

PUBLIC NOTICE Availability of Initial Study

Suite 400 San Francisco, CA 94103-2479

1650 Mission St.

Reception:

415.558.6378

10.000.0

Fax: 415.558.6409

Planning Information: 415.558.6377

Date: May 2, 2018

Case No.: 2015-004568ENV

Project Title: 10 South Van Ness Avenue Mixed-Use ProjectZoning: C-3-G (Downtown-General Commercial)

Van Ness and Market Downtown Residential Special Use District 120-R-

2/120/400-R-2 Height and Bulk Districts

Plan Area: Market and Octavia Area Plan

Block/Lot: 3506/004 and 003A

Lot Size: 51,150 square feet (1.17 acres)

Project Sponsor: 10 SVN, LLC

c/o Jim Abrams, J. Abrams Law, P.C. - (415) 999-4402

jabrams@jabramslaw.com

Lead Agency: San Francisco Planning Department Staff Contact: Rachel Schuett – (415) 575-9030

rachel.schuett@sfgov.org

To Responsible Agencies, Trustee Agencies, and Interested Parties:

RE: NOTICE OF AVAILABILITY OF THE INITIAL STUDY FOR THE 10 SOUTH VAN NESS AVENUE MIXED-USE PROJECT; PLANNING DEPARTMENT CASE NO. 2015-004568ENV; STATE CLEARINGHOUSE NO. 2017072018

This notice is to inform you of the availability of the Initial Study for the 10 South Van Ness Avenue Mixed-Use Project, described below. The Planning Department previously determined that this project could have a significant effect on the environment, and required that an Environmental Impact Report (EIR) be prepared. A Notice of Preparation of an EIR was circulated for a 30-day public review period on July 12, 2017. The Planning Department held a public scoping meeting to receive comments on the scope and content of the environmental analysis on August 2, 2017. An Initial Study has now been prepared to provide more detailed information regarding the impacts of the proposed project and to identify the environmental issues to be considered in the Draft EIR. The Initial Study is either attached or is available upon request from Rachel Schuett, the project environmental review coordinator, whom you may reach at (415) 575-9030, at rachel.schuett@sfgov.org, or at the address to the right. The report may also be viewed on-line at http://www.sf-planning.org/index.aspx?page=1570, starting on May 2, 2018. Referenced materials are available for review by appointment at the Planning Department's office at 1650 Mission Street, Suite 400 (call 415-558-6377).

<u>Project Description</u>: The project sponsor proposes to redevelop the 51,150-square-foot (1.17-acre) property at South Van Ness Avenue and Market Street in the South of Market (SoMa) neighborhood of San Francisco. The project site is occupied by a two-story, up to 45-foot-high building, and a small vacant lot. The northern portion of the on-site building was constructed in 1927, and is considered an individual historical resource. The building is occupied by the San Francisco Honda Dealership.

The project sponsor proposes to demolish the building and construct a mixed-use, 984-unit residential building with ground-floor retail space and two below-grade levels for parking and loading, accessed from 12th Street. Up to 518 vehicle parking spaces and seven freight loading spaces would be provided. Two project design options are being considered: a two-tower design (the "proposed project") with two separate 41-story 400-foot- tall towers (420 feet at the top of the elevator penthouses) on top of podiums; and a "project variant" with a single 55-story, 590-foot-tall tower (610 feet at the top of the elevator penthouses) on top of a podium. The proposed project would be approximately 1,071,100 gsf, with 48,150 sf of open space including a mid-block pedestrian alley between South Van Ness Avenue and 12th Street. The project variant would be approximately 1,073,000 gsf, with 47,210 sf of open space including a similar mid-block pedestrian alley between Market and 12th streets. Additional details regarding the project and its variant are in this Initial Study and will be subsequently analyzed in the EIR.

A Notice of Preparation of an EIR and Public Scoping Meeting was issued on July 12, 2017, and a public scoping meeting was held on August 2, 2017. Based on the comments received, the Planning Department has determined that preparation of an Initial Study would be appropriate to focus the scope of the EIR. Preparation of an Initial Study or EIR does not indicate a decision by the City to approve or to disapprove the project.

Further comments concerning environmental review of the proposed project and the scope of the EIR are welcomed, based on the content of the Initial Study. In order for your comments to be considered fully, we would appreciate receiving them by **June 4, 2018**. Please send written comments to **Rachel Schuett**, Senior Planner, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103. Comments may also be submitted via e-mail to <u>rachel.schuett@sfgov.org</u>.

If you work for an agency that is a Responsible or a Trustee Agency, we need to know the views of your agency as to the scope and content of the environmental information that is relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the Initial Study/EIR when considering a permit or other approval for this project. We will also need the name of the contact person for your agency.

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department's website or in other public documents.

TABLE OF CONTENTS

A.	PROJECT DESCRIPTION				
B.	PRO	48			
C.	CON	53			
D.	SUM	SUMMARY OF ENVIRONMENTAL EFFECTS			
E.	EVA	63			
	1.	LAND USE AND PLANNING	63		
	2.	POPULATION AND HOUSING	66		
	3.	CULTURAL RESOURCES	72		
	4.	TRANSPORTATION AND CIRCULATION	80		
	5.	NOISE	81		
	6.	AIR QUALITY	82		
	7.	GREENHOUSE GAS EMISSIONS	83		
	8.	WIND AND SHADOW	86		
	9.	RECREATION			
	10.	UTILITIES AND SERVICE SYSTEMS	90		
	11.	PUBLIC SERVICES	96		
	12.	BIOLOGICAL RESOURCES	99		
	13.	GEOLOGY AND SOILS	104		
	14.	HYDROLOGY AND WATER QUALITY	118		
	15.	HAZARDS AND HAZARDOUS MATERIALS	124		
	16.	MINERAL AND ENERGY RESOURCES	130		
	17.	AGRICULTURE AND FORESTRY RESOURCES	132		
	18.	MANDATORY FINDINGS OF SIGNIFICANCE	133		
F.	MIT	IGATION MEASURES	135		
G.	PUB	PUBLIC NOTICE AND COMMENT			
H.	DETERMINATION				
I.	INITIAL STUDY PREPARERS				

i

List of Tables

Table 1:

Table 2:	Characteristics of Proposed Project and Variant	31
Table 3:	Cumulative Projects.	49
List of Fig	gures	
Figure 1:	Project Location	3
Figure 2:	Project Site	
Figure 3:	Zoning Districts and Height and Bulk Districts	
Figure 4:	Proposed Project – Building Section Looking West toward Project Site from South Van	
0	Ness Avenue	9
Figure 5:	Proposed Project – Building Elevation Looking West toward Project Site from South Van Ness Avenue	
Figure 6:	Proposed Project – Building Elevation Looking South toward Project Site from Market Street	
Figure 7:	Proposed Project – Parking Garage/Basement Plan	
Figure 8:	Proposed Project – Ground-Floor Plan	
Figure 9:	Proposed Project – Level 2 Floor Plan	
Figure 10:	Proposed Project – Representative Floor Plans for Levels 3–12	
Figure 11:	Proposed Project – Representative Floor Plans for Levels 13–22	
Figure 12:	Proposed Project – Representative Floor Plans for Levels 23–41	
Figure 13:	Proposed Project - Open Space Plan	
Figure 14:	Proposed Project – Roof Plan	
Figure 15:	Proposed Project – Market Octavia Streetscape Plan (Plan View)	
Figure 16:	Proposed Project – Market Octavia Streetscape Plan (12th Street Right-of-Way Section)	
Figure 17:	Canopy Locations for Wind Reduction	27
Figure 18:	Variant – Building Elevations from 12th Street, Market Street, and South Van Ness Avenue	30
Figure 19:	Variant – Section	32
Figure 20:	Variant – Ground-Floor Plan	33
Figure 21:	Variant – Basement Garage Floor Plans	34
Figure 22:	Variant – Representative Floor Plans for Levels 3–8	36
Figure 23:	Variant – Representative Floor Plans for Levels 29–31	37
Figure 24:	Variant – Representative Floor Plans for Levels 32–40	38
Figure 25:	Variant – Representative Floor Plans for Levels 44–52	39
Figure 26:	Variant – Amenity and Common Open Space Plans	40
Figure 27:	Variant – Open Space Diagram	41
Figure 28:	Straight-Shot Streetscape Option with the Proposed Project (Plan View)	
Figure 29:	Straight-Shot Streetscape Option with the Proposed Project (12th Street Right-of-Way	
-	Section)	44
Figure 30:	Cumulative Projects	50

Proposed Project Characteristics......8

Acronyms and Other Abbreviations

ABAG Association of Bay Area Governments
ADA Americans with Disabilities Act
ADRP archeological data recovery plan
ATP archeological testing plan
BART Bay Area Rapid Transit
bgs below ground surface
BMP best management practice

BMR below-market-rate

CARB California Air Resources Board
C-3-G Downtown-General zoning
CCR California Code of Regulations
CEQA California Environmental Quality Act
DBI Department of Building Inspection
EIR environmental impact report

EO Executive Order

ERO Environmental Review Officer

FAR floor area ratio
GHG greenhouse gas
gsf gross square feet

Housing Element Housing and Urban Design Element

Hub Project Market Street Hub Project

HVAC heating, ventilation, and air conditioning

K–12 kindergarten through 12th grade

LEED Leadership in Energy and Environmental Design

MGD million gallons per day

Muni San Francisco Municipal Railway

PCB polychlorinated biphenyl

RPD San Francisco Recreation and Parks Department

sf square foot/feet

SFMTA San Francisco Municipal Transportation Agency
SFPUC San Francisco Public Utilities Commission
SFUSD San Francisco Unified School District

SoMa South of Market SUD special use district

SWPPP storm water pollution prevention plan TDM transportation demand management

U.S. 101 U.S. Highway 101
VMT vehicle miles traveled
ZOI zone of influence

A. PROJECT DESCRIPTION

The project sponsor, 10 SVN, LLC, proposes to redevelop the 1.17-acre (51,150-square-foot) triangle-shaped property located at 10 South Van Ness Avenue at the southwest corner of South Van Ness Avenue and Market Street in the South of Market (SoMa) neighborhood of San Francisco. The project site is currently occupied by the San Francisco Honda dealership, a two-story, 30- to 45-foot-high building at the northern end of the site, and by a small, undeveloped area at the southern end of the site. The proposed project would involve the construction of two 41-story buildings that would be 400 feet tall (420 feet total, including roof screens and elevator penthouses) and would contain a total of 984 dwelling units and retail space on the ground floor (Table 1). Above grade, the proposed project's two separate towers would be above a podium. Below grade, the two structures would be connected on basement Levels B1 and B2 with a single foundation.

In addition, a project design variant (hereinafter the "variant") is proposed that would feature one tower, up to 590 feet in height (610 feet total, including roof screens and elevator penthouses). The proposed variant would involve constructing a single 55-story tower over a podium structure. The proposed variant would also contain 984 dwelling units, ground-floor retail space, and two levels of underground parking. Both the proposed project and the variant would include a mid-block alley, which would be open-air and accessible to the public, and would serve as a pedestrian connection across the site. Under the proposed project, the mid-block alley would provide access from South Van Ness Avenue to 12th Street. Under the proposed variant, the mid-block alley would provide access from Market Street to 12th Street.

A streetscape option (the "straight-shot streetscape option") is also proposed for 12th Street. The straight-shot streetscape option would exceed the Market & Octavia Area Plan and Planning Department streetscape standards by extending the eastern sidewalk and pedestrian promenade adjacent to the project site from 15 feet to 40 feet in width on 12th Street. The western sidewalk on 12th Street would be expanded to a width of 18 feet. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction. The straight-shot streetscape option could be developed with either the proposed project or the variant.

Project Location and Site Characteristics

As shown in Figure 1, the 51,150-square-foot parcel is located at the southwest corner of Market Street and South Van Ness Avenue, and comprises the entire block bounded by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west (Figure 2). The project site comprises Assessor's Block 3506, Lots 004 and 003a, and is roughly triangular in shape.

Both South Van Ness Avenue and Market Street are major roadways through the Downtown/Civic Center and SoMa neighborhoods. South Van Ness Avenue, which becomes Van Ness Avenue north of Market Street, is a major north-south arterial through San Francisco and is considered U.S. Highway 101 (U.S. 101) between the Lombard Street and the Central Freeway portions of U.S. 101. Adjacent to the project site, South Van Ness Avenue has three travel lanes in each direction and parallel parking on both sides of the street. Market Street is a major east-west roadway through San Francisco that connects The Embarcadero and the Twin Peaks neighborhood. Market Street operates as a two-way roadway, generally with two travel lanes, for motorized modes of travel. Adjacent to the project site, eastbound Market Street has one mixed-flow travel lane, one

1

_

For purposes of describing project site location, this document uses a project north/south axis aligned with 12th Street, such that Market Street forms the northern boundary of the project site, 12th Street forms the western boundary, and South Van Ness Avenue forms the southwestern boundary.

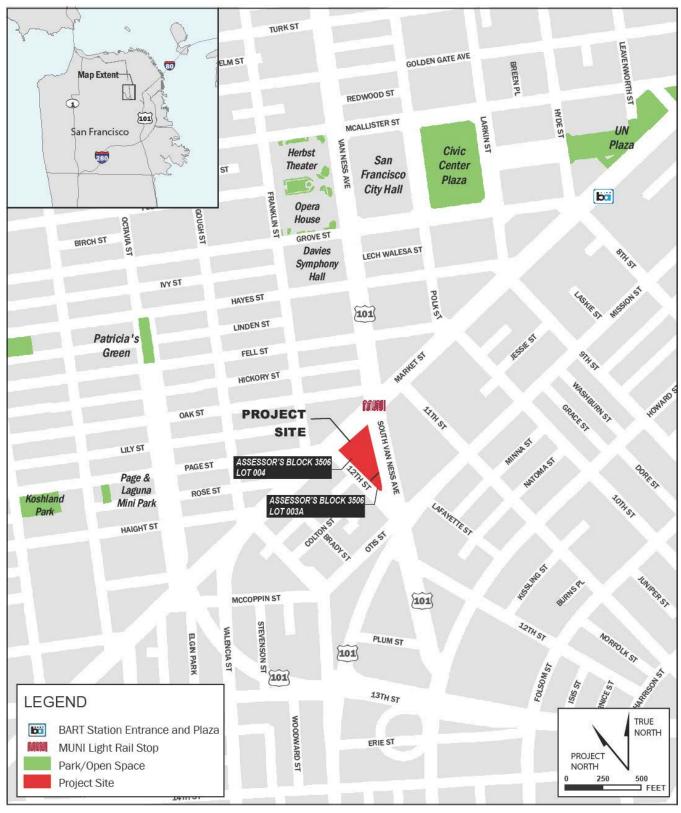
dedicated-transit/taxi lane, and a bicycle lane. In the westbound direction, Market Street has two mixed-flow travel lanes² and a bicycle lane.

The regional roadways that serve the project site are U.S. 101, Interstate 80, and Interstate 280. U.S. 101 provides access to and from the site via the adjacent South Van Ness Avenue, an on-ramp at South Van Ness Avenue and Division Street, and an off-ramp at Mission Street and Duboce Avenue. The intersection of South Van Ness Avenue and Market Street is also connected to the transit network via the subsurface San Francisco Municipal Railway (Muni) station at Market Street and South Van Ness Avenue, which is accessible from an entrance located along the Market Street frontage of the project site. This Muni station is served by the J, KT, L, M, and N Muni light rail lines, and the aboveground Market Street and South Van Ness Avenue Muni stops. These stops are served by the K-Owl, L-Owl, N-Owl, 6, 7, 7R, 14, 47, 49, 90, and 800 bus routes and the historic F line streetcar. The Civic Center Bay Area Rapid Transit (BART) station is also located 0.4 mile east of the project site on Market Street.

Existing Zoning/Height & Bulk Requirements

The project site is within the South of Market (SoMa) neighborhood of San Francisco, which borders the Civic Center neighborhood. The project site is also within the Market & Octavia Area Plan area, the Downtown-General (C-3-G) zoning district, and the Van Ness and Market Downtown Residential Special Use District (SUD). The northern portion of the site is in the 120-R-2 height and bulk district; and the southern portion of the site is in the 120/400-R-2 height and bulk district (see Figure 3). These height and bulk districts allow for a building of 120 feet in height on the northern portion of the project site and a podium of up to 120 feet in height and a tower, or towers, of up to 400 feet in height on the southern portion of the site. For buildings over 120 feet in height, all portions of structures above the podium height are subject to the bulk restrictions in Planning Code section 270(e)(2).

