and Chapter 18 (Soils and Foundations) of the SFBC.

The 2018 Modified Project Variant would not result in changes to the overall location of the HPS2 development, the overall extent of construction or operational activities, or the general mixed-use urban nature of the Project land uses. With the 2018 Modified Project Variant, HPS2 structures would be exposed to potential seismically induced ground failure, including liquefaction hazards. As with the Project analyzed by the 2010 FEIR, mitigation measures MM GE-4a.1 and MM GE-5a would ensure that the design and construction of the structures and facilities in the 2018 Modified Project Variant incorporates appropriate engineering practices to ensure seismic stability.

Mitigation measure MM GE-4a.1 would reduce impacts from liquefaction, lateral spreading, and settlement. If liquefaction estimates were such that MM GE-4a.1 would not address liquefaction and settlement-related impacts adequately, further mitigation would include one or more of the additional structural and/or ground-improvement procedures identified in mitigation measure MM GE-5a. Selection of the appropriate procedures would be dependent on the land use, development type, soil profile, and estimated settlement. Together, mitigation measures MM GE-4a.1 and MM GE-5a would reduce or avoid impacts related to seismically induced ground

failure such as liquefaction, lateral spreading, and/or settlement, reducing the impact to a less-than-significant level.

The 2018 Modified Project Variant may utilize DDC as a ground improvement technique for densifying the artificial fill at the site to reduce liquefaction risks, and in particular to provide sufficient treatment of the fill to allow mid-rise construction to be founded on a shallow foundation system as an alternative to deep foundation systems deriving support on deeper competent material. A full-scale test program[77] has been performed at the adjacent CP site that demonstrates DDC is an appropriate method for densifying the upper 20 to 30 feet of artificial fill across portions of the site to minimize liquefaction risks; a subsequent technical memo[78] indicates that findings from the CP study could be used as reference, but similar site-specific studies should be performed to determine the efficacy of DDC in reducing liquefaction risks at HPS2. The primary environmental impact associated with the use of DDC would be vibration-related impacts, which are addressed in Section II.B.8 (Noise and Vibration). The primary impacts related to the use of other ground improvement techniques, such as stone columns, grout columns, or drilled displacement columns, are similar to the impacts related to the installation of geothermal boreholes, which are addressed in Addendum 5 Section II.B.9 (Cultural Resources), Section II.B.10 (Hazards and Hazardous Materials), and Section II.B.11 (Geology and Soils).

The Site-Specific Geotechnical Investigation required by mitigation measure MM GE-5a would ensure that the selected ground improvement technique is appropriate for the site and would effectively minimize the impact of liquefaction, lateral spreading and seismic settlement hazards at CP and HPS2. The impact would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

> **MM GE-5a: Site-Specific Geotechnical Investigation with Analyses of Liquefaction, Lateral Spreading and/or Settlement.** Prior to issuance of building permits for the Project site:
>
> - The Applicant shall submit to the San Francisco Department of Building Inspection (DBI) for review and approval a site-specific, design-level geotechnical investigation prepared by a California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE), as well as project plans prepared in compliance with the requirements of the San Francisco Building Code (SFBC), the Seismic Hazards Mapping Act, and requirements contained in CGS Special Publication 117A "Guidelines for Evaluating and Mitigating Seismic Hazards in California." In addition, all engineering practices, and analyses of structural design

[77] ENGEO, Inc., *Evaluation of Deep Dynamic Compaction for Densification of Artificial Fill*, August 10, 2017.
[78] ENGEO, Inc., *Technical Memorandum to Daniel Hansen from Leroy Chan: Potential Constraints on Implementation of Deep Dynamic Compaction (DDC)*, December 14, 2017; revised December 21, 2017.

shall be consistent with SFBC standards to ensure seismic stability, including reduction of potential liquefaction hazards.

- DBI shall employ a third-party CEG and California Registered Professional Engineer (Civil) (PE) to form a Geotechnical Peer Review Committee (GPRC), consisting of DBI and these third-party reviewers. The GPRC shall review the site-specific geotechnical investigations and the site-specific structural, foundation, infrastructure, and other relevant plans to ensure that these plans incorporate all necessary geotechnical mitigation measures. No permits shall be issued by DBI until the GPRC has approved the geotechnical investigation and the Project plans, including the factual determinations and the proposed engineering designs and construction methods.
- All Project structural designs shall incorporate and conform to the requirements in the site-specific geotechnical investigations.
- The site-specific Project plans shall incorporate the mitigation measures contained in the approved site-specific geotechnical reports to reduce liquefaction hazards. The engineering design techniques to reduce liquefaction hazards shall include proven methods generally accepted by California Certified Engineering Geologists, subject to DBI and GPRC review and approval, including, but not necessarily limited to:

Structural Measures

- Construction of deep foundations, which transfer loads to competent strata beneath the zone susceptible to liquefaction, for shallow foundations
- Structural mat foundations to distribute concentrated load to prevent damage to structures

Ground Improvement Measures

- Additional over-excavation and replacement of unstable soil with engineering-compacted fill
- Dynamic compaction, such as Deep Dynamic Compaction (DDC) or Rapid Impact Compaction (RIC), to densify loose soils below the groundwater table
- Vibro-compaction, sometimes referred to as vibro-floatation, to densify loose soils below the groundwater table
- Stone columns to provide pore pressure dissipation pathways for soil, compact loose soil between columns, and provide additional bearing support beneath foundations
- Soil-cement columns to densify loose soils and provide additional bearing support beneath foundations
- Deep displacement grout columns to densify loose soil and provide additional bearing support beneath foundations
- The Project CEG or GE shall be responsible for ensuring compliance with these requirements.

Impact GE-6b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by seismically induced landslides. ***[Criterion L.a(iv)]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR concluded that there are no potential landslide hazards within the HPS2 site boundaries. Therefore, there would be no impact caused by seismically induced landslides.

The 2018 Modified Project Variant would not result in changes to the overall location of the HPS2 development, nor to the site boundaries. There would be no impact to the Project from seismically induced landslides.

Impact GE-7b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by shoreline instability. ***[Criterion L.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR outlines the various repairs, improvements, and modifications at HPS2 that would be required to stabilize the shoreline and protect structures and facilities at HPS2 from the adverse effects caused by shoreline instability. To reduce the potential for a future rise in sea level that could adversely affect the Project site, the Project includes modification of the land surface through grading and the importation of fill. These modifications would raise the surface elevation by 36 inches above the 100-year base flood elevation and building finish floor elevations would be 6 inches above that (total of 42 inches above Base Flood Elevation) per mitigation measure MM HY-12a.1 to account for future SLR and include an adaptive management strategy that would provide further protection for future SLR up to 55 inches if this should become necessary.

Revised SLR estimates published in 2012 by the National Research Council (NRC)[79] have become what is currently considered by the regulatory community as the "best available science" for California. The NRC projections include forecasts (most likely estimates) and high estimates (assumed worst case) for 2030, 2050, and 2050. As such, NRC projections have been incorporated into specific guidance relating to accommodating SLR on waterfront project by the agencies having jurisdiction over the Project. As discussed under Impact HY-12b in the Hydrology and Water Quality section, the City of San Francisco in 2014 adopted new guidance[80] for incorporating SLR into the design and construction of new development, and the Bay Conservation and Development Commission (BCDC), which has jurisdiction over the coastal zone along the San Francisco Bay,

[79] National Research Council (2012). *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future. Committee on Sea Level Rise in California, Oregon, and Washington*. Board on Earth Sciences and Resources and Ocean Studies Board, Division on Earth and Life Studies. The National Academies Press, Washington, D.C., 2012.
[80] San Francisco Sea Level Rise Committee. 2014. *Guidance for Incorporating Sea Level Rise into Capital Planning in San Francisco – Assessing Vulnerability and Risk to Support Adaptation*. September 2014.

updated its San Francisco Bay Plan in 2011[81] with specific recommendations regarding hazard mapping, adaptive management and other SLR adaptation strategies.

The 2018 Modified Project Variant would continue to require improvements and modifications at HPS2 to stabilize the shoreline and protect structures and facilities at HPS2 from the adverse effects caused by shoreline instability, including modification of the land surface through grading and ground improvement to reduce the potential for shoreline instability to adversely affect the Project site. The Site-Specific Geotechnical Investigation required by mitigation measure MM GE-5a would ensure that Project plans and shoreline engineering practices are consistent with SFBC standards to ensure seismic shoreline stability. Selected ground improvement technique is appropriate for the site and would effectively mitigate the shoreline instability at HPS2 to a less-than-significant level.

In addition to the structural improvements to shoreline features, the 2018 Modified Project Variant includes elevating the site using locally excavated and imported of fill to reduce the potential for a future rise in sea level to adversely affect the Project site. These modifications would raise the finished floor elevation by 5.5 feet above BFE per mitigation measure MM HY-12a.1 to account for future SLR. Mitigation measure MM HY-12a.2 includes an adaptive management strategy for the shoreline areas, which have higher adaptive capacity and resilience compared to development areas, requiring setbacks to accommodate future SLR-related improvements, and assurances that that the shoreline protection system, storm drain system, public facilities, and public access improvements would be protected should SLR exceed 2 feet. Therefore, the 2018 Modified Project Variant would not result in exposure of structures and facilities at HPS2 to substantial adverse effects caused by shoreline instability. The impact would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

> **MM GE-5a, Site-Specific Geotechnical Investigation with Analyses of Liquefaction, Lateral Spreading and/or Settlement**, is provided in full on p. 253 under Impact GE-5b.

Impact GE-8b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by landslides. ***[Criterion L.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR identified the potential for exposure to adverse effects caused by landslides in the HPS2 site, in the upland areas of the shoreline where serpentinite is abundant in the shear zone. Implementation of mitigation measure MM GE-6a would ensure that risks to structures in HPS2 from landslides would be avoided or reduced a less-than-significant level.

[81] San Francisco Bay Conservation and Development Commission, *Living with a Rising Bay. Vulnerability and Adaptation in San Francisco Bay and on its Shoreline*, October 2011.

The 2018 Modified Project Variant would not result in changes to the overall location of the HPS2 development, nor to the site boundaries. Thus, the potential for exposure to adverse effects caused by landslides in the HPS2 site remains in the upland areas of the shoreline where serpentinite is abundant in the shear zone. With implementation of mitigation measure MM GE-6a, the risks to structures in HPS2 from landslides would be avoided or reduced. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact GE-9b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by damage from settlement. ***[Criterion L.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As identified in the 2010 FEIR, the potential for exposure to adverse effects caused by settlement in the HPS2 site exists. Poorly consolidated artificial fill deposits are abundant in the HPS2 site. Slight to severe damage to structures could occur caused by the settlement of poorly compacted fill or consolidation of very soft natural deposits. The 2010 FEIR found that implementation of mitigation measure MM GE 5a would ensure Project compliance with the requirements of the SFBC and would ensure that potential impacts from unstable subsurface soils would be less than significant.

With the 2018 Modified Project Variant, in areas of the site containing loose artificial fill with a greater risk of settlement, a range of ground improvement techniques may be used to densify the fill and reduce seismically induced settlement risk, including but not limited to Deep Dynamic Compaction (DDC), Drilled Displacement Columns, Vibro-Compaction, Vibro-Densification, Deep Soil Mixing (DSM), Stone Columns, and Grout Columns. A full-scale test program (ENGEO 2017)[82] has been performed that demonstrates DDC is an appropriate method for densifying the upper 20 to 30 feet of artificial fill across some portions of the adjacent CP site to minimize liquefaction risks, and in particular to provide sufficient treatment of the fill to allow mid-rise construction to be founded on a shallow foundation system as an alternative to deep foundation systems deriving support on deeper competent material. A subsequent technical memo[83] recommends that findings from the CP study could be used as reference, but that site-specific studies should be performed to determine the efficacy of DDC for mitigating liquefaction risks at CP or HPS2.

The Site-Specific Geotechnical Investigation required by Mitigation Measure MM GE-5a would ensure that the selected ground improvement technique is appropriate for the site and would effectively mitigate the settlement hazards at CP and HPS2. The impact would remain less than significant with implementation of the identified mitigation measure.

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[82] ENGEO, Inc., *Evaluation of Deep Dynamic Compaction for Densification of Artificial Fill*, August 10, 2017.
[83] ENGEO, Inc., *Technical Memorandum to Daniel Hansen from Leroy Chan: Potential Constraints on Implementation of Deep Dynamic Compaction (DDC)*, December 14, 2017; revised December 21, 2017.

Mitigation Measure with Proposed 2018 Modifications

MM GE-5a, Site-Specific Geotechnical Investigation with Analyses of Liquefaction, Lateral Spreading and/or Settlement, is provided in full on p. 253 under Impact GE-5b.

Impact GE-10b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by expansive soils. ***[Criterion L.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

According to the 2010 FEIR, the HPS2 site has the potential to expose Project improvements to adverse effects caused by expansive soil, which could include damage to structures, foundations, and buried utilities and could increase required maintenance.

For the 2018 Modified Project Variant, as with the Project analyzed by the 2010 FEIR, impacts related to expansive soil would be avoided or reduced a less-than-significant level for structures and facilities in the HPS2 site through the implementation of standard engineering and geotechnical practices for the identification and remediation of expansive soil, as required by Chapter 18 (Soils and Foundations) of the SFBC. Implementation of mitigation measure MM GE-10a would avoid or reduce the impact to structures and facilities at HPS2 from expansive soil. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact GE-11b: Implementation of the Project at HPS Phase II would not expose people or structures to substantial adverse effects caused by corrosive soils. ***[Criterion L.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

According to the 2010 FEIR, structures at HPS2 could be exposed to corrosive soil hazards.

For the 2018 Modified Project Variant, as with the Project analyzed by the 2010 FEIR, impacts related to corrosive soil would be less than significant for structures and facilities in the HPS2 site through the implementation of standard engineering and geotechnical practices for the identification and protection against corrosive soil, as required by Chapter 18 (Soils and Foundations) of the SFBC. Implementation of mitigation measure MM GE-11a would ensure compliance with the requirements of the SFBC and would avoid or reduce the impact on structures and facilities in HPS2. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact GE-12: Implementation of the Project would not expose people or structures to substantial adverse effects caused by surface fault rupture. ***[Criterion L.a(i)]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

For the 2018 Modified Project Variant, as with the Project analyzed by the 2010 FEIR, fault rupture hazards in the Project site are unlikely. No known active faults cross the Project site, making hazards from fault rupture unlikely. Therefore, there would be no impact caused by surface fault rupture.

Impact GE-13: Implementation of the Project would not result in the use of soils incapable of adequately supporting septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. ***[Criterion L.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

For the 2018 Modified Project Variant, as with the Project analyzed by the 2010 FEIR, the Project would be connected to the City's existing wastewater treatment and disposal system. Development of the Project would not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

Impact GE-14: Implementation of the Project would not result in a substantial change of topography or destruction of unique geologic features. ***[Criterion L.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

The 2010 FEIR acknowledged that the Project would alter the surface topography of the site including adding 3 feet of fill in some areas and would alter the shoreline with new seawalls or other shoreline protection. The 2010 FEIR concluded that these changes would not substantially change the site topography or affect unique geological features. To accommodate SLR and account for required cover over pipes as defined by the SFPUC and the CP-HP subdivision regulations, the 2018 Modified Project Variant would add from 5 to 15 feet of fill in some areas to raise the site from current levels by an average of about 4.25 feet across the graded areas, but would generally remain relatively flat.[84] Similar to the 2010 Project, the 2018 Modified Project Variant would not substantially change site topography or affect unique geologic features, and would have no impact on such features.

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[84] As described in Impact GE-7b, the site must be raised to account for future sea level rise. MM HY-12a.1 (as modified per new guidance and regulation) requires that finished floor elevations be 5.5 feet above BFE.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to geology and soils impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to geology and soils, either on a project-related or cumulative basis.

II.B.12 Hydrology and Water Quality

	Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
9.	**Hydrology and Water Quality.** Would the Project:					
M.a	Violate any water quality standards or waste discharge requirements?	2010 FEIR p. III.M-66 (Impact HY-1b), p. III.M-84 (Impact HY-6b); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-5a, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM HY-6a.1, MM HY-6a.2, MM HY-6b.1, MM HY-6b.2, MM HY-6b.3, MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1, MM BI-12b.2, MM BI-18b.1, MM BI-18b.2, MM BI-19b.1, MM BI-19b.2,
M.b	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	2010 FEIR p. III.M-74 (Impact HY-2), p. III.M-93 (Impact HY-8); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	None

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
M.c	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on site or off site?	2010 FEIR p. III.M-75 (Impact HY-3), p. III.M-93 (Impact HY-9); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-6a.1
M.d	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?	2010 FEIR p. III.M-75 (Impact HY-4), p. III.M-94 (Impact HY-10); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM HY-6a.1
M.e	Create or contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff?	2010 FEIR p. III.M-76 (Impact HY-5), p. III.M-96 (Impact HY-11); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-1a.2, MM HY-6a.1
M.f	Otherwise substantially degrade water quality?	2010 FEIR p. III.M-91 (Impact HY-7); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-6a.1, MM HY-6a.2, MM HY-6b.1
M.g	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	2010 FEIR p. III.M-101 (Impact HY-12b); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-12a.1, MM HY-12a.2
M.h	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	2010 FEIR p. III.M-102 (Impact HY-13b); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-12a.2

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
M.i	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	2010 FEIR p. III.M-103 (Impact HY-14); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	MM HY-14
M.j	Expose people or structures to inundation by seiche, tsunami, or mudflow?	2010 FEIR p. III.M-104 (Impact HY-15); Addendum 1 p. 43; Addendum 4 p. 46	No	No	No	None

Changes to Project Related to Hydrology and Water Quality

The 2018 Modified Project Variant includes the following activities related to hydrology and water quality:

- The use of a ground source geothermal heating and cooling system at HPS2 that would require approximately 2,800 geothermal boreholes to meet heating and cooling demands.
- Raising the HPS2 site to a higher base elevation than what was proposed for the Project analyzed in the 2010 FEIR, to reflect the most recent science and thinking for SLR planning and to provide the SFPUC with increased freeboard and cover for utility systems based on that science. For the 2018 Modified Project Variant, finished floor elevations would be 5.5 feet above the Base Flood Elevation (BFE), as compared to 3.5 feet as analyzed by the Project in the 2010 FEIR, using locally excavated and imported fill.

New Regulations

The following new regulations would apply to the analysis of hydrology and water quality impacts.

New Sea Level Rise Policies and Guidance. In 2012, the National Research Council's (NRC) published *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (the NRC Report), which provides a scientific review of SLR for the West Coast and provides the most recent regional SLR predictions for 2030, 2050, and 2100, relative to the year 2000 sea level.[85] In March 2013, the California Ocean Protection Council updated its 2010 Statewide SLR guidance to adopt the NRC Report as the current, best available science on SLR for California. The California Coastal Commission supports the use of the NRC Report as the best science currently available in its *Sea Level*

[85] National Research Council, *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*. Washington, DC: The National Academies Press, 2012. Available at https://www.nap.edu/catalog/13389/sea-level-rise-for-the-coasts-of-california-oregon-and-washington, accessed November 30, 2017.

Rise Policy Guidance, which it adopted in 2015.[86] The California Coastal Commission guidance emphasizes the importance of regularly updating SLR projections as the science continues to advance.[87] The San Francisco Bay Conservation and Development Commission (BCDC), which has jurisdiction over the coastal zone along the San Francisco Bay, also considers the NRC Report to be the best available science-based prediction of SLR for San Francisco Bay. Accordingly, the City of San Francisco Planning Department considers the NRC Report to be the best science currently available on SLR affecting San Francisco for both CEQA and planning purposes. In 2011, the BCDC updated its San Francisco Bay Plan[88] with specific recommendations regarding hazard mapping, adaptive management and other seal level rise (SLR) adaptation strategies. In 2014, the City of San Francisco adopted new guidance[89] for incorporating SLR into the design and construction of new development.

Stormwater Management Ordinance. In 2010, the San Francisco Board of Supervisors passed San Francisco's first SMO, which requires the installation and maintenance of stormwater management controls for development and redevelopment projects meeting specific area and project type criteria. The SMO requires stormwater management controls for new and redevelopment projects in both the City's separate and combined sewer areas. The SMO was updated in 2016 to comply with the 2013 MS4 Permit and to reflect improvements made in the City's stormwater management review processes since enactment of the SMO in 2010. The SMO provides the SFPUC and Port with the legal authority to implement the post-construction program outlined in the City's Stormwater Management Requirements and Design Guidelines.

San Francisco Public Works Code, Article 4.2 – Stormwater Management Requirements and Design Guidelines. This update to the 2010 San Francisco Stormwater Design Guidelines became effective on May 27, 2016. Development projects discharging stormwater to either the combined sewer system or a separate stormwater system must comply with San Francisco Public Works Code Article 4.2, Section 147. The SFPUC and the Port have developed the San Francisco Stormwater Management Requirements and Design Guidelines provide regulatory requirements for post-construction stormwater management controls for new and redevelopment projects and help design teams implement these stormwater controls in accordance with the requirements of the Small MS4 General Stormwater Permit and Article 4.2, Section 147.[90]

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[86] Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), *State of California Sea-Level Rise Guidance Document.* Developed by CO-CAT, with science support provided by the Ocean Protection Council's Science Advisory Team and the California Ocean Science Trust, March 2013 Update (hereinafter "*State of California Sea-Level Rise Guidance Document*"). Available at http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013_SLR_Guidance_Update_FINAL1.pdf, accessed November 30, 2017.

[87] California Coastal Commission, *Sea Level Rise Policy Guidance, Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits*, Unanimously Adopted August 12, 2015. Available at http://documents.coastal.ca.gov/assets/slr/guidance/August2015/0_Full_Adopted_Sea_Level_Rise_Policy_Guidance.pdf, accessed November 30, 2017.

[88] San Francisco Bay Conservation and Development Commission, *Living with a Rising Bay. Vulnerability and Adaptation in San Francisco Bay and on its Shoreline*, October 2011.

[89] San Francisco Sea Level Rise Committee, *Guidance for Incorporating Sea Level Rise into Capital Planning in San Francisco – Assessing Vulnerability and Risk to Support Adaptation*, September 2014.

[90] SFPUC and Port of San Francisco, *San Francisco Stormwater Management Requirements and Design Guidelines*, April 2016.

Green Building Ordinance (City and County of San Francisco Building Code Chapter 13C). In November 2008, the City passed the San Francisco Green Building Ordinance (SFGBO), which is included as *San Francisco Building Code* Chapter 13C. In 2013, the SFGBO was amended to incorporate all mandatory elements of the 2013 CALGreen and Title 24 energy-efficiency standards and require green building practices and Leadership in Energy and Environmental Design (LEED) certification for all new residential and commercial construction in the city, unless otherwise indicated in the SFGBO, as well as alterations to existing buildings. The *Green Building Code* was last amended in April 2016, removing all references to LEED regarding stormwater management while incorporating new requirements established by the San Francisco Stormwater Management Requirements and Design Guidelines.

Subdivision Regulations for the Candlestick Point/Hunters Point Shipyard. These regulations were adopted by the San Francisco Department of Public Works in June 2014 pursuant to the Subdivision Code Section 1611, together with Public Works Code Sections 147.2(b)(2) and 1204(b)(2) to serve as general guidelines for the planning, development, design and improvement of the Candlestick Point/Hunters Point Shipyard development. Specific requirements for SLR planning are included as Attachment 4.

Comparative Impact Discussions

Impact HY-1b: Construction at HPS Phase II would not cause an exceedance of water quality standards or contribute to or cause a violation of waste discharge requirements. ***[Criterion M.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR concluded that construction activities at HPS2 would not exceed water quality standards or contribute to or cause a violation of waste discharge requirements, with the implementation of mitigation measures MM HY-1a.1 (SWPPP—Combined Sewer System), MM HY-1a.2 (SWPPP—Separate Storm Sewer System), MM HZ-1a (Article 22 Site Mitigation Plan), MM HZ-2a.1 (Unknown Contaminant Contingency Plan), MM HY-1a.3 (Groundwater Dewatering Plan), MM HZ-5a (Foundation Support Piles Installation Plan), MM HZ-10b (Regulatory Agency Approved Workplans and Permits for Shoreline Improvements), MM HZ-12 (Compliance with Administrative Order of Consent at Early Transferred Parcels), MM HZ-15 (Asbestos Dust Mitigation and Control Plans), MM BI-4a.1 (Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts), MM BI-4a.2 (Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related Impacts); MM BI-5b.4 (Eelgrass Water Quality BMPs); MM BI-12b.1 (Essential Fish Habitat Avoidance and Minimization Measures) and MM BI-12b.2 (Deconstruction/Construction Debris Recovery). All of the mitigation measures referenced in the hydrology section of the 2010 FEIR would ensure that water quality standards would not be exceeded nor would construction at HPS2 cause or contribute to a violation of the applicable waste discharge requirements (WDRs). A less-than-significant impact would result.

The 2018 Modified Project Variant would not result in any significant changes to the location of the Project and the extent of construction activities. Development would continue to occur on the same areas of the site analyzed for development in the 2010 FEIR. The installation of the geothermal wells using the mud rotary method would not require dewatering and would present little opportunity for impacting water quality. Once each borehole is completed, the drilling fluid would be removed and disposed of off site at a landfill. The drilling process would fall under the SWPPP measures but no groundwater dewatering plan would be required.

There are no changed circumstances or new information regarding the 2018 Modified Project Variant that would result in any different conclusions than those reached in the 2010 FEIR regarding the violation of water quality standards or waste discharge requirements. The 2010 FEIR mitigation measures and compliance with the regulatory requirements for water quality, runoff control, and stormwater management would continue to ensure that Project impacts are mitigated in accordance with the 2010 FEIR analysis and conclusions. Therefore, the 2018 Modified Project Variant would not result in new significant impacts or a substantial increase in the severity of previously identified impacts with respect to water quality standards or waste discharge requirements. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact HY-2: Construction activities associated with the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. ***[Criterion M.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR noted that groundwater would not be used for any construction activities such as dust control or irrigation of vegetated erosion control features; no groundwater wells would be developed as part of the Project and no on-site groundwater wells would be used for water supplies. Short-term construction groundwater dewatering would perhaps be necessary at certain locations (e.g., for installation of building foundations or underground utilities), but dewatering would have only a minor temporary effect on the groundwater table elevation in the immediate vicinity of the activity, and would not measurably affect groundwater supplies. Further, the shallow groundwater underlying the Project site at HPS2 is not used for water supply. Construction activities would generally occur within areas that are already developed, and much of the existing open space would remain undeveloped and continue to contribute to groundwater recharge. Construction of the Project would include installation and operation of groundwater remediation and monitoring wells, as required by Navy transfer documents and regulatory requirements (as discussed in 2010 FEIR Section III.K). The 2010 FEIR concluded that construction at the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, and this impact would be less than significant.

For the 2018 Modified Project Variant, the installation of the geothermal wells using the mud rotary method would not require dewatering and thus would not impact groundwater levels. The impact would remain less than significant, and no mitigation would be required.

Impact HY-3: Construction activities associated with the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site. ***[Criterion M.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR concluded that construction at the Project site would not substantially alter the existing drainage pattern of the site or area such that on- or off-site erosion is substantially increased and this impact would be less than significant.

As with the Project analyzed in the 2010 FEIR, stormwater associated with the 2018 Modified Project Variant either drains to storm drains (which include both combined and separate systems), or drains directly to the Bay via surface runoff (generally only along the shoreline). The existing drainage patterns would be generally preserved, with locally modified drainage patterns within the affected area due to the raising of ground elevation to protect the area from a potential rise in sea level. As with the Project analyzed in the 2010 FEIR, most of the affected area is already drained by sewer systems (combined and separate), and would continue to drain to a newly constructed entirely separate storm sewer systems, this would not result in a substantial alteration of drainage patterns related to erosion potential. Construction at the Project site would not substantially alter the existing drainage pattern of the site or area such that on- or off-site erosion would substantially increase. The impact would remain less than significant, and no mitigation would be required.

Impact HY-4: Construction activities associated with the Project would not substantially alter the existing drainage pattern of the site, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. ***[Criterion M.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR notes that no streams or rivers exist within the Project site, and thus, no streams or rivers would be altered by construction activity. The amount of impervious area would not increase; impervious areas would be removed and/or replaced and the Project site would generally be graded flat (0.1 to 0.5 percent grade), resulting in no increase in stormwater runoff during construction. As discussed in the 2010 FEIR under Impact HY-3, construction activities at the Project site would not substantially alter existing drainage patterns causing or contributing to increased stormwater runoff.

Construction would include clearance, grading, and excavation, and the subsequent construction of new buildings and infrastructure. With implementation of mitigation measures MM HY-1a.1 and MM HY-1a.2 (preparation of a SWPPP with BMPs to collect, retain as appropriate, and discharge stormwater runoff), and MM HY-1a.3 (Construction Dewatering Plan), construction of the Project would not substantially alter the existing drainage pattern of the site or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, and this impact would remain less than significant.

With the 2018 Modified Project Variant nothing has changed with respect to construction that would alter the existing drainage pattern of the site or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, and with implementation of mitigation measures MM HY-1a.1, MM HY-1a.2, and MM HY-1a.3, this impact would remain less than significant.

Impact HY-5: Construction activities associated with the Project would not create or contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff. ***[Criterion M.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

For the 2018 Modified Project Variant, as with the Project analyzed by the 2010 FEIR, management of runoff within portions of the Project site affected by construction activity discharging directly to the Bay or to a separate storm drain system would be governed by the conditions of a Stormwater Pollution Prevention Plan (SWPPP) developed per Construction General Permit requirements, as required by mitigation measure MM HY-1a.2, which would include measures to collect, retain, and discharge runoff in ways that do not overwhelm the capacity of existing downstream drainage facilities. Management of runoff from areas draining to the combined sewer system would be governed by conditions of a SWPPP with an Erosion and Sediment Control Plan (ESCP), developed per SFPUC requirements.

As described in the 2010 FEIR for Impact HY-1, dewatering to the combined sewer system would require a Batch Wastewater Discharge Permit from the SFPUC. This remains true for the 2018 Modified Project Variant. Permit conditions are specified by the SFPUC to prevent violation of the SFPUC's Wastewater Discharge Permit, including conveyance capacity constraints and effluent limits. Dewatering discharges to the separate sewer system would be governed by conditions of the Construction General Permits, other general permits, or an individual NPDES Permit/WDR, as specified by the SFRWQCB. This remains true for the 2018 Modified Project Variant.

As discussed in the 2010 FEIR for Impacts HY-3 and HY-4, construction of the Project would not be expected to greatly alter Project site drainage such that stormwater runoff is increased. This remains true for the 2018 Modified Project Variant. During construction, existing stormwater drainage facilities would be replaced by new, entirely separate sewer systems that would collect and treat site

stormwater flows. This new storm drain system would be designed and sized in accordance with the Subdivision Regulations for the Candlestick Point/Hunters Point Shipyard and would also be sized to accommodate 5-year storm event flows from upstream contributing areas (HPS1). In accordance with City design criteria, the newly piped storm drain system would be sized to convey the 5-year storm event when flowing full or surcharged (overloaded/flooded) and runoff from the 5-year storm event up to the 100-year storm event would be contained within the streets and drainage channels rights-of-way.

Impacts associated with additional sources of polluted runoff are addressed by the 2010 FEIR in Impact HY-1. As discussed under Impact HY-1, implementation of mitigation measures would reduce potential for construction activities to generate additional sources of polluted runoff to a less-than-significant level. The impact would remain less than significant with implementation of the identified mitigation measure.

Impact HY-6b: Implementation of the Project at HPS Phase II would not contribute to violations of water quality standards or waste discharge requirements. ***[Criterion M.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR concluded that development at HPS2 would not exceed water quality standards or contribute to or cause a violation of waste discharge requirements, with the implementation of mitigation measures MM HY-6a.1 (Regulatory Stormwater Requirements as modified to reflect new regulations), MM HY-6a.2 (Recycled Water Irrigation Requirements), MM HY-6b.1 Limitations on Stormwater Infiltration), MM HY-6b.3 (Clean Marinas California Program), MM HZ-1b (Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents), MM HZ-2a.1 (Unknown Contaminant Contingency Plan), MM HZ-5a (Foundation Support Piles Installation Plan), MM HZ-9 (Navy-approved workplans for construction and remediation activities on Navy-owned property), MM HZ-10b (Regulatory Agency Approved Workplans and Permits for Shoreline Improvements), MM HZ-12 (Compliance with Administrative Order of Consent at Early Transferred Parcels), MM HZ-15 (Asbestos Dust Mitigation and Control Plans), MM BI-18b.1 (Maintenance Dredging and Turbidity Minimization Measures for the Operation of the Marina), MM BI-18b.2 (Implement BMPs to Reduce Impacts of Dredging to Water Quality), MM BI-19b.1 (Work Windows to Reduce Maintenance Dredging Impacts to Fish during Operation of the Marina), and MM BI-19b.2 (Implement BMPs to Reduce Impacts of Dredging to Water Quality). These mitigation measures would ensure that water quality standards would not be violated nor would development at HPS2 cause or contribute to a violation of the applicable waste discharge requirements (WDRs). A less-than-significant impact would result.

The Project analyzed by the 2010 FEIR would remove existing buildings and other improvements at HPS2 that contain approximately 327 acres of impervious surfaces and replace them with approximately 214 acres of impervious surfaces, thereby reducing the total area of impervious cover

at HPS2 by approximately 35 percent. The 2018 Modified Project Variant would include approximately 230 acres of impervious surfaces, reducing the total impervious area by approximately 30 percent. As with the original Project analyzed in the 2010 FEIR, the reduction of impervious surfaces with implementation of the 2018 Modified Project Variant would reduce the volume of stormwater runoff from the HPS2 area and the extent of impervious area that could contribute pollutants in runoff. In addition, as with the Project as analyzed by the 2010 FEIR in Table III.M-4 (Estimated Change in Annual Pollutant Loads from HPS Phase II without BMPs), the change in land use with the 2018 Modified Project Variant, combined with the reduction in impervious surface, would result in a net decrease in the total pollutants loads in stormwater runoff. The implementation of required stormwater treatment BMPs would further reduce pollutant loads in stormwater runoff.