Mixed-flow travel lanes are traffic lanes that allow the use of personal vehicles, trucks, taxis, and public transportation vehicles.



3

Source: AECOM, 2017

Figure 1: Project Location

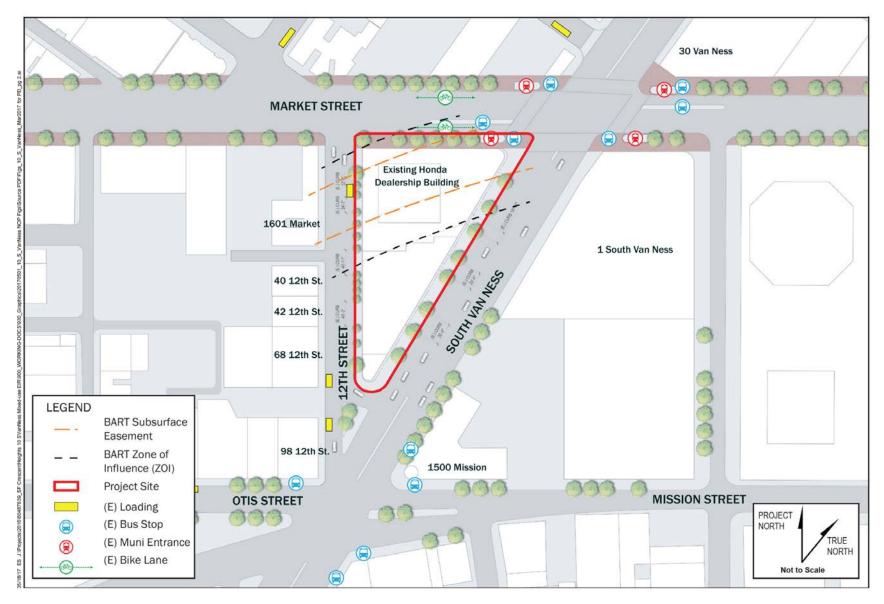
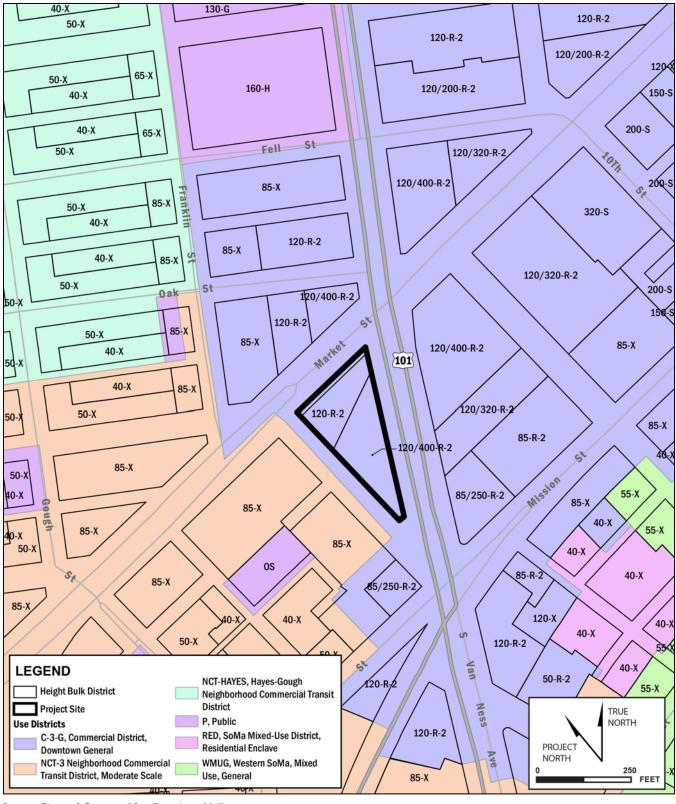


Figure 2: Project Site



5

Source: City and County of San Francisco, 2017

Figure 3: Zoning Districts and Height and Bulk Districts

Per Planning Code section 270(e)(2)(D), buildings between 351 and 550 feet in height may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gross square feet (gsf). Per Planning Code section 270(e)(2)(F), to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by 10 percent from the maximum floor plate, unless the overall tower floor plate is reduced by an equal or greater volume. A minimum distance of 115 feet must be preserved between all structures above 120 feet in height at all levels above 120 feet in height, as required by the controls for the R-2 bulk district. The permitted floor area ratio (FAR) in the C-3-G zone is 6:1.³ The existing FAR of the project site is approximately 2:1.

Existing Conditions

The project site slopes gently downward to the south. The ground surface elevation of the project site is approximately 40 feet above mean sea level along Market Street and approximately 32 feet above mean sea level at the southern boundary of the site. As shown in Figure 2, the project site is currently occupied by the 91,088-square-foot San Francisco Honda dealership, which consists of a two-story building, ranging from 30 to 45 feet in height (Lot 004), and a small, undeveloped area at the southern end of the site (Lot 003A). The existing building, which was constructed in 1927, was the former home of the Fillmore West concert venue, and is considered to be a historic resource. The Muni tunnel and station are located beneath Market Street approximately 30 feet north of the property line. The northern third of the project site includes a subsurface easement for the existing BART tunnel, which is located 19.62 feet below grade. The invert of the BART tunnel is approximately 85 feet below ground surface. The perimeter of the project site includes six curb cuts and associated driveways: three curb cuts along South Van Ness Avenue, and three along 12th Street. There are no curb cuts along Market Street.

Along the west side of South Van Ness Avenue, there are 11 metered vehicle parking spaces, with five spaces subject to restricted hours for street cleaning (no parking between 12:01 a.m.–6:00 a.m.). The east side of 12th Street along the project frontage has 10 general metered parking spaces, and one metered commercial loading space with restricted loading hours. Across 12th Street from the project site, there are five general metered parking spaces, three metered commercial loading spaces with restricted loading hours, one passenger loading space, and one parking space with Americans with Disabilities Act (ADA) access. Improvements to Van Ness Avenue between Aquatic Park and Mission Street are currently underway as part of the Van Ness Improvement Project. The Van Ness Improvement Project includes

FAR is the gross floor area of a building or buildings on a zoning plot divided by the area of such zoning plot. FAR is calculated to determine whether the mass and scale of a structure is compatible with zoning district requirements. In the Van Ness and Market Downtown Residential SUD, increased FAR is allowed with payment of in-lieu fees (the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee).

The Historic Resources Evaluation (*Part I Historic Resource Evaluation, Final Version:* 10 South Van Ness Avenue [2015-004568ENV] City and County of San Francisco, California) prepared for the project found the existing Honda dealership and service center at 10 South Van Ness Avenue to be eligible for listing in the California Register of Historic Places under Criterion 1 (events) for its association with the Fillmore West concert venue and Criterion 2 (persons) for its association with prominent San Francisco music promoter Bill Graham.

⁵ "Invert" refers to the bottom of the tunnel.

Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation, 10 Van Ness Avenue*, March 16, 2017. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2015-004568ENV.

replacement of the water and sewer networks and infrastructure improvements to support the Van Ness Bus Rapid Transit system, which is currently under construction.⁷

The land uses in the immediate vicinity of the project site are characterized by a mix of residential, commercial, and civic uses. The maximum permitted building heights in the vicinity of the project site (as allowed by existing height and bulk districts) range from 40 feet to 400 feet (see Figure 3). Several large, mixed-use commercial, office, and residential buildings are located along Van Ness Avenue and Market Street; they are interspersed with smaller buildings hosting office, commercial, warehouse/storage, and multifamily residential uses. The scale of the built environment generally increases in height traveling eastward along Market Street from the project site.

Proposed Project Characteristics

The proposed project is at the site of the San Francisco Honda dealership. The service center relocated in 2017, but the dealership remains open. To construct the proposed project, the dealership would also relocate and the existing 91,088-square-foot, two-story, 30- to 45-foot-tall building would be demolished. The proposed project would result in construction of a new 1,071,095-gsf, 984-unit development consisting of two 41-story, mixed-use residential buildings. The proposed project would construct two separate above-grade towers that are connected below grade. Above grade, each structure would consist of a tower on top of a podium. A section of the proposed project is shown in Figure 4, and elevations of the proposed project are shown in Figures 5 and 6.

The tower with frontage along Market Street is referred to as the north tower, and the tower adjacent to the intersection of South Van Ness Avenue and 12th Street is referred to as the south tower. Likewise, the more northerly podium is referred to as the north tower podium, and the more southerly podium is referred to as the south tower podium. Each tower would have its own building core. Two passageways would be constructed to serve as a connection between the two podiums across the mid-block alley, one at Level 2 and one at Level 13. The buildings would be connected below ground via a single, two-level parking garage/basement (see Figure 7).

The proposed project would have a single foundation supporting all of the project structures. Each tower would have a maximum height of 400 feet (420 feet total, including roof screens and the elevator penthouse on each tower). The ground floor through Level 12 would be located in the tower podiums, and Levels 13–41 would be located in the towers. The towers would be separated by a minimum of 115 feet. The north tower podium would be 114 feet in height, and the south tower podium would be 120 feet in height. Both podiums would include retail uses and residential lobbies at the ground level (see Figure 8).

As shown in Table 1 below, the proposed project would include a total of 935,745 gsf of residential uses, 30,350 gsf of retail uses; 3,000 gsf of rooftop mechanical equipment; and 102,000 gsf of parking with up to 518 accessory vehicle parking spaces. In both towers, residential amenities would be provided on Level 2, and residential units would be provided on Levels 3–41 (see Figures 9 through 12). Residential amenities would include a community space, a game room, a children's room, and a music room. Level 2 of both towers would also include a retail mezzanine space. Residential lobbies and building services would occupy 16,670 gsf. The

San Francisco Municipal Transportation Agency, Van Ness Improvement Project, Spring 2017, https://www.sfmta.com/sites/default/files/projects/2017/VN_Newsltr_17.02_170502.pdf, accessed August 9, 2017.

Pursuant to Planning Code section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

A height of 114 feet and 120 feet for the north and south tower podiums, respectively, is consistent with the height and bulk district for the site (120-R-2).

residential entrances would be at the approximate center of each tower podium's frontage on South Van Ness Avenue.

Table 1: Proposed Project Characteristics

Lot	Dimensions				
Size	51,150 square feet				
Length	475 feet (South Van Ness Avenue)/288 feet (Market Street)/450 feet (12th Street)				
Proposed Building	Area (gross square feet)				
Residential ¹	935,745				
Ground-Floor Retail	30,350				
Parking ²	102,000				
Rooftop Mechanical	3,000				
Total	1,071,095				
Building Characteristics	Description				
Charina	North Tower/Podium	ım 41 stories/12 stories			
Stories	South Tower/Podium	41 stories /12 st	41 stories /12 stories		
	North Tower/Podium	r/Podium 400 feet (up to 420 feet including the elevator			
Height	penthouse ³)/114 feet				
Tiergin	South Tower/Podium 400 feet (up to 420 feet including the elevator penthouse)/120 feet				
Ground Floor	Retail: 30,350 gross square feet with multiple tenant spaces				
	Residential: Two residential lobbies and 336 class I bicycle parking spaces				
Basement	518 vehicle parking spaces				
Proposed Units			Amount (Approx. Percent)		
		984			
Dwelling Units	North Tower	South Tower	Total		
Studio	267 (27%)	108 (11%)	375 (38%)		
1-Bedroom	294 (30%)	167 (17%)	461 (47%)		
2-Bedroom	51 (5%)	49 (5%)	100 (10%)		
3-Bedroom	19 (2%)	29 (3%)	48 (5%)		
Vehicle Parking Spaces ⁴	518				
Bicycle Parking Spaces ⁵	397				
Open Space ⁶					
Publicly accessible	2,975				
Common	45,176				
Private	0				

Notes:

- 1. Includes first-floor nonretail uses and second-floor residential amenity uses.
- 2. Includes parking and basement mechanical equipment.
- 3. Consistent with the Planning Code height and bulk designations for the project site, the building height is 400 feet. Up to 20 feet for the elevator penthouse, roof screens, and other rooftop appurtenances are exempt from this height limit.
- 4. Vehicle parking spaces: 491 for residential use, 14 for retail use, six for car-share, seven for off-street loading.
- 5. Bicycle parking spaces: 336 class I bicycle parking spaces on the ground floor, 61 class II bicycle parking spaces in on-street bicycle corrals.
- $6.\ Provided\ in\ compliance\ with\ Planning\ Code\ section\ 736.93,\ Usable\ Open\ Space\ Per\ Residential\ Unit.$

Source: 10 South Van Ness LLC, 2017

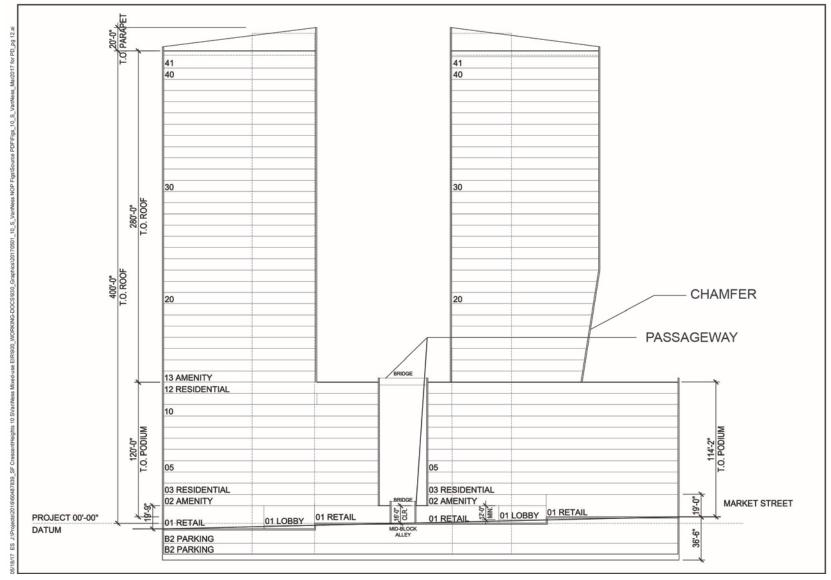


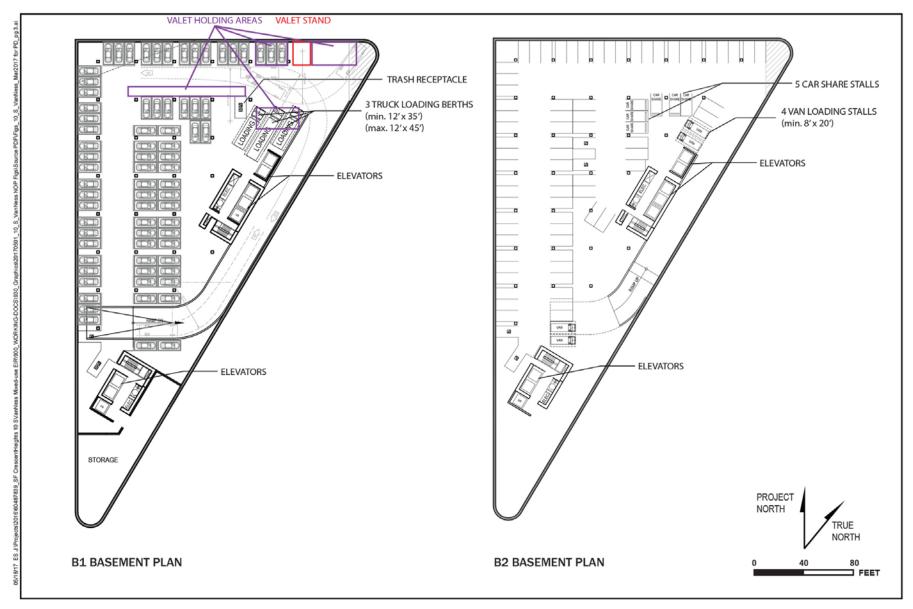
Figure 4: Proposed Project – Building Section Looking West toward Project Site from South Van Ness Avenue



Figure 5: Proposed Project – Building Elevation Looking West toward Project Site from South Van Ness Avenue



Figure 6: Proposed Project – Building Elevation Looking South toward Project Site from Market Street



Source: Handel Architects, 2016 and SITELAB Urban Studio, 2017

Figure 7: Proposed Project – Parking Garage/Basement Plan

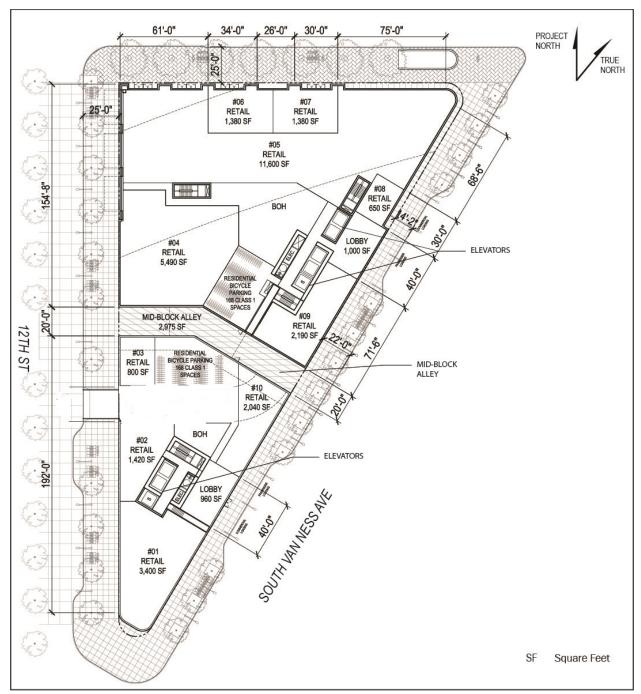


Figure 8: Proposed Project - Ground-Floor Plan

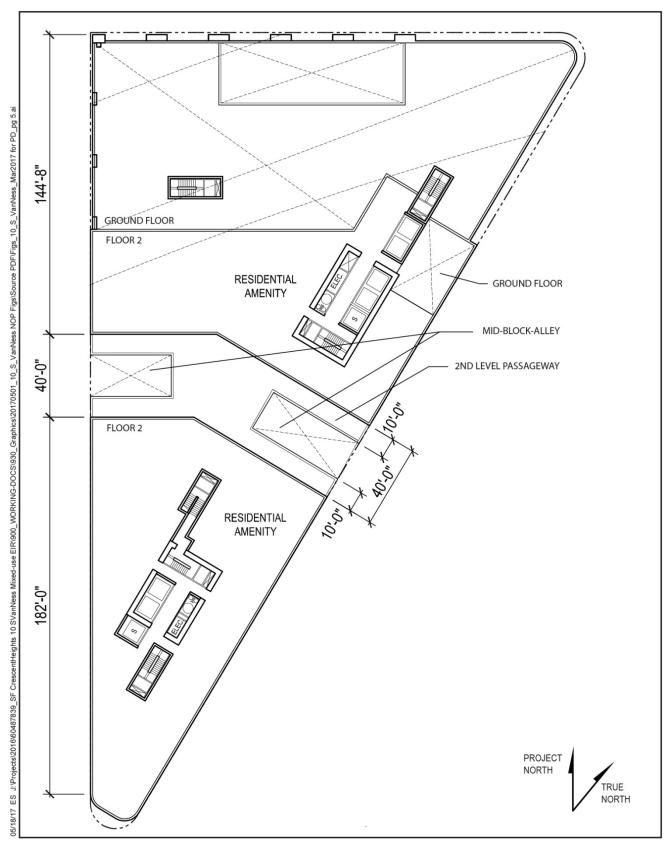


Figure 9: Proposed Project - Level 2 Floor Plan



Figure 10: Proposed Project – Representative Floor Plans for Levels 3–12

15

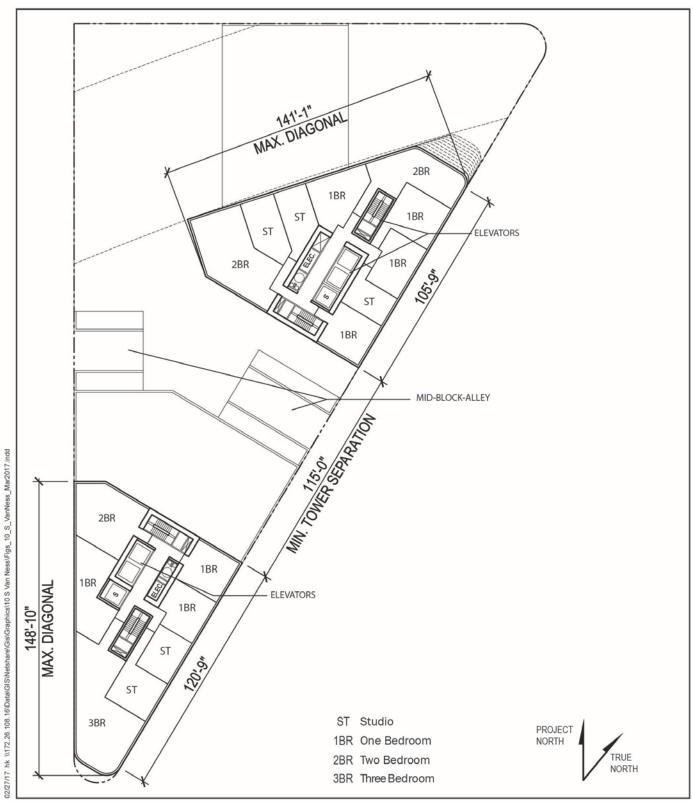


Figure 11: Proposed Project – Representative Floor Plans for Levels 13–22

16

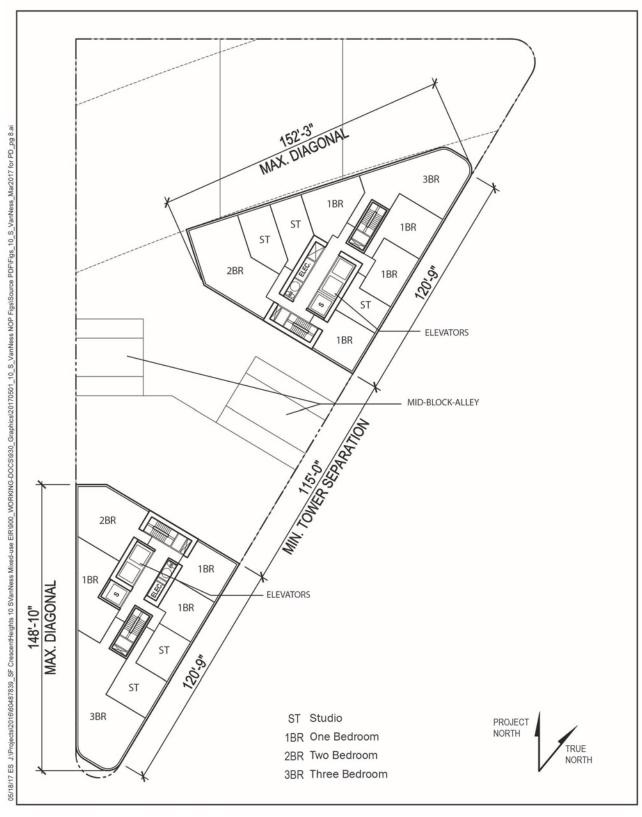


Figure 12: Proposed Project - Representative Floor Plans for Levels 23-41

The ground floors of the tower podiums, considered together, would include 30,350 gsf of retail space for use by multiple tenants. The retail spaces, as currently designed, include 10 retail spaces ranging in size from 800 square feet (sf) to 11,600 sf, as shown in Figure 8. The retail uses would front onto South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The retail spaces would all have a minimum floor-to-ceiling height of 19 feet.

Open Space. The proposed project would include 48,150 sf of usable open space per Planning Code section 736.93, which would be provided through a combination of publicly accessible open spaces, and common usable open spaces. ^{10,11} As shown in Figures 4 and 8, publicly accessible open space would include the 2,975-square-foot midblock alley between the two tower podiums, which would provide a pedestrian connection between South Van Ness Avenue and 12th Street. Privately accessible common open spaces would include amenity terraces on Level 2 of both tower podiums, Levels 3 and 11 of the north tower, Level 13 of the south tower, and on the roofs of both towers, as shown in Figure 13.

Parking/Loading and Mechanical Equipment. The proposed project would include 102,000 gsf of parking and building services, with up to 518 accessory vehicle parking spaces, in two basement levels, as shown in Figure 7. Ingress and egress for the secured garage would be provided via a single curb cut on 12th Street. The proposed project would include 491 spaces for residential use, 14 spaces for retail use, and six spaces for car-share vehicles. In addition, a total of seven off-street freight-loading spaces would be located in the two basement levels, three of which would be standard freight-loading spaces, and four of which would be service vehicle spaces. One freight-loading space would accommodate up to a 45-foot-long vehicle.

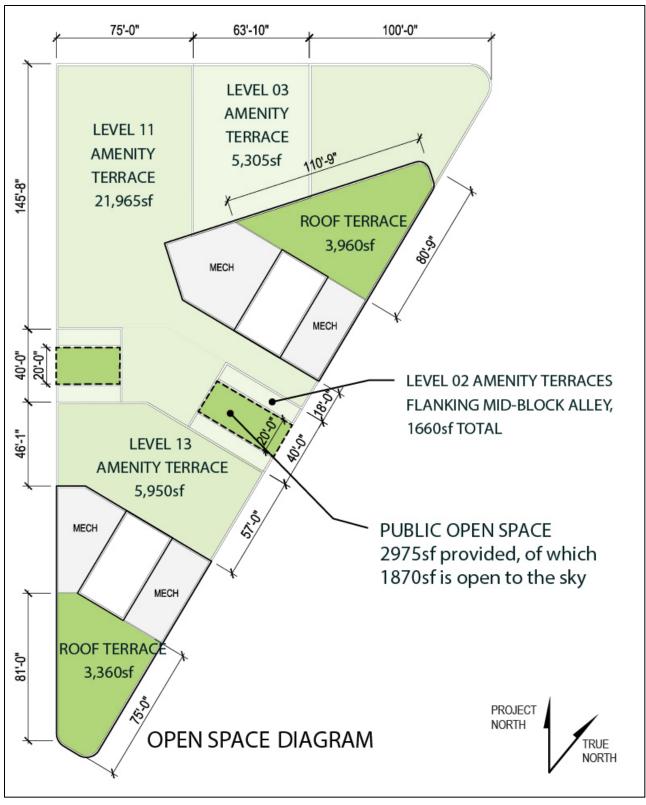
The majority of the parking spaces would be provided in stackers and would not be independently accessible. The garage would be staffed 24 hours per day, seven days per week by a valet service, via a valet station within the garage to manage resident and employee parking maneuvers, with the intent of facilitating inbound vehicle flow. The valet would serve residents, visitors, and car-share users. Valet staff would also direct delivery and moving trucks.

The proposed project would also provide 336 class I bicycle parking spaces, ¹² which would be provided in two secure bicycle rooms on the north tower podium ground floor: 332 for residential use and four for retail use. Onstreet bicycle parking would include 61 class II bicycle parking spaces: 49 for residential use and 12 for retail use, which would be located with the public right-of-way along Market Street, 12th Street and South Van Ness Avenue.

As defined in Planning Code section 135, common usable open space includes open space that is easily accessible from a dwelling unit or from a common area of a building or lot. Common usable open space is accessible to building occupants only, but, as opposed to private usable open space, is accessible to all building occupants rather than a select group of units. In C-3 districts, new buildings are required to provide privately owned public open spaces meeting the requirements of Planning Code section 138. These open spaces must be accessible to the general public.

Planning Code section 135 requires the provision of 36 square feet of private open space or 47.88 square feet of commonly accessible open space per residential unit. The proposed project would require 47,114 square feet of common usable open space.

Section 155.1(a) of the Planning Code defines class I bicycle spaces as "spaces in secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, nonresidential occupants, and Employees" and defines class II bicycle spaces as "spaces located in a publicly-accessible, highly visible location intended for transient or short-term use by visitors, guests, and patrons to the building or use."



19

Figure 13: Proposed Project - Open Space Plan

The proposed project would include one 1,500-kilowatt diesel-powered emergency generator and other mechanical equipment in the garage/basement. Trash storage would also be located in the garage/basement, adjacent to an accessible loading area. The garage/basement would be secured, and would be accessible only to residents and retailers. Approximately 3,000 gsf of the roof area would be reserved for heating, ventilation, and air conditioning (HVAC) mechanical equipment. The proposed project's roof plan is shown in Figure 14.

Circulation and Access. The proposed project would remove the existing curb cuts along South Van Ness Avenue and 12th street and replace them with a new 20-foot-wide curb cut along 12th Street. This would provide vehicle access to the parking garage, for both retail and residential users (two 10-foot-wide lanes for two-way, bi-directional traffic). In addition to stairs, two elevators would provide access to the residential lobbies from the parking garage/basement. From the residential lobbies, a second elevator would provide access to each tower. Elevator access would also be available between the below-grade parking garage/basement and the ground-floor retail space. As described above, two street-level residential entrances, one for each tower, would be located along South Van Ness Avenue. Pedestrian access to the retail spaces would be from South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley. The proposed mid-block alley would also provide public access through the project site between South Van Ness Avenue and 12th Street.

Class I and II bicycle facilities currently run along Market Street in both directions. Access to the class I bicycle parking spaces would be provided via a secured doorway on the mid-block alleyway to the bicycle room located near 12th Street. The class I bicycle parking spaces would be for residents and retail users and the bicycle storage room would also be connected to the building's lobby. A bicycle repair station would be located within the building. The location of the class II bicycle parking would be along Market Street, 12th Street, and South Van Ness Avenue and would be installed within the sidewalk areas. The nearest San Francisco Bike Share station is approximately 120 feet to the east of the project site on the east side of South Van Ness Avenue, directly across the street from the project site. The on-site class 1 bicycle parking is accessible to the Market Street bike lane via 12th Street and the mid-block alley.

Transportation Demand Management. The proposed project would result in more than 10 dwelling units and, thus, would be required to comply with San Francisco Planning Code section 169, Transportation Demand Management Program. As required under Planning Code section 169, the project sponsor is required to develop a transportation demand management (TDM) plan including measures that the property owner would implement to reduce single-occupancy driving to and from the project site. Compliance with the project's TDM plan would be included as a Condition of Approval for the proposed project and would be subject to monitoring by the Planning Department for the life of the project.¹³

The following TDM measures would comprise the TDM plan for the proposed project:

PKG-1: Unbundle Parking

Unbundle ¹⁴ parking in transportation analysis zone 578, where the project site is located.

According to Planning Code section 169, a property owner must facilitate a site inspection by the Planning Department before issuance of a certificate of occupancy, and must document implementation of applicable aspects of the TDM plan, maintain a TDM coordinator, allow for department inspections, and submit periodic compliance reports throughout the life of the project.

Where the cost of a parking space is separated from the cost of rent, lease, or ownership.