Plans for the 2018 Modified Project Variant reflect the current regulations, including the San Francisco Stormwater Management Requirements and Design Guidelines (SMR) and the Subdivision Regulations for the Candlestick Point/Hunters Point Shipyard that were issued since the 2010 FEIR was certified. MM HY-6a.1 has been modified by Addendum 5 to reflect the new regulations in the 2016 SMR. The rest of the 2010 FEIR mitigation measures would apply to the 2018 Modified Project Variant, to ensure that Project impacts are mitigated in accordance with the 2010 FEIR analysis and conclusions. The impact would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

> **MM HY-6a.1: Regulatory Stormwater Requirements.** The Project Applicant shall comply with requirements of the Municipal Stormwater General Permit and associated City SWMP, appropriate performance standards established in the Green Building Ordinance, and performance standards established by the SFPUC in the San Francisco Stormwater Management Requirements and Design Guidelines (SMR).
>
> The ~~Draft San Francisco Stormwater Design Guidelines have been developed to satisfy the Municipal Stormwater General Permit requirements for new development and redevelopment projects in areas served by separate storm sewers, and are expected to be adopted by December 2009~~ SMR includes regulatory requirements for post-construction stormwater management controls for new and redevelopment projects and helps design teams implement these stormwater controls. The Project Applicant shall comply with requirements of the ~~Draft San Francisco Stormwater Design Guidelines~~ SMR. ~~Upon adoption of the Final Stormwater Design Guidelines, the Project shall comply with the Final San Francisco Stormwater Design Guidelines unless discretionary permits have been approved.~~
>
> Per the ~~Draft San Francisco Stormwater Design Guidelines~~ SMR, the Project Applicant shall submit a Stormwater Control Plan (SCP) to the SFPUC, as part of the development application submitted for approval. The SCP shall demonstrate how the following measures would be incorporated into the Project:

- Low impact development site design principles (e.g., preserving natural drainage channels, treating stormwater runoff at its source rather than in downstream centralized controls)
- Source control BMPs in the form of design standards and structural features for the following areas, as applicable:
  - Commercial areas
  - Restaurants
  - Retail gasoline outlets
  - Automotive repair shops
  - Parking lots
- Source control BMPs for landscaped areas shall be documented in the form of a Landscape Management Plan that relies on Integrated Pest Management[91] and also includes pesticide and fertilizer application guidelines.
- Treatment control measures (e.g., bioretention, porous pavement, vegetated swales) targeting the Project-specific COCs: sediment, pathogens, metals, nutrients (nitrogen and phosphorus compounds), oxygen-demanding substances, organic compounds (e.g., PCBs, pesticides), oil and grease, and trash and debris. The SCP shall demonstrate that the Project has the land area available to support the proposed BMP facilities sized per the required water quality design storm. Volume-based BMPs shall be sized to treat runoff resulting from 0.75 inch of rainfall ~~(LEED® SS6.2)~~, and flow-based BMPs shall be sized to treat runoff resulting from a rainfall intensity of 0.2<u>4</u> inch per hour. Treatment trains shall be used where feasible.

Additional requirements:

- ~~LEED® SS6.2: BMPs used to treat runoff shall be designed to remove 80 percent of the average annual post-development total suspended solids loads. BMPs are considered to meet these criteria if they are designed in accordance with SFPUC requirements.~~
- The SCP shall include an Operations and Maintenance Plan that demonstrates how the treatment control BMPs would be maintained in the long term, what entities would be responsible for BMP maintenance within the public and private rights-of-way, funding mechanisms, and what mechanisms would be used to formalize maintenance and access agreements.
- The Project Applicant shall also prepare a Stormwater Drainage Master Plan (SDMP) for approval by the SFPUC. The SDMP shall include plans for the storm drain infrastructure and plans for stormwater management controls (e.g., vegetated swales, dry wells). The storm drain infrastructure shall illustrate conveyance of the 5-year

[91] IPM is a strategy that focuses on long-term prevention or suppression of pest problems (i.e., insects, diseases and weeds) through a combination of techniques including: using pest-resistant plants; biological controls; cultural practices; habitat modification; and the judicious use of pesticides according to treatment thresholds, when monitoring indicates pesticides are needed because pest populations exceed established thresholds.

storm event in a separate storm drain piped system, and conveyance of the 100-year storm event in the street and drainage channel rights-of-way.

Impact HY-7: Implementation of the Project would not otherwise degrade water quality. ***[Criterion M.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

For the 2018 Modified Project Variant, as with the Project analyzed by the 2010 FEIR, implementation of mitigation measure MM HY-6a.1 (as modified to reflect new regulations including compliance with San Francisco Stormwater Management Requirements and Design Guidelines) would result in BMPs designed to treat stormwater runoff for nitrogen compounds. In addition, mitigation measure MM HY-6b.1 would prohibit infiltration BMPs at HPS2 and further reduce the potential for nitrate and TDS degradation of groundwater quality underlying HPS2. Implementation of mitigation measure MM HY-6a.2 would ensure compliance with the Recycled Water General Permit, resulting in application rates that do not exceed agronomic requirements. As such, the potential for recycled water, and associated nitrates and TDS, leaching to groundwater is minimized. Compliance with these mitigation measures would reduce the potential for nitrogen and salt migration to groundwater and Project degradation of groundwater quality. The impact would remain less than signification with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

MM HY-6a.1, Regulatory Stormwater Requirements, is provided in full on p. 270 under Impact HY-6b.

Impact HY-8: Implementation of the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. ***[Criterion M.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As with the Project analyzed by the 2010 FEIR, the 2018 Modified Project Variant would not use groundwater as a source of water supply, and would, therefore, not deplete groundwater supplies. As described under Impact HY-6b, the 2018 Modified Project Variant would reduce the total impervious area at HPS2 by approximately 30 percent which could increase infiltration (via natural percolation of rainfall, as stormwater infiltration BMPs would be prohibited by mitigation measure HY-6b.1). Development associated with the 2018 Modified Project Variant would not interfere with groundwater recharge or substantially deplete groundwater supplies; thus, no impact would occur.

Impact HY-9: Implementation of the Project would not alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, and would not result in substantial erosion or siltation on site or off site. ***[Criterion M.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed above in constructions impacts (i.e., Impact HY-4), there are no streams or rivers within the Project site, and grading associated with the 2018 Modified Project Variant would not substantially alter the drainage pattern of the site. The Project site would discharge to a separated storm drain sewer system or the Lower Bay, rather than surface water bodies susceptible to erosion and siltation. In addition, implementation of mitigation measure MM HY-6a.1 (as modified to reflect new regulations) would require preparation of an SCP to control post-construction erosion that incorporates erosion and sediment transport control BMPs. The impact would remain less than significant with implementation of the identified mitigation measure.

Mitigation Measure with Proposed 2018 Modifications

> **MM HY-6a.1, Regulatory Stormwater Requirements**, is provided in full on p. 270 under Impact HY-6b.

Impact HY-10: Implementation of the Project would not alter the existing drainage pattern of the site, through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff, and would not result in flooding on site or off site. ***[Criterion M.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As described under Impact HY-6b, the 2018 Modified Project Variant would reduce the total impervious area at HPS2 by approximately 30 percent which could increase infiltration (via natural percolation of rainfall, as stormwater infiltration BMPs would be prohibited by mitigation measure MM HY-6b.1). Due to the increase in permeable surface area, infiltration would be expected to increase, resulting in a corresponding decrease in runoff volumes. As with the Project analyzed in the 2010 FEIR, grading would reduce slopes at HPS2, slowing runoff rates.

Table 22 (Estimated Stormwater Peak Flow Rates and Runoff Volumes without BMPs) lists the estimated Project site stormwater runoff flow rates for existing and 2018 Modified Project Variant conditions, calculated using the Rational Method and the same assumptions used in the 2010 FEIR.[92]

[92] City and County of San Francisco, Bureau of Engineering, Department of Public Works, Subdivision Regulations, for the Information and Guidance of all Subdividers, Engineers and Surveyors with reference to the Subdivision of Land within the City and County of San Francisco and to Supplement the Subdivision Code, January 6, 1982.

TABLE 22 ESTIMATED STORMWATER PEAK FLOW RATES AND RUNOFF VOLUMES WITHOUT BMPS

Storm Event	Existing (2010) (cfs)[b]	2010 Project (cfs)	2018 Modified Project Variant (cfs)[c]	Increase (Existing over 2018 Modified Project Variant)[a] (cfs)	Increase (Existing over 2018 Modified Project Variant)[a] (%)	Increase (Existing over 2010 Project) (cfs)	Increase (Existing over 2010 Project) (%)
Hunters Point Shipyard[d]							
5-Year	644	448	360	-286	-44%	-196	-30%
10-Year	730	509	509	-221	-30%	-221	-30%
100-Year	1,052	733	676	-376	-36%	-319	-30%
2-year 24-hour (acre-feet)							
HPS2	64	39	39	-24	-38%	-24	-38%

SOURCE: PBS&J, 2009; BKF, 2017.

a. A negative number denotes a reduction in Project flow rates compared to existing conditions.

b. Existing flows are based on 72 percent impervious surfaces (505.3 acres).

c. Project flows are based on 54 percent impervious surfaces (379.1 acres).

d. Off-site flow from HPS1 is not included in these runoff calculations. Required HPS1 diversions into the HPS2 separate stormwater sewer system would be 108 cfs.

As demonstrated in Table 22, the runoff peak flow rates from the Project site would be reduced by 44 percent for a 5-year storm, 30 percent for a 10-year storm, and 36 percent for a 100-year storm. Although these calculations are based on estimated site characteristics, it is not likely that more detailed data would indicate a substantially lower peak flow rates. Table 22 also shows that runoff volumes from the 2-year 24-hour storm (i.e., frequently occurring storms) would be reduced by implementation of the Project, which would also reduce flooding impacts.

As discussed in Impact HY-6a, p. III.M-114, the Project Sponsor has developed an LID Study,[93] which identifies concepts for how the development could integrate stormwater volume reduction and treatment control measures. In addition, the SFPUC would require preparation of an SDMP and an SCP for the Project that would ensure that this impact would remain less than significant.

Mitigation Measure with Proposed 2018 Modifications

MM HY-6a.1, Regulatory Stormwater Requirements, is provided in full on p. 270 under Impact HY-6b.

Impact HY-11: Implementation of the Project would not create or contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff. ***[Criterion M.e]***

	2010 CP-HPS2 FEIR	2010 CP-HPS2 FEIR Addendum 5
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As with the Project analyzed by the 2010 FEIR, a new separate storm drainage system would be constructed for the 2018 Modified Project Variant in accordance with the design standards and

[93] Arup North America, Ltd. and Lennar Urban, *Candlestick Point/Hunters Point Shipyard LID Stormwater Opportunities Study*, June 2009. Copies of these documents are on file for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA, 94103 as part of File No. 2007.0946E.

criteria issued by the SFPUC and criteria in the 2014 CP-HP Subdivision Regulations.[94] As discussed in Impact HY-10, above, overall Project site development would result in a reduction in peak storm flows and would also reduce runoff volumes from frequently occurring storms. Implementation of mitigation measure MM HY-6a.1 and compliance with stormwater drainage capacity design criteria would ensure that impacts related to exceeding the capacity of the storm sewer system would remain less than significant.

Mitigation Measure with Proposed 2018 Modifications

MM HY-6a.1, Regulatory Stormwater Requirements, is provided in full on p. 270 under Impact HY-6b.

Impact HY-12b: Implementation of the Project at HPS Phase II would not place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. ***[Criterion M.g]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR indicated that portions of the Project would fall within a Special Flood Hazard Area (SFHA)[95] and that housing could be located in an area subject to flooding if the rate of SLR were to exceed the 36 inches that served at the time as the basis for Project grading plans and fill elevations, and no improvements were to be made along the shoreline.

For the 2010 FEIR, a project-specific SLR study was undertaken[96] to develop planning and design guidance through the various phases of the project, based on the then most current and relevant information and guidance available regarding SLR, and knowledge of coastal processes of San Francisco Bay. For building structures, a 36-inch SLR allowance plus a freeboard of 6 inches was selected as the design criteria to use for design and construction, based on a conservative rate of SLR of 36 inches over the next 50 years (Rahmstorf 2007,[97] which includes ice-cap melt estimate) that was not expected to occur until about 2080,[98] which would be approximately 50 years beyond the last phase of construction for the project.

Mitigation measure MM HY-12a.1 required that all finished grade elevations in development areas would be 3.5 feet above the Base Flood Elevation (BFE), and streets and pads would be 3 feet above BFE to allow for future SLR, thereby elevating all housing and structures above the existing and potential future flood hazard area. MM HY-12a.1 also required the Project Applicant to request revision of the

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[94] City and County of San Francisco, Bureau of Engineering, Department of Public Works, January 6, 1982, op. cit.
[95] Term used by FEMA to refer to the portion of a floodplain or coastal area that is at risk from a 100-year flood
[96] Moffatt & Nichol, *Hunters Point Shoreline Structures Assessment*, October 2009.
[97] Rahmstorf, S., A. Cazenave, J.A. Church, J.E. Hansen, R.F. Keeling, D.E. Parker, and R.C.J. Somerville, 2007. Recent Climate Observations Compared to Projections. *Science* 316, p. 709.
[98] Moffatt & Nichol, *Candlestick Point/Hunters Point Development Project Initial Shoreline Assessment*, prepared for Lennar Urban, February 2009, op. cit.

San Francisco Interim Floodplain Maps (FIRMs), if adopted prior to Project implementation, to reflect new fill. Implementation of mitigation measure MM HY-12a.1 would ensure that impacts associated with construction of housing within a 100-year flood hazard area, as designated on a flood hazard delineation map, would be less than significant.

Mitigation measure MM HY-12a.2 required that shoreline and public access areas, which have higher adaptive capacity and resilience compared to development areas, be designed to incorporate setbacks to accommodate future SLR-related improvements. MM HY-12a.2 required that an interim SLR estimate for the year 2050 (16 inches, as put forth by BCDC and the State Coastal Conservancy[99]) be used as the design criteria for construction of shoreline areas, to ensure that adaptive management construction activities would not be triggered until the year 2050. The 2010 FEIR considered MM HY-12a.2 adequate in terms of ensuring that the storm drain system could function as a gravity-drained system up to at least the year 2050 and not require any management action until that point in time.

The 2010 FEIR found that with implementation of mitigation measure MM HY-12a.2, impacts pertaining to the placement of housing within a potential future mapped flood hazard area would be less than significant.

For the 2018 Modified Project Variant, portions of the Project would still fall within an SFHA, and housing could still be located in an area subject to flooding due to SLR based on the revised SLR estimates published in 2012 by the NRC that have become what is considered by the regulatory community as the "best available science" for California. As described above under "New Regulations," the NRC projections have been incorporated into specific requirements and guidance relating to accommodating SLR on waterfront projects by the agencies having jurisdiction over the Project.

The 2018 Modified Project Variant would still require improvements and modifications at HPS2 that protect against SLR, including raising the base elevation of the Project site. For development areas in the 2018 Modified Project Variant, mitigation measure MM HY-12a.1 has been modified by Addendum 5 to reflect the "worst-case" NRC SLR estimate for 2100 (66 inches) and the new requirements and guidance from the City of San Francisco and BCDC. For protecting the perimeter of the HPS2 site and adjacent open space (shoreline areas), which have higher adaptive capacity and resilience compared to development areas, mitigation measure MM HY-12a.2 has been modified by Addendum 5 to accommodate NRC's "worst-case" SLR forecast for 2050 (24 inches).

Mitigation measure MM HY-12a.1 requires Project finished grade elevations to be above the base flood elevation (BFE) accounting for future SLR. Mitigation measure MM HY-12a.2 requires that shoreline and public access improvements be designed to incorporate setbacks to accommodate SLR-related improvements. With implementation of these mitigation measures, impacts pertaining

[99] California State Coastal Conservancy. 2009. *Policy Statement on Climate Change.* Adopted at the June 4, 2009 Board Meeting. http://www.scc.ca.gov/index.php?p=75&more=1.

to the placement of housing within a potential future mapped flood hazard area would remain less than significant.

Mitigation Measures with Proposed 2018 Modifications

MM HY-12a.1: Finished Grade Elevations Above Base Flood Elevation. The Project site shall be graded such that finished floor elevations are a minimum of ~~3~~5.5 feet above the Base Flood Elevation (BFE)~~, and streets and pads are 3 feet above BFE~~ to ~~allow for~~ accommodate worst-case, future sea level rise projections for the end of the century, thereby elevating all housing and structures above the existing and potential future flood hazard area. If the FIRM for San Francisco is not finalized prior to implementation of the Project, the Project Applicant shall work with the City Surveyor or other applicable City department to revise the City's Interim Floodplain Map, as needed. If the FIRM for San Francisco is finalized prior to implementation of the Project, the Project Applicant shall request that the Office of the City Administrator (Floodplain Manager) request a Letter of Map Revision based on Fill (LOMR-F) from FEMA that places the Project outside a SFHA and requires that the FIRM is updated by FEMA to reflect revised regulatory floodplain designations.

MM HY-12a.2: Shoreline Improvements for Future Sea-Level Rise. Shoreline and public access improvements shall be designed to allow for future ~~increases in elevation~~ sea level rise above the Base Flood Elevation (BFE) that includes wave run-up (often called Total Water Level [TWL]) along the shoreline. In addition, adequate horizontal setback shall be provided to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing adequate setbacks to allow for future elevation increases ~~of at least 3 feet from the existing elevation along the shoreline~~ in response to up to 5.5 feet of sea level rise above the TWL, which is projected as the worst-case estimate at the end of the century. Before the first Small Lot Final Map is approved, the Project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline protection system, storm drain system, public facilities, and public access improvements will be protected should sea level rise exceed ~~16 inches at the perimeter of the Project~~ 2 feet. Prior to the sale of the first residential unit within the Project, the legislative body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the protective improvements.

Impact HY-13b: Implementation of the Project at HPS Phase II would not place structures within a 100-year flood hazard area or impede or redirect flood flows. ***[Criterion M.h]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR indicated that development at HPS2 could place structures within a SFHA (Zone A) according to the Preliminary FIRM for the San Francisco, but that structures within Zone A that do

not fall within a designated floodway would not be expected to impede or redirect flood flows. The 2010 FEIR also indicated that development at HPS2 would place structures, including the marina and the shoreline improvements, within a Zone V SFHA, according to the preliminary FIRM for San Francisco. The 2010 FEIR identified shoreline improvements that would be initially designed and constructed to accommodate a 16-inch increase in SLR, with an adaptive management approach to accommodate greater SLR increases should they occur, as required by mitigation measure MM HY-12a.2. The shoreline design for SLR, as well as the development setback from the shoreline required by MM HY-12a.2, would protect the site against coastal flooding hazards including high-velocity wave forces that could impede flood flows or cause flood flows to be directed to any portions of the site including open space or developed areas. Implementation of MM HY-12a.2 would reduce the impacts of placing structures in a Zone V SFHA to a less-than-significant level.

For the 2018 Modified Project Variant, structures would still fall within a SFHA (Zone AE) according to the Preliminary FIRM for San Francisco. However, with the proposed shoreline improvements, existing structures to be retained would no longer be in a flood hazard area. With implementation of MM HY-12a.2, shoreline improvements with the 2018 Modified Project Variant would be initially designed and constructed to protect the perimeter of the HPS2 site and adjacent open space (shoreline areas) by accommodating NRC's "worst case" SLR forecast for 2050 (24 inches). Mitigation measure MM HY-12a.2 requires that shoreline and public access improvements be designed to incorporate setbacks to accommodate sea-level-rise-related improvements. With implementation of these mitigation measures, the impact pertaining to the placement of housing, and retaining some of the existing structures, within a potential future mapped flood hazard area would be reduced. The impact would remain less than significant with implementation of the identified mitigation measure.

Mitigation Measure with Proposed 2018 Modifications

> **MM HY-12a.2, Shoreline Improvements for Future Sea-Level Rise**, is provided in full on p. 277 under Impact HY-12b.

Impact HY-14: Implementation of the Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. ***[Criterion M.i]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As concluded in the 2010 FEIR, the Project site is adjacent to, but not within, the dam failure inundation zones from failure of the University Mound South Basin and/or North Basin reservoirs, based on evidence provided by ABAG[100] (refer to 2010 FEIR Figure III.M-3).

[100] ABAG, Interactive ABAG (GIS) Maps Showing Dam Failure Inundation, Available at http://www.abag.ca.gov/bayarea/eqmaps/damfailure/damfail.html, accessed on September 8, 2008.

With the 2018 Modified Project Variant, it remains that the Project shoreline includes various features, such as concrete debris, unprotected embankments, pile-supported wharves, seawalls, and bulkheads that serve to protect the Project from flooding. Several of these features lack structural integrity and could fail suddenly, as the result of a large storm event or an earthquake, or gradually, through continued deterioration. Failure of these features could expose people or structures to flood hazards.

The 2018 Modified Project Variant would implement mitigation measure MM HY-14, which requires implementation of improvements recommended in Moffatt and Nichol's Shoreline Improvement Report[101] (for the 2018 Modified Project Variant, MM HY-14 has been modified by Addendum 5 to reference potential updates to the 2009 shoreline evaluation). In accordance with these recommendations, areas along the shoreline would be developed as open space, which would allow for implementation of additional flood control improvements, if necessary, in the case of a higher-than-planned SLR. The shoreline improvements would also reinforce the structural integrity of the existing shoreline, reducing the risk of sudden structural failure of deteriorated shoreline features. Such improvements would provide added protection against Project site flooding, and the risk of harm associated with dam failure would remain less than significant.

Mitigation Measure with Proposed 2018 Modifications

> **MM HY-14: Shoreline Improvements to Reduce Flood Risk.** To reduce the flood impacts of failure of existing shoreline structures, the Project Applicant shall implement shoreline improvements for flood control protection, as identified in the Candlestick Point/Hunters Point Development Project Proposed Shoreline Improvements report.[102] (or updated Shoreline Improvements Reports). Where feasible, elements of living shorelines shall be incorporated into the shoreline protection improvement measures.

Impact HY-15: Implementation of the Project would not expose people or structures to inundation by seiche, tsunami, or mudflow. ***[Criterion M.j]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR concluded that finished grade elevations, which account for SLR and 100-year flood elevations, would be over 1 foot above the potential tsunami wave run-up elevation, and protect the Project site from a seiche. Therefore, the impacts from tsunami and seiche inundation would be less than significant.

With the 2018 Modified Project Variant, the HPS2 site would be raised higher than was proposed for the 2010 Project to complete surcharging and corresponding ground stabilization, to elevate the site

[101] Moffatt & Nichols, 2009, *Candlestick Point/Hunters Point Redevelopment Project Proposed Shoreline Improvements*, prepared for Lennar Urban, September 2009.
[102] Moffatt & Nichols, 2009, *Candlestick Point/Hunters Point Redevelopment Project Proposed Shoreline Improvements*, prepared for Lennar Urban, September 2009.

in response to anticipated SLR, and to provide the SFPUC with required freeboard and cover for utility systems. Thus, the impacts from tsunami and seiche inundation would remain less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to hydrology and water quality impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to hydrology and water quality, either on a project-related or cumulative basis.

II.B.13 Biological Resources

Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
4. Biological Resources. Would the project:					
N.a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	2010 FEIR p. III.N-55 (Impact BI-3b), p. III.N-70 (Impact BI-6a), p. III.N-73 (Impact BI-6b), p. III.N-75 (Impact BI-7b), p. III.N-78 (Impact BI-8b), p. III.N-79 (Impact BI-9b), p. III.N-82 (Impact BI-10b), p. III.N-84 (Impact BI-11b), p. III.N-97 (Impact BI-15b), p. III.N-99 (Impact BI-16b), p. III.N-100 (Impact BI-17b), p. III.N-101 (Impact BI-18b), p. III.N-104 (Impact BI-19b), p. III.N-109 (Impact BI-22); Addendum 1 p. 44; Addendum 4 p. 47	No	No	No	MM HZ-10b, MM HY-1a.1, MM HY-1a.2, MM BI-4a.1, MM BI-4a.2, MM BI-5b.1, MM BI-5b.2, MM BI-5b.3, MM BI-5b.4, MM BI-6a.1, MM BI-6a.2, MM BI-6b, MM BI-7b, MM BI-9b, MM BI-14a, MM BI-18b.1, MM BI-18b.2, MM BI-19b.1, MM BI-19b.2
N.b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	2010 FEIR p. III.N-55 (Impact BI-3b), p. III.N-68 (Impact BI-5b), p. III.N-88 (Impact BI-12b), p. III.N-97 (Impact BI-15b), p. III.N-101 (Impact BI-18b), p. III.N-104 (Impact BI-19b), p. III.N-111 (Impact BI-23); Addendum 1 p. 44; Addendum 4 p. 47	No	No	No	MM HZ-10b, MM HY-1a.1, MM HY-1a.2, MM BI-4a.1, MM BI-4a.2, MM BI-5b.1, MM BI-5b.2, MM BI-5b.3, MM BI-5b.4, MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, MM BI-12b.2, MM BI-18b.1, MM BI-18b.2, MM BI-19b.1, MM BI-19b.2
N.c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the *Clean Water Act* (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	2010 FEIR p. III.N-63 (Impact BI-4b), p. III.N-91 (Impact BI-13), p. III.N-112 (Impact BI-24); Addendum 1 p. 44; Addendum 4 p. 47	No	No	No	MM BI-4a.1, MM BI-4a.2,

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
N.d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	2010 FEIR p. III.N-49 (Impact BI-2), p. III.N-55 (Impact BI-4), p. III.N-84 (Impact BI-11b), p. III.N-92 (Impact BI-13b), p. III.N-99 (Impact BI-16b), p. III.N-105 (Impact BI-20a), p. III.N-108 (Impact BI-20b), p. III.N-114 (Impact BI-25); Addendum 1 p. 44; Addendum 4 p. 47	No	No	No	MM BI-4a.1, MM BI-4a.2, MM BI-5b.1, MM BI-5b.2, MM BI-5b.3, MM BI-5b.4, MM BI-7b, MM BI-19b.1, MM BI-20a.1, MM BI-20a.2
N.e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	2010 FEIR p. III.N-96 (Impact BI-14b), p. III.N-109 (Impact BI-21b), p. III.N-115 (Impact BI-26); Addendum 1 p. 44; Addendum 4 p. 47	No	No	Yes	MM BI-7b, MM BI-14a, MM BI-14b, MM BI-19b.1
N.f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	2010 FEIR p. III.N-49 (Impact BI-1); Addendum 1 p. 44; Addendum 4 p. 47	No	No	No	None

Changes to Project Related to Biological Resources

The 2018 Modified Project Variant includes the following activities related to biological resources:

- Implementation of a water taxi service would result in increased impacts on jurisdictional waters of San Francisco Bay through construction of the water taxi landing infrastructure at Dry Dock 4 and, potentially, a minor increase in disturbance of marine mammals and rafting waterbirds.
- Construction of two bridges over Dry Dock 4 would result in shading of a small area of jurisdictional waters in San Francisco Bay and, potentially, a minor increase in disturbance of waterbirds in the immediate vicinity of the bridges.
- Increase in new parks by approximately 34 acres at HPS2 would benefit the populations of a variety of plant and animal species, including raptors, by providing more habitat area within the Project site than was proposed in the 2010 FEIR.

Changes in Circumstances

Several changes in the environmental setting have occurred within the CP-HPS2 area since the certification of the 2010 FEIR.

In 2013, the first phase of the Yosemite Slough Wetland Restoration Project was completed. This project is located immediately adjacent to the CP-HPS2 project area. The first phase of the restoration project involved the removal of fill to convert areas that were dominated by ruderal (i.e., disturbed) upland grassland in 2010 to restore marsh and mudflat habitat on the northeast side of the slough, northwest of the CP-HPS2 project boundary. Currently, the restored areas are dominated by sparse pickleweed (*Salicornia pacifica*) and mudflat, and they now provide foraging and roosting habitat for ducks, shorebirds, and other waterbirds. However, the wetland vegetation is not dense/tall enough, nor sufficiently extensive, to support special-status species such as the California Ridgway's rail (*Rallus obsoletus obsoletus*) that are associated with more extensive, well-developed tidal marshes in other parts of San Francisco Bay. The 2010 FEIR included an analysis of impacts of future construction of the Yosemite Slough bridge on jurisdictional wetlands and other waters that would be restored by the Yosemite Slough Wetland Restoration Project. The Yosemite Slough bridge would impact only very limited areas of restored wetlands at the northeast (HPS2) end of the bridge, in the areas that have already been restored. The bridge's primary impacts on wetlands that are to be restored as part of the Yosemite Slough Wetland Restoration Project would occur on the southwest (CP) side of the slough, but restoration activities have not yet begun on the southwest side of the slough, where conditions are still as they were in 2010.

On HPS2, changes in biological conditions have resulted from continued remediation of contamination by the U.S. Navy, creation of wetlands to compensate for impacts of the Navy's remediation on wetlands, and stockpiling of soil for future development. The Navy has continued investigations and removal of contaminated soil from HPS2. In developed portions of HPS2, such activities have had limited effects on biological conditions. However, on Parcels E and E2, along the southern shoreline of HPS2, these remediation actions have resulted in extensive soil disturbance; removal of the majority of nontidal salt marsh; and removal of the majority of tidal salt marsh along the edge of South Basin. A sheet-pile wall has been installed along much of the shoreline of South Basin, where tidal salt marsh was present in 2010. In addition, the Navy has graded the South Basin shoreline to a more gradual slope, which would facilitate natural restoration of tidal wetland vegetation, and it has created nontidal depressions on Parcel E2 for the purpose of establishing new wetlands. At present, those "new" wetlands are still under construction. The 2010 FEIR anticipated these changes in the distribution of wetlands resulting from Navy remediation and restoration activities, and the 2018 Modified Project Variant does not include any new activities that would impact jurisdictional wetlands or other waters on Parcels E or E2 that were not analyzed in the 2010 FEIR. Therefore, although the Navy's ongoing remediation and restoration activities represent a change in the environmental setting since 2010, they do not result in any changes (relative to those analyzed in the 2010 FEIR) in impacts that would result from development activities on HPS2 as part of the 2018 Modified Project Variant.

Since the 2010 FEIR, a small wetland swale straddling the HPS1/HPS2 boundary has been partially filled. Regulatory agency permits are being obtained, and compensatory mitigation for the fill is being provided. In addition, a new drainage that may be considered jurisdictional waters by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) has been

created in the northwestern part of HPS2. This drainage is approximately 550 feet long by 3 to 4 feet wide, emanates from a culvert southwest of the intersection of Donahue Street and Lakewood Street, and flows primarily through an asphalt swale (with some small areas of wetlands where it flows over earthen substrate) before entering San Francisco Bay. This drainage was present in 2010, but there was no evidence that it contained water other than during or shortly after rain events, whereas it was flowing continuously during site visits in summer and early fall of 2017. It is possible that this drainage has been connected to a groundwater source since 2010, in which case it may now be considered jurisdictional (subject to USACE and RWQCB review).

Although no new special-status species have been recorded within the Project site since 2010, several locally scarce species have been documented recently. A pair of ospreys (*Pandion haliaetus*) has nested on structures in the northeastern portion of HPS2 each of the past several years.[103] This species has been increasing as a breeder in the San Francisco Bay area in recent decades, though the number of nesting pairs is still low. Also, monitoring of black oystercatchers (*Haematopus bachmani*) inside San Francisco Bay has documented nesting by a pair of oystercatchers on Double Rock, located in South Basin east of the proposed Yosemite Slough bridge.[104] This species breeds on rocky coastlines, and relatively few nest inside San Francisco Bay.

No new special-status species that may occur in the Project area have been listed since 2010, and no special-status species that were not known or expected to occur in the Project area in the 2010 FEIR have been newly recorded in the Project area since then.

Comparative Impact Discussions

Impact BI-1: Implementation of the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. ***[Criterion N.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As was discussed in the 2010 FEIR, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that cover the Project area. Therefore, the Project would not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Consequently, no conflict with such plans would result from the 2018 Modified Project Variant activities.

[103] Noreen Weeden, Golden Gate Audubon Society; pers. comm. to S. Rottenborn.
[104] Hart, J. T., San Francisco Bay Area Black Oystercatcher Project, 2017; Hart, J. T., Monitoring Territorial Pairs and Reproductive Success, 2017.

Impact BI-2: Implementation of the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any common species or habitats through substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. ***[Criterion N.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As discussed in the 2010 FEIR, the Project would impact a number of common plant and animal species through the demolition and construction of buildings, removal of trees, construction of shoreline improvements, installation of trails, roads, and other facilities, construction of the Yosemite Slough bridge, increased foot and vehicular traffic, installation of towers, and operation of all these facilities. Some common habitats would be reduced in extent, and some common species would decline in abundance as a result of the Project. However, the species that would be affected, as well as their habitats, are abundant throughout the San Francisco Bay region, and the Project site supports an extremely small proportion of the regional abundance of these resources. Further, the abundance of many of these species on the Project site itself is relatively low due to the extent of developed/urban land uses on the site, the long history of disturbance of the site, the intensive nature of such disturbance in some areas (e.g., where remediation activities on HPS2 are occurring or have recently occurred), and the site's isolation from more extensive areas of natural habitat by the Bay and by urban development in surrounding areas. Those species that are present on the site in higher numbers consist primarily of species that are well adapted to urban or heavily disturbed areas. Consequently, any impacts of the Project on common species and habitats would have a negligible effect on regional populations and would thus be less than significant.

The Project would result in improvements to habitat conditions in many areas owing to the creation of extensive parkland, planting of numerous trees, and improvement of habitat along the shoreline. With implementation of the Draft Parks, Open Space, and Habitat Concept Plan, many wildlife species would benefit from the removal of invasive species, enhancement, restoration, and management of habitats such as grasslands and wetlands, and the planting of numerous trees and shrubs in areas that are currently highly degraded or disturbed. In particular, invertebrates and birds would benefit from the habitat enhancements that would be implemented on the Project site.

The 2018 Modified Project Variant activities would have little effect on the overall impact analysis of the Project on common plants and animals because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in disturbance of plants and animals. Operation of a water taxi service and construction of two footbridges over Dry Dock 4 could potentially impact common waterbirds on San Francisco Bay, but as discussed under Impact BI-16b, below, these activities would not result in substantial impacts, nor in impacts substantially greater than were analyzed for the marina in the 2010 FEIR. Increases in

building heights could potentially result in somewhat greater impacts to migratory birds, although as discussed in Impacts BI-14b and BI-20b, such increases in impacts are expected to be minor. The 2018 Modified Project Variant would result in a net increase in the extent of new parks by approximately 34 acres at HPS2 relative to the 2010 FEIR (from 140.0 acres to 173.9 acres reflected in Addendum 5; refer to Addendum 5 Appendix A, Table A-5); this would reduce impacts to a variety of plant and animal species, including raptors, and benefit populations of these species. The net effect of the 2018 Modified Project Variant activities on common species and habitats would continue to be less than significant and, for many species, would be beneficial (due to the increase in parks) compared to the 2010 Project. This impact would remain less than significant, and no mitigation would be required.

Impact BI-3b: Construction at HPS Phase II and construction of the Yosemite Slough bridge would not have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. ***[Criteria N.a and N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No impact	No impact

As discussed in the 2010 FEIR, no special-status plants have been recorded at HPS2 during prior botanical and rare plant surveys,[105] and because of the long history of development and disturbance of the site, no suitable habitat for rare plants is present on the site. Therefore, no impact to rare plants would result from the Project.

Impact BI-4b: Construction at HPS Phase II would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the *Clean Water Act* (including, but not limited to, marsh, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. ***[Criterion N.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR analyzed impacts on jurisdictional wetlands and other waters (i.e., open water) that would result from proposed Project activities. The majority of such impacts were expected to result from shoreline enhancements for coastal flood protection and habitat improvement, and from Yosemite Slough bridge construction. The majority of wetlands in terrestrial areas where other development would occur were expected to be impacted by Navy remediation activities.

As discussed in the summary of changes to the environmental setting above, there have been several modifications of the extent and distribution of jurisdictional wetlands and other waters on the Project site. Navy remediation activities have removed the majority of tidal salt marsh from the

[105] Jones & Stokes, *Natural Environmental Study Report for the Bayview Transportation Improvements Project*, June 2009.

South Basin shoreline on HPS2 Parcels E and E2, and the majority of nontidal salt marsh from Parcel E2. The Navy is currently in the process of creating/restoring both tidal and nontidal wetland habitat on Parcel E2. A small wetland swale straddling the HPS1/HPS2 boundary has been partially filled. Regulatory agency permits to allow this wetland, which totals approximately 0.12 acre, to be filled are being obtained, and compensatory mitigation for the fill is being provided. In addition, a drainage approximately 550 feet long by 3 to 4 feet wide, emanating from a culvert southwest of the intersection of Donahue Street and Lakewood Street, represents approximately 0.05 acre of potentially jurisdictional wetlands and other waters, may be filled by future development activities (and would thus be subject to 2010 FEIR MM BI-4a.1 and MM BI-4a.2), although no specific 2018 Modified Project Variant activities propose to fill this feature.