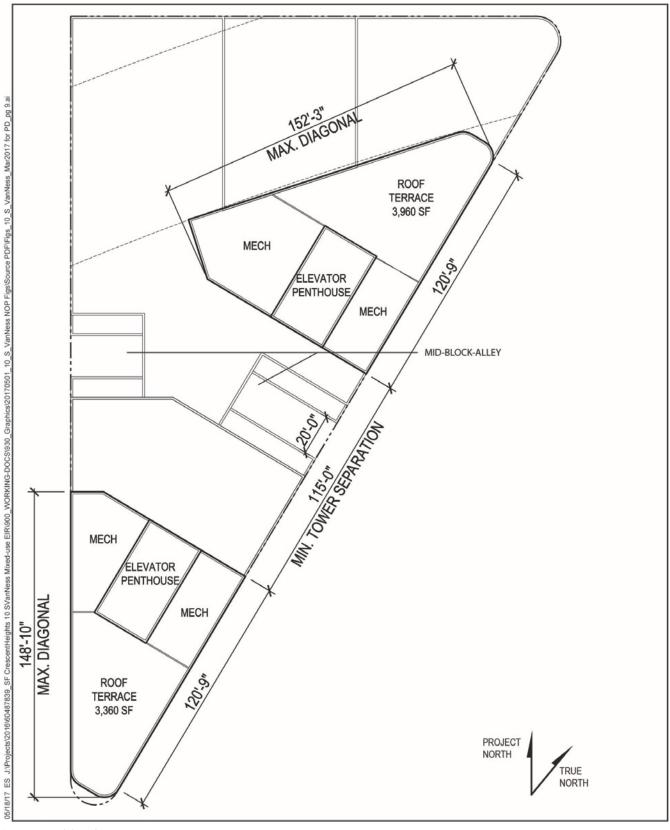


Figure 14: Proposed Project - Roof Plan

PKG-4: Parking Supply

Provide parking at a rate that is less than or equal to 80 percent and greater than 70 percent of the neighborhood residential parking rate. The project parking rate is 0.5 accessory parking spaces per unit, which is 76 percent of the neighborhood residential parking rate of 0.65 parking spaces per unit in transportation analysis zone 578 where the project site is located.

ACTIVE-1: Improve Walking Conditions

Complete streetscape improvements consistent with the Better Streets Plan and any local streetscape plan so that the public right-of-way is safe, accessible, convenient, and attractive to persons walking by: widening the sidewalk along the east side of 12th Street, providing a mid-block pedestrian alley to allow public access through the project site, and providing sidewalk bulb-outs along the east side of 12th Street to shorten the crossing distances at intersections with Market Street and South Van Ness Avenue, and to reduce vehicle speed.

The streetscape improvements would meet TDM ordinance criteria by providing the following 10 streetscape elements defined in Table 1 of Planning Code section 138.1:¹⁵

- High-visibility crosswalks
- Special crosswalk treatments
- Mid-block crosswalks
- Raised crosswalks
- Extended bulb-outs¹⁶
- Mid-block bulb-outs
- Reuse of "pork chop islands" ¹⁷ and excess right-of-way
- Shared public ways
- Pedestrian-only streets
- Aboveground landscaping

ACTIVE-2: Bicycle Parking

Provide class I and class II bicycle parking spaces as required by the Planning Code. The proposed project is providing 332 class I and 49 class II bicycle spaces for the residential use, and four class I and 12 class II bicycle spaces for the retail use, both of which meet the Planning Code, and TDM measure requirements.

ACTIVE-5A: Bicycle Repair Station

Provide on-site tools and space for bicycle repair. The proposed project would provide this repair station within the class I bicycle parking area on the building's ground floor.

CSHARE-1: Car-Share Parking

Provide car-share space parking as required by the Planning Code. To meet this requirement, the proposed project would provide six car-share spaces, to be located on Level B2.

Table 1, Pedestrian and Streetscape Elements per the Better Streets Plan, in section 138.1 of the San Francisco Planning Code, http://library.amlegal.com/nxt/gateway.dll/California/planning/planningcode?f=templates\$fn=default.htm\$3.0\$vid=amlegal:sanfrancisco_ca\$sync=1, accessed August 3, 2017.

¹⁶ A bulb-out is a traffic calming measure that reduces the crossing distance for pedestrians by extending the sidewalk.

Pork chop islands are irregularly shaped, raised islands placed between a right-turn slip lane and through-travel lanes.

DELIVERY-1: Delivery Supportive Amenities

The proposed project would facilitate delivery services by providing a staffed reception area for receipt of deliveries, and offering one of the following: (1) clothes lockers for delivery services, or (2) temporary storage for package deliveries, laundry deliveries, and other deliveries. These amenities would be provided on Level B1.

FAMILY-1: Family TDM Amenities

The proposed project would provide an onsite secure location on Level B1 for storage of personal car seats, strollers, and cargo bicycles or other large bicycles.

INFO-1: Multimodal Wayfinding Signage

The proposed project would provide multimodal wayfinding signage in key locations to support access to transportation services and infrastructure, including: transit, bike share, car-share parking, bicycle parking and amenities (including repair stations and fleets), showers and lockers, taxi stands, and shuttle/carpool/vanpool pick-up/drop-off locations.

INFO-2: Real Time Transportation Information Displays

The proposed project would provide real time transportation information on displays in prominent locations on the project site and within the buildings to highlight sustainable transportation options and support informed trip-making.

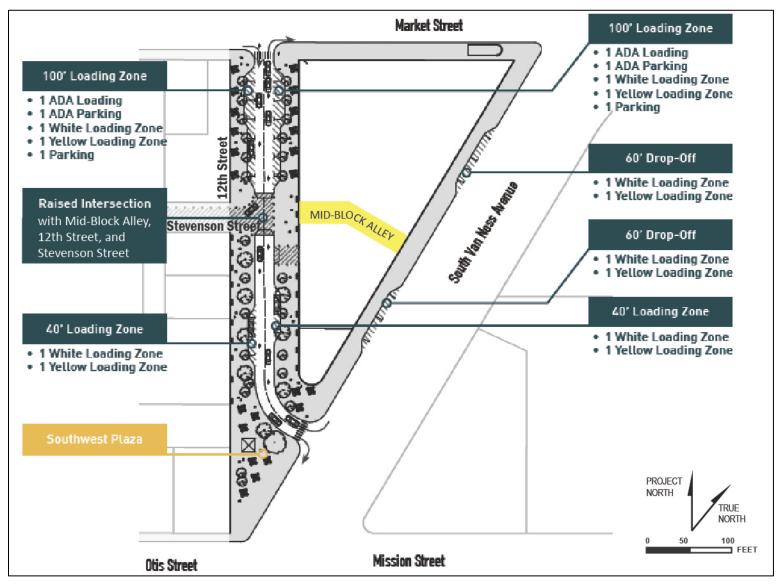
INFO-3: Tailored Transportation Marketing Services

The property owner would provide promotions and welcome packets to all new residents/employees, personal consultation for each new resident/employee, and request commitment to try new transportation options.

Streetscape Improvements. The proposed streetscape plan, called the "Market Octavia Streetscape Plan," would conform to Market & Octavia Area Plan and Planning Department standards and is shown in Figures 15 and 16. Under the Market Octavia Streetscape Plan, the eastern and western sidewalks along 12th Street would be expanded from 15 feet to a width of 21 feet (4 feet of frontage, 8 feet of pedestrian throughway, and 9 feet of pedestrian furnishing space), as shown in Figure 16. Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets. A raised crosswalk would be installed at the intersection of 12th and Stevenson streets. The "pedestrian island" at the intersection of 12th Street and South Van Ness Avenue would be removed and replaced by bulb-outs on both sides of 12th Street and a pedestrian plaza on the southwest side of the intersection.

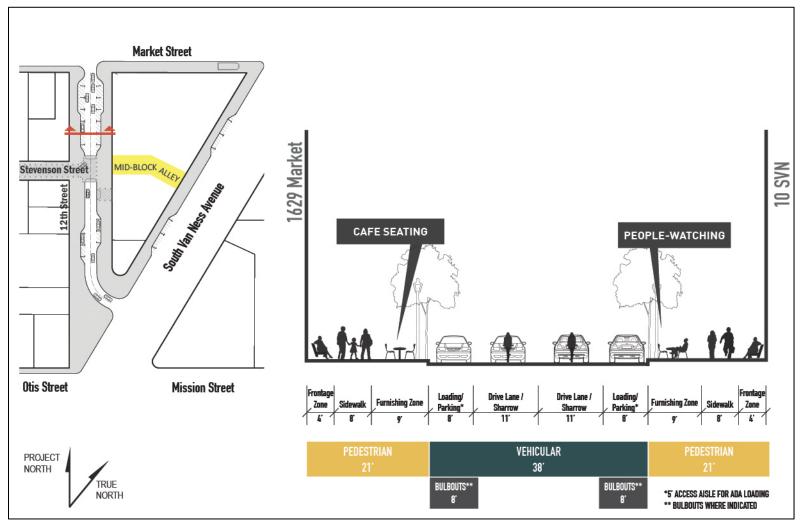
Two 60-foot-long white and yellow loading zones ¹⁸ are proposed along the South Van Ness Avenue frontage, near the entrances to the residential lobbies, to provide an area for passenger drop-off and pick up, and commercial loading activities. Proposed changes to the right-of-way are described below. Four passenger and commercial loading zones are proposed on 12th Street, one 100-foot-long loading zone and one 40-foot-long loading zone on each side of 12th Street. Each 100-foot loading zone would include one ADA loading space, one ADA parking space, one passenger loading space, one commercial loading space, and one regular parking space. Each 40-foot loading zone would include one passenger loading space and one commercial loading space.

White zones are for passenger loading and unloading during certain hours, with a time limit of five minutes. Yellow zones are for commercial loading activities.



Source: SITELAB Urban Studio, 2017

Figure 15: Proposed Project – Market Octavia Streetscape Plan (Plan View)



Source: SITELAB Urban Studio, 2017

Figure 16: Proposed Project – Market Octavia Streetscape Plan (12th Street Right-of-Way Section)

In addition to the streetscape improvements described above, the proposed project would install 33 net new street trees and class II bicycle racks with capacity for 61 bicycles along South Van Ness Avenue, Market Street, and 12th Street, in compliance with the City's Better Streets Plan.

Sustainability. The San Francisco Building Code includes a chapter on requirements for green buildings; these requirements establish either Leadership in Energy and Environmental Design (LEED)¹⁹ certification levels or Green Point Rated²⁰ system points for types of proposed residential and commercial buildings. The proposed project would seek LEED Silver certification, which includes measures applicable to both construction and operation of the proposed project. The proposed project would incorporate a number of sustainability features, including stormwater and rainwater collection features and a wastewater treatment system. The wastewater treatment system would be sized to treat and utilize recycled water from the proposed building for nonpotable uses in the building, including flushing toilets, irrigation, and cooling tower water for the HVAC system. The proposed project would remove the existing 28 trees along the perimeter of the project site frontage on all three sides of the property. In compliance with Public Works Code section 806(c)(2), the proposed project would install 61 new street trees, with one tree every 20 feet along the perimeter of the project site frontage for a total of 33 net new street trees.

The project sponsor has submitted an application to the Governor's Office seeking certification of the proposed project as an environmental leadership development project pursuant to Assembly Bill 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, and the California Environmental Quality Act (CEQA) section 21178 et seq. An environmental leadership development project does not result in any net increase in greenhouse gas (GHG) emissions and achieves a 10 percent higher standard for transportation efficiency than comparable projects. The California Air Resources Board (ARB) provided a letter of determination on December 18, 2017, that the proposed project would not result in any net additional GHG emissions and authorized the governor to certify the project. The governor's signature was received on December 21, 2017, certifying that the project is an environmental leadership development project. ²¹

Other Design Features. As a result of preliminary wind test modelling in accordance with Planning Code section 148, the north face of the proposed north tower would be chamfered 22 from Level 13 to Level 22, and 75 percent porous wind canopies (see Figure 17) would be constructed at the sidewalk level along the east side of South Van Ness Avenue between Market Street and Mission Street. This would provide protection to pedestrians and bicyclists from hazardous wind conditions. The chamfer is evident in Figure 4.

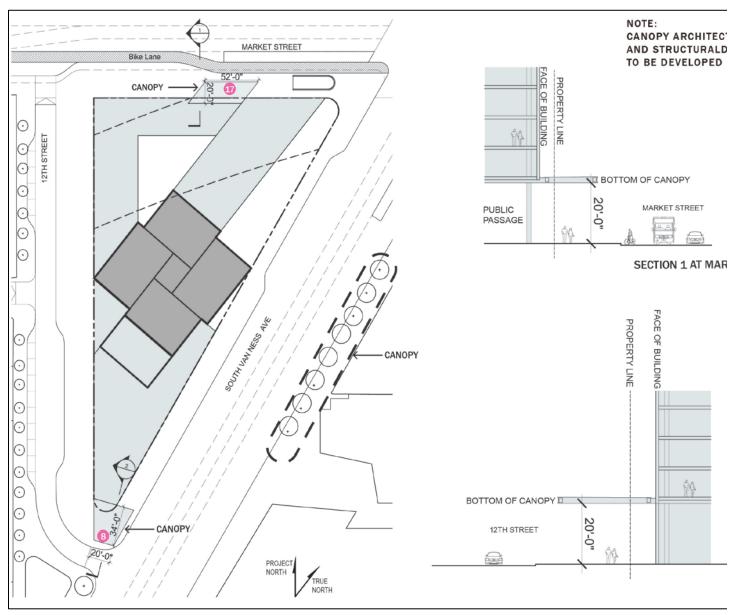
The proposed project would include canopies that would extend from the base of the building at strategic locations to improve wind conditions along the street. Figure 17 below indicates the wind canopy locations for the proposed project. The canopies would be trellis-like porous structures attached to the buildings with cantilevered segments, supported by vertical columns to a height of approximately 20 feet.

LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council, which involves third-party verification that a building or community was designed and built using strategies aimed at improving performance across metrics that include energy savings, water efficiency, indoor air quality, use of recycled materials, and proximity to public transportation.

²⁰ Green Point Rated is a program of Build it Green, established for evaluating residential building performance in the areas of resource conservation, indoor air quality, water conservation, energy efficiency, and livable communities (infill development, increased density, diversity of land uses).

²¹ The certification process for environmental leadership development projects is separate from the environmental review process conducted for the proposed project.

²² A chamfer is a flat surface resulting from cutting off the edge of a volume or a symmetrical sloping surface at an edge or corner.



Source: BMT Fluid Mechanics 2017

Figure 17: Canopy Locations for Wind Reduction

Construction. This section describes the construction activities associated with the proposed project. Construction is anticipated to occur over approximately 36 months, and would include the following phases: (1) demolition; (2) shoring and excavation; (3) foundation and podium construction; (4) superstructure/skin; and (5) interior work. Construction hours would typically be from 7 a.m. to 8 p.m., Monday through Thursday; and 7 a.m. to 5 p.m. on Fridays and Saturdays. Limited evening work (8 p.m. to 7 a.m.) and work on weekends (7 a.m. to 5 p.m.) would be required for phases 3 and 4.

As discussed previously, a subsurface BART easement runs underneath the northern portion of the project site, as shown in Figure 2. In this portion of the site, structural loads associated with the proposed project must remain equal to or less than existing loads on the BART tunnel. The northern half of the project site is within the BART zone of influence (ZOI). The portion of the structure within the BART easement would be supported by a concrete mat foundation, which would ensure that the existing load imposed on the BART tunnel is maintained. Outside of the easement, but within the BART ZOI, the tower and podium structures would be supported by a deep foundation consisting of double-cased, drilled cast-in-place piers. The installation of drilled cast-in-place piers involves digging cylindrical shafts and then filling them with wet concrete. Thus, no pile driving would be required. Outside of the BART ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation. ²³ Construction methods for the proposed project, including construction depth, techniques and approval processes are discussed in detail in the Geology and Soils Section below.

Construction activities would require temporary sidewalk and parking-lane closures for the entire construction period. The proposed project would develop and implement a construction management plan to anticipate and minimize transportation-related impacts of various construction activities associated with the proposed project. The construction management plan would ensure that overall circulation in the project area is maintained to the extent possible, with particular focus on ensuring transit, pedestrian, and bicycle access and connectivity. The program would supplement and expand, rather than modify or supersede, any manual, regulations, or provisions set forth by the SFMTA, the San Francisco Public Works or other city departments and agencies, and the California Department of Transportation.

Variant

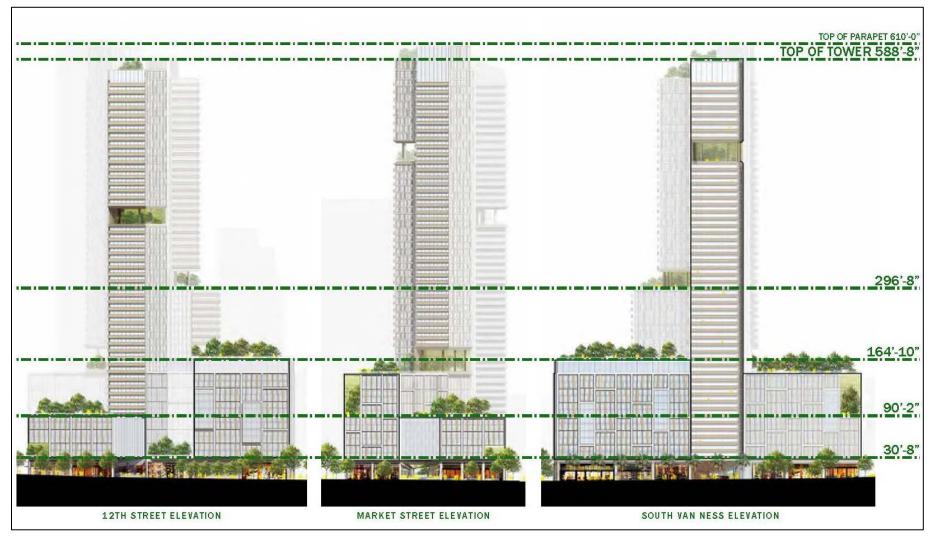
The project sponsor is also considering a taller building design consisting of a single tower and podium (see Figure 18). Elevations for 12th Street, Market Street, and South Van Ness Avenue are presented in Figure 18, while variant renderings are included in the project EIR. As shown in Table 2, the proposed variant would include construction of a single 590-foot-tall, 55-story building. ²⁴ Similar to the proposed project, the variant would have stair/elevator penthouses extending up to 20 feet above the roof height, for a total height of 610 feet. ²⁵ The podium would vary in height, from 90 to 139 feet along the Market Street frontage and up to 164

²³ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation, 10 Van Ness Avenue, San Francisco California, March 16, 2017.

²⁴ The Van Ness and Market Downtown Residential SUD encourages transit-oriented, high-density, mixed-use residential neighborhood development around the intersections of Market Street and Van Ness Avenue and Mission Street and Van Ness Avenue. The current height limit for building towers ranges from 250 to 400 feet. The project variant is intended to reflect the changes to the existing height limits proposed by the Market Street Hub Project. The Hub Project includes changes to existing height limits to provide greater variation in the heights of buildings proposed at the intersection of Market Street and Van Ness Avenue and to better ensure that the area's growth supports the City's goals for housing, transportation, the public realm, and the arts.

Pursuant to Planning Code section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

feet along the southern frontage of the site, as shown in Figure 18. The ground floor would contain the same uses as the proposed project, with comparable retail uses (see Figure 20) and a single residential lobby. As with the proposed project, 336 class I bicycle spaces would be provided on the ground floor for project residents and ground-floor retail spaces, and 61 class II bicycle spaces would be provided on the sidewalk adjacent to the project site, to meet Planning Code requirements. Vehicle parking would be the same as for the proposed project, with 518 vehicle parking spaces provided in a two-level subgrade parking garage/basement with an entrance off 12th Street (see Figure 21).



Source: KPF Associates, 2017

Figure 18: Variant – Building Elevations from 12th Street, Market Street, and South Van Ness Avenue

Table 2: Characteristics of Proposed Project and Variant

(Podium) Iding the
Podium)
Podium)
iding the
_
4 feet
re feet
es
bby, and
spaces
aces

Notes:

- 1 Includes first-floor nonretail uses and second-floor residential amenity uses.
- 2 Includes parking and basement mechanical equipment.
- 3 The Planning Code height and bulk designations for the project site exempt elevator penthouse, roof screens, and other rooftop appurtenances from height limits.
- 4 Vehicle parking spaces: 491 for residential use, 14 for retail use, six for car-share, seven for off-street loading.
- 5 Bicycle parking spaces: 336 class I bicycle parking spaces on the ground floor, 61 class II bicycle parking spaces in on-street bicycle corrals.
- 6 Provided in compliance with Planning Code section 736.93, Usable Open Space per Residential Unit.

Source: 10 South Van Ness LLC, 2017

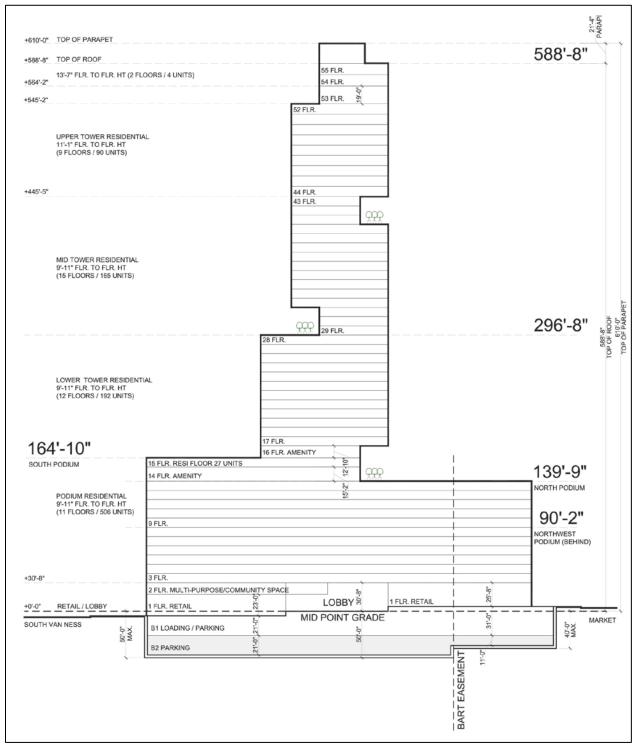


Figure 19: Variant - Section

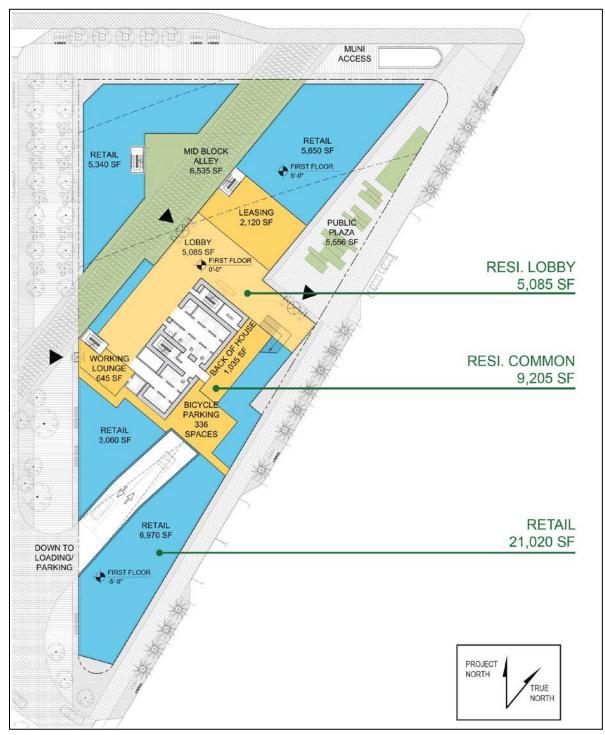


Figure 20: Variant - Ground-Floor Plan

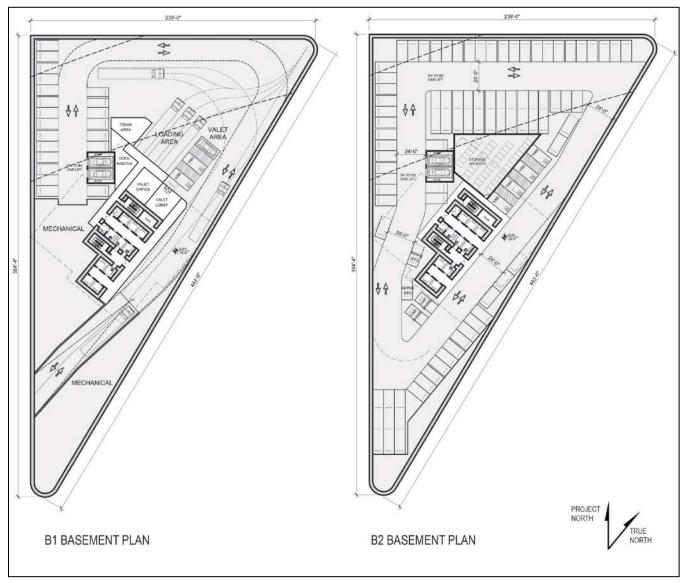


Figure 21: Variant – Basement Garage Floor Plans

The proposed variant would include approximately 984 dwelling units in a combination of studios and one-, two-, and three-bedroom units, similar to the proposed project. However, with the proposed variant, the mix of units would consist of approximately 347 studios, 449 one-bedroom units, 166 two-bedroom units, and 22 three-bedroom units (representative floor plans are shown in Figures 20 through 26). Residential uses would be provided on Levels 3 through 55, with Level 2 serving as an amenity floor for the proposed residential uses. The pedestrian entrances to the residential lobby would be located on South Van Ness Avenue and on the mid-block alley. One elevator from the parking garage/basement would provide access to the residential lobby. From the residential lobby, a second elevator would provide access to the tower. Elevator access may also be available between the below-grade parking garage/basement and the retail spaces.

Green roofs and open space are provided on several levels throughout the building. In addition to open space on the ground floor, podium levels and rooftop, voids located throughout the tower integrate green space. These voids have been designed to break up the building massing and balance programming, mechanical requirements, open space and green roofs at various levels, as depicted in the elevations shown in Figure 18. The voids were also designed to improve wind conditions and were located in strategic areas on the building based on the results of numerous wind tunnel tests.

Open Space. The proposed variant would include usable open space in a combination of publicly accessible open space (12,091 sf), common usable open space (25,565 sf), and private open space (9,550 sf) for a total of 47,206 sf.²⁶ The open space would be dispersed throughout the building as depicted in Figures 26 and 27. The publicly accessible open space would consist of a mid-block alley connecting Market Street to 12th Street and a pedestrian plaza along the northeasterly South Van Ness Avenue frontage, as shown in Figure 20. The common usable open space would be provided on Levels 14, 16, 29, 41, and 53.

Parking/Loading and Mechanical Equipment. The proposed variant would include the same parking and loading facilities and mechanical equipment as the proposed project. As with the proposed project the generator would be located in the basement with the air intake at the ground level.

Circulation and Access. The proposed variant would include the same circulation and access as the proposed project, with the exception of the location of lobby entrances and the configuration of the mid-block alley. For the proposed variant, there would be two entrances to the single residential lobby provided, one off the mid-block alley and one off South Van Ness Avenue. The proposed mid-block alley would provide public access through the project site between Market Street and 12th Street.

Transportation Demand Management. The proposed variant would include the same TDM plan as the proposed project.

Streetscape Improvements and On-Street Parking. The proposed variant would include the same streetscape improvements and on-street parking and loading as the proposed project.

²⁶ Private open space is open space only accessible to one unit or a certain group of units.



Figure 22: Variant – Representative Floor Plans for Levels 3–8

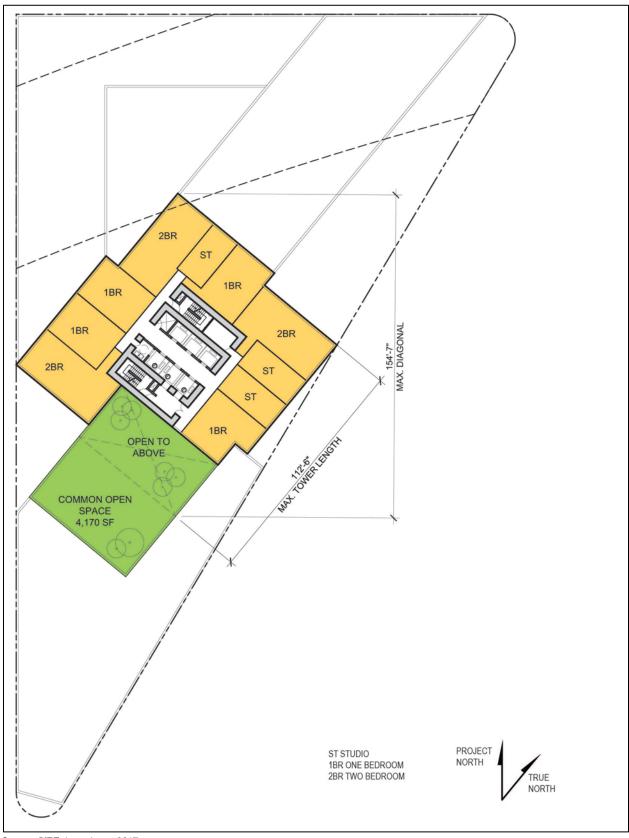


Figure 23: Variant - Representative Floor Plans for Levels 29-31

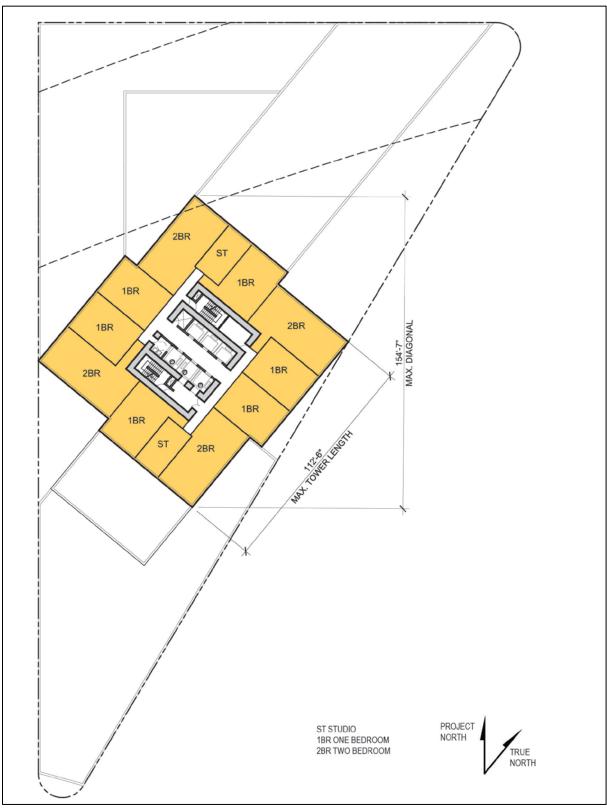


Figure 24: Variant – Representative Floor Plans for Levels 32–40



Figure 25: Variant – Representative Floor Plans for Levels 44–52

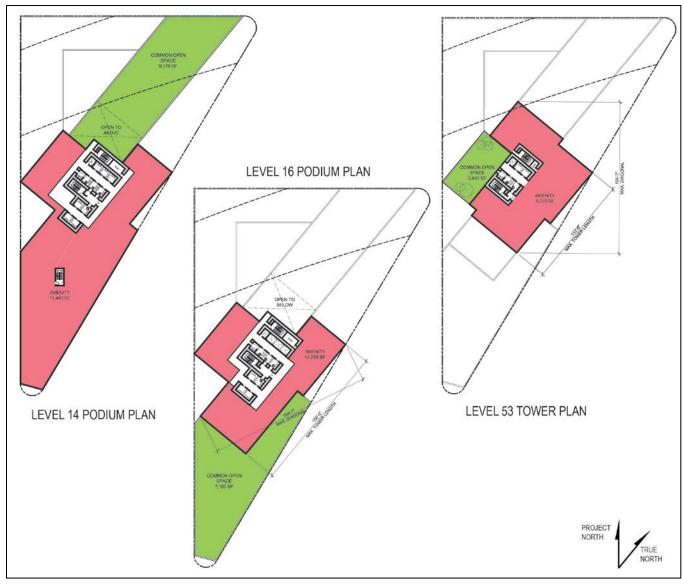


Figure 26: Variant – Amenity and Common Open Space Plans

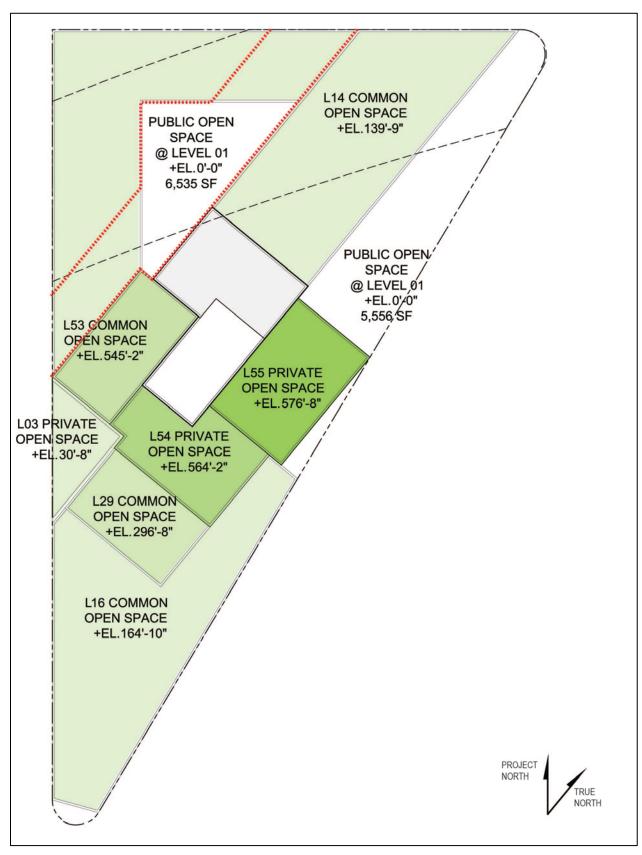


Figure 27: Variant - Open Space Diagram

Sustainability. The proposed variant would incorporate the same sustainability features as the proposed project. As with the proposed project, the variant is also certified as an environmental leadership development project. The proposed variant would also remove the existing 28 trees along the perimeter of the project site frontage on all three sides of the property, and install 61 new street trees in compliance with Public Works Code section 806(c)(2), for a total of 33 net new street trees.