Two new 2018 Modified Project Variant activities would result in impacts to jurisdictional habitats: the construction of two bridges over Dry Dock 4 and landings for the water taxi, both of which are described in detail in Project Description Section I.C.4 (Transportation Plan).

Neither of the bridges at Dry Dock 4 would involve placement of fill or structures within the water itself, and due to the height of the bridges above the water, little shading of the water would result from these bridges. However, there is some potential for shading to affect the biological functions and values of aquatic habitats under these bridges. The pedestrian and pedestrian/bicycles bridges over Dry Dock 4 would result in 0.22 acre of "shadow fill" of open bay waters. Shadow fill would not result in the complete loss of functions and values of the aquatic habitats below, however, and many fish and aquatic organisms would continue to use these areas following bridge construction.

All items of infrastructure for the water taxi landing within the water would be transportable. This infrastructure would not result in fill of waters, as it would all be floating or would be located above the water's surface (e.g., the access ramp). However, approximately 0.05 acre of Bay waters would be affected by the floating platform and shading from the access ramp. Fish and other aquatic organisms would still be able (and expected) to use the areas beneath these features after construction, though.

In total, the two bridges over Dry Dock 4 and the water taxi landing infrastructure would result in impacts to approximately 0.27 acre of Bay waters that were not analyzed in the 2010 FEIR. These impacts represent a very small addition to the approximately 28.48 acres of jurisdictional wetlands and other waters that were predicted to be impacted by the 2010 FEIR. Further, the 2010 FEIR analyzed impacts to the types of jurisdictional habitats (i.e., "other waters") that would be impacted by these 2018 Modified Project Variant activities, and from these same types of activities (e.g., from the Yosemite Slough bridge and from a marina at HPS2). Therefore, these 2018 Modified Project Variant activities do not represent a new significant impact or substantially more severe impact to jurisdictional wetlands and other waters.

Compensatory mitigation for these impacts on approximately 0.27 acre of Bay waters would be provided in accordance with 2010 FEIR MM BI-4a.1 and MM BI-4a.2. Implementation of these mitigation measures would reduce the impact to jurisdictional wetlands and other waters from the

2018 Modified Project Variant activities. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact BI-5b: Construction at HPS Phase II and construction of the Yosemite Slough bridge would not have a substantial adverse effect on eelgrass beds, a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. ***[Criterion N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR analyzed potential impacts of construction on eelgrass beds. At that time, eelgrass had been recorded along the north shore of the South Basin and on the north shore of HPS2, east of the northern end of Earl Street (refer to 2010 FEIR Figure III.N-2). The 2010 FEIR determined that in-water activities, such as the construction of the shoreline revetment improvements, had some potential to impact eelgrass, and it prescribed MM BI-5b.1, MM BI-5b.2, MM BI-5b.3, and MM BI-5b.4 to reduce impacts to eelgrass to less-than-significant levels.

No 2018 Modified Project Variant activities have the potential to impact eelgrass. The 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in activities where eelgrass could occur. The only 2018 Modified Project Variant activities that would affect Bay waters, the bridges over Dry Dock 4 and the water taxi landing at Dry Dock 4, are in areas where the water is too deep to provide suitable habitat for eelgrass. Eelgrass is not typically found in waters deeper than 12 feet mean lower low water;[106] Dry Dock 4 was constructed to support large ships and is considerably deeper. Water taxi operation is expected to occur in deeper waters, and water taxis associated with the 2018 Modified Project Variant are, therefore, not expected to traverse patches of eelgrass. The impact would remain less than significant with implementation of the identified mitigation measures.

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[106] NOAA Fisheries, *California Eelgrass Mitigation Policy and Implementing Guidelines*, October 2014.

Impact BI-6a: Construction at Candlestick Point would not have a substantial adverse effect, either directly or through habitat modifications, on any bird species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. ***[Criterion N.a]***

Impact BI-6b: Construction at HPS Phase II would not have a substantial adverse effect, either directly or through habitat modifications, on any bird species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As analyzed in the 2010 FEIR, development at CP and HPS2 has some potential to result in impacts to special-status birds. Peregrine falcons (*Falco anatum*) nesting on the Re-gunning crane on Parcel D of HPS2 could potentially be disturbed by nearby construction activities, and MM BI-6b was prescribed to avoid such impacts. No 2018 Modified Project Variant activities would occur close enough to the Re-gunning crane to disturb the nesting peregrine falcons, and the 2018 Modified Project Variant activities would, therefore, have no impact on these birds.

Project demolition and construction activities have the potential to impact nests of non-special-status birds that are protected by the Migratory Bird Treaty Act and California Fish and Game Code; however, MM BI-6a.1 was prescribed to avoid those impacts. Because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in disturbance of nesting birds, the 2018 Modified Project Variant activities are not expected to result in increased disturbance of nesting birds, beyond what was analyzed in the 2010 FEIR. Nevertheless, Implementation of MM BI-6a and MM BI-6b would ensure that the potential impact from the 2018 Modified Project Variant activities on protected birds would remain less than significant. It is worth noting that implementation of these mitigation measures would also avoid disturbance of active nests of locally scarce, non-special-status birds that have been recorded nesting in the Project area only recently, such as the osprey and black oystercatcher (as noted in the discussion of changes in the environmental setting above).

Impact BI-7b: Implementation of the Project at HPS Phase II would not have a substantial adverse effect on the quantity and quality of suitable foraging habitat for raptors. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, landscaping associated with the creation of a Grasslands Ecology Park on the southern portion of HPS2 would alter approximately 43 acres of nonnative grasslands within the HPS2 that currently serve as raptor foraging areas. Because historical raptor foraging

areas within the City have been reduced due to the conversion of open space to urbanized environments, permanent loss of suitable foraging habitat would be considered a substantial adverse effect. However, ongoing Navy remediation activities are disturbing much of this raptor foraging habitat, reducing its present value to raptors. In addition, the Project's proposed ecological enhancements, which would be refined in the Project's Draft Parks, Open Space, and Habitat Concept Plan, include measures to restore and manage areas that would be highly suitable as raptor foraging habitat; the 2010 FEIR included MM BI-7b to ensure that restoration and management of grasslands reduced Project impacts on raptors to less-than-significant levels.

The 2018 Modified Project Variant activities would not result in any additional impacts to raptors because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in impacts to raptors or their habitats. Rather, the 2018 Modified Project Variant includes an increase in the extent of new parks by approximately 34 acres at HPS2, which would increase raptor foraging habitat even more than was envisioned by the 2010 FEIR. Therefore, the 2018 Modified Project Variant activities would actually benefit raptors. Thus, the impact would remain less than significant with implementation of the identified mitigation measure.

Impact BI-8b: Construction at HPS Phase II would not have a substantial adverse effect, either directly or through habitat modifications, on the western red bat, a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR described that the western red bat (*Lasiurus blossevillii*) was the only special-status bat species with the potential to occur within the Project area. Potential roosting habitat for this species is present in more mature trees, where bats would roost in the foliage during migration and during the winter months (August–April). Construction activities that would remove these potential roosting sites could result in a small number of individuals being displaced, injured, or killed. However, due to the absence of mature trees from most areas, the lack of riparian habitat (its preferred habitat type), and the absence of this bat species as a breeder from the region, the number of bats that could potentially be impacted would be very small. Consequently, the loss or disturbance of western red bats and their habitats would not represent a substantial adverse effect as it would not substantially reduce the habitat of this species, cause its population to drop below self-sustaining levels, or reduce its range, and impacts would be less than significant. Rather, with implementation of MM BI-7b and MM BI-14a, the effect of Project activities on the western red bat would be expected to be beneficial.

No 2018 Modified Project Variant activities have the potential to result in greater impacts to western red bats than were analyzed in the 2010 FEIR because the 2018 Modified Project Variant activities

result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in impacts to western red bats or their habitats. Rather, the 2018 Modified Project Variant includes an increase in the extent of new parks by approximately 34 acres at HPS2. Planting of additional trees in this parkland could potentially increase western red bat roosting habitat beyond what was envisioned by the 2010 FEIR. Therefore, the 2018 Modified Project Variant activities could potentially benefit this species. Thus, the impact would remain less than significant, and no mitigation would be required.

Impact BI-9b: Pile driving associated with construction of the marina and the Yosemite Slough bridge would not have a substantial adverse effect at HPS Phase II, either directly or through habitat modifications, on marine mammals or fish identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As analyzed in the 2010 FEIR, in-water construction activities that involve pile driving could generate noise levels loud enough to disturb, injure, or kill fish and marine mammals, including special-status fish such as the green sturgeon (*Acipenser medirostris*), Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*), and longfin smelt (*Spirinchus thaleichthys*) and marine mammals such as the harbor seal (*Phoca vitulina*) and California sea lion (*Zalophus californianus*). The 2010 FEIR analysis focused on the need for pile driving for construction of the HPS2 marina and the Yosemite Slough bridge and prescribed MM BI-9b to reduce those impacts to less-than-significant levels.

The 2018 Modified Project Variant does not include any activities that would necessitate the driving of piles in water. Construction of the bridges and water taxi landing at Dry Dock 4 do not include pile driving within aquatic habitats. Therefore, no impacts on aquatic species from pile driving would result from the 2018 Modified Project Variant activities. Thus, the impact would remain less than significant with implementation of the identified mitigation measure.

Impact BI-10b: Construction at HPS Phase II would require removal of hard substrates (docks, riprap, seawalls, pilings, etc.) used by native oysters, but would not have a substantial adverse effect, either directly or through habitat modifications, on this species. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As analyzed in the 2010 FEIR, shoreline revetment improvements at CP and HPS2 would involve the removal of hard substrate that could potentially support native Olympia oysters (*Ostrea conchaphila*). However, installation of shoreline revetment features would replace any hard substrate that was lost, and the construction of two sections of breakwaters for the HPS2 marina would install

more suitable oyster habitat. As a result, impacts to native oysters would only be temporary, and overall effects of the Project on this species would be less than significant.

The 2018 Modified Project Variant does not include any activities that would involve the removal of hard substrate that could be used by native oysters. The edges of Dry Dock 4, which would be affected by construction of the bridges and water taxi landing, are vertical concrete walls that provide poor oyster habitat, and no hard substrate would be removed for the construction of these 2018 Modified Project Variant features. Any temporary impacts to hard substrate that could be used by native oysters would be minimal and temporary (during construction). Therefore, the impact from the 2018 Modified Project Variant activities on native oysters would remain less than significant.

Impact BI-11b: Construction at HPS Phase II would not have a substantial adverse effect on designated critical habitat for green sturgeon and Central California Coast steelhead, and would not result in impacts to individuals of these species as well as Chinook salmon and longfin smelt through temporary and permanent disturbance of aquatic and mudflat habitat during construction of shoreline revetments. ***[Criteria N.a and N.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR discussed the potential for in-water activities to result in impacts to habitat for special-status fish such as the green sturgeon, Central California Coast steelhead, Chinook salmon, and longfin smelt, and potentially disturbance of individuals of these species during construction. Construction of the proposed marina (including breakwaters) and shoreline revetments would result in the loss of habitat for these special-status fish species, including the loss of designated critical habitat for the green sturgeon and Central California Coast steelhead. Because of the regional rarity of all these special-status fish, impacts to individuals or to habitat used by these fish were considered significant. However, mitigation measures MM BI-4a.1 and MM BI-4a.2 would reduce these impacts to less-than-significant levels by compensating for the loss of jurisdictional waters, and overall, the removal of debris and other materials from Bay waters was expected to result in a net increase in fish habitat.

The 2018 Modified Project Variant does not involve any activities that would result in the permanent loss of fish habitat. The two bridges over Dry Dock 4 would completely span Bay waters, and although they would shade approximately 0.22 acre of waters below to some extent (as described in Impact BI-4b above), fish would continue to use waters below these bridges. The water taxi landing would affect approximately 0.05 acre of Bay waters due to the presence of the floating platform and shading from the access ramp. However, fish would still be able (and expected) to use the areas beneath these features after construction. Implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2 for the Dry Dock 4 bridges and water taxi landing would ensure that the potential impact to special-status fish would remain less than significant.

Impact BI-12b: Construction at HPS Phase II would not have a substantial adverse effect on designated essential fish habitat through (EFH) through placement of riprap and other fill, or through temporary water-quality impacts during construction. EFH is a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. ***[Criterion N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR described the impacts to EFH that could potentially result from the placement of fill and water-quality effects during construction of features in and near the Bay. Such impacts included loss of fish habitat due to placement of rock along the shoreline to buttress bulkheads, improve the shoreline revetments, and construct breakwaters for the HPS2 marina, as well as impairment of fish health if water quality were adversely affected by construction. The 2010 FEIR determined that mitigation to compensate for the loss of jurisdictional wetlands and other waters and avoid water-quality impacts (MM BI-4a.1, MM BI-4a.2), avoid and compensate for impacts to eelgrass (MM BI-5b.1, MM BI-5b.2, MM BI-5b.3, MM BI-5b.4), and avoid and minimize impacts to EFH during construction, demolition, and debris removal (MM BI-12a.2, MM BI-12b.1, MM BI-12b.2) would reduce impacts to EFH to less-than-significant levels.

The 2018 Modified Project Variant does not involve any activities that would result in the permanent loss of EFH, and as discussed in Impact BI-5b above, the 2018 Modified Project Variant activities would not result in impacts to eelgrass. The two bridges over Dry Dock 4 would completely span Bay waters, and although they would shade 0.22 acre of the waters below to some extent (as described for Impact BI-4b above), fish would continue to use waters below these bridges. The water taxi landing would affect approximately 0.05 acre of Bay waters due to the presence of the floating platform and shading from the access ramp. However, fish would still be able (and expected) to use the areas beneath these features after construction. Implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2 for the Dry Dock 4 bridges and water taxi landing would compensate for impacts to fish habitat resulting from the 2018 Modified Project Variant activities. Implementation of mitigation measures MM BI-12a.2, MM BI-12b.1, and MM BI-12b.2 would reduce impacts on water quality and EFH from construction in and near Bay waters. In total, implementation of mitigation measures MM BI-4a.1, MM BI-4a.2, MM BI-12a.2, MM BI-12b.1, and MM BI-12b.2 for construction of the Dry Dock 4 bridges and water taxi landing would reduce impacts on EFH. The impact would remain less than significant with implementation of the identified mitigation measures.

Impact BI-13b: Construction at HPS Phase II and construction of the Yosemite Slough bridge would not interfere substantially with the movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, but it could impede the use of native wildlife nursery sites. ***[Criterion N.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, no regional wildlife corridors or migratory pathways are present on the CP-HPS2 Project site. Construction at CP and HPS2 would affect primarily terrestrial species that are well adapted to human disturbance in the area and move locally within the Project site and between the adjacent habitat patches. Construction would not substantially interfere with this local movement as the terrestrial wildlife would be able to continue their pre-Project activities in the areas not under construction, and construction would not permanently bar their movement through those portions of the site as the construction activities would be temporary. The Yosemite Slough bridge would separate the upper part of Yosemite Slough, including the proposed restoration site, from South Basin and San Francisco Bay, but it would not substantially reduce the ability of fish or wildlife that currently move in and out of Yosemite Slough to continue doing so. Therefore, Project impacts on wildlife movement were considered less than significant.

The 2010 FEIR determined that eelgrass beds provide nurseries for fish and other aquatic organisms, and that Project activities had the potential to impact eelgrass. As a result, the 2010 FEIR prescribed MM BI-5b.1 through MM BI-5b.4 to reduce impacts to native wildlife nursery sites (i.e., eelgrass) to less-than-significant levels.

As discussed in Impact BI-5b above, the 2018 Modified Project Variant activities would not result in impacts to eelgrass. Furthermore, no 2018 Modified Project Variant activities would affect wildlife movement or native wildlife nursery sites beyond what was analyzed in the 2010 FEIR because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in disturbance of plants and animals. Therefore, the potential impact to wildlife movement and native wildlife nursery sites would remain less than significant with implementation of the identified mitigation measures.

Impact BI-14b: Construction at HPS Phase II and Yosemite Slough bridge would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. ***[Criterion N.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR discussed the potential impacts of construction of the CP-HPS2 Project on trees that are protected by the City of San Francisco's Urban Forestry Ordinance. The Project has the potential

to remove a number of trees that meet the criteria for "street trees" or "significant trees", in addition to removing a number of trees that are not in or near the public right-of-way and that therefore do not meet the criteria for protected trees. The 2010 FEIR determined that MM BI-14a, requiring the preservation and replacement/planting of street trees and significant trees, would be implemented to reduce impacts to trees to less-than-significant levels. The 2010 FEIR also included MM BI-7b, which required the development of a Parks, Open Space, and Habitat Concept Plan that would result in a substantial increase in the number of trees on the Project site. With implementation of MM BI-7b, the number of trees would be substantially greater after Project implementation, resulting in a beneficial impact on trees.

The 2018 Modified Project Variant activities would not result in impacts on trees that are greater than were analyzed in the 2010 FEIR because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in impacts to trees. Rather, the 2018 Modified Project Variant includes an increase in the extent of new parks by approximately 34 acres at HPS2, and this new parkland would provide even greater opportunity for tree planting than was envisioned by the 2010 FEIR. Therefore, the 2018 Modified Project Variant activities could increase the number of trees. Nevertheless, MM BI-14a would still be implemented for the 2018 Modified Project Variant activities to ensure compliance with the City's Urban Forestry Ordinance.

Impact BI-15b: Construction within the shoreline or Bay at HPS Phase II would not result in the disturbance of contaminated soil or the re-suspension of contaminated sediments. ***[Criteria N.a and N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, chemicals and radioactive materials are present in soil and groundwater in various locations on HPS2 at levels that require remediation. Disturbance of fill or shoreline sediments, and associated stockpiling and on-site soil movement, during construction could provide potential pathways through which fish and wildlife species could be exposed to contaminants in fill material or Bay/shoreline sediments. Exposure of fish and wildlife to such contaminants could potentially impair the health or productivity of exposed individuals, or could have food-chain effects on species that prey upon exposed individuals through bioconcentration of contaminants. Although the Navy is responsible for remediation of contaminated areas, safeguards to prevent mobilization of contaminated materials are still necessary to reduce impacts of contaminants to less-than-significant levels, and the 2010 FEIR prescribed MM HZ-10b, MM HY-1a.1, and MM HY-1a.2 to ensure that appropriate procedures are implemented.

The 2018 Modified Project Variant activities would not result in impacts from mobilization of contaminated materials that are greater than were analyzed in the 2010 FEIR because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather

than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in mobilization of contaminants. Nevertheless, MM HZ-10b, MM HY-1a.1, and MM HY-1a.2 would still be implemented for the 2018 Modified Project Variant activities to reduce impacts from mobilization of contaminants. This impact would remain less than significant with implementation of the identified mitigation measures.

Impact BI-16b: Implementation of the Project at HPS Phase II, including operation of the proposed marina, would not have a substantial adverse effect, either directly or through habitat modifications, on aquatic species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS or interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. ***[Criteria N.a and N.d.]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As discussed in the 2010 FEIR, operation of the marina and marina-related watercraft at HPS2 would have the potential to disturb marine mammals and birds. The marine mammals most likely to be disturbed are locally foraging harbor seals, as there are no pupping sites or major haulout locations in the Project vicinity where animals would be subject to increased disturbance from vessel traffic from the Project. San Francisco Bay provides resting and foraging habitat for a variety of waterfowl migrating along the Pacific flyway. These birds often congregate into relatively large rafts of birds. Those rafts are subject to disturbance from noise, size, speed, and wakes generated by vessel traffic. The common response to disturbance is for the birds to fly off the water surface and fly some distance away and land. Therefore, the marina and marina-related (personal watercraft operations) activities would increase the disturbance of birds resting and foraging on Bay waters. The 2010 FEIR determined that such impacts on marine mammals and waterbirds would be less than significant because the few boats that at any one time are moving from the proposed marina into the Bay are not expected to generate substantial additional disturbance over current conditions, considering the size of the Bay, the number of boats currently on the bay at any one time, and the amount of disturbance currently generated by the existing boats on the Bay.

The 2018 Modified Project Variant includes several activities whose operation could result in increased disturbance of waterbirds on San Francisco Bay. Small numbers of waterbirds currently forage or roost on the waters within Dry Dock 4. Although they would be able to continue doing so after construction of the bridges and the water taxi landing, those waterbirds' aversion to human activity would reduce their use of areas very close to the bridges and water taxi landing. The net result would be the loss of use of a relatively limited area of open water. This effect would impact relatively few birds, compared to the Project impacts analyzed in the 2010 FEIR; however, as human

activity along the shoreline and boat activity associated with the marina would already have impacted waterbird use of the Dry Dock 4 area.

Operation of the water taxi would have impacts similar to those analyzed in the 2010 FEIR for the marina. Taxi boats could disturb marine mammals and rafting waterbirds using waters around HPS2 and along their taxi routes. However, the increase in boat use associated with the water taxi service, beyond that analyzed in the 2010 FEIR, would be very limited. The 2010 FEIR assumed the construction and operation of a 300-slip marina. The water taxi service would involve many fewer boats. Initially, water taxi service would occur during weekday morning and evening peak hours to accommodate commuter traffic. As the population at HPS2 increases, additional trips could occur throughout the day, as supported by demand. Destinations for outbound trips and origins of inbound trips would depend on passenger demand, but are expected to include any of the docking locations in the San Francisco Bay, including San Francisco, Marin County, the East Bay, and the South Bay.

As discussed in the 2010 FEIR, the boat traffic associated with HPS2, including the water taxi service, would represent a very small percentage of vessel traffic operating in San Francisco Bay, and thus water taxi operation would not contribute any substantial, new disturbance of marine mammals or rafting waterbirds. Also, the water taxi service would be operating along "routes" that are currently traversed by numerous vessels, and that would be traversed by vessels associated with the HPS2 marina analyzed in the 2010 FEIR. Therefore, the water taxi service is not expected to result in impacts to portions of the Bay that would be undisturbed by existing or previously analyzed boat traffic. For these reasons, the 2018 Modified Project Variant activities' impacts on marine mammals and rafting waterbirds are less than significant.

Otherwise, operation of the 2018 Modified Project Variant activities would have little effect on the overall impact analysis of the Project on plants and animals because the 2018 Modified Project Variant activities result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in disturbance of plants and animals. Rather, 2018 Modified Project Variant includes an increase in the extent of new parks by approximately 34 acres at HPS2. Application of MM BI-7b to this new parkland would result in an increase in habitat for a number of plants and animals, relative to the Project analyzed in the 2010 FEIR. This impact would remain less than significant, and no mitigation would be required.

Impact BI-17b: Implementation of the Project at HPS Phase II would not have a substantial adverse effect, either directly or through habitat modifications, on nesting American peregrine falcons, identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As discussed in the 2010 FEIR, a pair of peregrine falcons' nests on the Re-gunning crane. However, operation of the Project would not result in substantial adverse effects to the falcons' nesting activities, as this nesting pair has persisted, and nested successfully, at this site for a number of years even while remediation activities have been ongoing in the vicinity of the nest site. The 2018 Modified Project Variant does not include any activities that would increase the potential for disturbance of the nesting falcons as compared to the activities that were analyzed in the 2010 FEIR; thus, the 2018 Modified Project Variant would not result in impacts on nesting peregrine falcons.

Impact BI-18b: Implementation of the marina in HPS Phase II would require routine maintenance dredging of the marina, which could remove habitat or generate substantial increases in turbidity within the marina, but would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS, or have a substantial adverse effect on designated EFH, a sensitive natural community identified in local or regional plans, policies, and regulations or by the NMFS. ***[Criteria N.a and N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR discussed that routine dredging might be needed to maintain the operational depth of the HPS2 marina. Dredging could result in the loss of benthic organisms living in the sediment that is being removed. The mobilization of sediment during dredging could alter habitat for other benthic organisms as it settles out onto substrate (e.g., for native oysters or spawning Pacific herring [*Clupea pallasii*]) and could reduce water quality for fish and other estuarine organisms. The 2010 FEIR prescribed MM BI-18b.1 and MM BI-18b.2 to reduce such impacts to less-than-significant levels.

No dredging is anticipated to be necessary for the 2018 Modified Project Variant activities. The only 2018 Modified Project Variant activity that involves watercraft is the addition of a water taxi service and construction of infrastructure to support that service. However, water taxis are not large and do not induce substantial draft, and the water taxi landing infrastructure is mobile, so that it could be moved to new locations if sedimentation impairs the operation of the taxi service. As a result, no dredging to maintain conditions for the water taxi service is proposed. Therefore, the 2018 Modified Project Variant would have no impact resulting from maintenance dredging. The Project would continue to implement mitigation measures MM BI-18b.1 and MM BI-18b.2 to ensure that the impact from dredging of the marina would remain less than significant.

Impact BI-19b: Implementation of the marina in HPS Phase II would not have a substantial adverse effect, either directly or through habitat modifications, on sensitive aquatic species, identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS, or have a substantial adverse effect on designated EFH, a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS, or have a substantial effect on predators that prey on contaminated species or feed on contaminated substrates as a result of routine maintenance dredging or could generate routine increases in turbidity within the marina that would result in the re-suspension of contaminated sediments. ***[Criteria N.a and N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, much of the seafloor within the Project area is contaminated from decades of industrial use, and maintenance dredging of the HPS2 marina has the potential to mobilize contaminants in sediments. Contaminants in these sediments may be taken up by aquatic organisms, either within the marina or in other areas to which contaminated sediments are carried by tides or currents. The uptake of contaminated food sources or exposure to elevated levels of toxins could reduce reproductive success, alter blood chemistry, suppress a fish's immune systems, and result in an increased risk of disease and mortality. These effects may occur in aquatic organisms that take up contaminated substances directly, wildlife species (such as shorebirds) that forage in contaminated substrates, or predators that feed on prey that have taken up contaminants. Such impacts are potentially significant, and the 2010 FEIR prescribed MM BI-19b.1 and MM BI-19b.2 to reduce such impacts to less-than-significant levels.

However, as described in Impact BI-18b above, no dredging is anticipated to be necessary for the 2018 Modified Project Variant activities. Therefore, the 2018 Modified Project Variant would have no impact resulting from the mobilization of contaminants during maintenance dredging. The Project would continue to implement mitigation measures MM BI-19b.1 and MM BI-19b.2 to ensure that the impact from dredging of the marina would remain less than significant. MM BI-19b.1 has been modified, as indicated below, to reflect the correct spawning season for Pacific herring and the appropriate work window.

Mitigation Measure with Proposed 2018 Modifications

MM BI-19b.1: Work Windows to Reduce Maintenance Dredging Impacts to Fish during Operation of the Marina. According to the Long-Term Management Strategy (LTMS), dredging Projects that occur during the designated work windows do not need to consult with NMFS under the federal *Endangered Species Act* (FESA).[107] The window in which

[107] U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, San Francisco Bay Conservation and Implementation Commission, and San Francisco Bay Regional Water Quality Control Board. *Long-Term Management Strategy for the Placement of Dredge Material in the San Francisco Bay, Management Plan*, 2001.

dredging is allowed for the protection of steelhead in the central Bay is June 1 to November 30. The spawning season for the Pacific herring is ~~March 1 to November 30~~ December 1 to February 28.[108] Therefore, the window that shall be applied to minimize impacts to sensitive fish species (during which dredging activities cannot occur) is ~~March~~ June 1 to November 30.

Impact BI-20a: Implementation of the Project at Candlestick Point would not interfere substantially with the movement of resident or migratory bird species by increasing collision hazards and the amount of artificial lighting. ***[Criterion N.d]***

Impact BI-20b: Implementation of the Project at HPS Phase II would not interfere substantially with the movement of resident or migratory bird species by increasing collision hazards and the amount of artificial lighting. ***[Criterion N.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant

The 2010 FEIR analyzed impacts of the construction of new buildings on resident and migratory birds by increasing collision hazards and the amount of artificial lighting. Within CP, towers ranging from 200 to 420 feet in height were proposed, and at HPS2, towers ranging from 240 to 350 feet in height were proposed. The 2010 FEIR discussed how migrating birds such as songbirds could be affected by such human-built structures because of the birds' propensity to migrate at night, their low flight altitudes, and their tendency to be disoriented by artificial light, making them vulnerable to collision with obstructions. Both tall structures and residential windows provide collision hazards to migrating birds. A majority of bird strikes occur when birds do not recognize windows on buildings. Thus, operation of the towers would pose collision hazards to migratory birds as effects associated with the lighting of the towers could alter the flight patterns of migratory birds and substantially increase bird strike collisions with the structures. Large-scale avian injury or mortality due to bird strikes has not been documented at buildings on the West Coast as it has in eastern and Midwestern North America. Due to the potential for bird strikes at tall buildings on CP and HPS2, this impact was considered significant. The 2010 FEIR prescribed MM BI-20a.1 and MM BI-20a.2 to reduce the effects of operational activities related to buildings and increased lighting on migrating birds to less-than-significant levels.

Under the 2010 Project, MM BI-20a.1 and MM BI-20a.2 applied to buildings that were more than 100 feet tall, under the assumption that impacts to migratory birds would result primarily from collisions by high-flying migrants, whereas the current thinking is that most bird collisions occur within 60 feet of the ground, where birds engage in most of their activities. Various summaries have placed this primary collision zone between 0 feet and 40 to 60 feet above the ground.[109,110] Current

[108] U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, San Francisco Bay Conservation and Implementation Commission, and San Francisco Bay Regional Water Quality Control Board. *Long-Term Management Strategy for the Placement of Dredge Material in the San Francisco Bay, Management Plan*, 2001; Appendix F.
[109] Sheppard, C. 2011. *Bird-Friendly Building Design*. American Bird Conservancy, The Plains, VA, 60 pages.
[110] San Francisco Planning Department. 2011. Standards for Bird-Safe Buildings.

practice is to concentrate bird-safe building design at lower elevations rather than higher elevations. Therefore, to be consistent with current practices, MM BI-20a.1 and MM BI-20a.2 have been revised to provide design recommendations for buildings that are lower in height. Compliance with these modified mitigation measures, which are included under Impact BI-20b, at both CP and HPS would reduce bird-collision impacts to less-than-significant levels.

Addendum 5 would allow increases in building heights by approximately 20 to 35 feet in many areas on HPS2 and would change the locations of some of the tallest towers. Increasing the heights of buildings could potentially result in an increase in collision risk for higher-flying birds. However, as discussed in the preceding paragraph, current practice in bird-safe design emphasizes the importance of reducing bird collision risk in the primary collision zone, closer to the ground, where birds engage in most of their activities. As a result, increasing the heights of buildings as part of Addendum 5 is not expected to result in a substantial increase in bird collision risk compared to the 2010 Project. Addendum 5 activities do not specifically include any new wind generators or lighting that would increase impacts to birds.

Mitigation Measures with Proposed 2018 Modifications

MM BI-20a.1 Lighting Measures to Reduce Impacts to Birds. During building design ~~of any building greater than 100 feet tall~~, the Project Applicant and architect shall consult with a qualified biologist experienced with bird strikes and building/lighting design issues (as approved by the City/Agency) to identify lighting-related measures to minimize the effects of the building's lighting on birds. Such measures, which may include the following and/or other measures, will be incorporated into the building's design and operation.

- Where lighting is necessary on rooftops, u~~U~~se strobe or flashing lights in place of continuously burning lights for obstruction lighting. Use flashing white lights rather than continuous light, red light, or rotating beams.
- Install shields onto light sources not necessary for air traffic to direct light towards the ground and away from areas that provide high-quality bird habitat.
- Extinguish all exterior lighting (i.e., rooftop floods, perimeter spots) not required for public safety.
- No uplighting will be installed.
- When interior or exterior lights must be left on at night, the developer and/or operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:
    - Installing motion-sensitive lighting.
    - Using desk lamps and task lighting.
    - Reprogramming timers.
    - Use of lower-intensity lighting.

- Windows or window treatments that reduce transmission of light out of the building will be implemented to the extent feasible.
- Educational materials will be provided to building occupants encouraging them to minimize light transmission from windows, especially during peak spring and fall migratory periods, by turning off unnecessary lighting and/or closing drapes and blinds at night.
- A report of the lighting alternatives considered and adopted shall be provided to the City/Agency for review and approval prior to construction. The City/Agency shall ensure that lighting-related measures to reduce the risk of bird collisions have been incorporated into the design of such buildings to the extent practicable.

MM BI 20a.2 Building Design Measures to Minimize Bird Strike Risk. During design of any building ~~greater than 100 feet tall~~ within 300 feet of a potential "urban bird refuge" (an open space 2 acres and larger dominated by vegetation, including vegetated landscaping, forest, meadows, grassland, or wetlands, or open water) or any structure containing free-standing glass walls, wind barriers, skywalks, balconies, and greenhouses on rooftops that have unbroken glazed segments 24 square feet and larger in size, the Project Applicant and architect will consult with a qualified biologist experienced with bird strikes and building/lighting design issues (as approved by the City/Agency) to identify measures related to the external appearance of the building/structure to minimize the risk of bird strikes. Such measures, which may include the following and/or other measures, will be incorporated into the building's design.

- Minimize the use of glass, particularly within the portion of the building between ground level and 60 feet above the ground.
- Use non-reflective tinted glass.
- Use window films to make windows visible to birds from the outside.
- Use external surfaces/designs that "break up" reflective surfaces. These patterns should include vertical elements at least 0.25 inch wide at a maximum spacing of 4 inches or horizontal elements at least 0.125 inch wide at a maximum spacing of 2 inches.
- Place bird attractants, such as bird feeders and baths, at least 3 feet and preferably 30 feet or more from windows in order to reduce collision mortality.
- A report of the design measures considered and adopted shall be provided to the City/Agency for review and approval prior to construction. If, in the opinion of a qualified biologist, modification or waiver of these bird-safe design measures would not result in substantial increases in bird collision risk, the report should include the justification for such an opinion, for consideration by the City/Agency. The City/Agency shall ensure that building design-related measures to reduce the risk of bird collisions have been incorporated to the extent practicable.

Impact BI-21b: Implementation of the Project at HPS Phase II would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. ***[Criterion N.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant

Impacts from proposed Project construction activities on trees that are protected by the City of San Francisco's Urban Forestry Ordinance are discussed in Impact BI-14b. No additional impacts to trees would result from Project implementation. Impacts to resident and migratory birds by increasing collision hazards and the amount of artificial lighting, resulting from proposed Project construction activities, are discussed in Impact BI-20b. The CP-HPS2 Project would reduce bird-collision impacts to less-than-significant levels by complying with MM BI-20a.1 and MM BI-20a.2. No additional impacts to birds associated with collision hazards and artificial lighting would result from Project implementation.

Impact BI-22: Implementation of the Project would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, by the CDFW, USFWS, or NMFS. ***[Criterion N.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, the CP-HPS2 Project would involve removal and/or modification of areas that have the potential to contain special-status species, including seven potentially breeding avian species, one bat species, and four fish species (green sturgeon, Chinook, steelhead, and longfin smelt). The Project also has the potential to affect designated critical habitat of the green sturgeon and thus, directly impact threatened and/or endangered species through habitat conversion or unauthorized take. In addition, Project activities would occur within habitats of locally rare or sensitive species such as Pacific herring and Olympia oysters, as well as avian species protected by the MBTA and California Fish and Game Code.