Other Design Features. Wind features for the proposed variant would be in the same locations as described for the proposed project. The tower has been designed with voids on various levels to break up the building massing, provide common and private open space amenities, and improve wind conditions. The voids in the tower massing help reduce wind down-drafting and acceleration around the tower by creating space for the wind to naturally flow through the tower. Absent these voids, stronger winds would occur at the pedestrian level at the base of the tower on 12th Street due to downdrafts and across South Van Ness Avenue due to wind acceleration around the tower massing.

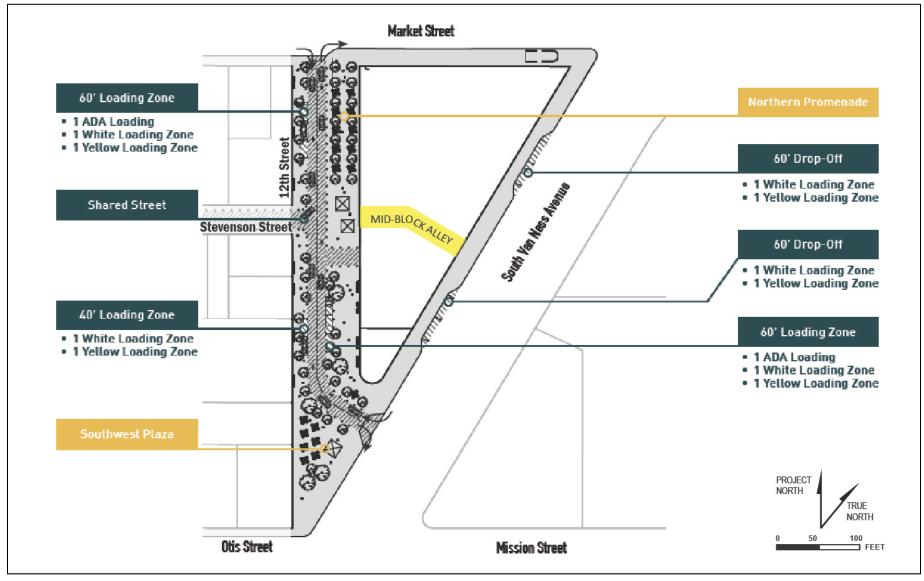
Construction. Construction activities would be the same under the proposed variant as under the proposed project, in terms of phasing, duration and potential for temporary sidewalk and roadway closures. The 55-story proposed single tower project variant would fundamentally have the same foundation type and design methodology as the 41-story double tower construction under the proposed project. Both are anticipated to be constructed with a combination of a mat foundation and deep foundation piers. In both cases, the tower columns and shear walls would be founded on a common pier cap. This pier cap would be supported by drilled piers extending below the BART ZOI, or up to approximately 80 feet bgs, but not to the depth of the underlying bedrock. The proposed variant with one tower would require fewer columns, shear walls, and piers compared to the proposed project with two towers. As under the proposed project, the variant would also not require pile driving.

Straight-Shot Streetscape Option

The straight-shot streetscape plan, shown in Figures 28 and 29 could be included, as on option, with either the proposed project or variant. ²⁷ The straight-shot streetscape plan would exceed Market & Octavia Area Plan and Planning Department standards by creating a pedestrian promenade on 12th Street (see Figure 28). On 12th Street, the eastern sidewalk would be expanded to a width of 40 feet (9 feet of pedestrian throughway, 25 feet for a pedestrian plaza, and an additional 6 feet of pedestrian throughway), while the western sidewalk would be expanded to a width of 18 feet (4 feet of buffer, 10 feet of pedestrian throughway, and an additional 4 feet of buffer), as shown in Figure 29. There would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction.

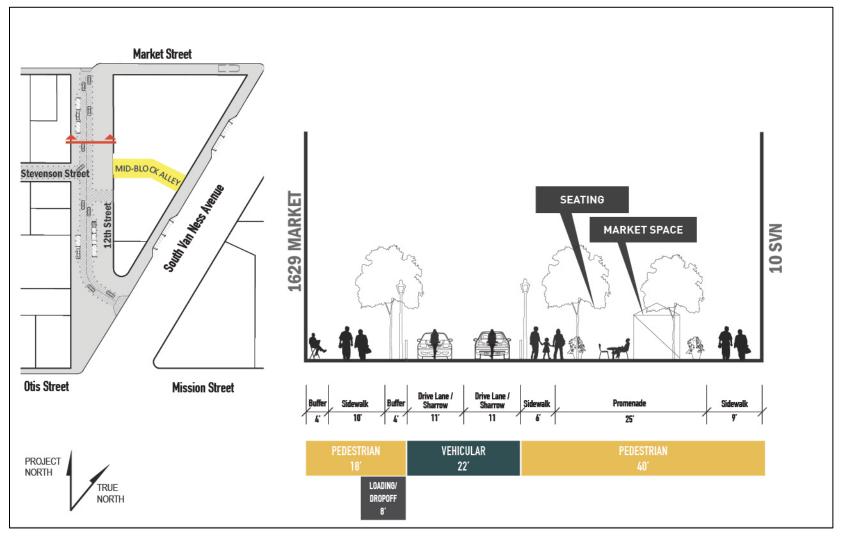
On the west side of 12th Street, the straight-shot streetscape design would include one 60-foot-long loading zone with one ADA loading space, one passenger loading space, and one commercial loading space, and one 40-foot-long loading zone with one commercial loading space and one passenger loading space. One 60-foot-long loading zone with one ADA loading space, one passenger loading space, and one commercial loading space would be included on the east side of 12th Street. The two loading zones on the west side of South Van Ness Avenue, and the pedestrian plaza on the southwest corner of the project site would be included as proposed under the Market Octavia Streetscape Plan.

Although Figures 28 and 29 show the straight-shot streetscape option with a mid-block alley connecting South Van Ness Avenue to 12th Street, if the straight-shot streetscape option were combined with the variant, the mid-block alley would be reconfigured to connect Market Street with 12th Street, as shown in Figure 20.



Source: SITELAB Urban Studio, 2017

Figure 28: Straight-Shot Streetscape Option with the Proposed Project (Plan View)



Source: SITELAB Urban Studio, 2017

Figure 29: Straight-Shot Streetscape Option with the Proposed Project (12th Street Right-of-Way Section)

As under the Market Octavia Streetscape Plan, this option would include 61 class II bicycle spaces along the project frontage sidewalks, with 32 spaces on 12th Street, 21 spaces on Market Street, and eight spaces on South Van Ness Avenue. Under both streetscape design options, the three existing curb cuts on South Van Ness Avenue and the three existing curb cuts on the east side of 12th Street would be removed, and a 20-foot-long curb cut would be created on the east side of 12th Street for access to and from the proposed underground parking garage.

Under the proposed streetscape plan and straight-shot streetscape option, new streetscape features would be consistent with the Better Streets Plan within the sidewalk areas along Market Street and South Van Ness Avenue. Approximately seven new street trees would be installed along the south side of Market Street, and approximately 17 new street trees would be installed along the west side of South Van Ness Avenue. Any new trees planted would comply with the Public Works requirements.

The design of the straight-shot streetscape option would be similar to the proposed streetscape design; the primary difference is that the straight-shot streetscape option would remove parking and instead include wider sidewalks, allowing for more room for pedestrian amenities such as a promenade along the east side of 12th Street and additional street furniture for sitting and marketplace kiosk space. In addition, the raised intersection at Stevenson Street and the mid-block alley under the proposed project streetscape would not be included under the straight-shot streetscape option. This option would propose a shared street concept that would be like a living street.²⁸

Required Approvals

This section describes the approvals that would be required for the proposed project and variant.

Approvals Required for the Proposed Project and Variant²⁹

Actions by the Planning Commission

- Approval of a Downtown Project Authorization pursuant to Planning Code Section 309 for new construction or substantial alteration of structures in C-3 Districts, with exceptions to the requirements of Sunlight Access on Certain Streets (section 146[a]); Reduction of Ground-Level Wind Currents in C-3 Districts (section 148); and Reduction of Shadows on Certain Public or Publicly Accessible Open Spaces in C-3 Districts (section 147).
- Approval of a Conditional Use Authorization pursuant to Planning Code section 303[u]) to permit accessory residential parking above that principally permitted in Planning Code sections 151.1 and 249.33.
- Approval of an in-kind improvements agreement under Planning Code section 424.3(c) for community improvements for the neighborhood infrastructure portion of the Van Ness and Market Downtown Residential SUD neighborhood infrastructure fee.

Living Streets convert standard streets and alleys "into shared spaces that prioritize the use of the space for pedestrians and open space – often by claiming street space to create enhanced and active places for landscaping and seating. Living Alleys typically include special paving, traffic calming, lighting, seating, greening, and other elements to indicate that vehicles are visitors and pedestrians have primacy across the full width of the right-of-way." Source: SF Better Streets, http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-spacelliving-alleys/, accessed April 23, 2018.

Additional approvals required for the variant are discussed separately below, p. 50.

Actions by Other City Departments and Agencies

- Planning Department and Department of Building Inspection (DBI) Approval of the site permit and addenda thereto. Approval of demolition, grading, and building permits for the demolition of the existing buildings and construction of the new building. Permit for underpinning of adjacent structures. Night noise permit for nighttime construction.
- SFMTA Board of Directors Approval of the proposed curb modifications, parking space removal, and bicycle corrals on South Van Ness Avenue, Market Street, and 12th Street.
- SFMTA Department of Parking and Traffic Approval of a special traffic permit for use of a public street space during project construction; approval of foundation, shoring, and dewatering systems as they relate to the Muni ZOI.
- SFMTA Color Curb Program Approval of a request for on-street loading spaces on South Van Ness Avenue and 12th Street.
- Bureau of Streets and Mapping, San Francisco Public Works Subdivision and condominium map
 approval and encroachment permits for sidewalk underground vaults. Permit for removal and
 planting of street trees; approval of a street space permit for use of a public street space during
 project construction (including construction of the proposed wind canopies); street and sidewalk
 permits for any modifications to public streets, sidewalks, or curb cuts.
- San Francisco Public Works Street encroachment permit, to be approved by the director of public works, and by the board of supervisors if required by the director, for wind canopies to be located in the public right-of-way.
- San Francisco Public Utilities Commission Approval of any changes to sewer laterals. Approval of an erosion and sediment control plan before commencing construction, and compliance with post-construction stormwater design guidelines, including a stormwater control plan.
- San Francisco Department of Public Health Approval of a dust control plan because the site is in excess of 0.5 acre (article 22B). Approval of a ventilation plan, in compliance with San Francisco Health Code, article 38, because the proposed project site is located within an area that is identified in the Air Pollutant Exposure Zone Map.³⁰ Approval of a site mitigation plan under the Maher Ordinance (article 22A), because the proposed project is located within the Maher Ordinance Area.³¹
- Board of Supervisors Approval of sidewalk widening.
- Recreation and Park Commission Joint determination with the Planning Commission that the project complies with the requirements of Planning Code section 295.

Actions by Other Agencies

- Bay Area Air Quality Management District Issuance of permits for the installation and operation of an emergency generator.
- BART Plan review and approval of shoring and foundation within the BART ZOI, and issuance of a permit to work within or adjacent to the right-of-way.

San Francisco Department of Public Health, 2014, Air Pollutant Exposure Zone Map, April 2014, https://www.sfdph.org/dph/files/EHSdocs/AirQuality/AirPollutantExposureZoneMap.pdf, accessed August 9, 2017.

³¹ San Francisco Planning Department, Expanded Maher Area Map, March 2015, https://www.sfdph.org/dph/eh/HazWaste/hazWasteSiteMitigation.asp, accessed August 9, 2017.

Additional Approvals Required for the Proposed Variant

Actions by the Planning Commission

- Recommend to the board of supervisors approval of *Planning Code Map and Text Amendments for Height District Reclassification*: from the 120/400-R2 and 400-R-2 Height and Bulk District, as described above, to create a special use district (SUD).³²
- General Plan Amendment: Approval of General Plan Amendment to Downtown Area Plan.

Actions by the Board of Supervisors

- Planning Code Amendments for Height District Reclassification: The building height of the proposed variant would exceed the height limit of the existing 120/400 R-2 and 400-R-2 Height and Bulk District. The board of supervisors would need to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to Planning Code section 302, to create an SUD.
- General Plan Amendment: Approval of General Plan Amendment to Downtown Area Plan.

The creation of a special use district is the instrument by which height and bulk controls can be changed in a small geographic area. The SUD would include increases to the height and bulk limits, and may include some changes to the inclusionary housing requirement.

В. PROJECT SETTING

As described above, the project site is located at the southwest corner of Market Street and South Van Ness Avenue, on the entire block bounded by South Van Ness Avenue to the east, Market Street to the north, and 12th Street to the west. As shown in Figure 2, the project site is roughly triangular in shape and is currently occupied by the 91,088-square-foot San Francisco Honda dealership. 33 A subsurface easement for BART is located underneath the northern third of the project site. Two Muni bus stops and one subsurface Muni rail entrance are located along the project site's frontage with Market Street.

The land uses in the immediate vicinity of the project site are characterized by a mix of residential, commercial, and civic uses. The maximum permitted building heights in the vicinity of the project site (as allowed by existing height districts) range from 40 feet to 400 feet (see Figure 3). Several large, mixed-use commercial, office, and residential buildings are located along Van Ness Avenue and Market Street; they are interspersed with smaller buildings hosting office, commercial, warehouse/storage, and multifamily residential uses.

Cumulative Setting

Cumulative analysis under CEQA may use a list-based or projections-based approach depending on the environmental topic and resources addressed. Table 3 includes cumulative projects within a 0.25-mile radius of the project site that may be considered in determining cumulative environmental effects that are more localized. Table 3 shows the past, present, and reasonably foreseeable relevant projects within 1,500 feet of the project site that, in conjunction with the proposed project or variant, are considered for purposes of the cumulative environmental analysis (see Figure 30). As shown in Table 3, cumulative projects within 1,500 feet of the project site would result in 3,777 residential units, 118,146 gsf of retail, 2,349 gsf of commercial, 542,599 gsf of office, and 142,125 gsf of institutional uses..

48

The historic resources evaluation prepared for the project (Part I Historic Resource Evaluation, Final Version: 10 South Van Ness Avenue (2015-004568ENV) City and County of San Francisco, California) found the existing Honda dealership at 10 South Van Ness Avenue to be eligible for listing in the California Register under Criterion 1 (Events) for its association with the Fillmore West concert venue and Criterion 2 (Persons) for its association with prominent San Francisco music promoter Bill Graham.

Table 3: Cumulative Projects³⁴

		Dwelling	Gross Square Feet				
Address	Case File No.	Units	Retail	Commercial	Office	Institutional	
22-24 Franklin Street ¹	2013.1005E	35	2,100				
98 Franklin Street	2016-014802ENV	345	3,100			75,500	
33 Gough Street ²	No current case						
	number						
1532 Howard Street ¹	2013.1305E	15					
1390 Market Street	2005.0979E						
(Fox Plaza Expansion) ³	2005.0979E						
1546-1564 Market Street ¹	2012.0877E	109	4,810				
1629 Market Street (1601-							
1637 Market Street and 53	2015.005848ENV	584	13,100		27,300		
Colton Street)							
1699 Market Street ¹	2014.0484E	162	4,500				
1700 Market Street	2013.1179E	48		1,549			
1740 Market Street	2014.0409E	110	7,600				
1500 Mission Street (1500 and 1580 Mission Street) ¹	2014.000362ENV	550	35,000		463,300		
1601 Mission Street	2014.1121ENV	220	7,336				
30 Otis Street	2015.010013ENV	354	4,600			13,125	
1 Oak Street	2009.0159E	320	1,300				
30 Van Ness Avenue ⁴	2015.008571ENV	610	21,000		49,999		
200-214 Van Ness Avenue	2015.012994ENV	113	5,000			54,000	
Parcels M and N –	2014 002220ENIV	10		900			
300 Octavia Boulevard	2014.002330ENV	12		800			
Parcel O – 455 Fell Street	2015.002837ENV	108	1,200		2,000		
Parcels R and S	2014.1322ENV	56	7,500				
Parcel T	2014.1509ENV	26					
Total		3,777	118,146	2,349	542,599	142,125	

Notes:

Source: Compiled by AECOM in 2017, updated April 2018.

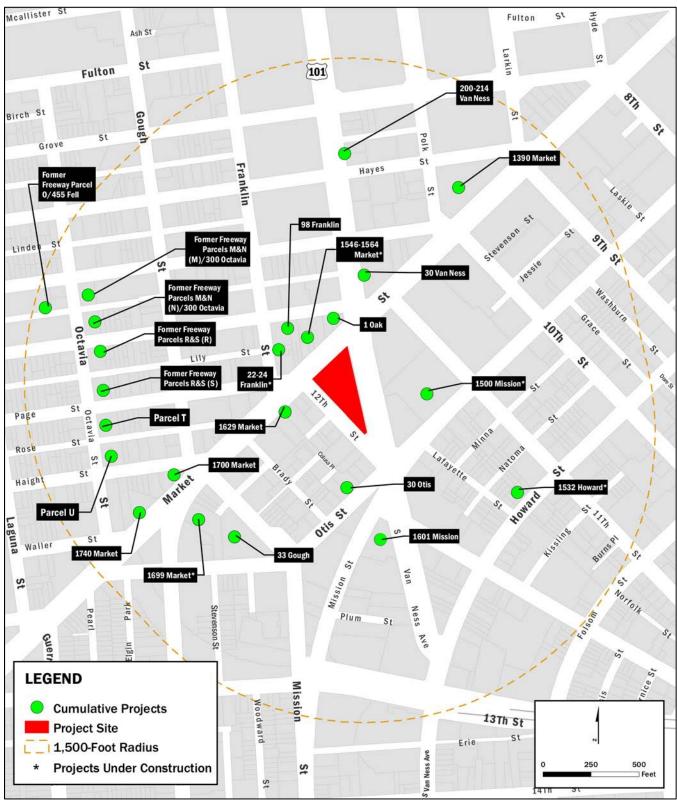
^{1.} Project(s) currently under construction.

^{2.} No project is currently proposed for this site; the environmental evaluation application was withdrawn on April 5, 2018. Modeled as a Hub pipeline project with a 200-foot-tall tower and 80-foot-tall podium.

^{3.} No proposed project currently exists at this site. Modeled as a 120- to 140-foot-tall building.

^{4.} The project is the sale of a four-story, city-owned office building over ground-floor retail/commercial, with continued use of the office by the City until 2019. After 2020, the building is expected to be replaced with a high-rise residential tower, with a proposed Hub height increase to 520/120 feet.

³⁴ The cumulative projects list was identified at the time of the publication of the notice of preparation of an environmental impact report (July 12, 2017). This list was updated in April 2018.



Source: AECOM 2017

Figure 30: Cumulative Projects

In addition to the cumulative projects shown in Table 3, the following transportation improvement plans and area plans are considered for purposes of the cumulative environmental analysis:

Van Ness Bus Rapid Transit – Clearinghouse No. 2007092059. The Van Ness Bus Rapid Transit project proposes operational and physical improvements to facilitate improved Muni bus service along Van Ness Avenue between Mission and Lombard streets. The operational improvements include designating bus-only lanes to allow buses to travel with fewer impediments; adjusting traffic signals to give buses more green light time at intersections; and providing real-time bus arrival and departure information to passengers to allow them to manage their time more efficiently. The physical improvements include building high-quality and well-lit bus stations to improve passenger safety and comfort, as well as providing streetscape improvements and amenities to make the street safer and more comfortable for pedestrians and bicyclists who access the transit stations. Improvements to stations in the vicinity of the project site include locating the Bus Rapid Transit station in the northbound direction of South Van Ness Avenue at Market Street and discontinuing the existing curbside bus stop on South Van Ness Avenue north of Mission Street.

Better Market Street Project – Case No. 2014.0012E. The goal of this project is to make improvements to Market Street to reestablish the street as the premier cultural, civic, and economic center of San Francisco. The Better Market Street Project is a coordinated multi-city agency effort led by San Francisco Public Works, the San Francisco Planning Department, and the SFMTA to redesign and implement transportation and streetscape improvements to Market Street. The project would make improvements to the 2.2-mile segment of Market Street between Octavia Boulevard and The Embarcadero and potentially along Mission Street between Valencia Street and The Embarcadero. The project envisions a new Market Street that is more beautiful and green, has enlivened public plazas and sidewalks full of cafés, showcases public art and performances, provides dedicated bicycle facilities, and delivers efficient and reliable transit. The Better Market Street Project would include transportation and streetscape improvements, including changes to the roadway configuration and private vehicle access; traffic signals; surface transit, such as transit-only lanes, stop spacing, service, stop location, stop characteristics and infrastructure; bicycle facilities; pedestrian facilities; streetscapes; commercial and passenger loading; vehicular parking; plazas; and utilities.

Market & Octavia Area Plan – Case No. 2003.0347. As part of the general plan, the Market & Octavia Area Plan serves to respond to the need for housing, repair the fabric of the neighborhood, and to support transit-oriented development. The Market & Octavia Area Plan includes zoning for residential and commercial uses, prescribes streetscape and open space improvements, and locates high-density land uses close to transit. The Market & Octavia Area Plan established the Van Ness and Market Downtown Residential SUD, in which the project site is located, which is intended to be a transit-oriented, high-density, mixed-use neighborhood with a significant residential presence.

Western SoMa Area Plan – Case No. 2008.0877. The Western SoMa Area Plan is an adopted element of the San Francisco General Plan. The plan area consists of approximately 298 acres in the western portion of the South of Market area, with its northwestern boundary approximately 0.5 mile southeast of the project site. The Western SoMa Area Plan establishes new height and bulk districts, changes to zoning districts, and new density restrictions for the area. The Area Plan also includes streetscape improvements along designated streets and intersections, including installation of signalized pedestrian crossings; sidewalk extensions and corner bulb-outs; gateway treatments such as signage and lighting; physical roadway features such as enhanced hardscape areas, landscaped islands and colored textured pavement; public realm greening amenities (i.e., street trees and planted medians); and other pedestrian enhancements (i.e., street furniture, public restrooms).

The Market Street Hub Project (Hub Project) – Case No. 2015-000940ENV. The Hub Plan would amend the 2008 Market and Octavia Area Plan, for the easternmost portions of the Market and Octavia Area Plan. The overarching objectives of the Hub Plan are to encourage housing, including affordable housing; create safer and more walkable streets as well as welcoming and active public spaces; increase transportation options; and create a neighborhood with a range of uses and services to meet neighborhood needs. ³⁵ The Hub Plan would pursue this vision through changes to current zoning controls in the area to meet plan objectives. This would include changes to height and bulk districts for select parcels to allow more housing, including more affordable housing. The Hub Plan seeks to increase the space available for housing through changes to the planning code and zoning map so as to allow development of a taller, larger, and more diverse array of buildings and heights within the Hub Plan area. Modifications to zoning controls would also allow more flexibility for development of nonresidential uses, specifically, office, institutional, art, and public uses. The plan also calls for public-realm improvements to streets and alleys within and adjacent to the Hub Plan area. The Hub Plan would lower off-street parking maximums to decrease off-street parking capacity within the Hub Plan area, a transit-rich location. In addition to analyzing the Hub Plan at a programmatic level, the Hub Plan EIR would evaluate two individual development projects within the Hub Plan area (i.e., 30 Van Ness Avenue Project and 98 Franklin Street Project) at a project-specific level. The Planning Department is anticipated to release a notice of preparation of an environmental impact report (EIR) for the Hub Plan in May 2018 and have a public scoping meeting to receive oral comments concerning the scope of the EIR in June 2018 and a draft EIR in spring 2019.

It is anticipated that if all of the parcels in the Hub Plan area were to be developed to the proposed maximum height and bulk limits, these changes would result in approximately over 2,000 new residential units (over 5,000 new residents) in addition to new commercial space.

May 2, 2018 Planning Department Case No. 2015-004568ENV

³⁵ A draft plan was released in March 2017. Please see: http://sf-planning.org/market-street-hub-project. Accessed April 21, 2018.

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the San Francisco Planning Code or Zoning Map, if applicable.		
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.		
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.		

This section discusses all applicable (1) variances, special authorizations, and proposed changes to the Planning Code or Zoning Map, (2) conflicts with adopted plans and goals of the City or region, and (3) approvals or permits required from various federal, state, and local agencies necessary for the construction and operation of the proposed project.

Conflicts with adopted plans, policies, or regulations do not, in and of themselves, indicate a significant environmental effect within the meaning of CEQA. To the extent that physical environmental impacts may result from such conflicts, these impacts are analyzed under the relevant environmental topic in the initial study (Section E, Evaluation of Environmental Effects), or in the project EIR. The consistency of the proposed project or variant with plans, policies, and regulations that do not relate to physical environmental issues will be considered by City decision-makers when they determine whether to approve, modify, or disapprove the proposed project or variant.

San Francisco Plans and Policies

San Francisco General Plan

The San Francisco General Plan provides the City's vision for the future of San Francisco. The general plan is divided into 10 elements that apply citywide: Air Quality, Arts, Commerce and Industry, Community Facilities, Community Safety, Environmental Protection, Housing, Recreation and Open Space, Transportation, and Urban Design. The general plan also includes area plans that identify objectives for specific geographic planning areas, such as the Market & Octavia Area Plan, which includes the project site.

The general plan also includes area plans, each of which focuses on a particular area of the city. The project site is in the area covered by the Market and Octavia Area Plan, which establishes objectives and policies that guide development in the Market and Octavia neighborhoods. The general plan also includes a land use index, which consolidates the different land use policies contained in all of the different elements of the general plan, including area plans.

The proposed project or variant would not obviously or substantially conflict with the objectives and policies of the general plan except as noted below. The proposed project or variant, which would be 400- or 590-feet tall, respectively, would potentially conflict with the following policies of the general plan:

- Recreation and Open Space Element
 - o Policy 2.3: Preserve sunlight in public open spaces.
- Urban Design Element

o Policy 3.4: Promote building forms that will respect and improve the integrity of open spaces and other public areas.

The physical environmental impacts that could result from these potential conflicts will be discussed in the EIR. The consistency of the proposed project with general plan objectives and policies that do not relate to physical environmental issues will be considered by City decision makers as part of their deliberations on whether to approve or disapprove the proposed project, and any potential conflicts identified as part of that process would not alter the physical environmental effects of the proposed project.

San Francisco Planning Code

The San Francisco Planning Code, which incorporates by reference the City's zoning maps, governs permitted uses, densities and the configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless a project complies with the San Francisco Planning Code, or an exception or variance is granted pursuant to the provisions of the San Francisco Planning Code, or legislative amendments to the Planning Code are included and adopted as part of the proposed project.

Land Use Controls

The building site component of the project site is in the C-3-G District. Pursuant to Planning Code section 210.3, the C-3-G District "is composed of a variety of uses: retail, offices, hotels, entertainment, clubs and institutions, and high-density residential. Many of these uses have a citywide or regional function, although the intensity of development is lower here than in the downtown core area. As in the case of other downtown districts, no off-street parking is required for individual commercial buildings. In the vicinity of Market Street, the configuration of this district reflects easy accessibility by rapid transit."

The project site is also within the Van Ness and Market Downtown Residential SUD. As noted in San Francisco Planning Code section 249.33, this district is intended to be a transit-oriented, high-density, mixed-use neighborhood with a significant residential presence. The SUD is intended to serve as a transitional zone between larger scale commercial areas downtown and lower scale residential and neighborhood commercial areas to the west.

Planning Code sections 215 through 227 regulate the types of land uses that are principally permitted, conditionally permitted, or not permitted in the C-3-G District. Other Planning Code requirements that are applicable to the proposed project include, but are not limited to, the provisions of:

- Section 124: Floor Area Ratio
- Section 132.1: Setbacks and Streetwall Articulation in C-3 Districts
- Section 134: Rear Yards
- Section 135: Usable Open Space
- Section 138: Public Open Space in C-3 Districts
- Section 138.1: Streetscape and Pedestrian Improvements
- Section 140: Dwelling Unit Exposure
- Section 145.1: Street Frontages
- Section 146: Sunlight Access to Public Sidewalks in C-3 Districts
- Section 147: Reduction of Shadows on Certain Public and Publicly Accessible Open Spaces in C-3
 Districts

- Section 148: Reduction of Ground-Level Wind Currents in C-3 Districts
- Section 151.1: Permitted Off-Street Parking Spaces in C-3 Districts
- Section 152.1: Required Off-Street Freight Loading Spaces in C-3 Districts
- Section 155.2: Bicycle Parking
- Section 166: Car Sharing
- Section 249.33: Van Ness and Market Downtown Residential Special Use District
- Section 295: Height Restrictions on Structures Shadowing Property Under the Jurisdiction of the Recreation and Park Commission
- Section 309: Permit Review in C-3 Districts
- Section 411: Transit Impact Development Fee
- Section 415: Housing Requirements for Residential and Live/Work Development Projects
- Section 424: Van Ness and Market Affordable Housing and Neighborhood Infrastructure Fee and Program
- Section 429: Public Art Requirements

As described in Section A, Project Description, under "Project Approvals," pp. 44 to 47, the project would require the following approvals: approval of a Downtown Project Authorization pursuant to Planning Code section 309 for new construction or substantial alteration of structures in C-3 Districts, with exceptions to the requirements of Sunlight Access on Certain Streets (section 146[a]); Reduction of Ground-Level Wind Currents in C-3 Districts (section 148); and Reduction of Shadows on Certain Public or Publicly Accessible Open Spaces in C-3 Districts (section 147); approval of a Conditional Use Authorization pursuant to Planning Code section 303[u]) to permit accessory residential parking above that principally permitted in Planning Code sections 151.1 and 249.33.

Height and Bulk

The northern portion of the site is in the 120-R-2 height and bulk district; and the southern portion of the site is in the 120/400-R-2 height and bulk district. This allows for a building of 120 feet in height on the northern portion of the project site and a podium of up to 120 feet in height and a tower of up to 400 feet in height on the southern portion of the site. The R-2 bulk district does not set bulk restrictions for buildings under 120 feet in height. For buildings over 120 feet in height, all portions of structures above the podium height are subject to the bulk restrictions in San Francisco Planning Code section 270(e)(2).

Per San Francisco Planning Code section 270(e)(2)(D), buildings between 351 and 550 feet in height may not exceed a plan length of 115 feet, a diagonal dimension of 145 feet, and a maximum average floor area of 10,000 gsf. Per San Francisco Planning Code section 270(e)(2)(F), to encourage tower sculpting, the gross floor area of the top one-third of the tower shall be reduced by 10 percent from the maximum floor plate unless the overall tower floor plate is reduced by an equal or greater volume. A minimum distance of 115 feet must be preserved between all structures above 120 feet in height at all levels above 120 feet in height, as required by the R-2 bulk district.