No new special-status species that may occur in the Project area have been listed since 2010, and no special-status species that were not known or expected to occur in the Project area in the 2010 FEIR have been newly recorded in the Project area since then. The 2018 Modified Project Variant activities simply result in changes in the land-use development program, rather than increases in the amount of developed area or inclusion of new activities that would result in substantial increases in impacts on special-status species. As a result, the 2018 Modified Project Variant activities would not result in new impacts to special-status species or substantially greater impacts to such species compared to the analysis in the 2010 FEIR, and no additional analysis of impacts from the 2018 Modified Project Variant activities on special-status species is necessary. The Project would continue to implement the

mitigation measures described in 2010 FEIR (Impact BI-22) to ensure that the impact to special-status species would remain less than significant.

Impact BI-23: Implementation of the Project would not have a substantial adverse effect on sensitive natural communities identified in local or regional plans, policies, or regulations by the CDFW, USFWS, or NMFS. ***[Criterion N.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As discussed in the 2010 FEIR, no riparian habitat occurs in the Project area, and the only sensitive habitats other than wetlands and aquatic habitats (discussed in Impact BI-24 below) are eelgrass and areas designated as EFH. The 2010 FEIR prescribed mitigation measures to reduce impacts to eelgrass and EFH to less-than-significant levels.

Impacts from proposed Project construction activities on eelgrass are discussed in Impact BI-5b, and impacts from proposed Project construction activities on EFH are discussed in Impact BI-12b. No additional impacts to eelgrass or EFH would result from Project implementation. This impact would remain less than significant with implementation of the identified mitigation measures.

Impact BI-24: Implementation of the Project would not have a substantial adverse effect on federally protected wetlands and other waters as defined by Section 404 of the *Clean Water Act* (including, but not limited to, marsh, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. ***[Criterion N.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Impacts to jurisdictional wetlands and other waters (i.e., open water) that would result from proposed Project construction activities are discussed in Impact BI-4b. No additional impacts to these jurisdictional habitats would result from Project implementation. This impact would remain less than significant with implementation of the identified mitigation measures.

Impact BI-25: Implementation of the Project would not interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site. ***[Criterion N.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Impacts to established native resident or migratory wildlife corridors and native wildlife nursery sites that would result from proposed Project construction activities are discussed in Impact BI-13b. Impacts from proposed Project construction activities on eelgrass, provide nurseries for fish and

other aquatic organisms, are discussed in Impact BI-5b. No additional impacts to these resources would result from Project implementation.

Impacts to resident and migratory birds by increasing collision hazards and the amount of artificial lighting, resulting from proposed Project construction activities, are discussed in Impact BI-14b. The CP-HPS2 Project would reduce bird-collision impacts to less-than-significant levels by complying with Planning Code Section 139 in lieu of MM BI-20a.1 and MM BI-20a.2. No additional impacts to birds associated with collision hazards and artificial lighting would result from Project implementation. This impact would remain less than significant with implementation of the identified mitigation measures.

Impact BI-26: Implementation of the Project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. ***[Criterion N.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Impacts to jurisdictional wetlands and other waters (i.e., open water) that would result from proposed Project construction activities are discussed in Impact BI-4b. No additional impacts to these jurisdictional habitats would result from Project implementation.

Impacts from proposed Project construction activities on trees that are protected by the City of San Francisco's Urban Forestry Ordinance are discussed in Impact BI-14b. No additional impacts to trees would result from Project implementation. The 2018 Modified Project Variant activities would not result in impacts on trees that are greater than were analyzed in the 2010 FEIR.

Impacts to resident and migratory birds by increasing collision hazards and the amount of artificial lighting, resulting from proposed Project construction activities, are discussed in Impact BI-14b. The CP-HPS2 Project would reduce bird-collision impacts to less-than-significant levels by complying with Planning Code Section 139 in lieu of MM BI-20a.1 and MM BI-20a.2. No additional impacts to birds associated with collision hazards and artificial lighting would result from Project implementation. This impact would remain less than significant with implementation of the identified mitigation measures.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to biological resources impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to biological resources, either on a project-related or cumulative basis.

II.B.14 Public Services

Criterion	*Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)*	*Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?*	*Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?*	*Any New Information of Substantial Importance?*	*Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant*
14. Public Services. Would the project:					
O.a Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, [or the] need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?	2010 FEIR p. III.O-7 (Impact PS-1), p. III.O-8 (Impact PS-2); Addendum 1 p. 45; Addendum 4 p. 49	No	No	No	MM TR-1, MM PS-1, Varies[111]
O.b Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, [or the] need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?	2010 FEIR p. III.O-17 (Impact PS-3), p. III.O-18 (Impact PS-4); Addendum 1 p. 45; Addendum 4 p. 49	No	No	No	MM TR-1, Varies[111]
O.c Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, [or the] need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives of the school district?	2010 FEIR p. III.O-28 (Impact PS-5), p. III.O-28 (Impact PS-6); Addendum 1 p. 45; Addendum 4 p. 49	No	No	No	None

[111] Refer to Sections II.B.3, II.B.7, II.B.8, II.B.9, II.B.10, and II.B.12 for the specific mitigation measures for construction-related effects.

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
O.d	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, [or the] need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services?	2010 FEIR p. III.O-35 (Impact PS-7), p. III.O-35 (Impact PS-8); Addendum 1 p. 45; Addendum 4 p. 49	No	No	No	None

Changes to Project Related to Public Services

The elements of the land use program evaluated in Addendum 5 that relate to public services, including police protection, fire protection, schools, and libraries, are changes in population, employment, and development levels associated with the 2018 Modified Project Variant that would require new or expanded facilities to maintain acceptable service levels that were not identified and addressed in the 2010 FEIR. Refer to Section I (Project Description) and Section II.B (Population, Housing, and Employment) for information regarding the land use program (including schools) and projected population, housing, and employment at the site.

Comparative Impact Discussions

Impact PS-1: Construction activities associated with the Project would not result in a need for new or physically altered facilities in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. ***[Criterion O.a]***

	2010 CP-HPS2 FEIR	2010 CP-HPS2 FEIR Addendum 5
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR determined that construction activities could result in increased demand for police services if construction activities cause traffic conflicts requiring SFPD response. The 2010 FEIR determined that access to the Project site during construction would be maintained by implementation of a construction traffic management program (CTMP), as required by mitigation measure MM TR-1. The CTMP would provide necessary information to various contractors and agencies as to how to maximize the opportunities for complementing construction management measures and to minimize the possibility of conflicting impacts on the roadway system, while safely accommodating the traveling public in the area. The 2010 FEIR determined that the program would supplement and expand, rather than modify or supersede any manual, regulations, or provisions set forth by SFMTA, DPW or other City departments and agencies.

The 2010 FEIR determined that construction activities also could increase demand for SFPD services if the site is not adequately secured, providing increased opportunity for criminal activity. To ensure adequate site security, the 2010 FEIR determined that mitigation measure MM PS-1 would require the Project Applicant to provide security during project construction. The 2010 FEIR concluded that impacts to the SFPD would be considered less than significant with implementation of the security measures required by mitigation measure MM PS-1.

While the number of construction jobs created as a result of the Project has changed, as shown in Table 8 (Construction Employment) in Addendum 5 Section II.B.2 (Population, Housing, and Employment), the number of years of construction has been extended to 21 years, although the beginning date of construction is delayed by approximately 4 years. Construction began in 2014 and would extend to 2034, as compared to the 2010 FEIR, which showed construction beginning in 2010 and continuing to 2028.

As with the Project analyzed in the 2010 FEIR, access to the Project site during construction would be maintained by implementation of a CTMP, as required by mitigation measure MM TR-1, and mitigation measure MM PS-1 would require the Project Applicant to provide security during project construction. As with the Project analyzed in the 2010 FEIR, impacts to the SFPD would remain less than significant with implementation of the security measures required by mitigation measure MM PS-1.

Impact PS-2: Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. ***[Criterion O.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Varies	Varies (same as 2010 FEIR)

As identified in the 2010 FEIR, the Project site lies within the SFPD's Bayview District. Police services are provided from the Bayview Police Station, located at 201 Williams Avenue near Third Street. Police operating from this station provide service to the southeastern part of the city, extending along the eastern edge of McLaren Park to the Bay and south from Channel Street to the San Mateo County line.

The 2010 FEIR determined that impacts on police protection services are considered significant if an increase in population or development levels would result in inadequate staffing levels (as measured by the ability of the SFPD to respond to call loads) and/or increased demand for services that would require the construction or expansion of new or altered facilities that might have an adverse physical effect on the environment. To estimate personnel requirements for new projects, the SFPD considers the size of the incoming residential population and the expected or actual experience with calls for service from other potential uses of the site. Any potential increase in staffing at the SFPD Bayview Station would be expected to take place over time throughout the Project development period with the incremental addition of new housing and new nonresidential building space and their occupancy.

As discussed in the 2010 FEIR, while the City has no adopted staffing ratio, the existing "level of service" at the SFPD can be determined by comparing citywide police force staffing to total City population (including both residents and workers).

The 2010 FEIR identified a citywide ratio of 1 officer per 665 people. This ratio, when applied to the total projected resident and employee population of the Project site at build-out under the 2018 Modified Project Variant of 41,484 (consisting of 16,618 employees and 24,866 residents) results in the need for 63 police personnel to provide a comparable level of service in the Bayview District. Consequently, the 2018 Modified Project Variant would result in the demand for an additional 10 police personnel above the 53 police personnel identified in the 2010 FEIR. The increase in 10 police personnel under the 2018 Modified Project Variant is attributed to the 172 residential units that were transferred from HPS1 to HPS2 and an increase in R&D and retail land uses in HPS2.

As discussed in the 2010 FEIR, while staffing increases, in and of themselves, would not create a significant environmental impact, the construction of new facilities to serve additional police officers could create significant environmental impacts. Additional SFPD personnel needed to serve the Project would require a station from which to operate. Using an estimate of 110 sf per person, which was used in the 2010 FEIR, the additional 63 police officers would require approximately 6,930 sf of interior building space, an increase in 930 sf over the 6,000 sf[112] identified in the 2010 FEIR.

As with the project analyzed in the 2010 FEIR, up to 100,000 gross square feet (gsf) divided equally between CP and HPS2 would be designated for community-serving uses, such as fire, police, healthcare, day-care, places of worship, senior centers, library, recreation center, community center, and/or performance center uses. These uses have been anticipated as part of the Project, and the impacts of their construction were evaluated in the 2010 FEIR. Accordingly, the potential construction of a new police facility (counter, storefront, or other configuration) on the Project to accommodate development associated with the 2018 Modified Project Variant was addressed in the 2010 FEIR. With the construction of a new facility or a suitable retrofitting or expansion of the Bayview Station, the SFPD would have ample space to accommodate the additional police officers needed to maintain the SFPD's existing level of service.

As with the project analyzed in the 2010 FEIR, construction activities associated with the proposed public facilities, which could include a potential 6,820 sf building space for new police officers, are considered part of the overall Project. A discussion of project-related construction impacts, including those associated with the construction of public facilities, is provided in the applicable sections of the 2010 FEIR, including Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise and Vibration), Section III.J (Cultural Resources and Paleontological Resources), Section III.K (Hazards and Hazardous Materials), and Section III.M (Hydrology and Water Quality). Construction impacts would be temporary. While it is likely that construction of the various public

[112] The actual square footage identified in the 2010 FEIR is 53 officers multiplied by 110 sf per officer, which is 5,830 sf; but, it was rounded up to 6,000 sf.

facilities would not result in significant impacts (either individually or combined), construction of the entire development program, of which the public facilities are a part, would result in significant and unavoidable impacts related to construction noise and demolition of an historic resource; all other construction-related impacts would be less than significant (in some cases, with implementation of identified mitigation). Refer to 2010 FEIR Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise and Vibration), Section III.J (Cultural Resources and Paleontological Resources), Section III.K (Hazards and Hazardous Materials), and Section III.M (Hydrology and Water Quality) for the specific significance conclusions for construction-related effects.

Impact PS-3: Construction activities associated with the Project would not result in a need for new or physically altered facilities in order to maintain acceptable response times for fire protection and emergency medical services. ***[Criterion O.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR determined that during construction of the Project, emergency access to the Project site would be maintained through compliance with the CTMP prepared for the Project, as required by mitigation measure MM TR-1. Compliance with the CTMP would ensure that access to the Project site is not obstructed during construction activities. The CTMP would provide necessary information to various contractors and agencies as to how to maximize the opportunities for complementing construction management measures and to minimize the possibility of conflicting impacts on the roadway system, while safely accommodating the traveling public in the area. The program would supplement and expand, rather than modify or supersede any manual, regulations, or provisions set forth by SFMTA, DPW, or other City departments and agencies.

As with the Project analyzed in the 2010 FEIR, access to the Project site during construction would be maintained by implementation of a CTMP, as required by mitigation measure MM TR-1. As with the Project analyzed in the 2010 FEIR, impacts to the SFPD would be remain less than significant with implementation of the security measures required by mitigation measure MM PS-1.

Impact PS-4: Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable response times for fire protection and emergency medical services. ***[Criterion O.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Varies	Varies (same as 2010 FEIR)

The 2010 FEIR determined that the addition of 10,500 residential units (and a resulting residential population of 24,465) and an employment population of 10,730 (for a total population of 35,195) combined with an increase in the intensity of physical development on the Project site, would result in new demand for fire protection and emergency medical services. The 2010 FEIR concluded that

construction of 100,000 gsf of community uses, which could include a new SFFD facility, would allow the SFFD to maintain acceptable response times for fire protection and emergency medical services. The current proposal is that the fire station would be accommodated outside of the 100,000 gsf of community services, but would be accommodated within HPS2. Irrespective of the how the SFFD facility is accommodated in terms of the land use program, the provision of the facility would still allow the SFFD to maintain acceptable response times for fire protection and emergency medical services.

The 2010 FEIR concluded that, while the development of the Project may require new or physically altered SFFD facilities in order to maintain acceptable fire protection and emergency medical services, the potential impacts associated with the construction of a new facility had been addressed in the 2010 FEIR and would not require further environmental review.

In addition, the 2010 FEIR noted that all new buildings must meet standards for emergency access, sprinkler, and other water systems, as well as all other requirements specified in the *San Francisco Fire Code*, which would help to minimize demand for future fire protection services. In addition, the 2010 FEIR noted that all development, including high-rise residential buildings would be reviewed by DBI and the SFFD to ensure that structures are designed in compliance with the *San Francisco Fire Code*. *San Francisco Fire Code* Sections 511.1 and 511.2 outline specific requirements for high-rise buildings (i.e., buildings above 200 feet) and would apply to the Project's proposed high-rise structures.

As discussed above, the 2018 Modified Project Variant would not result in a net increase in population in the combined CP and HPS Project sites. While the 2018 Modified Project Variant would generate more jobs than the CP-HPS2 Project (by approximately 5,880 jobs), it would generate fewer jobs than the R&D Variant (Variant 1) (by approximately 17 jobs). Consequently, as with the Project analyzed in the 2010 FEIR, construction of a new SFFD facility would allow the SFFD to maintain acceptable response times for fire protection and emergency medical services. Therefore, while the development of the Project may require new or physically altered SFFD facilities in order to maintain acceptable fire protection and emergency medical services, the potential impacts associated with the construction of a new facility were addressed in the 2010 FEIR and would not require further environmental review.

Impact PS-5: Construction activities associated with the Project would not affect the provision of school services by decreasing access to school services. ***[Criterion O.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As with the Project analyzed in the 2010 FEIR, construction of the Project would not result in impacts to the SFUSD system, as construction of the Project would not itself create new residents or students. Also, no SFUSD facilities are located on the Project site. All school services would be

available to the community throughout the duration of project construction. As such, no impact to school services during construction of the project would occur.

Impact PS-6: New students associated with implementation of the Project would not require new or expanded school facilities, the construction of which could result in substantial adverse impacts. ***[Criterion O.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

For planning purposes, and using the SFUSD student generation rate of 0.203 student (including elementary, middle, and high school students) per new housing unit, the 2010 FEIR determined that approximately 2,131 school-age children would live within the Project site following full build-out of the Project, including approximately 1,593 school-age children living at CP and approximately 538 total students at the HPS2 site, as shown in 2010 FEIR Table III.O-8 (Project Buildout Public School Enrollment Compared to SFUSD Capacity) in Section III.O (Public Services).

As discussed above, the 2010 FEIR proposed 10,500 residential units over the entire Project site, including both CP and HPS. The current proposal includes 10,672 residential units. Accordingly, using the same generation rate of 0.203 student per new housing unit that was used in the 2010 FEIR, approximately 2,166 school-age children would live within the Project site following full build-out of the Project, including approximately 1,465 school-age children living at CP and approximately 700 students at the HPS2 site.

As discussed above, the 2010 FEIR did not analyze school uses at HPS2. The HPS2 proposed modifications would provide for one or more public or private elementary, secondary, or post-secondary schools. The public schools are expected to accommodate up to 700 students. The private school would accommodate approximately 1,000 students. Consequently, it is anticipated that sufficient school capacity would be provided between the schools provided at HPS2 and/or other public and private schools in the City to accommodate on-site student population. Construction-related impacts of these schools are addressed throughout Addendum 5.

Finally, as with the Project analyzed in the 2010 FEIR, school impact fees paid pursuant to SB 50 would go toward maintaining or improving school facilities to accommodate growth in school attendance. SB 50 would ensure that future facilities are provided. As such, this impact would remain less than significant, and no mitigation would be required.

Impact PS-7: Construction activities associated with the Project would not affect provision of school services by decreasing access to library services. ***[Criterion O.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	No Impact	No Impact

As with the Project analyzed in the 2010 FEIR, construction of the Project would not result in impacts to the San Francisco Public Library system, as the construction itself would not result in an increase in population requiring library services. Also, no library branches are located on the Project site. All library services would be available to the community throughout the duration of project construction. As such, no impact to library services during construction of the Project would occur.

Impact PS-8: Implementation of the Project would not result in an increase in demand for library services that is not met by existing library facilities in the vicinity that have been expanded or updated. ***[Criterion O.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As with the Project analyzed in the 2010 FEIR, residential and nonresidential development associated with the Project would increase demand for local library services in the Bayview neighborhood.

As discussed above, the 2018 Modified Project Variant would not result in a net increase in population in the combined CP and HPS Project sites. While the 2018 Modified Project Variant would generate more jobs than the CP-HPS2 Project (by approximately 5,880 jobs), it would generate fewer jobs than the R&D Variant (Variant 1) (by approximately 17 jobs).

Similar to the 2010 Project, the 2018 Modified Project Variant would result in a direct and indirect population increase within the Bayview neighborhood. Library branches serving the Project site, including the Portola branch (opened in 2009), the Visitacion Valley branch (opened in 2010), and expanded Bayview branch (opened in 2013), would continue to meet the demands of the community. The aforementioned SFPL branches would accommodate increased demand from the Project, and no additional library facilities would be required to accommodate development proposed in the Project. Impacts to libraries resulting from the 2018 Modified Project Variant would remain less than significant, and no mitigation would be required.

However, as with the Project analyzed in the 2010 FEIR, space within the Project site would also be dedicated to the provision of library services to supplement the expanded Bayview branch library. As part of the Project, a 1,500 gsf reading room and space for automated book-lending machines would be integrated into the community retail and public facilities uses that are proposed.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to public services impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to public services, either on a project-related or cumulative basis.

II.B.15 Recreation

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
15.	**Recreation.** Would the project:					
P.a	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration or degradation of the facilities would occur or be accelerated?	2010 FEIR p. III.P-15 (Impact RE-2); Addendum 1 p. 46; Addendum 4 p. 50	No	No	No	MM RE-2
P.b	Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered park or recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives?	2010 FEIR p. III.P-15 (Impact RE-2); Addendum 1 p. 46; Addendum 4 p. 50	No	No	No	MM RE-2
P.c	Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	2010 FEIR p. III.P-12 (Impact RE-1); Addendum 1 p. 46; Addendum 4 p. 50	No	No	No	Varies[113]
P.d	Adversely affect existing recreational opportunities?	2010 FEIR p. III.P-32 (Impact RE-3); Addendum 1 p. 46; Addendum 4 p. 50	No	No	No	None

Changes to Project Related to Recreation

The 2018 Modified Project Variant at HPS2 includes a total of 232.0 acres of parks and recreation areas at HPS2, consisting of 173.9 acres of new parks and 58.1 acres of recreation areas, including sports fields and active urban recreation. In addition, the 17.3 acres of other parks and open space areas would be provided, but OCII would not consider these areas as creditable parkland. Appendix A Table A-5 (Comparison of 2018 Modified Project Variant to 2010 Project, R&D Variant [Variant 1], and Housing/R&D Variant [Variant 2A] [Parks and Open Space]) provides a detailed identification of new parks, new sports fields and active urban recreation areas, state park land, and other parks at both CP and HPS2 under the 2018 Modified Project Variant, as well as the same information for the 2010 Project, the R&D Variant (Variant 1), and the R&D/Housing Variant (Variant 2A). Overall, as compared to the 2010 Project, the parks and open space acreage would increase by 1.3 acres.

[113] Refer to Sections II.B.3, II.B.7, II.B.8, II.B.9, II.B.10, and II.B.12 for the specific mitigation measures for construction-related effects.

Comparative Impact Discussions

Impact RE-1: Construction of the parks, recreational uses, and open space proposed by the Project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR. (Refer to Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) ***[Criterion P.c]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Varies	Varies (same as 2010 FEIR)

The 2010 FEIR found that impacts associated with construction of the proposed parks and recreational facilities would be considered part of the overall Project impacts. The construction impacts identified in 2010 FEIR Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise and Vibration), Section III.J (Cultural Resources and Paleontological Resources), Section III.K (Hazards and Hazardous Materials), Section III.M (Hydrology and Water Quality), and Section III.N (Biological Resources), and other relevant topics include impacts and mitigation measures associated with the construction of park and recreational facilities. The parks and recreation facilities would not be expected to have construction impacts separate from the overall Project. Additionally, because the Project would provide adequate parks and recreation facilities and open space to accommodate the increased demand from the Project, no additional park or recreation facility construction would be required.

Similarly, the 2018 Modified Project Variant construction related impact discussions, conclusions, and mitigation measures considered in the 2010 FEIR and Addendum 5 include construction of the parks and recreational facilities. The parks and recreation facilities would not be expected to have additional or separate impacts beyond those discussed for the overall Project. Consequently, no separate analysis of park and recreation facility construction impacts is required.

Impact RE-2: Implementation of the Project would not increase the use of existing parks and recreational facilities that would cause the substantial physical deterioration of the facilities to occur or to be accelerated, nor would it result in the need for, new or physically altered park or recreational facilities. ***[Criterion P.a]***[114]

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR found the Project would provide a total of 336.4 acres of new and or improved park land and recreational facilities with 104.8 acres at CP and 231.6 acres at HPS2. Based on the total number of new residents (24,465), the 2010 Project would provide 13.7 acres of parkland per 1,000 residents within the Project site, which exceeds the City General Plan ratio of 5.5 acres per 1,000 residents. The total number of new residents and new jobs (35,195) would result in a parks-to-

[114] The 2010 FEIR combined the discussion of Criterion P.a and Criterion P.b (2010 FEIR p. III.P-10, footnote 983).

population ratio of 9.5 acres per 1,000 employees/residents. Thus, the 2010 FEIR concluded that the Project would not have a significant impact.

The 2010 FEIR determined that the timing of Project development could result in a temporary increase in the use of parks and recreational facilities in a manner that would cause or accelerate the physical deterioration or degradation of those facilities if development of resident/employee generating uses occur in advance of the development of park and recreational facilities. To address this potential impact, the 2010 FEIR included mitigation measure MM RE-2, which would ensure that the potential impact would be reduced to a less-than-significant level.

The 2018 Modified Project Variant would modify the park and recreational facilities plan at HPS2 as described in Addendum 5 Section I (Project Description). The 2018 Modified Project Variant would provide a total (excluding "other" parks) of 232.0 acres of parks, sports fields, and active urban recreational areas at HPS2, which is approximately 0.4 acre more than for HPS2 in the 2010 Project. At CP, the 2018 Modified Project Variant would provide a total of 9.0 acres of new parks (there are no sports fields or active urban recreational areas proposed at CP), which is 0.9 acre more than provided at CP under the 2010 Project. The CP-HPS2 total parks and recreation acreage for the 2018 Modified Project Variant would be 337.7 acres, which is approximately 1.3 acres more than the CP-HPS2 total for the 2010 Project. Thus, the 2018 Modified Project Variant park and recreational acreage would be more than the park and recreation acreage considered in the 2010 FEIR impact analysis. Refer to Addendum 5 Appendix A, Table A-5, for a detailed identification of parks acreage for the 2018 Modified Project Variant, as well as the 2010 Project, the R&D Variant (Variant 1), and the Housing/R&D Variant (Variant 2A). The 2018 Modified Project Variant would also provide more parks, sports fields, and active urban recreational areas as compared to the R&D Variant (Variant 1) and the Housing/R&D Variant (Variant 2A). Further, because it is likely that residents or employees of HPS2 and CP would use parks or recreational facilities at either HPS2 or CP, this analysis considers both portions of the Project Site.

Under the 2018 Modified Project Variant, the total of 24,866 new residents would result in a parks-to-population ratio of 13.5 acres per 1,000 residents, which exceeds the City General Plan identified ratio of 5.5 acres per 1,000 residents. Further, including the 16,618 new jobs provided under the 2018 Modified Project Variant, a total of 8.1 acres per 1,000 employees/residents would be provided. As with the 2010 Project, the 2018 Modified Project Variant would also not have a significant impact related to the parks-per-resident ratio since the General Plan ratio of 5.5 acres per population would not be exceeded.

The 2018 Modified Project Variant construction phasing schedule would continue to meet or exceed the standard of 5.5 acres of parkland per 1,000 residents. Mitigation measure MM RE-2, which was adopted by the City, requires that parks and population are phased in a substantially concurrent manner, such that adequate parkland is constructed and operational when residential and employment-generating uses are occupied. The 2018 Modified Project Variant must comply with

this mitigation measure. This impact would remain less than significant with implementation of the identified mitigation measure.

Mitigation Measure with Proposed 2018 Modifications

MM RE-2: Phasing of parkland with respect to residential and/or employment-generating uses. Development of the Project and associated parkland shall ~~proceed in four phases, as illustrated by Figure II-16 (Proposed Site Preparation Schedule) of Chapter II (Project Description) of this EIR. To~~ ensure that within each phase or sub-phase, parks and population increase substantially concurrently~~,~~ and development shall be scheduled such that adequate parkland is constructed and operational when residential and employment-generating uses are occupied. The following standards shall be met:

- No project development shall be granted a temporary certificate of occupancy if the City determines that the new population associated with that development would result in a parkland-to-population ratio within the Project site lower than 5.5 acres per 1,000 residents/population, as calculated by the Agency.
- For the purposes of this mitigation measure, in order for a park to be considered in the parkland-to-population ratio, the Agency must determine that within 12 months of the issuance of the temporary certificate of occupancy, it will be fully constructed and operational, and, if applicable, operation and maintenance funding will be provided to the Agency.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to recreation impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to recreation, either on a project-related or cumulative basis.

II.B.16 Utilities

Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
18. Utilities. Would the project:					
Q.a Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	2010 FEIR p. III.Q-17 (Impact UT-2); Addendum 1 p. 47 Addendum 4 p. 52	No	No	No	MM UT-2 (as modified by Addendum 5)
Q.b Require new or expanded water entitlements and resources, if there are not sufficient water supplies available to serve the project from existing entitlements and resources?[115]	2010 FEIR p. III.Q-15 (Impact UT-1); Addendum 1 p. 47 Addendum 4 p. 52	No	No	No	None
Q.c Require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	2010 FEIR p. III.Q-31 (Impact UT-3b); Addendum 1 p. 47; Addendum 4 p. 52	No	No	No	None
Q.d Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	2010 FEIR p. III.Q-31 (Impact UT-3b); Addendum 1 p. 47; Addendum 4 p. 52	No	No	No	MM UT-3a
Q.e Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?[116]	2010 FEIR p. III.Q-34 (Impact UT-4); Addendum 1 p. 47; Addendum 4 p. 52	No	No	No	None
Q.f Be served by a landfill with insufficient permitted capacity to accommodate Project-related solid waste disposal needs?	2010 FEIR p. III.Q-45 (Impact UT-5b), p. III.Q-47 (Impact UT-6b), p. III.Q-51 (Impact UT-7b), p. III.Q-53 (Impact UT-8b); Addendum 1 p. 47; Addendum 4 p. 52	No	No	No	MM UT-5a, MM UT-7a

[115] This standard has been slightly modified from the text found in CEQA Guidelines Appendix G for ease of comprehension.
[116] This standard has been slightly modified from the text found in CEQA Guidelines Appendix G for ease of comprehension.

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
Q.g	Fail to comply with federal, state, and local statutes and regulations related to solid waste?	2010 FEIR p. III.Q-55 (Impact UT-9); Addendum 1 p. 47 Addendum 4 p. 52	No	No	No	MM UT-5a, MM UT-7a
Q.h	Require or result in the construction of new or expansion of existing utility infrastructure, the construction of which could cause significant environmental effects?	2010 FEIR p. III.D-31 (Section III.D), p. III.H-18 (Section III.H), p. III.I-20 (Section III.I), p. III.J-31 (Section III.J), p. III.K-46 (Section III.K), p. III.L-22 (Section III.L), p. III.M-49 (Section III.M), p. III.O-7 (Section III.O), p. III.S-33 (Section III.S); Addendum 1 p. 47; Addendum 4 p. 52	No	No	No	Varies[117]
Q.i	Result in a determination by the utility service provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	2010 FEIR p. III.Q-59 (Impact UT-10); Addendum 1 p. 47; Addendum 4 p. 52	No	No	No	None

Changes to Project Related to Utilities

The elements of the land use program evaluated in Addendum 5 that relate to utilities are the change in the number of residential units and hotel rooms, and the change in square footage of buildings (used for commercial, industrial, and community purposes), office space, schools, and parks.

Water

The land use program that is evaluated in Addendum 5 is different than the land use program evaluated in the 2010 FEIR, as described in the Project Description. Accordingly, total water demand as a result of the project has also changed. Table 23 (Water Demand) shows a total water demand of 1.90 mgd, which is higher than the 1.67 mgd estimated for the 2010 Project but less than the 1.99 mgd estimated for the approved R&D Variant (Variant 1) (refer to 2010 FEIR Table III.Q-4 [Project Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance (mgd)] and Table IV-11 [R&D Variant Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance (mgd)], respectively). Compared to the R&D Variant (Variant 1), the 2018 Modified Project Variant represents an overall decrease in water demand of 0.09 mgd, with increased demand from residential, hotel, neighborhood retail, school, and community uses; and decreased demand from office, regional retail, and football stadium uses.

[117] Refer to Sections II.B.3, II.B.7, II.B.8, II.B.9, II.B.10, II.B.11, II.B.12, II.B.14, and II.B.18 for the specific mitigation measures for construction-related effects.

TABLE 23 WATER DEMAND

Land Use	Demand[a] (mgd) CP	Demand[a] (mgd) HPS2	2018 Modified Project Variant Total (mgd)	2010 Project Total (mgd)	R&D Variant (Variant 1) Total (mgd)
Residential	0.57	0.18	***0.75***	0.83	0.83
Regional Retail	0.09	0.01	***0.10***	0.08	0.08
Neighborhood Retail	0.02	0.05	***0.07***	0.04	0.03
Office	0.04	0.00	***0.04***	0.06	0.06
Research and Development	0.00	0.52	***0.52***	0.36	0.71
Hotel	0.02	0.04	***0.06***	0.05	0.05
Football Stadium	0.00	0.00	***0.00***	0.02	0.00
Arena	0.02	0.00	***0.02***	0.01	0.01
Schools	0.00	0.01	***0.01***	Not Applicable[b]	Not Applicable[b]
Water Taxi	0.00	0.00	***0.00***	Not Applicable[b]	Not Applicable[b]
Community Use (including artists' studios)	0.01	0.10	***0.11***	0.02	0.02
Public Parking	0.00	0.00	***0.00***	0.00[c]	0.00[c]
Parks and Open Space	0.07	0.15	***0.22***	0.21	0.19
Total Demand	***0.84***	***1.06***	***1.90***	***1.67***	***1.99***

SOURCE: ARUP, Candlestick Point – Hunters Point Shipyard Phase II Water Demand Memorandum, 2009; BKF, 2018.

a. Water demand was calculated using the land use program identified in Addendum 5 Table 2 (2018 Modified Project Variant Land Use Program) and applying the unit demand water values used by ARUP in 2010 and/or new unit demand water values for new land uses.

b. This value was not provided in the 2010 FEIR because the associated land uses were not a part of the 2010 Project or R&D Variant (Variant 1).

c. This value was not provided in the 2010 FEIR, although public parking was a part of the 2010 Project and R&D Variant (Variant 1). While the value was not provided in the 2010 FEIR, the water demand for public parking in 2010 would be consistent with the water demand for public parking under the 2018 Modified Project Variant (0.00 mgd).

The 2010 FEIR Utilities Variant 4 includes eleven decentralized wastewater treatment plants, each capable of treating 100,000 gallons per day (gpd), which would accommodate the estimated Project-generated wastewater flow of approximately 1.1 mgd. Under Utilities Variant 4, seven plants would be located within Candlestick Park and four within Hunters Point. The eleven decentralized plants would generate 1.05 mgd of reclaimed water. The 2018 Modified Project Variant would instead include a centralized recycled water system at HPS2, consisting of a dedicated 976,000 gpd central treatment that would serve both CP and HPS2 and require one full-time employee. Consistent with the Utilities Variant 4, the central treatment plant under the 2018 Modified Project Variant would divert wastewater to a sanitary sewer system for treatment using membrane bioreactor (MBR) technology to obtain a water quality appropriate for irrigation, toilet flushing and other nonpotable uses. If a connection would be provided to CP, recycled water would be transported from the HPS2 plant to CP via a pipe attached to the bottom of from the Yosemite Slough Bridge.

The 2010 FEIR analyzed the Auxiliary Water Supply System (AWSS) as being connected to the existing AWSS system at the intersection of Earl Street and Innes Avenue and at the Palou Avenue and Griffith Avenue intersection with looped service along Spear Avenue/Crisp Road. With the 2018 Modified Project Variant, the AWSS would be connected to the existing AWSS system at the Palou Avenue and Griffith Avenue intersection with a looped service along Spear Avenue/Crisp Road.

Off-site improvements to the University Mound AWSS storage tank and distribution system may also be implemented by the City of San Francisco to support HPS2. A second optional connection may be installed at a later date by the City of San Francisco at the intersection of Earl Street and Innes Avenue. If a connection would be provided to CP, recycled water would be transported from the HPS2 plant to Candlestick via a pipe attached to the bottom of the Yosemite Slough Bridge.

Wastewater

The land use program that is evaluated in Addendum 5 is different than the land use program evaluated in the 2010 FEIR, as described in the Project Description. Accordingly, total wastewater generation as a result of the project has also changed. Table 24 (Wastewater Generation) shows total wastewater generation of 1.25 mgd, which is higher than the 1.18 mgd estimated for the 2010 Project but less than the 1.35 mgd estimated for the approved R&D Variant (Variant 1) (refer to 2010 FEIR Table III.Q-5 [Project Wastewater Generation] and Table IV-12 [R&D Variant Wastewater Generation], respectively). Compared to R&D Variant (Variant 1), the 2018 Modified Project Variant represents an overall decrease in wastewater generation of 0.10 mgd, with decreased demand from office, regional retail, and football stadium uses, and increased generation from residential, neighborhood retail, school, and community uses.

TABLE 24 WASTEWATER GENERATION

Land Use	*Estimated Wastewater Generation Expressed as % of Water Demand (or as otherwise specified)*	*CP (mgd)*	*HPS2 (mgd)*	*2018 Modified Project Variant Total (mgd)*	*2010 Project Total (mgd)*	*R&D Variant (Variant 1) Total (mgd)*
Residential	95%	0.54	0.17	***0.71***	0.79	0.79
Regional Retail	57%	0.05	0.01	***0.06***	0.05	0.05
Neighborhood Retail	57%	0.01	0.03	***0.04***	0.02	0.02
Office	57%	0.02	0.00	***0.02***	0.03	0.03
Community Uses (includes Artist space)	57%	0.01	0.06	***0.07***	0.02	0.02
Research and Development	57%	0.00	0.30	***0.30***	0.21	0.40
Hotel	57%	0.01	0.02	***0.03***	0.03	0.03
Football Stadium	95%	0.00	0.00	***0.00***	0.02	0.00
Arena	95%	0.02	0.00	***0.02***	0.01	0.01
Schools	57%	0.00	0.00	***0.00***	Not Applicable[a]	Not Applicable[a]
Total		***0.66***	***0.59***	***1.25***	***1.18***	***1.35***

SOURCE: ARUP, 2009; BKF, 2018.

a. This value was not provided in the 2010 FEIR because the associated land uses were not a part of the 2010 Project or R&D Variant (Variant 1).

As directed by the SFPUC, wastewater from the HPS2 site would now be conveyed to the existing combined sewer main on the Innes Avenue tributary to the Central Basin, rather than the Hunters Point tunnel sewer system, as originally analyzed in the 2010 FEIR. With the changes to the land use program represented by the 2018 Modified Project Variant, projected maximum peak flows from HPS2 into the

Central Basin system, based on 0.59 mgd and peaking factor of 3.0 would be approximately 1,229 gpm (0.59 mgd/24 hours/60 minutes x 1,000,000 times 3.0). A peaking factor of less than 3.0 may be achieved, pursuant to the Subdivision Regulations for the Candlestick Point/Hunters Point Shipyard, which would reduce the maximum peak flows from HPS2 into the Central Basin system.

For the 2010 FEIR, Hydroconsult Engineers (HCE) determined that the existing wastewater flow for the Project site was 0.206 mgd and that the total net increase in wastewater from the Project site would equal 0.754 mgd for the 2010 Project and 0.974 mgd for the R&D Variant (Variant 1),[118] and that there would be a decrease in CSO volume, frequency, and duration of CSO in the Yosemite Basin and a decrease in overall CSO volume for the entire Bayside Drainage Area because stormwater from the Project site would no longer flow into the Combined Sewer System. For the 2018 Modified Project Variant, the total net increase in wastewater would equal 1.044 mgd (1.25 minus 0.206).

Solid Waste

The land use program that is evaluated in Addendum 5 is different than the land use program evaluated in the 2010 FEIR, as described in the Project Description. Accordingly, total solid waste generation as a result of the project has also changed. Table 25 (Solid Waste Generation) shows total solid waste generation of 23,153 tons per year (tpy), which is higher than the 21,827 tpy estimated for the 2010 Project and the 22,225 tpy estimated for the approved R&D Variant (Variant 1) (refer to 2010 FEIR Table III.Q-8 [Project Solid Waste Generation] and Table IV-14 [R&D Variant Solid Waste Generation], respectively). Compared to R&D Variant 1, the 2018 Modified Project Variant represents an overall increase in solid waste generation of 928 tpy, with increased generation from residential, retail, hotel, and research and development, and decreased generation (zero) from office and football stadium uses. The proposed water taxi service is anticipated to result in the generation of nominal solid waste, if any; food and beverages are not assumed to be provided as part of the service. Furthermore, the implementation of proposed parking would not generate solid waste. There would be solid waste receptacles on site, but the solid waste would be generated as a result of the 2018 Modified Project Variant land uses, or as nominal waste generated off site that would be deposited at parking structures.

The Project Description estimates that the borings for the ground-source geothermal heating and cooling system would result in approximately 12,250 cubic yards of excavated soil that would be reused on site in a manner consistent with the Soil Import Plan and Risk Management Plan.

[118] 2010 FEIR Appendix Q3, Hydrologic Modeling to Determine Potential Water Quality Impacts, Hydroconsult Engineers, October 19, 2009.

TABLE 25 SOLID WASTE GENERATION

		Candlestick Point			*HPS2*			*2018 Modified Project Variant Total*			*2010 Project Total*		*R&D Variant (Variant 1) Total (mgd)*	
Use	***Generation Factor (per day or year)***	***Area or Units***	***Tons per Day or Event***	***Tons per Year[l]***	***Area or Units***	***Tons per Day or Event***	***Tons per Year[l]***	***Area or Units***	***Tons per Day or Event***	***Tons per Year or per Total Number of Events[a]***	***Tons per Day or Event***	***Tons per Year or per Total Number of Events***	***Tons per Day or Event***	***Tons per Year or per Total Number of Events***
Residential	5.653 lb/unit	7,218 units	20.4	7,446	3,454 units	9.8	3,577	***10,672 sf***	***30.2***	***11,023***	29.7	10,840.5	29.7	10,840.5
Neighborhood Retail/Maker Space/Regional Retail	0.02600411 lb/sf	760,000 sf	9.9	3,614	401,000 sf	5.2	1,898	***1,161,000 sf***	***15.1***	***5,512***	11.5	4,197.5	11.5	4,197.5
R&D/Office	0.006 lb/sf	150,000 sf	0.45	164.3	4,265,000 sf	12.8	4,672	***4,415,000 sf***	***13.3***	***4,836.3***	8.0	2,920	15.5	5,657.5
Hotel	0.0108 lb/sf	150,000 sf	0.81	296.0	120,000	0.65	237	***270,000 sf***	***1.5***	***533.0***	0.8	292.0	0.8	292.0
Arena	2.23 lb/seat	10,000 seats	5.6[b]	840[c]	0	0	0	***10,000 seats***	***5.6***	***840c***	5.6	836.3[c]	5.6	836.3[c]
Stadium	2.23 lb/seat	0	0	0	0	0	0	***0***	***0***	***0***	2,339.2	2,339.2[i]	0	0
Artist Studios/Art Center	0.006 lb/sf	0	0	0	255,000 sf	0.8	292	***255,000 sf***	***0.8***	***292.0***	0.8	292.0	0.8	292.0
Community Facilities	0.006 lb/sf	50,000 sf	0.15	54.8	50,000 sf	0.15	54.8	***100,000 sf***	***0.3***	***109.6***	0.3	109.6	0.3	109.6
Schools[d]	6.2 gallons/ acre/year	0	0	0	410,000 sf (9.4 acres)	0.0007	0.24[e]	***410,000***	***0.24***	***0.24***	Not Applicable[j]	Not Applicable[j]	Not Applicable[j]	Not Applicable[j]
Parks and Open Space[d]	5.0 gallons/ acre/year	105.7 acres	0.006	2.2[f]	232.0 acres	0.013	4.8[g]	***337.7 acres***	***0.020***	***7.0***	Not Available[k]	Not Available[k]	Not Available[k]	Not Available[k]
Total				***12,417***			***10,736[h]***			***23,153***		***21,827***		***22,225***

SOURCE: PBS&J 2009; Generation Factors from Arup, *Carbon Footprint Report*, March 24, 2009; FivePoint, 2018. City of Dublin, Long Term Trash Reduction Plan Table 1-1, February 1, 2014.

a. Calculated by adding the horizontal columns, rather than calculating total number of units by the generation rate.

b. The Performance venue is projected to be 50 percent attendance.

c. Assumes 150 events per year at 50 percent attendance.

d. City of Dublin, *Long Term Trash Reduction Plan*, February 1, 2014, Table 1-1 (San Francisco Bay Area trash generation rates by land use [gallons/acre/year]).

e. 9.41 acres x 6.2 gallons = 58.34 gallons per year x 8.35 lb. of water weight = 487.2 pounds per year, or 0.24 ton.

f. 105.7 acres x 5.0 gallons = 528.5 gallons per year x 8.35 lb. of water weight = 4,413 pounds per year, or 2.2 tons.

g. 232.0 acres x 5.0 gallons = 1,160 gallons per year x 8.35 lb. of water weight = 9,686 pounds per year, or 4.8 tons.

h. The recycled water facility is not assumed to generate measurable solid waste as only one employee would be at the site on a given day.

i. Assumes 12 sold-out games and 20 other sold-out stadium events per year.

j. This value is not provided in the 2010 FEIR because the associated land uses were not a part of the 2010 Project or R&D Variant (Variant 1).

k. The value for this land use category was not provided in the 2010 FEIR.

l. Tons per year is calculated by taking the tons per day or event value, which may have been rounded, and multiplying by 365.

Alternative Utility Infrastructure

The 2010 FEIR Utilities Variant 4 analyzed implementation of a district heating and cooling system, an on-site wastewater treatment, and the use of photovoltaic cells to reduce energy usage. The 2018 Modified Project Variant includes the following alternative utility systems: a ground source geothermal heating and cooling system as the primary source of heating and cooling for the development; extensive use of solar power (10.5- to 16.5-megawatt [MW] generating capacity); and expanded recycled water system. Each of these alternative utility systems are described in detail in Project Description Section I.C.5 (Infrastructure Plan).

New Regulations

The following new regulations would apply to the analysis of utilities impacts.

Water Efficient Irrigation Ordinance (Ordinance No. 301-10, *San Francisco Administrative Code* Chapter 63). To ensure the efficient use of water within all San Francisco landscapes, projects with 500 sf or more of new or modified landscape area are required to comply with the Water Efficient Irrigation Ordinance (effective January 1, 2011). To reduce landscape water use, projects must design, install, and maintain efficient irrigation systems, utilize low-water-use plantings, and set a maximum applied water allowance, also known as an annual water budget. The requirements of the Water Efficient Irrigation Ordinance apply to owners of residential, commercial, municipal, and mixed-use properties with a new construction or modified landscape project greater than or equal to 500 sf. The San Francisco Green Landscaping Ordinance has additional guidelines and recommendations related to reducing stormwater runoff, stormwater treatment strategies, and improving local and regional water quality.

Recycled Water Ordinance (Ordinance Nos. 390-91 and 391-91, *San Francisco Code of Public Works* Article 22). The City and County of San Francisco's Recycled Water Ordinance requires property owners to install recycled water systems in new construction, modified construction, or remodeling projects totaling 40,000 sf or more as well as new or existing landscapes totaling 10,000 sf or more that were not constructed in conjunction with a development project. The goal of the ordinance is to maximize the use of recycled water. Buildings and facilities that are located within the designated recycled water use areas are required to use recycled water for all uses authorized by California.

Mandatory Use of Alternate Water Supplies in New Construction Ordinance (Ordinance No. 109-15, *San Francisco Health Code* Article 12C). This ordinance amends *San Francisco Health Code* Article 12C to require new buildings larger than 250,000 sf to be constructed, operated, and maintained using available alternate water sources for toilet and urinal flushing as well as irrigation. In addition, new buildings larger than 40,000 sf are required to prepare water budget calculations. Approvals from the SFPUC and permits from both the Department of Public Health and

Department of Building Inspection would be needed for the proposed project to verify compliance with the requirements and local health and safety codes.

Subdivision Regulations for the Candlestick Point/Hunters Point Shipyard were adopted by the San Francisco Department of Public Works in June 2014 pursuant to the Subdivision Code Section 1611, together with Public Works Code Sections 147.2(b)(2) and 1204(b)(2) to serve as general guidelines for the planning, development, design and improvement of the Candlestick Point–Hunters Point Shipyard development. Specific requirements for SLR planning are included as Attachment 4.

Green Building Ordinance (*City and County of San Francisco Building Code*, Chapter 13C). In November 2008, the City passed the San Francisco Green Building Ordinance (SFGBO), which is included as *San Francisco Building Code* Chapter 13C. In 2013, the SFGBO was amended to incorporate all mandatory elements of the 2013 CALGreen and Title 24 energy-efficiency standards and require green building practices and Leadership in Energy and Environmental Design (LEED) certification for all new residential and commercial construction in the city, unless otherwise indicated in the SFGBO, as well as alterations to existing buildings. The *Green Building Code* was last amended in April 2016 to establish requirements for certain new building construction to include development of renewable energy facilities (*Green Building Code* Sections 4.201.2 and 5.201.1.2). The requirements include the installation of solar PV systems and/or solar thermal systems in the solar zone (i.e., an allocated space that is unshaded and free of obstructions, usually a roof). The renewable energy requirements are applicable to residential and nonresidential new construction projects of 10 occupied floors or less.

California Assembly Bill 341 (AB 341) (*Public Resources Code* Division 30, Part 3, Chapter 12.8). AB 341, which became law in 2011, establishes a new statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020, and changed the way that the state measures progress toward the 75 percent recycling goal, focusing on source reduction, recycling and composting. AB 341 also requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The purpose of the law is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and expand the opportunity for additional recycling services and recycling manufacturing facilities in California.[119]

California Assembly Bill 1826 (*Public Resources Code* Division 30, Part 3, Chapter 12.9, Commercial Organic Waste Recycling Law). AB 1826 became effective on January 1, 2016, and requires businesses and multi-family complexes (with 5 units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. The law phases in the requirements on businesses with full implementation realized in 2019:

- **First Tier:** Commencing in April 2016, the first tier of affected businesses included those that generate eight or more cubic yards of organic materials per week.

[119] California Department of Resources Recycling and Recovery, *Mandatory Commercial Recycling*, 2015. Available at http://www.calrecycle.ca.gov/recycle/commercial/, accessed November 2, 2017.

- **Second Tier:** In January 2017, the affected businesses expanded to include those that generate four or more cubic yards of organic materials per week.
- **Third Tier:** In January 2019, the affected businesses are further expanded to include those that generate four or more cubic yards of commercial solid waste per week.

Comparative Impact Discussions

Impact UT-1: Implementation of the Project would not require water supplies in excess of existing entitlements or result in the need for new or expanded entitlements. ***[Criterion Q.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Amendment 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR concluded that the Project would not require water supplies in excess of existing entitlements or result in the need for new or expanded entitlements, based on a total water demand estimate of 1.99 mgd for R&D Variant (Variant 1), and determined the impact to be less than significant.

The 2018 Modified Project Variant would be subject to 2016 Title 24 building standards and the SFGBO, as amended in 2016, which together represent more stringent requirements for water efficiency than what was required by the building standards in effect at the time the 2010 FEIR was certified. This would help reduce the Project's use of water.

As shown in Table 23, total estimated water demand for the 2018 Modified Project Variant is 1.90 mgd. Since this is less that the 1.99 mgd estimated for R&D Variant (Variant 1), the conclusion is the same as that reached in the 2010 FEIR: the impact would remain less than significant and no mitigation would be required.

The project site is within a designated recycled water use area and therefore must comply with the Recycled Water Ordinance No. 109-15, *San Francisco Health Code* Article 12C. With its inclusion of an expanded on-site recycled water treatment and distribution system, the 2018 Modified Project Variant would be in compliance with the ordinance.

Impact UT-2: Implementation of the Project would not require or result in the construction of new or expanded water treatment facilities. The Project would require the expansion of an auxiliary water conveyance system to provide adequate water supply for firefighting to the Project site. ***[Criterion Q.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Amendment 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR concluded that Project would not require or result in the construction of new or expanded water treatment facilities, and this impact would be less than significant.

The 2010 FEIR concluded that the Project would require mitigation measure MM UT-2 (construction of an AWSS) to provide adequate water supply for firefighting to the Project site. The AWSS would ensure the provision of adequate water for on-site firefighting purposes, and the Project would not require water supplies in excess of existing entitlements or result in the need for new or expanded entitlements for water to fight fires. The impact would be less than significant with implementation of this mitigation measure.

Because total water demand for the 2018 Modified Project Variant is 1.90 mgd and therefore is less than the water demand for R&D Variant (Variant 1), the conclusion remains the same as that reached in the 2010 FEIR: the impact would remain less than significant with implementation of mitigation measure MM UT-2.

Mitigation Measure with Proposed 2018 Modifications

> **MM UT-2: Auxiliary Water Supply System.** Prior to issuance of occupancy permits, as part of the Infrastructure Plan to be approved, the Project Applicant shall construct an Auxiliary Water Supply System (AWSS) within Candlestick Point to connect to the City's planned extension of the off-site system on Gilman Street from Ingalls Street to Candlestick Point. The Project Applicant shall construct an additional AWSS on HPS Phase II to connect to the existing system ~~at Earl Street and Innes Avenue and~~ at Palou and Griffith Avenues, with service along Spear Avenue/Crisp Road.

Impact UT-3b: Implementation of the Project at HPS Phase II would not require expansion of existing off-site wastewater conveyance facilities. ***[Criterion Q.d]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Amendment 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

For dry weather conditions, the 2010 FEIR concluded that the existing conveyance infrastructure could accommodate the additional flows from the HPS2 development in addition to existing flows even during periods of peak flow conditions, and that no expansion of the off-site wastewater conveyance lines would be required as a result of HPS2. The impact would be less than significant, based on a total wastewater generation estimate of 1.35 mgd for R&D Variant (Variant 1).

Because total wastewater generation for the 2018 Modified Project Variant is 1.25 mgd and therefore less than the wastewater generation estimate for R&D Variant (Variant 1), the conclusion would be the same as that reached in the 2010 FEIR: the impact would remain less than significant. However, wastewater flows from HPS2 are no longer tributary to the Hunters Point tunnel sewer system, as originally analyzed in the 2010 FEIR. As described above, and consistent with the 2014 Storm Sewer Master Utility Plan, SFPUC has requested that wastewater from HPS now be conveyed to the existing combined sewer main on Innes Avenue, which is tributary to the Central Basin, rather than the Hunters Point tunnel sewer system, as originally analyzed in the 2010 FEIR. As indicated above in "Changes to Project Related to Utilities", the 2018 Modified Project Variant represents a projected

maximum peak flow of approximately 1,229 gpm from HPS2 to the Central Basin system. No expansion of the existing off-site conveyance infrastructure would be required to accommodate flows to the Central Basin system from the 2018 Modified Project Variant in addition to existing flows even during periods of peak flow conditions. The impact would remain less than significant with implementation of the identified mitigation measures.

The total net increase in wastewater from the 2018 Modified Project Variant would equal 1.044 mgd. As with the Project analyzed in the 2010 FEIR, this is an increase in dry weather flows compared to the existing condition of 0.206 mgd, but the proposed diversion of wet-weather flows away from the combined system during storm events would offset the increase in dry-weather flows. The 2009 HCE study found that for both the 2010 Project and R&D Variant (Variant 1), the separate wastewater and stormwater systems would result in a *decrease* in CSO volume, frequency, and duration of CSO in the Yosemite Basin (less than one event per year lasting approximately 1.2 hours, resulting in 3.1 million gallons per year CSO, compared to the baseline condition of one 2-hour event per year resulting in 5.3 million gallons per year CSO) and decrease in overall CSO volume for the entire Bayside Drainage Area from 890 million gallons per year to 877 million gallons per year because stormwater from the Project site would no longer flow into the Combined Sewer System. The slight net increase in total wastewater from 0.974 mgd (R&D Variant [Variant 1]) to 1.044 mgd for the 2018 Modified Project Variant would not change this conclusion.[120] Though it remains possible that a temporary increase in CSO volume could occur during wet weather if structures are occupied and contribute wastewater to the Combined Sewer System prior to completion of the separate stormwater and wastewater infrastructure, mitigation measure MM UT-3a would reduce this impact. This impact would remain less than significant by providing temporary detention or retention of wastewater on site during such conditions.

Impact UT-4: Implementation of the Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. ***[Criterion Q.e]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR concluded that the Project would not exceed wastewater treatment requirements of the RWQCB. The impact would be less than significant, based on a total wastewater generation estimate of 1.35 mgd for R&D Variant (Variant 1), and determined the impact to be less than significant.

Because total wastewater generation for the 2018 Modified Project Variant is 1.25 mgd and therefore less than the wastewater generation estimate for R&D Variant (Variant 1), the conclusion is the same

[120] The 2018 Modified Project Variant represents an increase of about 0.008 million gallons over a 2-hour period compared to the R&D Variant (Variant 1), which is negligible compared to the 3.1 million gallons per year CSO result for the Project in the 2009 HCE study, and would not affect the conclusion when comparing the Project to the 5.3 million gallons per year CSO for existing conditions.

as that reached in the 2010 FEIR: the impact would remain less than significant, and no mitigation would be required.

Impact UT-5b: Construction at HPS Phase II, including demolition of existing facilities, would not generate construction-related solid waste that would exceed the capacity of landfills serving the City and County of San Francisco. ***[Criterion Q.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The estimates for construction and demolition debris from the 2018 Modified Project Variant remain unchanged from the estimates for the Project as analyzed in the 2010 FEIR. However, construction-related solid waste now goes to Recology's Hay Road Landfill, rather than the Altamont Landfill that was serving the City of San Francisco in 2010. As described above, the City's agreement with the Hay Road Landfill to accept up to 2,400 tpd of solid waste should extend for approximately 9 years from 2016, based on projected disposal volumes, with an option to renew the Agreement thereafter for an additional 6 years.

The 2010 FEIR estimated that 136,776 tons of construction debris (over the entire construction period) from HPS2 could not be recycled (based on a 75 percent diversion rate) and would be transported to the Altamont Landfill. It was estimated that the HPS2 construction waste represented approximately 0.3 percent of the remaining capacity of the Altamont Landfill as of August 2009 (45.7 million cubic yards).[121] The 2010 FEIR also noted that, at current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032, but could possibly close three years earlier, in January 2029. Most of the demolition activities, which generate construction debris, were expected to conclude in 2028 at HPS2, 4 years before the landfill was expected to close.

With respect to the Hay Road Landfill, which would now be used for solid waste generated by the 2018 Modified Project Variant, 136,776 tons of construction debris from HPS2 represents 0.45 percent of the remaining capacity of 30.4 million cubic yards. Although this is a slightly higher percentage of remaining capacity than if the Altamont Landfill were used (0.45 percent as compared to 0.3 percent), it similarly represents a nominal contribution to the remaining capacity of either landfill. Further, the projected closure date of the Hay Road Landfill extends to 2077, which is far beyond the projected 2032 (or 2029) closure date of the Altamont landfill. Thus, using Hay Road Landfill provides a long-term solution to accommodate the construction schedule represented by the 2018 Modified Project Variant, which proposes construction activities through 2034, which is when (or after) the Altamont Landfill is proposed to close. Accordingly, the fact that there is an identified landfill with adequate remaining capacity that is operational through 2077, combined with implementation of mitigation measure MM UT-5a, would ensure that construction at HPS2, including demolition of existing facilities, would not generate construction-related solid waste that would exceed the capacity of

[121] Assumes an average density of 1 ton per cubic yard.

landfills serving the City and County of San Francisco. As such, this impact would remain less than significant with implementation of the identified mitigation measure.

Impact UT-6b: Construction at HPS Phase II would not require the disposal of hazardous wastes such as lead-based paint, asbestos, and contaminated soils that would exceed the capacity of transport, storage, and disposal facilities permitted to treat such waste. ***[Criterion Q.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2010 FEIR concluded that Treatment, Storage, and Disposal (TSD) facilities in California and adjoining states have sufficient capacity to treat hazardous wastes, construction of Candlestick Point would not generate hazardous wastes (construction debris or contaminated soil) that would exceed the capacity of TSDs authorized to treat such waste. The 2010 FEIR concluded that this would be a less-than-significant impact.

For the 2018 Modified Project Variant, there is no change with respect to the generation of hazardous wastes, except for the potential of encountering contaminated soil when installing the borings associated with the ground source geothermal heating and cooling system. If contaminated soil is encountered it is expected to generate a relatively small volume of contaminated drill cuttings and fluids, since the borings would be located in areas of the site where the Navy has already completed its cleanup activities in areas that avoid known contamination zones. Further, the volume would be small relative to the contaminated soil generated during deep excavations for large structures such as residential towers; installation of foundation piles; trenching for utility lines; grading and compaction; and other earth-disturbing activities at the site. If encountered, the contaminated drill cuttings and fluid would be managed in a controlled manner as hazardous waste, in accordance with mitigation measures for hazardous waste identified in the 2010 FEIR and the Soil Import Plan and Risk Management Plan. Accordingly, excavated soil may be relocated on site to raise the ground surface elevation to account for future SLR impacts, as a substantial amount of fill soil is required to raise grade.

As with the project analyzed in the 2010 FEIR, contaminated soils generated by the 2018 Modified Project Variant may require transportation off site and treatment at authorized registered TSDs. Because the TSDs in California and adjoining states have sufficient capacity to treat hazardous wastes, construction of the 2018 Modified Project Variant would not generate hazardous wastes (construction debris or contaminated soil) that would exceed the capacity of TSDs authorized to treat such waste. This impact would remain less than significant, and no mitigation would be required.

Impact UT-7b: Implementation of the Project at HPS Phase II would not generate solid waste that would exceed the capacity of landfills serving the City and County of San Francisco. ***[Criterion Q.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

The 2010 FEIR concluded that the impact of operational solid waste generated by the HPS2 on the capacity of the Altamont Landfill would be less than significant, with implementation of mitigation measure MM UT-7a.

The solid waste generated by the 2018 Modified Project Variant is estimated at 23,153tpy (equivalent to an average of 63.43 tpd), which is slightly higher than the 21,827 tpy estimated for the 2010 Project and the 22,225 tpy estimated for the approved R&D Variant (Variant 1). Compared to R&D Variant (Variant 1), the 2018 Modified Project Variant represents an overall increase in solid waste generation of 928 tpy, or an average of 2.54tpd.

San Francisco's municipal solid waste now goes to Recology's Hay Road Landfill rather than the Altamont Landfill that was serving the City of San Francisco in 2010. As described above, the City's agreement with the Hay Road Landfill to accept up to 2,400 tpd of solid waste should extend for approximately 9 years from 2016, based on projected disposal volumes, with an option to renew the Agreement thereafter for an additional 6 years (approximately 2031). The projected closure date of the Hay Road Landfill is 2077. By contrast, the 2010 FEIR estimated that the Altamont Landfill was due to reach capacity in January 2032 based on current disposal rates, and could possibly close three years earlier, in 2029.

The total solid waste generated by the 2018 Modified Project Variant (23,153 tons per year as shown in Table 25) represents approximately 0.08 percent of the remaining capacity of the Hay Road Landfill as of July 2010 (30.4 million cubic yards).[122] The 2018 Modified Project Variant's net increase in solid waste of 928 tpy compared to R&D Variant (Variant 1) analyzed by the 2010 FEIR would amount to approximately 928 tpy, or about 0.002 percent of the landfill's remaining capacity. The 2018 Modified Project Variant's estimated generation of 63.43 tpd represents approximately 2.6 percent of the maximum daily waste that could be accepted according to the agreement with Hay Road Landfill, only slightly higher than the 60.89 tpd estimated for R&D Variant (Variant 1) analyzed by the 2010 FEIR, which represents approximately 2.5 percent of the daily waste allowed by Hay Road Landfill.

Despite the small increase in municipal solid waste generation by the 2018 Modified Project Variant as compared to the Project analyzed by the 2010 FEIR and R&D Variant (Variant 1), Hay Road Landfill has a higher remaining capacity than Altamont Landfill, and a projected closure date well beyond that of the Altamont Landfill. Thus, using Hay Road Landfill provides a long-term solution to accommodate the operation of the 2018 Modified Project Variant. Accordingly, the fact that there

[122] Assumes an average density of 1 ton per cubic yard.

is an identified landfill with adequate remaining capacity that is operational through 2077, combined with implementation of mitigation measure MM UT-7a, which requires preparation of a Site Waste Management Plan, would ensure that implementation of the 2018 Modified Project Variant would not generate solid waste that would exceed the capacity of landfills serving the City and County of San Francisco. As such, this impact would remain less than significant with implementation of the identified mitigation measure.

Impact UT-8b: Implementation of the Project at HPS Phase II would not generate hazardous waste that would exceed the permitted capacity of transport, storage, and disposal facilities authorized to treat such waste. ***[Criterion Q.f]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

As with the Project analyzed in the 2010 FEIR, the specific businesses or activities that could operate under the 2018 Modified Project Variant are not known at this time, but since no industrial uses are proposed under the 2018 Modified Project Variant, the amount of hazardous wastes that would be generated would be minimal, consisting primarily of household hazardous waste and small amounts of inorganic wastes such as waste oil from commercial uses. New residents and businesses would be expected to comply with all hazardous waste regulations, including the disposal of household hazardous waste. Because the minimal amount of hazardous waste that would be generated by the Project could be accommodated by existing facilities, this impact would remain less than significant, and no mitigation would be required.

Impact UT-9: Implementation of the Project would comply with federal, state, and local statutes and regulations related to solid waste. ***[Criterion Q.g]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Since approval of the 2010 FEIR, the California legislature passed AB 341, which all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. San Francisco's existing (2009) Mandatory Recycling and Composting Ordinance is arguably more stringent than AB 341, because it already has in place its Mandatory Recycling and Composting Ordinance, which requires San Francisco residents and businesses to properly separate recyclables and compostable material and keep them out of the landfill. Owners of businesses and multifamily buildings could be fined if they were to fail to provide tenants with adequate bin service and information on their proper use.

Since approval of the 2010 FEIR, the California legislature passed California AB 1826, which requires businesses and multi-family complexes (with 5 units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. San Francisco's existing (2009)

Mandatory Recycling and Composting Ordinance is arguably more stringent than AB 1826, because it already has in place its Mandatory Recycling and Composting Ordinance, which requires businesses and multi-family property owners to provide color-coded, labeled bins in convenient locations for tenants, employees, contractors, and customers to ensure separation of discards. Building owners could be fined if they were to fail to provide tenants with adequate bin service and information on their proper use.

On October 5, 2012, San Francisco Mayor Ed Lee announced that the city of San Francisco had reached an 80 percent landfill waste diversion rate, higher than any city in North America at the time.[123] The City has a goal to achieve zero waste by 2020 through continued implementation of the City's Zero Waste strategies and recent improvements to the efficiency of sorting and transfer facilities. Development within the Project site would meet or exceed all of the City's solid waste diversion requirements for new development. Mitigation measure MM UT-7a.1 requires the Project Applicant to provide a Site Waste Management Plan demonstrating the manner in which the Project would comply with these requirements. The Project Sponsor proposes to provide recycling facilities for residents and tenants of commercial and retail space. Implementation of mitigation measures MM UT-7a.1, MM UT-7a.2, and MM UT-5a would ensure compliance with applicable regulations pertaining to solid waste. Development of the Project would not conflict with regulatory policies pertaining to solid waste. This impact would remain less than significant with implementation of the identified mitigation measures.

Impact UT-10: Implementation of the Project would not require extension of dry utility infrastructure that would exceed the capacity of the services providing such utilities. ***[Criterion Q.i]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The 2018 Modified Project Variant includes infrastructure for solar power, recycled water, and a ground source geothermal heating and cooling system that would provide the primary source of heating and cooling for the development. A trench network located primarily beneath roadways would accommodate the utility systems including electrical, communications, gas, recycled water and sewerage.

Heating and cooling would be provided from centralized plants, instead of individual systems in each building or facility. Similar to the district heating and cooling systems proposed in the 2010 FEIR Utilities Variant 4, the 2018 Modified Project Variant utilizes a central heating and cooling

[123] San Francisco Office of the Mayor, Press Release: Recology & City Recycling & Compost Program Creates Jobs, Stimulates Growth of Green Economy & Supports City's 2020 Zero Waste Goal, October 5, 2012. Available at http://sfmayor.org/article/mayor-lee-announces-san-francisco-reaches-80-percent-landfill-waste-diversion-leads-all, accessed on November 9, 2017.

plant to serve HPS2, distributing hot water and chilled water from the district plant to individual buildings via the pipe distribution network located under the streets.

The 2018 Modified Project Variant would be subject to 2016 Title 24 building standards and the SFGBO, as amended in 2016, which together represent more stringent requirements for building energy efficiency than what was required by the building standards in effect at the time the 2010 FEIR was certified. This would reduce the Project's use of electricity and natural gas.

The 2018 Modified Project Variant includes a commitment to maximize the use of on-site solar PV panels along and provide an on-site battery storage system to store surplus energy generated from the solar PV systems, enabling better management of electricity loads during peak periods. This would reduce total electric power provided to HPS2 by SFPUC.

The 2018 Modified Project Variant would include an additional 576,000 gpd of recycled water capacity compared to the 2010 FEIR Utilities Variant 4, reducing the amount of retail potable water needed from SFPUC to satisfy HPS2 water demand.

As with the 2010 FEIR, the subdivision process would include submittal of detailed infrastructure plans to the Department of Public Works identifying how they would meet the infrastructure needs of the Project. Implementation of these plans would be a condition of subdivision approval. The subdivision process would ensure that adequate infrastructure is provided to accommodate the demands of the Project such that the capacity of the service providers to provide such utilities would not be exceeded. Moreover, the demands on locally serving utilities for natural gas, electricity and water should be less than the demands identified in the 2010 FEIR Utilities Variant 4. Therefore, the impact would remain less than significant, and no mitigation would be required.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to utilities impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to utilities, either on a project-related or cumulative basis.

II.B.17 Energy

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
11.	**Energy.** Would the project:					
R.a	Encourage activities that result in the use of large amounts of fuel or energy, or use such resources in a wasteful manner?	2010 FEIR p. III.R-16 (Impact ME-1), p. III.R-16 (Impact ME-2), p. III.R-21 (Impact ME-3), p. III.R-23 (Impact ME-4); Addendum 1 p. 48, Addendum 4 p. 52	No	No	No	MM GC-2, MM GC-3, MM GC-4, MM TR-1, MM TR-2, MM TR-4

Changes to Project Related to Energy

The 2018 Modified Project Variant includes the following activities related to energy:

- Modifications to the land use program;
- Modifications designed to increase energy efficiency and reduce the Project's reliance on imported natural gas and grid-supplied electricity. These modifications include renewable energy systems comprised of a ground source geothermal heating and cooling system and on-site solar photovoltaic (Solar PV) systems; and, in terms of assumptions;
- Given that the 2010 R&D Variant (Variant 1) includes comparable R&D/office uses (5,150,000 sf under the R&D Variant [Variant 1] as compared to 4,265,000 sf under the 2018 Modified Project Variant) and does not include a stadium (similar to the 2018 Modified Project Variant), this Variant is more comparable to the 2018 Modified Project Variant than the 2010 Project (which includes a stadium and less R&D uses); nonetheless, a comparison to the 2010 Project is made in terms of plug-in appliances, building envelopes, and natural gas use to ensure comparison to the 2010 FEIR.

Plug-in Electricity Demand

The 2010 Project would require approximately 60,652 MWh of electricity annually to supply plug-in appliances, based on plug-in electricity usage rates for each building type taken from the 2006 California Commercial End-Use Survey (CEUS), as shown by Table 26 (Electricity Demand from Plug-In Appliances).[124]

Table 26 also shows plug-in electricity estimates using an updated methodology based on non-Title 24 electricity use factors in CalEEMod 2016, which take into account the notable increase in the use of electronic devices since 2010 (e.g., televisions, cell phones, copiers, printers, computers, laptops, iPads, wireless hubs, battery chargers, electrical cars, etc.). If either the 2010 Project or any of its variants were developed today, they would similarly be subject to the plug-in energy use

[124] Itron, Incorporated. 2006. California Commercial End-Use Survey Results. CEC-400-2006-005. Available at http://www.energy.ca.gov/ceus/.

factors that have been used to determine energy use associated with the 2018 Modified Project Variant. Therefore, Table 26 shows the plug-in electrical uses for both the 2010 Project and the R&D Variant (Variant 1) using the 2018 energy use factors for plug-in appliances. In addition, Table 26 also shows the 2010 Project using the 2010 energy use factors for plug-in appliances, only for purposes of comparison with the 2010 FEIR.

Table 26 shows that total plug-in electricity usage by the 2018 Modified Project Variant would be approximately 84,607 MWh per year (using the 2018 energy use factor), an increase of about 39 percent over the 2010 FEIR estimate (for the 2010 land use plan and using the 2010 FEIR energy use factor). As previously mentioned, this increase in energy use for plug-in appliances is attributable to an increase in use of electronic devices since 2010 and the fact that the 2010 land use plan includes less R&D uses and a stadium). However, as also shown in Table 26, the projection of electricity consumption for plug-in appliances associated with the 2018 Modified Project Variant and the R&D Variant (Variant 1), with both using the 2018 energy use factors, are comparable, reflecting comparable land use plans and a comparable use of plug-in electronic devices.

Building Energy Demand

The quantitative analysis of energy usage in the 2010 FEIR relied on data from the Climate Change Technical Report (Appendix S)[125] to estimate the total building envelope energy use, using figures that represented the 2008 Title 24 building energy standards. The Title 24 standards have advanced considerably since 2008, with the 2013 and 2016 iterations requiring ever higher building energy efficiencies. Accordingly, building energy use estimates for the 2018 Modified Project Variant are much lower than the estimates for the Project analyzed in the 2010 FEIR, reflecting the energy efficiency improvements in the 2016 Title 24 standards.

Table 27 (Electricity Demand from Building Envelopes) shows that the energy demand from the 2010 Project, using the 2008 Title 24 Standards reflected in the 2010 FEIR, as compared to the 2018 Modified Project Variant using the same standards, would be about 64 percent more. However, Table 27 (Electricity Demand from Building Envelopes) also shows that the 2018 Modified Project Variant using 2018 standards (2016 Title 24 Standards), would result in building envelope electricity use of only 14,745 MWh per year, a decrease of approximately 63 percent from the 2010 Project estimate using the 2008 Title 24 Standards. This decrease reflects the benefit of a stricter energy code. However, assuming development the R&D Variant (Variant 1), as compared to the 2018 Modified Project Variant, and using the 2018 standards (2016 Title 24 Standards) for both projects in term of building energy demand, each would be comparable in terms of building energy usage.

[125] Environ International Corporation, *Climate Change Technical Report: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, October 2009 (2010 FEIR Appendix S), with data modified from the CEC's *Statewide Residential Appliance Saturation Survey, Volume 2, Study Results, Final Report*, June 2004.

TABLE 26 ELECTRICITY DEMAND FROM PLUG-IN APPLIANCES

		CP		*HPS2*		*2018 Modified Project Variant Site Total*					
Type of Use	*2018 Energy Use Factor (MWh/sf or unit)[a]*	*2018 Development Program[b]*	*MWh Consumed Annually[c]*	*2018 Development Program[b]*	*MWh Consumed Annually[c]*	*2018 Development Program*	*MWh Consumed Annually[d]*	*Percent of Total by Land Use[e]*	*2010 Project MWh Consumed Annually (using 2010 Energy Use Factors)*	*2010 Project MWh Consumed Annually (using 2018 Energy Use Factors)*	*R&D Variant (Variant 1) MWh Consumed Annually (using 2018 Energy Use Factors)*
Artist Studio	0.00838	—	—	255,000	2,137	***255,000***	***2,137***	***3%***	2,359	2,137	2,137
Community Use	0.00635	50,000	318	50,000	318	***100,000***	***636***	***1%***	926	635	635
Arena	0.00635	75,000	476	—	—	***75,000***	***476***	***1%***	548	476	476
Hotel	0.00598	150,000	897	120,000	718	***270,000***	***1,615***	***2%***	1,035[h]	897	897
R&D/Office	0.00635	150,000	953	4,265,000	27,083	***4,415,000***	***28,036***	***33%***	24,513	17,132	33,007
Regional Retail	0.00824	635,000	5,232	100,000	824	***735,000***	***6,056***	***7%***	6,077	5,232	5,232
Residential	3.79554	7,218	27,396	3,454	13,110	***10,672***	***40,506***	***48%***	18,722	39,853	39,853
Neighborhood Retail/ Maker Space	0.00824	125,000	1,030	301,000	2,480	***426,000***	***3,510***	***4%***	2,392	2,060	2,060
Stadium	N/A[i]	Not Applicable	—	Not Applicable	—	***Not Applicable***	***—***	***N/A***	4,080	4,080	0
School/Institution (High School)	0.00378	—	—	27,858	105	***27,858***	***105***	***0%***	Not Applicable[j]	Not Applicable	Not Applicable
School/Institution (Post-Secondary)	0.00608	—	—	37,142	226	***37,142***	***226***	***0%***	Not Applicable[j]	Not Applicable	Not Applicable
School/Institution (Elementary/Junior High School)	0.00378	—	—	345,000	1,304	***345,000***	***1,304***	***2%***	Not Applicable[j]	Not Applicable	Not Applicable
Total			***36,302***		***48,305***		***84,607***	***100%***	***60,652***	***72,502***	***84,298***
Percent of Total			***43%***		***57%***						

NOTES:

a. The electricity factors are based on non-Title 24 electricity and lighting factors from CalEEMod 2016. The factors were converted from kWh to MWh.

b. Based on build-out floor areas or number of units associated with the 2018 Modified Project Variant.

c. Calculated by multiplying energy use factor by number of units or square feet.

d. Calculated by adding the horizontal columns, rather than calculating total number of units by the generation rate.

e. Due to rounding, the totals may not add up to 100% when added individually.

h. In the 2010 FEIR, there was a typographical error for the hotel energy use. Electricity consumption should have been 1,035 MWh per year, rather than 2 MWh reported in Table III.R-7. However, Table 3-17 of 2010 FEIR Appendix S reflected the correct number. This would not alter the 2010 FEIR analysis or conclusions, as the project proponent committed to achieving 15% or better energy efficiency than required by Title 24 and would still not be using electricity in a wasteful manner.

i. The stadium is not part of the 2018 Modified Project Variant. In the 2010 FEIR, electricity use for the Candlestick Park stadium was estimated in City and County of San Francisco, *Climate Action Plan*, 2004, Table 2-4.

j. Energy consumption for this land use category was not provided in the 2010 FEIR because the associated land uses were not part of the 2010 Project.

TABLE 27 ELECTRICITY DEMAND FROM BUILDING ENVELOPES

Type of Use	Electricity Use Factor, 2016 Title 24 Standards (MWh/gsf or unit)[a]	CP		HPS2		2018 Modified Project Variant Site Total			2010 Project MWh Consumed Annually, 2008 Title 24 Standards	2010 Project MWh Consumed Annually, 2016 Title 24 Standards	R&D Variant (Variant 1) MWh Consumed Annually, 2008 Title 24 Standards	R&D Variant (Variant 1) MWh Consumed Annually, 2016 Title 24 Standards
		2018 Development Program[b]	MWh Consumed Annually, 2016 Title 24 Standards[c]	2018 Development Program[b]	MWh Consumed Annually, 2016 Title 24 Standards[c]	2018 Development Program	MWh Consumed Annually, 2016 Title 24 Standards[d]	Percent of Total Electricity by Land Use[e]				
Artist Studio	0.00410	—	—	255,000	1,046	***255,000***	***1,046***	***7%***	1,326	1,046	1,326	1,046
Community Use	0.00121	50,000	61	50,000	61	***100,000***	***122***	***1%***	520	122	520	122
Arena	0.00121	75,000	91	0	0	***75,000***	***91***	***1%***	113	91	113	91
Hotel	0.00219	150,000	329	120,000	263	***270,000***	***592***	***4%***	409[h]	329	409[f]	329
R&D/Office	0.00121	150,000	182	4,265,000	5,161	***4,415,000***	***5,343***	***36%***	13,780	3,207	26,780	6,232
Regional Retail	0.00224	635,000	1,422	100,000	224	***735,000***	***1,646***	***11%***	1,715	1,422	1,715	1,422
Residential	0.42645	7,218	3,078	3,454	1,473	***10,672***	***4,551***	***31%***	18,218	4,478	18,407	4,478
Neighborhood Retail/Maker Space	0.00224	125,000	280	301,000	674	***426,000***	***954***	***6%***	676	560	675	560
Stadium	N/A[i]	N/A	—	N/A	—	***N/A***	***—***	***N/A***	4,080	4,080	N/A	N/A
School/Institution (High School)	0.00066	—	—	27,858	18	***27,858***	***18***	***0%***	N/A[j]	N/A[j]	N/A[j]	N/A[j]
School/Institution (Post-Secondary)	0.00414	—	—	37,142	154	***37,142***	***154***	***1%***	N/A[j]	N/A[j]	N/A[j]	N/A[j]
School/Institution (Elementary/Junior High School)	0.00066	—	—	345,000	228	***345,000***	***228***	***2%***	N/A[j]	N/A[j]	N/A[j]	N/A[j]
Total			***5,443***		***9,302***		***14,745***	***100%***	***40,837***	***15,335***	***49,945***	***14,280***
Percent of Total			***37%***		***63%***							

NOTES:

a. The electricity factors are based on Title 24 electricity from CalEEMod 2016. The factors were converted from kWh to MWh.

b. Based on build-out floor areas or number of units associated with the 2018 Modified Project Variant.

c. Calculated by multiplying energy use factor by number of units or square feet.

d. Calculated by adding the horizontal columns, rather than calculating total number of units by the generation rate.

e. Due to rounding, the totals may not add up to 100% when added individually.

f. In the 2010 FEIR, there was a typographical error for the hotel energy use. Electricity consumption should have been 409 MWh per year, rather than 1 MWh reported in Table III.R-8. However, Table 3-17 of 2010 FEIR Appendix S reflected the correct number. This would not alter the 2010 FEIR analysis or conclusions, as the project proponent committed to achieving 15% or better energy efficiency than required by Title 24 and would still not be using electricity in a wasteful manner.

i. The stadium is not part of the 2018 Modified Project Variant. In the 2010 FEIR, electricity use for the Candlestick Park stadium was estimated in: City and County of San Francisco, 2004. *Climate Action Plan*, Table 2-4. Based on comparable energy savings achieved by other recently constructed stadiums, a 20% reduction in electricity use is anticipated with construction of the replacement stadium.

j. Energy consumption for this land use category was not provided in the 2010 FEIR because the associated land uses were not part of the 2010 Project.

Natural Gas Demand

Table 28 (Natural Gas Demand, Baseline) shows that the 2018 Modified Project Variant would result in building natural gas use of 234,314 MMBtu per year, using the 2016 Title 24 standards, a decrease of approximately 40 percent from the 2010 Project estimate, using the 2008 Title 24 Standards.[126] Table 28 also shows the energy demand for the R&D Variant (Variant 1). The 2018 Modified Project Variant would be comparable to the R&D Variant (Variant 1) using the 2018 standards (2106 Title 24 Standards) in terms of natural gas useage.

Summary

In summary, the use of energy associated with plug-in appliances and buildings, as well as natural gas, would be comparable between R&D Variant and the 2018 Modified Project Variant.

Vehicle Fuel Use

Table 29 (2010 FEIR Petroleum Demand) shows Project diesel and gasoline consumption associated with operation of the Project as analyzed in the 2010 FEIR. VMT would likely be lower for the 2018 Modified Project Variant over time due to vehicle trip lengths being reduced as Project (and other surrounding projects, such as Indian Basin and Pier 70) build out occurs. This overall reduction in VMT is in line with the City of San Francisco's projections for reduced VMT levels by 2040 (see Appendix D). Implementation of the 2018 Modified Project Variant would result in a better mix of land uses in the area, and as a result, the distances that people would have to drive would be reduced. Fuel use per VMT for the 2018 Modified Project Variant would be expected to be lower than for the 2010 Project because of higher average fleet fuel efficiencies in California (due to the Pavley vehicle efficiency standards and CARB's Mobile Source Strategy (2016).

[126] During preparation of Addendum 5, it was discovered that the natural gas usage estimate for residential units in the 2010 FEIR was underestimated by a factor of 1,000 due to an error in transcribing the "use factor" units from Environ's 2009 Climate Change Technical Report. If the correct units are applied, the revised natural gas usage estimate for residential units would be approximately 321,000 MBtu per year rather than the 321 MBtu reported in 2010 FEIR Table III.R-9. The revised annual total for all uses would be approximately 384,000 MBtu per year, rather than the 63,262 MBtu reported in 2010 FEIR Table III.R-9.

TABLE 28 NATURAL GAS DEMAND, BASELINE

Type of Use	Natural Gas Use Factor, 2016 Title 24 Standards (MMBtu/sf or unit)[a]	CP		HPS2		2018 Modified Project Variant Site Total			2010 Project MMBtu Consumed Annually, 2008 Title 24 Standards, with 15% Reduction	2010 Project MMBtu Consumed Annually, 2016 Title 24 Standards	R&D Variant (Variant 1) MMBtu Consumed Annually, 2008 Title 24 Standards, with 15% Reduction	R&D Variant (Variant 1) MMBtu Consumed Annually, 2016 Title 24 Standards
		2018 Development Program[b]	MMBtu Consumed Annually, 2016 Title 24 Standards[c]	2018 Development Program[b]	MMBtu Consumed Annually, 2016 Title 24 Standards[c]	2018 Development Program	MMBtu Consumed Annually, 2016 Title 24 Standards[c]	Percent of Total by Land Use[e]				
Artist Studio	0.01933	—	—	255,000	4,929	255,000	4,929	2%	3,825	4,929	4,335	4,929
Community Use	0.02475	50,000	1,238	50,000	1,238	100,000	2,476	1%	1,700	2,475	1,700	2,475
Arena	0.02475	75,000	1,856	—	—	75,000	1,856	1%	1,549	1,856	1,549	1,856
Hotel	0.03651	150,000	5,477	120,000	4,381	270,000	9,858	4%	5,168[f]	5,477	4,399	5,477
R&D/Office	0.02475	150,000	3,713	4,265,000	105,559	4,415,000	109,272	47%	45,050	65,588	87,550	127,463
Regional Retail	0.00460	635,000	2,921	100,000	460	735,000	3,381	1%	2,591	2,921	2,591	2,921
Residential[g]	8.73043	7,218	63,016	3,454	30,155	10,672	93,171	40%	321,300	91,670	321,300	91,670
Neighborhood Retail/Maker Space	0.00460	125,000	575	301,000	1,385	426,000	1,960	1%	1,020	1,150	1,020	1,150
Stadium	N/A[h]	Not Applicable	—	Not Applicable	—	Not Applicable	—	N/A	7,200	7,200	N/A	N/A
School/Institution (High School)	0.01647	—	—	27,858	459	27,858	459	0%	Not Applicable[i]	Not Applicable[i]	Not Applicable[i]	Not Applicable[i]
School/Institution (Post-Secondary)	0.03420	—	—	37,142	1,270	37,142	1,270	1%	Not Applicable[i]	Not Applicable[i]	Not Applicable[i]	Not Applicable[i]
School/Institution (Elementary/Junior High School)	0.01647	—	—	345,000	5,682	345,000	5,682	2%	Not Applicable[i]	Not Applicable[i]	Not Applicable[i]	Not Applicable[i]
Total			***78,796***		***155,518***		***234,314***	***100%***	***389,403***	***183,266***	***424,444***	***237,941***
Percent of Total			***34%***		***66%***							

NOTES:

a. Project natural gas demand was estimated based on land use and basic compliance with 2016 Title 24 standards. The factors were converted from kBtu to MMBtu (1 MMBtu = 1,000 kBtu).

b. Based on build-out floor areas or number of units associated with the 2018 Modified Project Variant.

c. Calculated by multiplying energy use factor by number of units or square feet.

d. Calculated by adding the horizontal columns, rather than calculating total number of units by the generation rate.

e. Due to rounding, the totals may not add up to 100% when added individually.

f. In the 2010 FEIR, there was a typographical error for the hotel energy use. Natural gas consumption should have been 5,168 MMBtu per year, rather than 8 MMBtu reported in Table III.R-9. However, Table 3-17 of 2010 FEIR Appendix S reflected the correct number. This would not alter the 2010 FEIR analysis or conclusions, as the project proponent committed to achieving 15% or better energy efficiency than required by Title 24 and would still not be using electricity in a wasteful manner.

g. In the 2010 FEIR, there was a typographical error in terms of the natural gas usage estimate for residential units. The revised natural gas usage estimate for residential units under the 2010 Project should have been approximately 321,000 MBtu per year, rather than the 321 MBtu reported (Table III.R-9). The correct natural gas usage for residential units is shown in Table 3-8 of 2010 FEIR Appendix S. The revised natural gas use under the 2010 Project would represent approximately 1.3% of the city's total natural gas usage, whereas the 2010 FEIR reported it was less than 1%; however, this would not alter the 2010 FEIR conclusions, as the project proponent committed to achieving 15% or better energy efficiency than required by Title 24 and would still not be using natural gas in a wasteful manner.

h. The stadium is not part of the 2018 Modified Project Variant. In the 2010 FEIR, natural gas use for the Candlestick Park stadium was estimated in: City and County of San Francisco, 2004. *Climate Action Plan*, Table 2-4. Based on comparable energy savings achieved by other recently constructed stadiums, a 20% reduction in natural gas use is anticipated with construction of the replacement stadium.

i. Energy consumption for this land use category was not provided in the 2010 FEIR because the associated land uses were not part of the 2010 Project.

TABLE 29 2010 FEIR PETROLEUM DEMAND

	Project Annual VMT (million miles travelled)[a]	*Average Countywide Vehicle Fuel Efficiency (2030)*[b]	*Project Total Fuel Consumption (million gallons)*	*Project Gasoline Consumption (million gallons)*[c]	*Project Diesel Consumption (million gallons)*[c]
Candlestick Point	223.67	21.15	10.58	9.92	0.66
Hunters Point Shipyard	92.36	21.15	4.37	4.09	0.27
Total	***316.03***		***14.95***	***14.01***	***0.93***

SOURCES:

a. Annual VMT was calculated by PBS&J based on trip generation information and average trip lengths reported in: CHS Consulting Group, Fehr and Peers, and LCW Consulting, *Candlestick Point–Hunters Point Shipyard Phase II Development Plan Transportation Study*, 2009.

b. Equals the projected Countywide 2030 VMT (3,495 million miles travelled) divided by the projected total transportation fuel consumed (171.27 million gallons) for San Francisco County, as reported in: California Department of Transportation (Caltrans), *California Motor Vehicle Stock, Travel and Fuel Forecast*, website: http://www.dot.ca.gov/hq/tsip/smb/documents/mvstaff/mvstaff08.pdf, accessed August 20, 2009. This factor does not take into account recently adopted fuel efficiency standards.

c. On average 94 percent of the transportation fuels consumed in San Francisco were gasoline fuels, while 6 percent were diesel fuels, as reported in: California Department of Transportation (Caltrans), *California Motor Vehicle Stock, Travel and Fuel Forecast*, website: http://www.dot.ca.gov/hq/tsip/smb/documents/mvstaff/mvstaff08.pdf, accessed August 20, 2009.

New Regulations

The following new regulations would apply to the analysis of energy impacts.

Federal fuel-efficiency standards for medium- and heavy-duty trucks have been jointly developed by the United States Environmental Protection Agency (USEPA) and the National Highway Traffic Safety Administration (NHTSA). The HPS1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.[127] The USEPA and NHTSA also adopted the HPS2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.[128]

The Clean Energy and Pollution Reduction Act of 2015, Senate Bill (SB) 350 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 will (1) increase the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) require the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provide for the evolution of the Independent System Operator (ISO) into a regional organization; and (4) require the

[127] U.S. Environmental Protection Agency, Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, August 2011. Available at https://nepis.epa.gov/Exe/ZyPDF.cgi/P100BOT1.PDF?Dockey=P100BOT1.PDF, accessed December 22, 2017.
[128] U.S. Environmental Protection Agency, Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25, 2016. Available at https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed December 22, 2017.

state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory provisions. Among other objectives, the Legislature intends to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.[129]

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development in 2008. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2017.

The California Energy Code (Title 24, Section 6) was created as part of the California Building Standards Code (California Code of Regulations [CCR] Title 24) by the California Building Standards Commission in 1978 to establish statewide building energy efficiency standards to reduce California's energy consumption. Standards are updated on an approximately three-year cycle as technology and methods have evolved. The 2016 Standards, effective January 1, 2017, focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations.[130]

California Advanced Clean Cars/Zero Emission Vehicle Program. In January 2012, CARB approved the Advanced Clean Cars (ACC) program (13 CCR 19562.1 and 1962.2), which includes new GHG standards for model years 2017 through 2025 and requires greater numbers of zero emission vehicles (ZEVs) than previously anticipated by California Assembly Bill 1493 (Pavley). The ZEV Program is designed to achieve California's long-term GHG emission reduction goals by requiring manufacturers to offer for sale specific numbers of the cleanest cars available, including battery electric, fuel cell, and plug-in hybrid electric vehicles. The ACC/ZEV Program is expected to reduce considerably the statewide consumption of petroleum fuels used by vehicles.

San Francisco's *Strategies to Address Greenhouse Gas Emissions*[131] documents the City's actions to pursue cleaner energy, energy conservation, alternative transportation and solid waste policies. For instance, the City has implemented mandatory requirements and incentives that have measurably

[129] *SB-350 Clean Energy and Pollution Reduction Act of 2015*. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350, Accessed December 14, 2017.
[130] California Energy Commission, 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, June 2015. Available at http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf, accessed December 15, 2017.
[131] San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, November 2010. Available at http://sfmea.sfplanning.org/GHG_Reduction_Strategy.pdf.

reduced GHG emissions including, but not limited to, increasing the energy efficiency of new and existing buildings, installing solar panels on building roofs, implementing a green building strategy, adopting a zero waste strategy, adopting a construction and demolition debris recovery ordinance, creating a solar energy generation subsidy, incorporating alternative fuel vehicles in the City's transportation fleet (including buses), and adopting a mandatory recycling and composting ordinance. The strategy also includes 30 specific regulations for new development that would reduce a project's GHG emissions, with eight geared toward energy efficiency and one toward renewable energy.

Green Building Ordinance (*City and County of San Francisco Building Code*, Chapter 13C). In November 2008, the City passed the San Francisco Green Building Ordinance (SFGBO), which is included as San Francisco Building Code Chapter 13C. In 2013, the SFGBO was amended to incorporate all mandatory elements of the 2013 CALGreen and Title 24 energy-efficiency standards and require green building practices and Leadership in Energy and Environmental Design (LEED) certification for all new residential and commercial construction in the city, unless otherwise indicated in the SFGBO, as well as alterations to existing buildings. The Green Building Code was last amended in April 2016.

Comparative Impact Discussions

Impact ME-1: Construction activities associated with the Project would not result in the use of large amounts of energy, or use energy in a wasteful manner. (Less than Significant) ***[Criterion R.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant	Less than Significant

The construction activities for the 2018 Modified Project Variant would not differ substantially from construction activities associated with the Project analyzed by the 2010 FEIR. Project construction equipment would be required to comply with the latest EPA and CARB engine emissions standards, which are more stringent than standards that were in place when the 2010 FEIR was certified. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption.

With the 2018 Modified Project Variant nothing has changed that would affect the 2010 FEIR's conclusions regarding construction energy use. The construction-related energy use associated with the 2018 Modified Project Variant would not wasteful. The impact would remain less than significant, and no mitigation would be required.

Impact ME-2: Buildings constructed by the Project would not use large amounts of electricity in a wasteful manner. (Less than Significant with Mitigation) ***[Criterion R.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

In 2015, California had the third-lowest statewide energy consumption in the country on a per-capita basis, behind New York and Rhode Island.[132] Californians consumed approximately 197 million Btu of total energy per capita in 2015. In comparison, the average annual U.S. per capita energy consumption was approximately 303 million Btu.[133] However, as was the case in 2010 when the 2010 FEIR was completed, California's overall energy consumption remains second only to that of Texas.[134]

As shown in Table 30 (Electricity Consumption in San Francisco, by Land Use, 2016), annual electricity consumption in San Francisco County was approximately 5,759 million kWh in 2016, an increase of 11.7 percent from the 2007 total electricity consumption figure of 5,155 million kWh provided in the 2010 FEIR.[135]

TABLE 30 ELECTRICITY CONSUMPTION IN SAN FRANCISCO, BY LAND USE, 2016

Land Use	*Total Consumption (million kWh)*	*Percent of Total Consumption*
Nonresidential	4,294.41	75%
Residential	1,464.78	25%
Total	***5,759.19***	***100%***

SOURCE: California Energy Commission, *Electricity Consumption by County: San Francisco County*. http://ecdms.energy.ca.gov/elecbycounty.aspx (accessed December 21, 2017).

According to the City of San Francisco Climate Action Strategy, 73 percent of the electricity used in San Francisco comes from PG&E and 16 percent from the SFPUC. The remaining 11 percent comes from independently contracted energy service providers used by some large commercial and industrial customers such as the Bay Area Rapid Transit district. Forty-one percent of the combined electricity mix for San Francisco (PG&E, SFPUC, and energy service providers) came from renewable sources in 2010.[136]

PG&E's electricity generation profile has changed significantly over time, with an increasing percentage of renewables in its power mix. The 2010 FEIR reported that in 2007, PG&E generated 12 percent of its total electricity through renewable sources, including biomass, small hydroelectric, geothermal, and wind. The remainder of PG&E's generation portfolio in 2007 included natural gas

[132] U.S. Energy Information Administration, *Total Energy Consumed per Capita*, 2015. Available at https://www.eia.gov/state/rankings/?sid=US, accessed December 21, 2017.
[133] Ibid.
[134] California Energy Commission, *U.S. Per Capita Electricity Use by State in 2005*. Available at http://energyalmanac.ca.gov/electricity/us_per_capita_electricity_2005.html, accessed August 17, 2009.
[135] Note that the current figure for 2007 total electricity use in San Francisco County provided on the CEC web site is 5,625 million kWh; Using that figure, annual total electricity use in San Francisco County increased approximately 2.4 percent from 2007 to 2016.
[136] San Francisco Department of the Environment, *San Francisco Climate Action* Strategy, 2013 update. Available at https://sfenvironment.org/sites/default/files/engagement_files/sfe_cc_ClimateActionStrategyUpdate2013.pdf.

combustion (47 percent), nuclear fission (23 percent), large-scale hydroelectric (13 percent), coal combustion (4 percent), and other sources (1 percent).[137] In 2016, PG&E generated 33 percent of its total electricity through renewable sources, while the statewide average was 25 percent.[138] The remainder of PG&E's generation portfolio in 2016 included natural gas combustion (17 percent), nuclear fission (24 percent), large-scale hydroelectric (12 percent), coal combustion (0 percent), and unspecified sources of power (14 percent).

For the Project analyzed in the 2010 FEIR, the Project Sponsor made a preliminary commitment to making all new residential units 15 percent more energy efficient than required under the 2008 Title 24 standards as a project design feature by employing high performance lighting, materials, and other energy efficiency measures. The current 2016 Title 24 standards go well beyond this commitment in terms of building energy efficiency, so electricity use by the 2018 Modified Project Variant is expected to be lower than the Project analyzed in the 2010 FEIR. Table 27 (Electricity Demand from Building Envelopes) above shows that the buildings in the 2018 Modified Project Variant would use approximately 63 percent less electricity than the Project analyzed by the 2010 FEIR and 70 percent less than the R&D Variant (Variant 1).

Table 26 (Electricity Demand from Plug-In Appliances) above indicates that total plug-in electricity usage by the 2018 Modified Project Variant would increase by about 39 percent over the 2010 FEIR estimate. This increase reflects a state (and global) trend of increased use of plug-in devices at homes and businesses with the proliferation of televisions, cell phones, copiers, printers, computers and battery chargers. The CPUC recently reported that plug load energy use in the residential and commercial sectors in California is growing rapidly, and that some estimates show that plug loads will exceed 50 percent of residential electric consumption by 2030.[139] Plug-in electricity use depends on the devices and appliances installed by future Project residents and employees, and would be difficult for the Project Sponsor to influence. However, the Project Sponsor's preliminary commitment to installing ENERGY STAR appliances into residential units for all builder-supplied appliances (mitigation measure MM GC-3) would result in a small decrease in plug-in electricity use from the numbers shown for the 2018 Modified Project Variant.

As noted above, the 2018 Modified Project Variant includes modifications designed to reduce the Project's reliance on grid-supplied electricity, through the use of renewable energy systems comprised of a ground source geothermal heating and cooling system and on-site solar PV systems. In addition, individual buildings would be required to meet or exceed the energy conservation requirements in the San Francisco Green Building Ordinance, which itself includes energy conservation requirements that exceed those in the California Building Code (i.e., Title 25, Part 6). Electricity would not be used in a wasteful, inefficient, or unnecessary manner.

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[137] CEC, Sources of Electricity for Major Utilities in California. Available at http://www.pgecorp.com/corp_responsibility/reports/2007/environment/energy-future.html, accessed August 19, 2009.
[138] CEC, 2016 Power Content Label. Available at http://www.energy.ca.gov/pcl/, accessed December 21, 2017.
[139] California Public Utilities Commission (CPUC), *Research and Technology Action Plan 2012–2015*, for the California Energy Efficiency Strategic Plan.

With its modified energy systems and with implementation of mitigation measures MM GC-2, MM GC-3, and MM GC-4, the 2018 Modified Project Variant would not use large amounts of electricity in a wasteful manner. The impact would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

MM GC-2: ~~Exceed the 2008~~ Comply with the 2016 Standards for Title 24 Part 6 energy efficiency standards for homes and businesses ~~would by at least 15 percent~~.

Impact ME-3: Buildings constructed by the Project would not use large amounts of natural gas in a wasteful manner. (Less than Significant with Mitigation) ***[Criterion R.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As was the case when the 2010 FEIR was certified, natural gas in San Francisco is supplied by PG&E. As shown in Table 31 (Natural Gas Consumption in San Francisco, by Land Use, 2016), annual natural gas consumption in San Francisco County was approximately 22,679,763 million Btu in 2016, a decrease of approximately 21.6 percent from the 2007 total natural gas consumption figure of 28,918,000 million Btu provided in the 2010 FEIR.[140]

TABLE 31 NATURAL GAS CONSUMPTION IN SAN FRANCISCO, BY LAND USE, 2016

Land Use	*Total Consumption (million British thermal units [Btu])*	*Percent of Total Consumption*
Nonresidential	12,966,831	57%
Residential	9,712,932	43%
Total	***22,679,763***	***100%***

SOURCE: California Energy Commission, *Natural Gas Consumption by County: San Francisco County*. http://ecdms.energy.ca.gov/gasbycounty.aspx (accessed December 21, 2017).

Approximately 158 million gallons of gasoline and 11 million gallons of diesel were consumed in San Francisco for transportation in 2007.[141] By 2030, consumption of transportation-related fossil fuels is expected to increase by about 57 percent citywide.

For the Project analyzed in the 2010 FEIR, the Project Sponsor made a preliminary commitment to making all new residential units 15 percent more energy efficient than required under the 2008 Title 24 standards as a project design feature by employing high performance lighting, materials, and other energy efficiency measures. The current 2016 Title 24 standards go well beyond this

[140] Note that the current figure for 2007 total natural gas use in San Francisco County provided on the CEC web site is 25,831,904 million Btu; Using that figure, annual total natural gas use in San Francisco County decreased by approximately 12.2 percent from 2007 to 2016.

[141] California Department of Transportation (Caltrans), *California Motor Vehicle Stock, Travel and Fuel Forecast*. Available at http://www.dot.ca.gov/hq/tsip/smb/documents/mvstaff/mvstaff08.pdf, accessed August 20, 2009.

commitment in terms of building energy efficiency, so energy use by the 2018 Modified Project Variant is expected to be lower than the Project analyzed in the 2010 FEIR, for both electricity and natural gas. Table 28 (Natural Gas Demand, Baseline) above shows that the buildings in the 2018 Modified Project Variant would use approximately 40 percent less natural gas than the Project analyzed by the 2010 FEIR and 45 percent less than the R&D Variant (Variant 1).

As noted above, the 2018 Modified Project Variant includes the use of a ground source geothermal heating and cooling system, would reduce the Project's reliance on imported natural gas. In addition, individual buildings would be required to meet or exceed the energy conservation requirements in the San Francisco Green Building Ordinance, which itself includes energy conservation requirements that exceed those in the California Building Code (i.e., Title 25, Part 6). Natural gas would not be used in a wasteful, inefficient, or unnecessary manner.

With its modified energy systems and with implementation of mitigation measures MM GC-2 and MM GC-3, the 2018 Modified Project Variant would not use large amounts of natural gas in a wasteful manner. The impact would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure with Proposed 2018 Modifications

MM GC-2, is provided in full on p. 347 under Impact ME-2.

Impact ME-4: Vehicle trips associated with the Project would not use large amounts of energy in a wasteful manner. (Less than Significant with Mitigation) ***[Criterion R.a]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As with the Project analyzed in the 2010 FEIR, the 2018 Modified Project Variant would increase vehicle trips to and from the Project site, and result in a commensurate increase in the use of petroleum fuels, compared to existing conditions.

Table 29 (2010 FEIR Petroleum Demand) shows Project diesel and gasoline consumption associated with operation of the Project as analyzed in the 2010 FEIR. VMT would likely be lower for both the 2010 Project and the 2018 Modified Project Variant than what was analyzed in the 2010 FEIR due to vehicle trip lengths being reduced over time as the CP-HPS2 Project (and other surrounding projects, such as India Basin and Pier 70) build-out occurs. This overall reduction in VMT is in line with the City of San Francisco's projections for reduced VMT levels by 2040 (refer to Addendum 5 Appendix D). Under the 2018 Modified Project Variant, higher average fleet fuel efficiencies would be expected in California (due to the Pavley vehicle efficiency standards) as compared to the 2010 Project.

As with the Project analyzed in the 2010 FEIR, the 2018 Modified Project Variant would implement mitigation measures MM TR-1, MM TR-2, and MM TR-4 to minimize VMT by managing traffic flows and promoting transportation demand management (TDM). In addition, implementation of

California's Advanced Clean Cars/Zero Emission Vehicle (ACC/ZEV) Program would reduce average petroleum use by vehicles below levels assumed in the 2010 FEIR. With implementation of the ACC/ZEV Program and implementation of these mitigation measures, vehicle trips associated with the Project would not use large amounts of energy in a wasteful manner, and this impact would remain less than significant.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to energy impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to energy, either on a project-related or cumulative basis.

II.B.18 Greenhouse Gas Emissions

	Criterion	Where Impact Was Analyzed in Prior Environmental Documents (Beginning Page)	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More-Severe Impacts?	Any New Information of Substantial Importance?	Previously Approved Mitigation Measures That Would Also Address Impacts of the 2018 Modified Project Variant
7.	**Greenhouse Gas Emissions.** Would the project:					
S.a	Conflict with the state goal of reducing GHG emissions in California to 1990 levels by 2020, as set forth by the timetable established in AB 32 (*California Global Warming Solutions Act of 2006*), such that the project's GHG emissions would result in a substantial contribution to global climate change?	2010 FEIR p. III.S-35 (Impact GC-1); Addendum 1 p. 49; Addendum 4 p. 53	No	No	No	MM GC-1, MM GC-2, MM GC-3, MM GC-4
S.b	Conflict with San Francisco's *Climate Action Plan* such that it would impede implementation of the local GHG reduction goals established by the 2008 Greenhouse Gas Reduction Ordinance?	2010 FEIR p. III.S-35 (Impact GC-1); Addendum 1 p. 49; Addendum 4 p. 53	No	No	No	MM GC-1, MM GC-2, MM GC-3, MM GC-4

Changes to Project Related to Greenhouse Gas Emissions

The 2018 Modified Project Variant includes the following activities related to greenhouse gas (GHG) emissions:

- Modifications to the land use program;
- The changes in traffic volumes;
- Inclusion of the central energy plants and recycled water facility; and
- The changes in construction activity.

New Regulations

San Francisco has developed a number of plans and programs to reduce the City's contribution to global climate change and to meet the goals of the City's Greenhouse Gas Reduction Ordinance. San Francisco's *Strategies to Address Greenhouse Gas Emissions*[142] documents the City's actions to pursue cleaner energy, energy conservation, alternative transportation, and solid waste policies. For instance, the City has implemented mandatory requirements and incentives that have measurably reduced GHG emissions including, but not limited to, increasing the energy efficiency of new and existing buildings, installing solar panels on building roofs, implementing a green building strategy,

[142] San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, November 2010. Available at http://sfmea.sfplanning.org/GHG_Reduction_Strategy.pdf.

adopting a zero waste strategy, adopting a construction and demolition debris recovery ordinance, creating a solar energy generation subsidy, incorporating alternative fuel vehicles in the City's transportation fleet (including buses), and adopting a mandatory recycling and composting ordinance. The strategy also includes 30 specific regulations for new development that would reduce a project's GHG emissions. These GHG reduction actions have resulted in a 23.3 percent reduction in GHG emissions in 2012 compared to 1990 levels,[143] exceeding the year 2020 reduction goals in the BAAQMD's Clean Air Plan and AB 32, and putting the City on a path to meet the goals in the Governor's Executive Orders S-3-05 and B-30-15. These requirements were not incorporated into the numerical analysis because they were not considered in the 2010 FEIR.

The 2010 FEIR considered regulations, such as Title 24, Part 6, for building energy efficiency, as well as standards for vehicle efficiency. These are standards that the project or vehicles associated with the project would be subject to when the Project is implemented, regardless of the status of CEQA clearance. Thus, this 2018 analysis took into account the updates to the following regulations for the operational analysis related to Greenhouse Gases:

- California Air Resources Board (CARB) Advanced Clean Cars (ACC) program
- 2016 Standards for Title 24 Part 6 energy efficiency standards

Comparative Impact Discussions

Impact GC-1: The Project would not result in a substantial contribution to global climate change by increasing GHG emissions in a manner that conflicts with the state goal of reducing GHG emissions in California to 1990 levels by 2020 (e.g., a substantial contribution to global climate change) or conflicts with San Francisco's Climate Action Plan by impeding implementation of the local GHG reduction goals established by the San Francisco 2008 Greenhouse Gas Reduction Ordinance. ***[Criteria S.a and S.b]***

	2010 CP-HPS2 FEIR	*2010 CP-HPS2 FEIR Addendum 5*
Significance after Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

As disclosed in the 2010 FEIR, the Project's construction and operational GHG emissions impacts would be less than significant after mitigation. Construction emissions were quantified from off-road equipment and on-road vehicles. These emissions averaged 6,600 MT CO_2e per year over the construction time period, which is 0.0014 percent of the total 2004 statewide GHG emissions inventory and less than 1 percent of the construction equipment emissions for the Bay Area 2007 GHG emissions projections. Construction of HPS alone would release 46,061 MT CO_2e total over the entire construction period. Since construction contractors would be subject to ARB regulations, emissions would be less than significant. The 2010 FEIR determined more vegetation would be added as a result of the Project than would be removed during construction. Thus, the 2010 Project

[143] ICF International, *Technical Review of the 2012 Community-wide Inventory for the City and County of San Francisco*, January 21, 2015. Available at http://sfenvironment.org/download/2012-community-greenhouse-gas-inventory-3rd-party-verification-memo-january-2015, accessed May 26, 2016.

was predicted to result in a net sequestration of carbon due to vegetation, so there is no impact from GHG emissions associated with vegetation changes. The 2010 Project's operational emissions were calculated as 154,639 MT CO_2e per year after mitigation, with 52,842 MT CO_2e per year from HPS and 101,798 MT CO_2e per year from CP. The Project emissions were 52 percent lower than the ARB Scoping Plan No Action Taken scenario, and the Project would comply with continued GHG reduction actions by the City and County of San Francisco to further reduce emissions.

Revised emissions were calculated for HPS for the 2018 Modified Project Variant. CP is not changing from what was analyzed in the 2010 FEIR. Construction emissions were calculated using the same methodology as was used in the 2010 FEIR. Construction emissions for HPS for the 2018 Modified Project Variant are 60,480 MT CO_2e, which is an increase of 31 percent of the HPS emissions in the 2010 FEIR. This increase is due to the change in equipment activity due to the change in land uses proposed at HPS. However, part of this increase is due to the construction of the geothermal plant, which would ultimately reduce CO_2e emissions from building energy use. HPS construction emissions were 0.0006 percent of the total statewide GHG emissions inventory in the 2010 FEIR and 0.0008 percent for the 2018 Modified Project Variant. HPS construction emissions from the 2018 Modified Project Variant also continue to make up less than 1 percent of the construction equipment portion of the Bay Area GHG emissions inventory. Construction equipment makes up 1.7 percent of the total Bay Area GHG emissions inventory as reported in the 2010 FEIR. The 2010 FEIR did not compare construction GHG emissions against a specific numeric threshold, as the BAAQMD has not adopted a numeric threshold for construction GHG emissions. However, given that the relative magnitude of Project emissions in the context of regional and statewide emissions did not change, conclusions from the 2010 FEIR also do not change.

As described further in Appendix I2.2 (Operational Emissions Data), calculations for operations followed the same general methodology as used in the 2010 FEIR, but with updated land use, traffic data, and the operational year associated with the 2018 Modified Project Variant. Current modeling techniques were used to incorporate updated information on building energy use and vehicular emissions to take in to account the effect of the delay in implementation of the Project. Thus, the 2016 Standards for Title 24 Part 6 energy efficiency standards were incorporated into this analysis, since the buildings must comply with that most recent standard.

The 2018 Modified Project Variant is expected to result in a total of 110,859 MT CO_2e per year, with 55,455 MT CO_2e per year from HPS and 55,405 MT CO_2e per year from CP. The GHG emissions for the 2018 Modified Project Variant are 28 percent lower than those disclosed in the 2010 FEIR. Thus, conclusions in the 2010 FEIR still apply and the Project would not conflict with the state's goals of reducing GHG emissions to 1990 levels by 2020. As discussed previously, the City and County of San Francisco has additional regulations and ordinances that would also help limit GHG emissions associated with Project-related operational emissions. As discussed in the 2010 FEIR, the Project design is a dense, infill mixed-use project, with a transit-oriented design. The 2010 FEIR also includes mitigation measures that align with the local GHG reduction ordinances. For example,

MM GC-1 aligns with San Francisco's *Strategies to Address Greenhouse Gas Emissions* Policy 3.9 that encourages and requires the planting of trees in conjunction with new development; and MM GC-3 aligns with Policy 13.4 that encourages the use of energy conserving appliances and lighting systems. Thus, the Project would not conflict with the City's GHG reduction goals established in the Greenhouse Gas Reduction Ordinance. The 2018 Modified Project Variant meets these same criteria, therefore, the impact would remain less than significant with implementation of the identified mitigation measures.

Mitigation Measure Modified by Addendum 5

> **MM GC-2:** ~~Exceed the 2008~~ Comply with the 2016 Standards for Title 24 Part 6 energy efficiency standards for homes and businesses ~~would by at least 15 percent~~.

Conclusion

The 2018 Modified Project Variant would not change any of the 2010 FEIR's findings with respect to greenhouse gas emissions impacts. There is no new information of substantial importance, such as new regulations, a change of circumstances (e.g., physical changes to the environment as compared to 2010), or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the 2010 FEIR related to greenhouse gas emissions, either on a project-related or cumulative basis.

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III. CONCLUSION

Based on the foregoing, it is concluded that the analyses conducted and the conclusions reached in the 2010 FEIR certified on June 3, 2010, remain valid. The proposed revisions to the Project would not cause new significant impacts not identified in the 2010 FEIR, and no new mitigation measures would be necessary to reduce significant impacts. Other than as described in Addendum 5, no Project changes have occurred, and no changes have occurred with respect to circumstances surrounding the proposed Project that would cause significant environmental impacts to which the Project would contribute considerably, and no new information has become available that shows that the Project would cause significant environmental impacts. Therefore, no supplemental environmental review is required beyond Addendum 5.

Date of Determination:

I do hereby certify that the above determination has been made pursuant to State and local requirements.

Jose Campos
OCII Environmental Review Officer

cc: Bulletin Board/Master Decision File Distribution List

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Exhibit A
To Planning Commission Resolution No. 18101

Candlestick Point – Hunters Point Shipyard Phase 2 Development Project General Plan Findings and Planning Code Section 101.1 Findings

The following constitute findings that the Candlestick Point – Hunters Point Shipyard Phase 2 Development Project (the Project) is, on balance, consistent with the General Plan and Planning Code Section 101.1.

These findings consider, and are conditioned upon, all required Planning Commission actions related to the Project including, but not limited to, adoption of Planning Code text and map amendments (Planning Code Amendments); amendments to the General Plan, including amendments to the Bayview Hunters Point Area Plan, adoption of the Candlestick Point Sub-Area Plan, and adoption of the Hunters Point Shipyard Area Plan (General Plan Amendments); and adoption of the amendments to the Bayview Hunters Point Redevelopment Plan (BVHP Redevelopment Plan) and the Hunters Point Shipyard Redevelopment Plan (Shipyard Redevelopment Plan) and approval of the Candlestick Point and Hunters Point Shipyard Phase 2 Design for Development Documents and corresponding technical amendments to the Hunters Point Shipyard Phase 1 Design for Development Document.

Additionally, these findings will apply to other Project actions and related documents including, but not limited to the Planning Cooperation Agreement, Real Property Transfer Agreement between the Redevelopment Agency and the City and County of San Francisco for certain City property at Candlestick Point ("Recreation and Park Land Transfer Agreement"), Interagency Cooperation Agreement, amendments to the Subdivision Code, amendments to the Health Code and related amendments to the Public Works Code and Building Code and the Public Trust Exchange Agreement.

BAYVIEW HUNTERS POINT AREA PLAN

The Bayview Hunters Point Area Plan (BVHP Area Plan) provides broad principles, objectives, and policies for community development in the Bayview neighborhood. The BVHP Area Plan discusses the need to arrest the demographic decline of the African American population; provide economic development and jobs, particularly for local residents; eliminate health and environmental hazards including reducing land use conflicts; provide additional housing, particularly affordable housing; provide additional recreation, open space, and public service facilities, and better address transportation deficiencies by offering a wider range of transportation options.

As a part of the adopted General Plan amendments (Planning Commission Resolution No. 18098), the BVHP Area Plan was amended to implement the Project and reflect the fact that four years have passed since the BVHP Area Plan was last updated. Most significantly, a new Candlestick Point Subarea Plan was adopted as part of this Area Plan.

The Project, including General Plan Amendments / Planning Code text and map Amendments and all other Project documents referenced in these findings, are consistent with and implements the following BVHP Area Plan's Objectives and Policies.

OBJECTIVE 1	STIMULATE BUSINESS, EMPLOYMENT, AND HOUSING GROWTH WITHIN THE EXISTING GENERAL LAND USE PATTERN BY RESOLVING CONFLICTS BETWEEN ADJACENT INDUSTRIAL AND RESIDENTIAL AREAS.
OBJECTIVE 4	DEVELOP AND MAINTAIN A SYSTEM FOR THE EASY MOVEMENT OF PEOPLE AND GOODS, TAKING INTO ACCOUNT ANTICIPATED NEEDS OF BOTH LOCAL AND THROUGH TRAFFIC.
POLICY 4.1	Develop a comprehensive network and schedule of roadway improvements to assure that Bayview maintains an adequate level of service at key intersections as the residential and work force population in the district increases.
POLICY 4.2	Develop the necessary improvements in public transit to move people efficiently and comfortably between different neighborhoods of Bayview Hunters Point, to and from Candlestick Park, and to and from Downtown and other parts of the region.
POLICY 4.5	Create a comprehensive system for pedestrian and bicycle circulation.
POLICY 4.6	Provide convenient regional access to Candlestick Park stadium without negatively impacting nearby residential streets.
OBJECTIVE 5	PRESERVE AND ENHANCE EXISTING RESIDENTIAL NEIGHBORHOODS.
POLICY 5.2	Conserve the existing supply of Federally subsidized lower income housing.
POLICY 5.3	Conserve and enhance the existing supply of public housing.
OBJECTIVE 6	ENCOURAGE THE CONSTRUCTION OF NEW AFFORDABLE AND MARKET RATE HOUSING AT LOCATIONS AND DENSITY LEVELS THAT ENHANCE THE OVERALL RESIDENTIAL QUALITY OF BAYVIEW HUNTERS POINT.
POLICY 6.1	Encourage development of new moderate density affordable ownership units, appropriately designed and located and especially targeted for existing Bayview Hunters Point residents.

POLICY 6.4	Encourage development of new affordable housing on the ridge portion of Hunters Point Shipyard to help improve the residential character and circulation pattern of the Hunters Point residential area.
POLICY 6.5	In the vicinity of Bayview Hill, encourage well-sited housing development that complements the natural areas and open space, as well as provides for local economic development.
OBJECTIVE 8	STRENGTHEN THE ROLE OF BAYVIEW'S INDUSTRIAL SECTOR IN THE ECONOMY OF THE DISTRICT, THE CITY, AND THE REGION.
POLICY 8.2	Achieve reuse of Hunters Point Shipyard.
OBJECTIVE 10	ENHANCE THE DISTINCTIVE AND POSITIVE FEATURES OF BAYVIEW HUNTERS POINT.
POLICY 10.1	Better define Bayview's designated open space areas by enabling appropriate, quality development in surrounding areas.
POLICY 10.3	Recognize, protect, and enhance cultural resources of native populations as an integral imprint on the land use pattern of Bayview Hunters Point.
OBJECTIVE 11	IMPROVE DEFINITION OF THE OVERALL URBAN PATTERN OF BAYVIEW HUNTERS POINT
POLICY 11.1	Recognize and enhance the distinctive features of Bayview Hunters Point as an interlocking system of diverse neighborhoods.
POLICY 11.2	Increase awareness and use of the pedestrian/bicycle trail system that links subareas in Bayview Hunters Point with the rest of the City.
OBJECTIVE 12	PROVIDE AND MAINTAIN ADEQUATELY LOCATED, WELL DESIGNED, FULLY EQUIPPED RECREATION FACILITIES AND ENCOURAGE THEIR USE.
POLICY 12.1	Make better use of existing facilities.
POLICY 12.3	Renovate and expand Bayview's parks and recreation facilities, as needed.
OBJECTIVE 13	PROVIDE CONTINUOUS PUBLIC OPEN SPACE ALONG THE SHORELINE OF BAYVIEW HUNTERS POINT UNLESS PUBLIC ACCESS CLEARLY CONFLICTS WITH MARITIME USES OR OTHER NON-OPEN SPACE USES REQUIRING A WATERFRONT LOCATION.

POLICY 13.1	Assure that new development adjacent to the shoreline capitalizes on the unique waterfront location by improving visual and physical access to the water in conformance with urban design policies.
POLICY 13.2	Maintain and improve the quality of existing shoreline open space.
POLICY 13.3	Complete the San Francisco Bay Trail around the perimeter of the City which links open space areas along the shoreline and provides for maximum waterfront access.
POLICY 13.4	Provide new public open spaces along the shoreline -- at Islais Creek, Heron's Head, India Basin, Hunters Point Shipyard, and Candlestick Point/South Basin.
OBJECTIVE 14	ASSURE ADEQUATE NUMBERS, TYPES, AND LOCATIONS OF COMMUNITY FACILITIES AND SERVICES TO MEET THE NEEDS OF THE LOCAL COMMUNITY.
POLICY 14.1	Assure adequate maintenance programming and resident utilization of existing multi-purpose community facilities.
OBJECTIVE 15	COMBINES SOCIAL REVITALIZATION WITH PHYSICAL AND ECONOMIC REVITALIZATION EFFORTS.

The Project is consistent with and implements the Bayview Hunters Point Area Plan as it is proposed to be amended by the General Plan Amendment. It provides development that provides a wide range of job opportunities and a wide range of new housing types and affordability levels; includes the rebuilding of Alice Griffith assuring existing residents the ability to stay at the site; improves the shoreline and links the existing community to the Bay with a better network of connections and access; and enhances transportation opportunities. The Project will come with a robust package of community benefits including job training and placement programs for Bayview and San Francisco residents.

The Project calls for new fully integrated and holistically planned mixed use neighborhoods at Candlestick Point and Hunters Point Shipyard with different land programming than what was previously envisioned. However, in keeping generally with existing Objectives and Policies within the BVHP Area Plan, the Project includes complementary uses in near proximity to each other; a full complement of uses for residents, workers, and visitors; and thus, a reduced need for automobile trips. The Project includes a transportation system that can accommodate the increased density while reducing automobile use. The Project includes generous amount of open space programmed and designed for a broad range of users and activities along with a flexible approach to community facilities.

HOUSING ELEMENT

The principle objectives of the Housing Element are to provide new housing; retain the existing supply; enhance physical conditions and safety without jeopardizing use or affordability; support affordable housing production by increasing site availability and capacity; increase the effectiveness and efficiency of the affordable housing production system; protect the affordability of existing housing; expand financial resources for permanently affordable housing; ensure equal access; avoid or mitigate hardships imposed by displacement; reduce homelessness and the risk of homelessness in coordination with relevant agencies and providers; pursue place making and neighborhood building principles in increasing the supply of housing; and strengthen citywide affordable housing programs through coordinated regional and state efforts.

The Project is consistent with and implements the following objectives and policies of the Housing Element:

OBJECTIVE 1	TO PROVIDE NEW HOUSING, ESPECIALLY PERMANENTLY AFFORDABLE HOUSING, IN APPROPRIATE LOCATIONS WHICH MEETS IDENTIFIED HOUSING NEEDS AND TAKES INTO ACCOUNT THE DEMAND FOR AFFORDABLE HOUSING CREATED BY EMPLOYMENT DEMAND.
POLICY 1.5	Support development of affordable housing on surplus public lands.
POLICY 1.6	Create incentives for the inclusion of housing, particularly permanently affordable housing, in new commercial development projects.
POLICY 1.9	Require new commercial developments and higher educational institutions to meet the housing demand they generate, particularly the need for affordable housing for lower income workers and students.
OBJECTIVE 4	SUPPORT AFFORDABLE HOUSING PRODUCTION BY INCREASING SITE AVAILABILITY AND CAPACITY
POLICY 4.1	Actively identify and pursue opportunity sites for permanently affordable housing.
POLICY 4.2	Include affordable units in larger housing projects.
POLICY 4.6	Support a greater range of housing types and building techniques to promote more economical housing construction and potentially achieve greater affordable housing production.
POLICY 5.2	Support efforts of for-profit and non-profit organizations and other community-based groups and expand their capacity to produce and manage permanently affordable housing.

POLICY 5.3	Create greater public awareness about the quality and character of affordable housing projects and generate community-wide support for new affordable housing.
POLICY 6.2	Ensure that housing developed to be affordable is kept affordable.
POLICY 6.5	Monitor and enforce the affordability of units provided as a condition of approval of housing projects.
OBJECTIVE 7	EXPAND THE FINANCIAL RESOURCES AVAILABLE FOR PERMANENTLY AFFORDABLE HOUSING.
POLICY 7.1	Enhance existing revenue sources for permanently affordable housing.
OBJECTIVE 8	ENSURE EQUAL ACCESS TO HOUSING OPPORTUNITIES.
POLICY 8.1	Encourage sufficient and suitable rental housing opportunities and emphasize permanently affordable rental units wherever possible.
POLICY 8.3	Ensure affirmative marketing of affordable housing.
POLICY 8.4	Encourage greater economic integration within housing projects and throughout San Francisco.
POLICY 8.6	Increase the availability of units suitable for users with supportive housing needs.
POLICY 8.8	Promote the adaptability and maximum accessibility of residential dwellings for disabled and elderly occupants.
POLICY 8.9	Encourage the provision of new home ownership opportunities through new construction so that increased owner occupancy does not diminish the supply of rental housing.
OBJECTIVE 9	AVOID OR MITIGATE HARDSHIPS IMPOSED BY DISPLACEMENT
POLICY 9.1	Minimize the hardships of displacement by providing essential relocation services.
POLICY 9.2	Offer displaced households the right of first refusal to occupy replacement housing units that are comparable in size, location, cost, and rent control protection.

POLICY 11.2 Ensure housing is provided with adequate public improvements, services, and amenities.

POLICY 11.3 Encourage appropriate neighborhood-serving commercial activities in residential areas, without causing affordable housing displacement.

POLICY 11.10 Include energy efficient features in new residential development and encourage weatherization in existing housing to reduce overall housing costs and the long-range cost of maintenance.

The Project is consistent with and implements the Housing Element in that it accommodates up to 10,500 units of high density housing at Candlestick Point and Hunters Point Shipyard combined. The Project will supply a greater percentage of units to be dedicated for work force and affordable housing than would otherwise be required in the Planning Code. The rebuilding of the Alice Griffith Housing development, including the provision of at least one-to-one replacement housing at the development's existing affordability levels while at the same time ensuring against displacement of existing residents, is a key feature of the Project. Finally, the Project includes a full complement of supporting uses, including job-creating uses, recreational opportunities, and transportation alternatives.

COMMERCE AND INDUSTRY

The principle objectives for Commerce & Industry are to manage economic growth and change, maintain a sound and diverse economic base and fiscal structure, provide expanded employment opportunities for city residents particularly the unemployed and underemployed in a wide range of fields and levels, improve viability of existing businesses as well as attract new businesses – particularly in new industries, and assure entrepreneurial opportunities for local businesses.

The following objectives and policies are relevant to the Project:

OBJECTIVE 1 MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.

POLICY 1.2 Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

POLICY 1.3 Locate commercial and industrial activities according to a generalized commercial and industrial land use plan.

The land use maps within the Candlestick Point Sub-Area Plan and the Hunters Point Shipyard Area Plan establish where office, retail, research and development, and light-industrial uses can be located. The BVHP Redevelopment Plan and the Shipyard Redevelopment Plan identify square footage caps for

commercial uses. These together serve as the commercial land use and density maps for Candlestick Point and Hunters Point Shipyard.

OBJECTIVE 2	MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY.
POLICY 2.1	Seek to retain existing commercial and industrial activity and to attract new such activity to the city.
POLICY 2.3	Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.
OBJECTIVE 3	PROVIDE EXPANDED EMPLOYMENT OPPORTUNITIES FOR CITY RESIDENTS, PARTICULARLY THE UNEMPLOYED AND ECONOMICALLY DISADVANTAGED.
POLICY 3.1	Promote the attraction, retention and expansion of commercial and industrial firms which provide employment improvement opportunities for unskilled and semi-skilled workers.
POLICY 3.2	Promote measures designed to increase the number of San Francisco jobs held by San Francisco residents.
POLICY 3.3	Emphasize job training and retraining programs that will impart skills necessary for participation in the San Francisco labor market.
POLICY 3.4	Assist newly emerging economic activities.
OBJECTIVE 4	IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.
POLICY 4.1	Maintain and enhance a favorable business climate in the city.

POLICY 4.2	Promote and attract those economic activities with potential benefit to the City.
POLICY 4.5	Control encroachment of incompatible land uses on viable industrial activity.
OBJECTIVE 5	REALIZE SAN FRANCISCO'S FULL MARITIME POTENTIAL.
POLICY 5.8	Encourage maritime activity which complements visitor activity and resident recreation.
POLICY 5.9	Redevelop Hunters Point Shipyard to provide employment in the industrial, maritime industrial, research & development, and cultural sectors, consistent with the Hunters Point Shipyard Redevelopment Plan.

To ensure economic success along with greater overall job opportunities, the Project includes a wide possible range of commercial job-generating uses, including green technology, research and development, and light industrial uses.In addition, the proposed amendments to the Shipyard Redevelopment Plan also provide for cultural and maritime activities (a 300-slip marina) to take advantage of the shipyard's shoreline location.

The newly adopted HPS Area Plan and the amended BVHP Redevelopment Plan and amended Shipyard Redevelopment Plan together provide a revised land-use program for Hunters Point Shipyard that allows for light-industrial, research and development, and cultural uses, residential development, and maritime activities (i.e. a 300-slip marina) that are complementary to the mixed use nature of the Project and the visitor-attracting objectives for the shoreline.

OBJECTIVE 6	MAINTAIN AND STRENGTHEN VIABLE NEIGHBORHOOD COMMERCIAL AREAS EASILY ACCESSIBLE TO CITY RESIDENTS.
POLICY 6.1	Ensure and encourage the retention and provision of neighborhood-serving goods and services in the city's neighborhood commercial districts, while recognizing and encouraging diversity among the districts.

POLICY 6.2 Promote economically vital neighborhood commercial districts which foster small business enterprises and entrepreneurship and which are responsive to economic and technological innovation in the marketplace and society

POLICY 6.4 Encourage the location of neighborhood shopping areas throughout the city so that essential retail goods and personal services are accessible to all residents.

POLICY 6.5 Discourage the creation of major new commercial areas except in conjunction with new supportive residential development and transportation capacity.

The General Plan Amendments and the amendments to the BVHP Redevelopment Plan and the Shipyard Redevelopment Plan provide for a balance of commercial and residential uses, and the need to assure robust multi-modal transportation.

POLICY 6.7 Promote high quality urban design on commercial streets.

POLICY 6.9 Regulate uses so that traffic impacts and parking problems are minimized.

The Project is consistent with and implements the Commerce and Industry Element by creating approximately 10,000 perm ant jobs and thousands of ongoing construction job opportunities throughout the build out of the Project. Both the Candlestick Point Subarea Plan and the Hunters Point Shipyard Area Plan contain policies that call for the commercial development on underutilized land that will include between 2.65 and 5 million square feet of research and development and office uses in addition to several other job creating uses. Furthermore, the Project includes a robust community benefit package of job training and placement commitments from the developer.

RECREATION AND OPEN SPACE ELEMENT

The principle objectives of the Recreation and Open Space Element are to preserve large areas of open space sufficient to meet the long-range needs of the Bay Region, develop and maintain a diversified and balanced citywide system of high quality public open space, provide a continuous public open space along the shoreline, and provide opportunities for recreation and the enjoyment of open space in every neighborhood.

The following objectives and policies are relevant to the Project:

OBJECTIVE 1 PRESERVE LARGE AREAS OF OPEN SPACE SUFFICIENT TO MEET THE LONG-RANGE NEEDS OF THE BAY REGION.

POLICY 1.1	Protect the natural character of regional open spaces and place high priority on acquiring open spaces noted for unique natural qualities.
POLICY 1.3	Increase the accessibility of regional parks by locating new parks near population centers, establishing low user costs, improving public transit service to parks and creating regional bike and hiking trails.
OBJECTIVE 2	DEVELOP AND MAINTAIN A DIVERSIFIED AND BALANCED CITYWIDE SYSTEM OF HIGH QUALITY PUBLIC OPEN SPACE.
POLICY 2.1	Provide an adequate total quantity and equitable distribution of public open spaces throughout the City.
POLICY 2.2	Preserve existing public open space.
POLICY 2.3	Preserve sunlight in public open spaces.
POLICY 2.6	Make open spaces accessible to people with special needs.
POLICY 2.7	Acquire additional open space for public use.
POLICY 2.8	Develop a recreational trail system that links city parks and public open space, ridge lines and hilltops, the Bay and ocean, and neighborhoods, and ties into the regional hiking trail system.
POLICY 2.9	Maintain and expand the urban forest.
POLICY 2.12	Expand community garden opportunities throughout the City.
POLICY 2.13	Preserve and protect significant natural resource areas.
OBJECTIVE 3	PROVIDE CONTINUOUS PUBLIC OPEN SPACE ALONG THE SHORELINE UNLESS PUBLIC ACCESS CLEARLY CONFLICTS WITH MARITIME USES OR OTHER USES REQUIRING A WATERFRONT LOCATION.
POLICY 3.1	Assure that new development adjacent to the shoreline capitalizes on its unique waterfront location, considers shoreline land use provisions, improves visual and physical access to the water, and conforms with urban design policies.
POLICY 3.2	Maintain and improve the quality of existing shoreline open space.

POLICY 3.3	Create the Bay and Coastal Trails around the perimeter of the City which links open space along the shoreline and provides for maximum waterfront access.
POLICY 3.5	Provide new public open spaces along the shoreline.
OBJECTIVE 4	PROVIDE OPPORTUNITIES FOR RECREATION AND THE ENJOYMENT OF OPEN SPACE IN EVERY SAN FRANCISCO NEIGHBORHOOD.
POLICY 4.5	Require private usable outdoor open space in new residential development.
POLICY 4.6	Assure the provision of adequate public open space to serve new residential development.
POLICY 4.7	Provide open space to serve neighborhood commercial districts.

The Project is consistent with and implements the Recreation and Open Space Element in that it includes approximately 336 acres of open space to be created, preserved, or improved in conjunction with new development. The Project includes a wide mix of open space and recreational opportunities including an improved and reconfigured Candlestick Point State Recreation Area (as authorized through SB 792). The Project also includes a wide distribution of City parks that would include playing fields and courts, community gardens, and dog runs among other activities. Generous amounts of land are to be improved or restored as natural areas. The Project provides for a continuous series of open spaces along the shoreline with the Bay Trail being one of its main features.

The Project does include tall buildings (towers) within both Candlestick Point and Hunters Point Shipyard. Design guidelines and development standards included in the Design for Development documents dictate careful and thorough consideration of the placement of towers relative to the open space network, so that impacts are minimized on balance. Any towers that could potentially impact properties under the jurisdiction of the Department of Recreation and Parks would be required to complete shadow studies to assure that they meet the requirements of Planning Code Section 295.

TRANSPORTATION

The Transportation Element is largely concerned with the movement of people and goods. It addresses the need for multi-modal streets and facilities, implementation of the City's transit-first policy, the need to limit parking and auto capacity on the roads, and ways to incentivize travel by transit, bike and by foot. It also addresses the relationship between transportation and land use and how the two should be coordinated to reduce the need for auto trips.

The following objectives and policies are relevant to the Project:

OBJECTIVE 1	MEET THE NEEDS OF ALL RESIDENTS AND VISITORS FOR SAFE, CONVENIENT AND INEXPENSIVE TRAVEL WITHIN SAN FRANCISCO

	AND BETWEEN THE CITY AND OTHER PARTS OF THE REGION WHILE MAINTAINING THE HIGH QUALITY LIVING ENVIRONMENT OF THE BAY AREA.
POLICY 1.1	Involve citizens in planning and developing transportation facilities and services, and in further defining objectives and policies as they relate to district plans and specific projects.
POLICY 1.2	Ensure the safety and comfort of pedestrians throughout the city.
POLICY 1.3	Give priority to public transit and other alternatives to the private automobile as the means of meeting San Francisco's transportation needs, particularly those of commuters.
POLICY 1.4	Increase the capacity of transit during the off-peak hours.
POLICY 1.5	Coordinate regional and local transportation systems and provide for interline transit transfers.
POLICY 1. 6	Ensure choices among modes of travel and accommodate each mode when and where it is most appropriate.
OBJECTIVE 2	USE THE TRANSPORTATION SYSTEM AS A MEANS FOR GUIDING DEVELOPMENT AND IMPROVING THE ENVIRONMENT.
POLICY 2.1	Use rapid transit and other transportation improvements in the city and region as the catalyst for desirable development, and coordinate new facilities with public and private development.
POLICY 2.2	Reduce pollution, noise and energy consumption.
POLICY 2.4	Organize the transportation system to reinforce community identity, improve linkages among interrelated activities and provide focus for community activities.
POLICY 2.5	Provide incentives for the use of transit, carpools, vanpools, walking and bicycling and reduce the need for new or expanded automobile and automobile parking facilities.
POLICY 2.6	In conversion and re-use of inactive military bases, provide for a balanced, multi-modal transportation system that is consistent with and complementary to the planned land use and the local and regional transportation system.

OBJECTIVE 9	IMPROVE BICYCLE ACCESS TO SAN FRANCISCO FROM ALL OUTLYING CORRIDORS.
POLICY 9.2	Where bicycles are prohibited on roadway segments, provide parallel routes accessible to bicycles or shuttle services that transport bicycles.
OBJECTIVE 11	ESTABLISH PUBLIC TRANSIT AS THE PRIMARY MODE OF TRANSPORTATION IN SAN FRANCISCO AND AS A MEANS THROUGH WHICH TO GUIDE FUTURE DEVELOPMENT AND IMPROVE REGIONAL MOBILITY AND AIR QUALITY.
POLICY 11.1	Maintain and improve the Transit Preferential Streets program to make transit more attractive and viable as a primary means of travel.
POLICY 11.3	Encourage development that efficiently coordinates land use with transit service, requiring that developers address transit concerns as well as mitigate traffic problems.
OBJECTIVE 12	DEVELOP AND IMPLEMENT PROGRAMS IN THE PUBLIC AND PRIVATE SECTORS, WHICH WILL SUPPORT CONGESTION MANAGEMENT AND AIR QUALITY OBJECTIVES, MAINTAIN MOBILITY AND ENHANCE BUSINESS VITALITY AT MINIMUM COST.
POLICY 12.1	Develop and implement strategies which provide incentives for individuals to use public transit, ridesharing, bicycling and walking to the best advantage, thereby reducing the number of single occupant auto trips.
POLICY 12.2	Build on successful efforts implemented at numerous private sector worksites, such as the downtown Transportation Brokerage Program and voluntary programs, and adapt such programs for application in new areas as appropriate.
POLICY 12.3	Implement private and public sector TDM programs which support each other and explore opportunities for private-public responsibility in program implementation.
POLICY 12.4	Encourage private and public sector cooperation in the promotion of alternative work programs designed to reduce congestion and the number of automobile trips.
OBJECTIVE 13	PROMOTE THE DEVELOPMENT OF MARKETING STRATEGIES THAT ENCOURAGE AND FACILITATE THE USE OF TRANSIT AND OTHER ALTERNATIVES TO THE SINGLE-OCCUPANT AUTOMOBILE FOR

SHOPPING, RECREATION, CULTURAL AND OTHER NON-WORK TRIPS.

POLICY 13.1 Encourage the use of alternatives to the automobile for all age groups in the advertisement of business, recreational and cultural attractions by identifying their proximity to transit facilities and significant landmarks.

OBJECTIVE 14 DEVELOP AND IMPLEMENT A PLAN FOR OPERATIONAL CHANGES AND LAND USE POLICIES THAT WILL MAINTAIN MOBILITY AND SAFETY DESPITE A RISE IN TRAVEL DEMAND THAT COULD OTHERWISE RESULT IN SYSTEM CAPACITY DEFICIENCIES.

POLICY 14.1 Reduce road congestion on arterials through the implementation of traffic control strategies, such as traffic signal-light synchronization (consistent with posted speed limits) and turn controls, that improve vehicular flow without impeding movement for pedestrians and bicyclists.

POLICY 14.2 Ensure that traffic signals are timed and phased to emphasize transit, pedestrian, and bicycle traffic as part of a balanced multi-modal transportation system.

POLICY 14.4 Reduce congestion by encouraging alternatives to the single occupant auto through the reservation of right-of-way and enhancement of other facilities dedicated to multiple modes of transportation.

POLICY 14.8 Implement land use controls that will support a sustainable mode split, and encourage development that limits the intensification of automobile use.

OBJECTIVE 15 ENCOURAGE ALTERNATIVES TO THE AUTOMOBILE AND REDUCED TRAFFIC LEVELS ON RESIDENTIAL STREETS THAT SUFFER FROM EXCESSIVE TRAFFIC THROUGH THE MANAGEMENT OF TRANSPORTATION SYSTEMS AND FACILITIES.

POLICY 15.1 Discourage excessive automobile traffic on residential streets by incorporating traffic-calming treatments.

OBJECTIVE 16 DEVELOP AND IMPLEMENT PROGRAMS THAT WILL EFFICIENTLY MANAGE THE SUPPLY OF PARKING AT EMPLOYMENT CENTERS THROUGHOUT THE CITY SO AS TO DISCOURAGE SINGLE-OCCUPANT RIDERSHIP AND ENCOURAGE RIDESHARING, TRANSIT AND OTHER ALTERNATIVES TO THE SINGLE-OCCUPANT AUTOMOBILE.

POLICY 16.1 Reduce parking demand through the provision of comprehensive information that encourages the use of alternative modes of transportation.

POLICY 16.3 Reduce parking demand through the provision of incentives for the use of carpools and vanpools at new and existing parking facilities throughout the City.

POLICY 16.4 Manage parking demand through appropriate pricing policies including the use of premium rates near employment centers well-served by transit, walking and bicycling, and progressive rate structures to encourage turnover and the efficient use of parking.

POLICY 16.5 Reduce parking demand through limiting the absolute amount of spaces and prioritizing the spaces for short-term and ride-share uses

POLICY 16.6 Encourage alternatives to the private automobile by locating public transit access and ride-share vehicle and bicycle parking at more close-in and convenient locations on-site, and by locating parking facilities for single-occupant vehicles more remotely.

OBJECTIVE 18 ESTABLISH A STREET HIERARCHY SYSTEM IN WHICH THE FUNCTION AND DESIGN OF EACH STREET ARE CONSISTENT WITH THE CHARACTER AND USE OF ADJACENT LAND.

POLICY 18.2 Design streets for a level of traffic that serves, but will not cause a detrimental impact on adjacent land uses, or eliminate the efficient and safe movement of transit vehicles and bicycles.

POLICY 18.4 Discourage high-speed through traffic on local streets in residential areas through traffic "calming" measures that are designed not to disrupt transit service or bicycle movement, including:

- Sidewalk bulbs and widenings at intersections and street entrances;
- Lane off-sets and traffic bumps;
- Narrowed traffic lanes with trees, landscaping and seating areas; and
- colored and/or textured sidewalks and crosswalks.

POLICY 18.5 Mitigate and reduce the impacts of automobile traffic in and around parks and along shoreline recreation areas.

OBJECTIVE 20 GIVE FIRST PRIORITY TO IMPROVING TRANSIT SERVICE THROUGHOUT THE CITY, PROVIDING A CONVENIENT AND

	EFFICIENT SYSTEM AS A PREFERABLE ALTERNATIVE TO AUTOMOBILE USE.
POLICY 20.1	Give priority to transit vehicles based on a rational classification system of transit preferential streets
POLICY 20.2	Reduce, relocate or prohibit automobile facility features on transit preferential streets, such as driveways and loading docks, to avoid traffic conflicts and automobile congestion.
POLICY 20.3	Develop transit preferential treatments according to established guidelines.
POLICY 20.5	Place and maintain all sidewalk elements, including passenger shelters, benches, trees, newsracks, kiosks, toilets, and utilities at appropriate transit stops according to established guidelines.
POLICY 20.9	Improve inter-district and intra-district transit service.
POLICY 20.14	Engage new technologies that will emphasize and improve transit services on transit preferential streets.
OBJECTIVE 23	IMPROVE THE CITY'S PEDESTRIAN CIRCULATION SYSTEM TO PROVIDE FOR EFFICIENT, PLEASANT, AND SAFE MOVEMENT.
POLICY 23.1	Provide sufficient pedestrian movement space with a minimum of pedestrian congestion in accordance with a pedestrian street classification system.
POLICY 23.2	Widen sidewalks where intensive commercial, recreational, or institutional activity is present, sidewalks are congested and where residential densities are high.
POLICY 23.3	Maintain a strong presumption against reducing sidewalk widths, eliminating crosswalks and forcing indirect crossings to accommodate automobile traffic.

The Project does contemplate the narrowing of sidewalks on a portion of Ingalls to assure adequate room for continued light-industrial on-street loading and parking while increasing the road's capacity to handle additional traffic from the development. Such action is necessary to implement several important objectives and policies of the Commerce and Industry Element, including improving viability of existing industry and maintenance of a diverse economic base. To harmonize these policies with those designed to protect pedestrian circulation, the Project minimizes the narrowing along Ingalls to the extent feasible.

POLICY 23.4	Tow-away lanes should not be approved, and removal should be considered, if they impair existing and potential pedestrian usage and level of service on abutting sidewalks, as well as the needs of transit operation on the street.
POLICY 23.5	Minimize obstructions to through pedestrian movement on sidewalks by maintaining an unobstructed width that allows for passage of people, strollers and wheelchairs.
POLICY 23.6	Ensure convenient and safe pedestrian crossings by minimizing the distance pedestrians must walk to cross a street.
OBJECTIVE 24	IMPROVE THE AMBIENCE OF THE PEDESTRIAN ENVIRONMENT.
POLICY 24.2	Maintain and expand the planting of street trees and the infrastructure to support them.
POLICY 24.3	Install pedestrian-serving street furniture where appropriate.
POLICY 24.5	Where consistent with transportation needs, transform streets and alleys into neighborhood-serving open spaces or "living streets", especially in neighborhoods deficient in open space.
OBJECTIVE 26	CONSIDER THE SIDEWALK AREA AS AN IMPORTANT ELEMENT IN THE CITYWIDE OPEN SPACE SYSTEM.
OBJECTIVE 27	ENSURE THAT BICYCLES CAN BE USED SAFELY AND CONVENIENTLY AS A PRIMARY MEANS OF TRANSPORTATION, AS WELL AS FOR RECREATIONAL PURPOSES.
POLICY 27.9	Identify and expand recreational bicycling opportunities.
POLICY 27.10	Accommodate bicycles in the design and selection of traffic control facilities.
POLICY 27.12	Ensure completion of the Bay Trail in San Francisco.
OBJECTIVE 28	PROVIDE SECURE AND CONVENIENT PARKING FACILITIES FOR BICYCLES.
POLICY 28.1	Provide secure bicycle parking in new governmental, commercial, and residential developments.
POLICY 28.2	Provide secure bicycle parking at existing city buildings and facilities and encourage it in existing commercial and residential buildings.

POLICY 28.3	Provide parking facilities which are safe, secure, and convenient.
POLICY 28.5	Provide bicycle parking at major recreational facilities and at all large sports, cultural, or other heavily attended events.
OBJECTIVE 30	ENSURE THAT THE PROVISION OF NEW OR ENLARGED PARKING FACILITIES DOES NOT ADVERSELY AFFECT THE LIVABILITY AND DESIRABILITY OF THE CITY AND ITS VARIOUS NEIGHBORHOODS.
POLICY 30.1	Assure that new or enlarged parking facilities meet need, locational and design criteria.
POLICY 30.2	Discourage the proliferation of surface parking as an interim land use, particularly where sound residential, commercial or industrial buildings would be demolished pending other development.

The Candlestick Point Subarea Plan, the Hunters Point Shipyard Area Plan, the BVHP Redevelopment Plan and the Shipyard Redevelopment Plan generally discourage surface parking, except in connection with the football stadium. However, as recognized in these plans, in some instances, surface parking may be appropriate on an interim basis through the phasing of the Project.

POLICY 30.7	Limit and screen from view from public access areas parking facilities over the water, and near the water's edge where such parking interferes with public access.
OBJECTIVE 31	ESTABLISH PARKING RATES AND OFF-STREET PARKING FARE STRUCTURES TO REFLECT THE FULL COSTS, MONETARY AND ENVIRONMENTAL, OF PARKING IN THE CITY.
POLICY 31.1	Set rates to encourage short-term over long term automobile parking.
POLICY 31.3	Encourage equity between drivers and non-drivers by offering transit fare validations and/or cash-out parking programs where off-street parking is validated or subsidized.
OBJECTIVE 34	RELATE THE AMOUNT OF PARKING IN RESIDENTIAL AREAS AND NEIGHBORHOOD COMMERCIAL DISTRICTS TO THE CAPACITY OF THE CITY'S STREET SYSTEM AND LAND USE PATTERNS.
POLICY 34.1	Regulate off-street parking in new housing so as to guarantee needed spaces without requiring excesses and to encourage low auto ownership in neighborhoods that are well served by transit and are convenient to neighborhood shopping.

POLICY 34.3	Permit minimal or reduced off-street parking supply for new buildings in residential and commercial areas adjacent to transit centers and along transit preferential streets.
OBJECTIVE 35	MEET SHORT-TERM PARKING NEEDS IN NEIGHBORHOOD SHOPPING DISTRICTS CONSISTENT WITH PRESERVATION OF A DESIRABLE ENVIRONMENT FOR PEDESTRIANS AND RESIDENTS.
POLICY 35.1	Provide convenient on-street parking specifically designed to meet the needs of shoppers dependent upon automobiles.
POLICY 35.2	Assure that new neighborhood shopping district parking facilities and other auto-oriented uses meet established guidelines.

The Project is consistent with and implements the Transportation Element in that it establishes land use patterns with complementary uses in close proximity to one another and uses are sensibly limited to planned transit, pedestrian, bicycle, and other transportation improvements. The Project includes new streets and transportation facilities that emphasize travel by transit, bike and by foot. It includes robust pedestrian streetscape improvements that make travelling by bike and by foot safe, comfortable and enjoyable. In addition, these improvements reach into existing neighborhoods so as to form a single urban fabric and transportation network encompassing the new development and the surrounding areas. The Project includes a dedicated right-of-way for transit to assure its prominence and reliability, including a direct connection to Hunters Point Shipyard over a new bridge over Yosemite Slough. The Project's Transportation Plan also calls for both the extension of an existing transit line, as well as new lines to serve worker populations. Such transit improvements will serve existing neighborhoods as well as the new development. The Project limits the number of off-street parking spaces and manages parking and loading in a strategic way to assure land use efficiency and urban design considerations over parking convenience.

URBAN DESIGN PLAN

The Urban Design Element addresses the physical character and order of the City. It establishes objectives and polices dealing with the city pattern, conservation (both of natural areas and historic structures), major new developments, and neighborhood environment. It discusses meeting "human needs", largely by assuring quality living environments, and by protecting and enhancing those characteristics of development that make San Francisco special.

The following objectives and policies are relevant to the Project:

OBJECTIVE 1	EMPHASIS OF THE CHARACTERISTIC PATTERN WHICH GIVES TO THE CITY AND ITS NEIGHBORHOODS AN IMAGE, A SENSE OF PURPOSE, AND A MEANS OF ORIENTATION.

POLICY 1.1 Recognize and protect major views in the city, with particular attention to those of open space and water.

POLICY 1.2 Recognize, protect and reinforce the existing street pattern, especially as it is related to topography.

POLICY 1.3 Recognize that buildings, when seen together, produce a total effect that characterizes the city and its districts.

POLICY 1.4 Protect and promote large-scale landscaping and open space that define districts and topography.

POLICY 1.5 Emphasize the special nature of each district through distinctive landscaping and other features.

POLICY 1.6 Make centers of activity more prominent through design of street features and by other means.

POLICY 1.7 Recognize the natural boundaries of districts, and promote connections between districts.

OBJECTIVE 2 CONSERVATION OF RESOURCES WHICH PROVIDE A SENSE OF NATURE, CONTINUITY WITH THE PAST, AND FREEDOM FROM OVERCROWDING.

POLICY 2.1 Preserve in their natural state the few remaining areas that have not been developed by man.

The Project calls for the reconfiguration of the Candlestick Point State Recreation Area as provided for in SB 792. While there would be a small net reduction in acreage to the State Park, the Candlestick Point Sub-Area Plan calls for full improvement of these shoreline park and open space areas, including substantial area that is currently unimproved, offers limited access, and is only used periodically for stadium parking. The Project thus enables a fully realized Candlestick Point State Recreation Area, consistent with the vision set forth in SB 792 and the State Parks General Plan. Furthermore, the Project would accommodate the creation of an additional 240 acres of parks and open space in addition to the Candlestick Point State Recreation Area.

POLICY 2.2 Limit improvements in other open spaces having an established sense of nature to those that are necessary, and unlikely to detract from the primary values of the open space.

POLICY 2.3 Avoid encroachments on San Francisco Bay that would be inconsistent with the Bay Plan or the needs of the city's residents.

POLICY 2.4	Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.
POLICY 2.7	Recognize and protect outstanding and unique areas that contribute in an extraordinary degree to San Francisco's visual form and character.
POLICY 2.8	Maintain a strong presumption against the giving up of street areas for private ownership or use, or for construction of public buildings.
POLICY 2.9	Review proposals for the giving up of street areas in terms of all the public values that streets afford.
POLICY 2.10	Permit release of street areas, where such release is warranted, only in the least extensive and least permanent manner appropriate to each case.
OBJECTIVE 3	MODERATION OF MAJOR NEW DEVELOPMENT TO COMPLEMENT THE CITY PATTERN, THE RESOURCES TO BE CONSERVED, AND THE NEIGHBORHOOD ENVIRONMENT.
POLICY 3.1	Promote harmony in the visual relationships and transitions between new and older buildings.
POLICY 3.3	Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.
POLICY 3.4	Promote building forms that will respect and improve the integrity of open spaces and other public areas.
POLICY 3.5	Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.
POLICY 3.7	Recognize the special urban design problems posed in development of large properties.
POLICY 3.8	Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the city.
OBJECTIVE 4	IMPROVEMENT OF THE NEIGHBORHOOD ENVIRONMENT TO INCREASE PERSONAL SAFETY, COMFORT, PRIDE AND OPPORTUNITY .
POLICY 4.1	Protect residential areas from the noise, pollution and physical danger of excessive traffic.

POLICY 4.2	Provide buffering for residential properties when heavy traffic cannot be avoided.
POLICY 4.3	Provide adequate lighting in public areas.
POLICY 4.4	Design walkways and parking facilities to minimize danger to pedestrians.
POLICY 4.5	Provide adequate maintenance for public areas.
POLICY 4.6	Emphasize the importance of local centers providing commercial and government services.
POLICY 4.7	Encourage and assist in voluntary programs for neighborhood improvement.
POLICY 4.8	Provide convenient access to a variety of recreation opportunities.
POLICY 4.9	Maximize the use of recreation areas for recreational purposes.
POLICY 4.10	Encourage or require the provision of recreation space in private development.
POLICY 4.11	Make use of street space and other unused public areas for recreation, particularly in dense neighborhoods, such as those close to downtown, where land for traditional open spaces is more difficult to assemble.
POLICY 4.12	Install, promote and maintain landscaping in public and private areas.
POLICY 4.13	Improve pedestrian areas by providing human scale and interest.

The Project is consistent with and implements the Urban Design Element in that it enables the establishment of new vibrant mixed-use neighborhoods on currently underutilized land. Pursuant to the policies of the new Candlestick Point Sub-Area Plan, Bayview Hunters Point Area Plan, and amendments to the BVHP Redevelopment Plan and the Shipyard Redevelopment Plan, development patterns typical of San Francisco would be applied to the new neighborhoods. These would include but not be limited to: the extension of the existing street grid, incorporation of ample open space with a wide variety of configurations and programming, particular attention placed on the design of streets and other public realm elements, with particular attention given to how buildings interface with the public realm, and emphasis on pedestrian and bicyclist safety and comfort in the design of the streets.

The Project would be large scale in nature. However, the development standards and design guidelines contained in the Design for Development documents ensure that the development fits within its San Francisco context. Policies within these regulating plans call for fine-grained networks of typical San Francisco-sized blocks, a wide variety of building types and sizes, and the need to provide a human-scale

interface with the street and public realm. To assure that large buildings and towers do not overwhelm their surroundings, the Design for Development documents contain policies that require a full host of design and siting considerations including, but not limited to, the following: (1) the effect of such buildings on shadows, wind, and views; (2) the aesthetic effect of large buildings and towers on the surrounding streets; (3) the perception of such buildings from afar; and (4) the relationship of such buildings to geographic features such as Bayview Hill, Hunters Point Hill, and the surrounding Bay.

In keeping with the Urban Design Element's preservation related objectives and policies, the Shipyard Redevelopment Plan and its associated documents calls for the preservation of several significant buildings and the construction of a heritage park that will, among other things, commemorate the Shipyard's history. The Project proposes that other cultural elements be incorporated into the design, including elements that will celebrate the local African-American population and the Shipyard's existing artists.

ENVIRONMENTAL PROTECTION ELEMENT

The Environmental Protection Element is concerned with protecting the natural environment within San Francisco's urban context. The element provides objectives and policies for the following topics: the Bay, ocean and shoreline, air, fresh water, land, flora and fauna, transportation noise, and energy.

The following objectives and policies are relevant to the Project:

OBJECTIVE 1	ACHIEVE A PROPER BALANCE AMONG THE CONSERVATION, UTILIZATION, AND DEVELOPMENT OF SAN FRANCISCO'S NATURAL RESOURCES.
Policy 1.1	Conserve and protect the natural resources of San Francisco.
Policy 1.2	Improve the quality of natural resources.
Policy 1.3	Restore and replenish the supply of natural resources.
Policy 1.4	Assure that all new development meets strict environmental quality standards and recognizes human needs.
OBJECTIVE 3	MAINTAIN AND IMPROVE THE QUALITY OF THE BAY, OCEAN, AND SHORELINE AREAS.
Policy 3.1	Cooperate with and otherwise support regulatory programs of existing regional, state, and federal agencies dealing with the Bay, ocean, and shorelines.
Policy 3.2	Promote the use and development of shoreline areas consistent with the General Plan and the best interests of San Francisco.

OBJECTIVE 7	ASSURE THAT THE LAND RESOURCES IN SAN FRANCISCO ARE USED IN WAYS THAT BOTH RESPECT AND PRESERVE THE NATURAL VALUES OF THE LAND AND SERVE THE BEST INTERESTS OF ALL THE CITY'S CITIZENS.
POLICY 7.1	Preserve and add to public open space in accordance with the objectives and policies of the Recreation and Open Space Element.
POLICY 7.3	Require that filling of land adhere to the highest standards of soils engineering consistent with the proposed use.
OBJECTIVE 8	ENSURE THE PROTECTION OF PLANT AND ANIMAL LIFE IN THE CITY.
Policy 8.1	Cooperate with and otherwise support the California Department of Fish and Game and its animal protection programs.
Policy 8.2	Protect the habitats of known plant and animal species that require a relatively natural environment.
Policy 8.3	Protect rare and endangered species.
OBJECTIVE 10	MINIMIZE THE IMPACT OF NOISE ON AFFECTED AREAS.
OBJECTIVE 11	PROMOTE LAND USES THAT ARE COMPATIBLE WITH VARIOUS TRANSPORTATION NOISE LEVELS.
Policy 11.1	Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.
Policy 11.3	Locate new noise-generating development so that the noise impact is reduced.
OBJECTIVE 15	INCREASE THE ENERGY EFFICIENCY OF TRANSPORTATION AND ENCOURAGE LAND USE PATTERNS AND METHODS OF TRANSPORTATION WHICH USE LESS ENERGY.
POLICY 15.3	Encourage an urban design pattern that will minimize travel requirements among working, shopping, recreation, school and childcare areas.

The Project is consistent with and implements the Environmental Protection Element in that it calls for mixed-use, high density, transit-friendly, sustainable development. Moreover, the Project provides for the improvement and restoration of approximately 261 acres along the shoreline. A reconfiguration of the Candlestick Point State Park Recreation Area has been authorized under SB 792 to accommodate these improvements. The Candlestick Point – Hunters Point Shipyard Phase II Environmental Impact Report (

CP-HPS II EIR) considers potential impacts to biological resources, air quality, noise emissions, hazardous material and shoreline related land uses, among many other topics. The CP-HPS II EIR concludes that any potential impacts to biological resources can be mitigated to less than significant levels. The CP-HPS II EIR reaches similar conclusions regarding hazardous material, water quality, and energy. Development of the neighborhoods envisioned in the amended Bayview Hunters Point Redevelopment Plan and Hunters Point Redevelopment Plan would be required to meet City, Regional, State and Federal regulations regarding the protection of potentially vulnerable biological resources, hazardous material clean-up, water quality, emission standards for air quality and noise. The CP- HPS II EIR identifies potential significant and unavoidable impacts regarding noise and air pollutant emissions; these impacts are largely traffic and construction related and are substantially due to the Project's scale and intensity. The Project and all related City approvals are nonetheless consistent with the Environmental Protection Element as the Project satisfies and implements the preponderance of Element's objectives and policies: the Project furthers the Element's emphasis on the need to coordinate land use and transportation and on efficient, compact, and sustainable development; the Project furthers the Element's encouragement of improving and restoring the shoreline and other open spaces.

COMMUNITY FACILITIES ELEMENT

The Community Facilities element addresses police facilities, neighborhood center facilities, fire facilities, library facilities, public health facilities, and touches upon educational facilities, institutional facilities (colleges, etc.) wastewater facilities, and solid waste facilities.

The following objectives and policies are relevant to the Project:

OBJECTIVE 3	ASSURE THAT NEIGHBORHOOD RESIDENTS HAVE ACCESS TO NEEDED SERVICES AND A FOCUS FOR NEIGHBORHOOD ACTIVITIES
POLICY 3.6	Base priority for the development of neighborhood centers on relative need.
OBJECTIVE 4	PROVIDE NEIGHBORHOOD CENTERS THAT ARE RESPONSIVE TO THE COMMUNITY SERVED.
POLICY 4.1	Assure effective neighborhood participation in the initial planning, ongoing programming, and activities of multi-purpose neighborhood centers
OBJECTIVE 5	DEVELOPMENT OF A SYSTEM OF FIREHOUSES WHICH WILL MEET THE OPERATING REQUIREMENTS OF THE FIRE DEPARTMENT IN PROVIDING FIRE PROTECTION SERVICES AND WHICH WILL BE IN HARMONY WITH RELATED PUBLIC SERVICE FACILITIES AND WITH ALL OTHER FEATURES AND FACILITIES OF LAND DEVELOPMENT AND TRANSPORTATION PROVIDED FOR A OTHER SECTIONS OF THE GENERAL PLAN

OBJECTIVE 6 DEVELOPMENT OF A PUBLIC LIBRARY SYSTEM IN SAN FRANCISCO WHICH WILL MAKE ADEQUATE AND EFFICIENT LIBRARY SERVICE FREELY AVAILABLE TO EVERYONE WITHIN THE CITY, AND WHICH WILL BE IN HARMONY WITH RELATED PUBLIC SERVICE FACILITIES AND WITH ALL OTHER FEATURES AND FACILITIES OF LAND DEVELOPMENT AND TRANSPORTATION PROVIDED FOR IN OTHER SECTIONS OF THE GENERAL PLAN

The Project is consistent with and implements the Community Facilities Element in that it provides for mixed-use development that includes public uses and community facilities. The Project generally calls for a flexible approach to providing community facilities. It includes approximately 50,000 square feet at Hunters Point Shipyard, along with an additional 50,000 square feet at Candlestick Point that could be used for a wide range of community uses. Among the currently identified uses would be a fire station at Hunters Point Shipyard and a library reading room. The Project also includes a community benefit package that would address needs for educational and health facilities. Because of the long build-out of the Project, the ability to program individual parcels has been largely left open to assure that the appropriate community facility can be identified when the needs arise.

PUBLIC SAFETY ELEMENT

OBJECTIVE 2 REDUCE STRUCTURAL AND NON-STRUCTURAL HAZARDS TO LIFE SAFETY, MINIMIZE PROPERTY DAMAGE AND RESULTING SOCIAL, CULTURAL AND ECONOMIC DISLOCATIONS RESULTING FROM FUTURE DISASTERS.

POLICY 2.1 Assure that new construction meets current structural and life safety standards.

POLICY 2.3 Consider site soils conditions when reviewing projects in areas subject to liquefaction or slope instability.

POLICY 2.9 Consider information about geologic hazards whenever City decisions that will influence land use, building density, building configurations or infrastructure are made.

POLICY 2.12 Enforce state and local codes that regulate the use, storage and transportation of hazardous materials in order to prevent, contain and effectively respond to accidental releases.

The Project is consistent with and implements the Community Safety Element. All improvements, including infrastructure, buildings and open space improvements will be constructed to local seismic standards, taking into account, among other considerations, the geological condition of the soil and where applicable, remediation activity. The Project is proposed to be built to accommodate sea level rise due to global warming.

ARTS ELEMENT

The Arts Element is concerned with, among other things, providing guiding principles for the City and County of San Francisco relative to the arts; validating and increasing the role of the arts as a major economic force in the region, and protecting arts organizations and artists through the adoption of policies that will withstand changes in political climate.

The following objectives and policies are relevant to the Project:

OBJECTIVE I-1	RECOGNIZE THE ARTS AS NECESSARY TO THE QUALITY OF LIFE FOR ALL SEGMENTS OF SAN FRANCISCO
POLICY I-3.3	Strive for the highest standards of design of public buildings and grounds and structures placed in the public right of way.
POLICY III-1.3	Protect and assist in the creation of artists' live/work spaces
POLICY III-2.2	Assist in the improvement of arts organizations' facilities and access in order to enhance the quality and quantity of arts offerings
OBJECTIVE VI-1	SUPPORT THE CONTINUED DEVELOPMENT AND PRESERVATION OF ARTISTS' AND ARTS ORGANIZATIONS' SPACES.
POLICY VI-1.6	Insure the active participation of artists and arts organizations in the planning and use of de-commissioned military facilities in San Francisco.
POLICY VI-1.11	Identify, recognize, and support existing arts clusters and, wherever possible, encourage the development of clusters of arts facilities and arts related businesses throughout the city.

The Project is consistent with and implements the Arts Element in that it provides for the preservation and improvement of the existing Hunters Point artist colony (Building 101) along with the reconstruction of other Shipyard artists studios so as to provide approximately 255,000 square feet of improved artist studio and related arts space. The Project locates this space within a central Hunters Point Shipyard village center cultural district with an emphasis on arts-related uses. In addition, the Design for Development documents, which include governing development standards and design guidelines governing the Project, require development of a high quality public realm.

AIR QUALITY ELEMENT

The Air Quality Element is concerned, in part, with reducing the level of pollutants in the air, thus protecting and improving public health, welfare and the quality of life of the citizens of San Francisco and

the residents of the metropolitan region. It emphasizes that opportunities for economic growth in the area can be enhanced through implementation of transportation, land use and other policies in harmony with clean air goals.

The following objectives and policies are relevant to Project:

OBJECTIVE 3	DECREASE THE AIR QUALITY IMPACTS OF DEVELOPMENT BY COORDINATION OF LAND USE AND TRANSPORTATION DECISIONS.
POLICY 3.1	Take advantage of the high density development in San Francisco to improve the transit infrastructure and also encourage high density and compact development where an extensive transportation infrastructure exists.
POLICY 3.2	Encourage mixed land use development near transit lines and provide retail and other types of service oriented uses within walking distance to minimize automobile dependent development
POLICY 3.6	Link land use decision making policies to the availability of transit and consider the impacts of these policies on the local and regional transportation system
POLICY 3.8	Promote the development of non-polluting industries and insist on compliance with established industrial emission control regulations by existing industries.
POLICY 3.9	Encourage and require planting of trees in conjunction with new development to enhance pedestrian environment and select species of trees that optimize achievement of air quality goals
OBJECTIVE 5	MINIMIZE PARTICULATE MATTER EMISSIONS FROM ROAD AND CONSTRUCTION SITES.
POLICY 5.1	Continue policies to minimize particulate matter emissions during road and building construction and demolition.
OBJECTIVE 6	LINK THE POSITIVE EFFECTS OF ENERGY CONSERVATION AND WASTE MANAGEMENT TO EMISSION REDUCTIONS.
POLICY 6.2	Encourage recycling to reduce emissions from manufacturing of new materials in San Francisco and the region.

The Project is consistent with and implements the Air Quality Element in that it calls for mixed-use, high density, multi-modal, sustainable development that will enable efficient use of land and encourage travel by

transit, bicycle and by foot, thereby reducing auto use. The Design for Development documents governing development of the Project encourage other sustainable features including storm water "low-impact" development, energy-saving design, and robust tree planting and landscaping through the streets and open spaces. While the CP-HPS II EIR identifies potential significant and unavoidable impacts regarding air pollutant emissions, the impacts are largely traffic related, which, in turn, is substantially due to the Project's scale. The Project is nonetheless consistent with the Air Quality Element because it satisfies and implements the preponderance of Element's objectives and policies; most importantly, the Project furthers the Element's emphasis on coordinating land use and transportation and on efficient and compact development.

General Plan Priority Finding
(Planning Code Section 101.1 Findings)

Planning Code Section 101.1(b) establishes eight priority policies and is a basis by which differences between competing policies in the General Plan are resolved. As described below, the Project is consistent with the eight priority policies set forth in Planning Code Section 101.1(b).

1. That existing neighborhood serving retail uses be preserved and enhanced and future opportunities for resident employment in or ownership of such businesses enhanced.

The Project will preserve and enhance existing neighborhood serving retail uses. The Project includes 885,000 square feet of retail use, including 250,000 square feet of neighborhood serving retail across Candlestick Point and Hunters Point Shipyard. The proposed new retail will not unduly compete with existing neighborhood commercial districts. Indeed, the substantial new residential, research and development, and office uses to be developed as part of the Project will provide additional patrons for existing neighborhood commercial districts, including Third Street. As a part of the CP-HPS II EIR, an urban decay analysis was conducted to assure that the proposed new retail would not unduly compete and cause urban decay to surrounding retail clusters. The analysis concluded that the project would not cause such decay.

2. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.

The Project includes new development on largely undeveloped and underutilized land; it does not call for the redevelopment of existing established neighborhoods. No existing dwelling units outside of Alice Griffith are being contemplated for demolition as part of the project. Alice Griffith will be rebuilt and will include replacement affordable housing units at the same affordable levels. The phasing of the reconstruction of Alice Griffith will ensure that eligible residents may move to their newly updated units from their existing homes without displacement off-site. Furthermore, the Project calls for the new developments to be integrated into the existing Bayview residential fabric by extending the existing street grid into the development, and extending proposed streetscape improvements into the existing neighborhood.

3. That the City's supply of affordable housing be preserved and enhanced.

The Project calls for development that would have a positive effect on the City's affordable housing stock. The Project would provide up to 10,500 new dwelling units. A

large percentage (approximately 32%) of these new units would be below market rate and affordable to a range of incomes, including workforce housing units as well as units for very low, low, and moderate income households. A major component of new development would be the rebuilding of Alice Griffith. Alice Griffith units would be replaced on a one-to-one basis with new mixed income buildings. Phasing of construction would ensure that eligible residents may move to their newly upgraded units from their existing homes without displacement off-site. Alice Griffith would be improved with new housing structures, a more integrated street grid, community facilities and open space.

4. That commuter traffic not impede MUNI transit service or overburden our streets or neighborhood parking.

The Project's mix of adjacent and complementary land uses and the accompanying transportation and circulation network aim to reduce car usage and encourage walking, bicycling and transit usage. The Project includes significant transit infrastructure enhancements including dedicated transit lanes and transit-priority signaling; enhancements to several existing MUNI lines; and creation of several new lines, including a Bus Rapid Transit line; and new express buses. The capacity of selected street segments would be enhanced to accommodate peak demand associated with the proposed stadium. The Project includes Transportation Demand Management (TDM) measures, including management of the parking supply, that encourage residents, workers, and visitors to use alternative modes of transportation. Thus, on balance, while the Project will increase traffic in its vicinity, it will not impede MUNI transit service or overburden streets or neighborhood parking.

5. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced.

The Project would not adversely affect the industrial sector or service sectors. To the contrary, the Project will enhance resident employment and economic opportunity. The Project would include up to 2,650,000 square feet for job-generating uses in a wide range of possible fields including research and development, green technology, life sciences, clean technology, general office, and light industrial. There is the potential for an additional 2,500,000 square feet of such uses if the stadium is not developed. The existing arts colony at Hunters Point Shipyard would be maintained and enhanced. Other jobs would be made available as part of the development's retail and significant open space components. No existing industrial uses would be removed by the project.

6. That the City achieves the greatest possible preparedness to protect against injury and loss of life in an earthquake.

All new construction would be subject to the City's Building Code, Fire Code and other applicable safety standards. Thus, the Project would improve preparedness against injury and loss of life in an earthquake by prompting development that would comply with applicable safety standards, unlike many of the aging existing buildings, particularly at the Shipyard.

7. That landmarks and historic buildings be preserved.

Structures found to be eligible for listing on the National Register of Historic Places, including Dry Docks 2, 3, and 4, the pumphouses (Buildings 205 and 140), the Gatehouse (Building 204), and the Tool Building (Building 207) would be preserved as the Hunters Point Shipyard Dry Dock and Naval Shipyard Historic District. Furthermore, the Project calls for the establishment for a Heritage Park that, among other things, will celebrate and commemorate the working history of the Shipyard. Buildings identified potential contributors to the Historic District would be further evaluated to determine the feasibility of their preservation and adaptive reuse. Thus, the Project would not adversely affect the preservation of landmarks and historic buildings, particularly in light of the other Priority Policies calling for creation of opportunities for resident employment and affordable housing

8. That our parks and open space and their access to sunlight and vistas be protected from development.

The Project would not adversely affect existing open spaces or their access to sunlight and vistas. The Project would include approximately 336 acres of open space (roughly half the land area of the site) including the improved Candlestick Point State Recreation Area, and development of new dual use sports fields as part of the stadium alternative. A reconfiguration of the Candlestick Point State Recreation Area has been authorized through SB 792 that will help with its ongoing planning, operation, and maintenance, as well as its integration into the redevelopment of Candlestick Point and the Hunters Point Shipyard. Parks and open space would be programmed for a wide variety of passive and active recreational opportunities and would assure all residents, workers, and visitors will have nearby access to open space. The Project includes extension of the City's street grid in a manner that will help assure preservation of public views to the Bay. In addition, the Design for Development documents call for the careful placement of tall buildings to guard against undo shadow and wind impacts to the public realm.