The proposed variant would exceed the existing height and bulk limits and would require the board of supervisors to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to San Francisco Planning Code section 302, through the creation of a special use district.

Floor Area Ratio

Currently, there is no density limit based on lot size within the C-3-G District, as indicated in San Francisco Planning Code section 210.2, Table 210.2. San Francisco Planning Code section 210.2, Table 210.2, limits the FAR

in the C-3-G District to 6:1 for this district, meaning that the building area for a project cannot exceed six times its lot area. The Van Ness and Market Downtown Residential SUD does not permit use or transfer of development rights to increase FAR.³⁶ An increase in FAR is available through payment of the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee.³⁷

The project site is 51,150 sf in area, which would result in permitted building area of 306,900 sf, which would exceed the permitted 6:1 FAR.³⁸ The project sponsor would pay the fees required by the San Francisco Planning Code to achieve the proposed FAR. The proposed project and variant would comply with the San Francisco Planning Code section 415, the Inclusionary Affordable Housing Program, by providing the required percentage of onsite or offsite BMR units or paying the in-lieu fee.

The Accountable Planning Initiative

The Accountable Planning Initiative added section 101.1 to the San Francisco Planning Code and established eight Priority Policies. These policies are as follows (the sections of this initial study addressing the environmental issues associated with the policies, if any, are included in parenthesis):

- (1) Preservation and enhancement of neighborhood-serving retail uses
- (2) Protection of neighborhood character
- (3) Preservation and enhancement of affordable housing
- (4) Discouragement of commuter automobiles
- (5) Protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership
- (6) Maximization of earthquake preparedness
- (7) Landmark and historic building preservation
- (8) Protection of open space

The demolition of the existing building at 10 South Van Ness Avenue potentially conflicts with Priority Policy No. 7, which calls for the preservation of historic buildings. The construction of either the proposed project or variant potentially conflicts with Priority Policy No. 8, which calls for the protection of parks and open space and their access to sunlight. The physical environmental impacts that could result from these potential conflicts will be discussed in the EIR.

Before issuing a permit for any project requiring an initial study under CEQA or for any demolition, conversion, or change of use, and before taking any action that requires a finding of consistency with the San Francisco General Plan, the City is required to find that the proposed project or legislation would be consistent with the Priority Policies. Staff reports and approval motions prepared for the decision-makers would include a comprehensive project analysis and findings regarding the consistency of the proposed project with the Priority Policies.

Transferable development rights allow a property to exceed the FAR at a development site by purchasing development rights from historic buildings.

In the Van Ness and Market Downtown Residential SUD, increased FAR is allowed with payment of in-lieu fees (the Van Ness inclusionary affordable housing fee and the Van Ness and Market Neighborhood infrastructure fee).

Defined as $6 \times 51,150 \text{ sf} = 306,900 \text{ sf}$.

Other Local Plans and Policies

In addition to the general plan, the planning code and zoning maps, and the Accountable Planning Initiative, other local plans and policies that are relevant to the proposed project are discussed below.

- San Francisco Sustainability Plan: is a blueprint for achieving long-term environmental sustainability by addressing specific environmental issues including, but not limited to, air quality, climate change, energy, ozone depletion, and transportation. The goal of the San Francisco Sustainability Plan is to enable the people of San Francisco to meet their present needs without sacrificing the ability of future generations to meet their own needs. The San Francisco Building Code was amended in 2008 to add chapter 13C, Green Building Requirements, which partially implements the energy provisions of the Sustainability Plan.
- San Francisco Climate Action Strategy: is a local action plan that examines the causes of global climate change and the human activities that contribute to global warming, provides projections of climate change impacts on California and San Francisco based on recent scientific reports, presents estimates of San Francisco's baseline greenhouse gas emissions inventory and reduction targets, and describes recommended actions for reducing the City's greenhouse gas emissions.
- San Francisco Transit First Policy: The Transit First Policy is a set of principles that emphasize the City's commitment that the use of public rights of way by pedestrians, bicyclists, and public transit be given priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement the City's Transit First Policy principles in conducting the City's affairs.
- San Francisco Bicycle Plan: is intended to provide the safe and attractive environment needed to
 promote bicycling as a transportation mode. In addition to identifying the existing bicycle route
 network and proposing short term and long term improvements to this network, the plan identifies
 goals, objectives, and policies to support these proposed improvements.
- San Francisco Better Streets Plan: consists of illustrative typologies, standards, and guidelines for the design of San Francisco's pedestrian environment, with the central focus of enhancing the livability of the city's streets. The requirements of the Better Streets Plan were incorporated into the San Francisco Planning Code as section 138.1.
- Transportation Sustainability Fee Ordinance: requires that development projects that filed environmental review applications prior to July 21, 2015, but have not yet received approval, pay 50 percent of the applicable Transportation Sustainability Fee. TSF funds may be used to improve transit serves and improve pedestrian and bicycle facilities.
- The *Better Market Street Project*: is a plan that envisions a new Market Street that is more beautiful and green, has enlivened public plazas and sidewalks full of cafés, showcases public art and performances, provides dedicated bicycle facilities, and delivers efficient and reliable transit. The goal of the Better Market Street Project is to revitalize and reestablish Market Street as the cultural, civic, and economic center of San Francisco.

The proposed project and variant have been reviewed against these local plans and policies and the proposed project and variant would not obviously or substantially conflict with them.

Regional Plans and Policies

In addition to local plans and policies, there are several regional planning agencies whose environmental, land use, and transportation plans and policies consider the growth and development of the nine-county San Francisco Bay Area. Some of these plans and policies are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project and variant are discussed below

- Plan Bay Area and Regional Housing Needs Plan: prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), is a long-range land use and transportation plan for the nine-county Bay Area that covers the period from 2010 to 2040. Plan Bay Area calls for concentrating housing and job growth around transit corridors, particularly within areas identified by local jurisdictions as Priority Development Areas. In addition, Plan Bay Area specifies strategies and investments for maintaining, managing, and improving the region's multimodal transportation network and proposes transportation projects and programs to be implemented with reasonably anticipated revenue. Plan Bay Area was adopted in July 2017.
- ABAG's *Projections 2013* is an advisory policy document that uses population and employment forecasts to assist in the development of local and regional plans and policy documents.
- The Bay Area Air Quality Management District's *Bay Area 2017 Clean Air Plan* requires implementation of "all feasible measures" to reduce ozone and to provide a control strategy to reduce ozone, particulate matter, toxic air contaminants, and GHGs. The 2017 Clean Air Plan describes the status of local air quality and identifies emission control measures to be implemented.
- The Regional Water Quality Control Board's *Water Quality Control Plan for the San Francisco Bay Basin* is a master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes implementation programs to achieve water quality objectives.

The proposed project and variant have been reviewed against these regional plans and policies and the proposed project and variant would not obviously or substantially conflict with these plans or policies.

58

_

Association of Bay Area Governments and Metropolitan Transportation Commission, *Plan Bay Area* 2040, Final, adopted July 26, 2017.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

	Land Use/Planning		Greenhouse Gas Emissions	Geology/Soils
	Population and Housing	\boxtimes	Wind and Shadow	Hydrology/Water Quality
	Cultural Resources		Recreation	Hazards & Hazardous Materials
\boxtimes	Transportation and Circulation		Utilities/Service Systems	Mineral/Energy Resources
\boxtimes	Noise		Public Services	Agriculture/Forestry Resources
\boxtimes	Air Quality		Biological Resources	Mandatory Findings of Significance

Approach to Environmental Review

This initial study examines the proposed project and variant to identify potential effects on the environment. For each checklist item, the evaluation considered the impacts of the proposed project both individually and cumulatively, with the exception of GHG emissions, which are evaluated only in the cumulative context. All items on the initial study checklist that have been checked "Less than Significant with Mitigation Incorporated," "Less than Significant Impact," "No Impact" or "Not Applicable" indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that topic. A discussion is included for those issues checked "Less than Significant with Mitigation Incorporated" and "Less than Significant Impact" and for most items checked with "No Impact" or "Not Applicable."

For all of the items checked "No Impact" or "Not Applicable" without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience, and expertise on similar projects, and standard reference material available within the Planning Department, such as the City's Transportation Impact Analysis Guidelines for Environmental Review, or the California Natural Diversity Database and maps published by the California Department of Fish and Wildlife.

For the analysis of potential cumulative effects, each environmental topic herein briefly identifies the cumulative context relevant to that topic. For example, for shadow impacts, the cumulative context would be nearby projects that could contribute to cumulative shadow effects on the same open space affected by the project. In other cases, such as air quality, the context would be the San Francisco Bay Area Basin.

Variant

The proposed variant is primarily different from the proposed project in terms of building envelope size, shape, height, bulk, massing and appearance. The overall square footage and breakdown allocated to residential and commercial retail use are nearly identical to the proposed project, including the number of residential units, parking, and open space. Construction would involve the same activities, transportation and circulation issues, duration, depth/amount of excavation, and removal/disposal of building materials as the proposed project. Therefore associated impacts such as air quality and noise impacts from construction would also be identical because the same equipment, vehicles, and material types and quantities would be used for the same period.

As a result, the proposed variant would only be expected to differ in analysis and impacts where the building envelope is a factor (i.e., wind and shadow).

For these reasons, the impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project for nearly all environmental topics, and are not discussed separately.

Straight-shot Streetscape Option

The straight-shot streetscape option could be applied to either the proposed project or the variant. The design of the straight-shot streetscape option would be similar to the proposed streetscape design. The primary difference is that the straight-shot streetscape option would include wider sidewalks expanded to 40 feet on the east side of 12th Street and extended up to 18 feet on the west side of 12th Street. The straight-shot streetscape option would provide more pedestrian streetscape amenities than the proposed streetscape design, applying living streets concepts. ⁴⁰ Additionally, there would be two 11-foot-wide mixed-flow travel lanes, with one lane running in each direction under the straight-shot streetscape option. The straight-shot streetscape option is not discussed further under the topics included in this initial study because there would be no difference in impacts between the straight-shot streetscape option and the proposed streetscape design under either the proposed project or the variant.

As a result, the straight-shot streetscape option will be analyzed and discussed in more detail in only the Transportation and Circulation section of the EIR.

Senate Bill 743 and Public Resources Code Section 21099

Senate Bill 743 was signed into law on September 27, 2013, and became effective on January 1, 2014. Among other provisions, Senate Bill 743 amends CEQA by adding Public Resources Code section 21099 regarding analysis of aesthetics, parking and transportation impacts for urban infill projects.²⁴

Aesthetics and Parking Analysis

Public Resources Code section 21099(d), effective January 1, 2014, provides that "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment." Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

- (1) The project is in a transit priority area. ⁴¹
- (2) The project is on an infill site.⁴²
- (3) The project is residential, mixed-use residential, or an employment center.

Living Streets convert standard streets and alleys "into shared spaces that prioritize the use of the space for pedestrians and open space – often by claiming street space to create enhanced and active places for landscaping and seating. Living Alleys typically include special paving, traffic calming, lighting, seating, greening, and other elements to indicate that vehicles are visitors and pedestrians have primacy across the full width of the right-of-way." Source: SF Better Streets, http://www.sfbetterstreets.org/find-project-types/reclaiming-roadway-space/living-alleys/, accessed April 23, 2018.

⁴¹ CEQA Guidelines section 21099(a)(7) defines a "transit priority area" is defined as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in CEQA Guidelines section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

⁴² CEQA Guidelines section 21099(a)(4) defines an "infill site" as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. "Qualified urban uses" are defined in CEQA Guidelines section 21072 as any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses.

The proposed project and variant meet each of the above three criteria because each (1) is located near major transit routes, (2) is located on an infill site that has been previously developed with industrial and commercial uses and is surrounded by areas of either recently completed or planned urban development; and (3) would be a mixed-use residential project. Thus, this initial study and the EIR do not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.⁴³

The Planning Department recognizes that the public and decision makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. In addition, CEQA section 21099(d)(2) states that a lead agency maintains the authority to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers and that aesthetics impacts do not include impacts on historical or cultural resources (e.g., historic architectural resources). As such, the Planning Department does consider aesthetics for design review and to evaluate effects on historic and cultural resources. Renderings of the proposed project and variant will be included in the EIR.

Automobile Delay and Vehicle Miles Traveled Analysis

CEQA section 21099(b)(1) requires that the Governor's Office of Planning and Research develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects that "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." CEQA section 21099(b)(2) states that upon certification of the revised guidelines for determining transportation impacts pursuant to section 21099(b)(1), automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment under CEQA.

In January 2016, the Governor's Office of Planning and Research published a Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA for public review and comment. The update recommended that transportation impacts for projects be measured using a vehicle miles traveled (VMT) metric. On March 3, 2016, in anticipation of the future certification of the revised CEQA Guidelines, the San Francisco Planning Commission adopted the recommendation of the Governor's Office of Planning and Research to use the VMT metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: The VMT metric does not apply to the analysis of impacts on non-automobile modes of travel such as riding transit, walking, and bicycling.)

Accordingly, this initial study does not contain a discussion of automobile delay impacts. Instead, a VMT and induced automobile travel impact analysis will be provided in the EIR. The topic of automobile delay, nonetheless, may be considered by decision-makers, independent of the environmental review process, as part of their decision to approve, modify, or disapprove the proposed project.

⁴³ San Francisco Planning Department, *Eligibility Checklist: CEQA Section* 21099 – *Modernization of Transportation Analysis*, 2014.0408E, March 30, 2017. This document is on file and available for public review at the Planning Department, 1650 Mission Street, Suite 400, as part of Case File 2014.0408E.

Summary of Potentially Significant Impacts

This initial study evaluates the proposed 10 South Van Ness Avenue project and variant to determine whether they would result in significant environmental impacts. The designation of topics as "Potentially Significant" in this initial study means that these topics will be analyzed in greater depth in the EIR. On the basis of this initial study, the following are the topics for which impacts have been determined to be potentially significant:

- Cultural Resources (historic architectural resources only)
- Transportation and Circulation
- Noise
- Air Quality
- Wind and Shadow

These environmental topics will be evaluated in an EIR prepared for the project.

Summary of Less-than-Significant Impacts

The following potential individual and cumulative environmental effects were determined to be either less than significant or would be reduced to a less-than significant level through recommended mitigation measures included in this initial study:

- Land Use and Land Use Planning (all topics)
- Population and Housing (all topics)
- Cultural Resources (archeological resources, human remains, tribal cultural resources)
- Greenhouse Gas Emissions (all topics)
- Recreation (all topics)
- Utilities and Service Systems (all topics)
- Public Services (all topics)
- Biological Resources (all topics)
- Geology and Soils (all topics)
- Hydrology and Water Quality (all topics)
- Hazards and Hazardous Materials (all topics)
- Mineral and Energy Resources (all topics)
- Agriculture and Forestry Resources (all topics)

These items are discussed and mitigation measures are included, where appropriate, in Section E of this initial study and require no further environmental analysis in an EIR. All mitigation measures identified in this initial study are listed in **Section F**, **Mitigation Measures and Improvement Measures**. These measures have been agreed to by the project sponsor and will be implemented.

For each checklist item, the evaluation has considered both individual and cumulative impacts of the proposed project, the variant, and both streetscape designs.

E. EVALUATION OF ENVIRONMENTAL EFFECTS

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
1.	LAND USE AND PLANNING					
	Would the project:					
a)	Physically divide an established community?				\boxtimes	
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?					

Land Use and Planning

The proposed project and variant share a comparable program of development, with the same types and amounts of land uses. For this reason, the potential land use impacts from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact LU-1: The proposed project or variant would not physically divide an established community. (*No Impact*)

The project site is in the Market & Octavia Area Plan area as designated by the San Francisco General Plan. ⁴⁴ In addition, per the San Francisco Zoning Code, the project site is in the Downtown General Commercial (C-3-G) zoning district, where retail sales and service uses on the ground floor and residential uses above the ground floor are principally permitted. Furthermore, the project site is in the Van Ness and Market Downtown Residential SUD, a transit-oriented, high-density, mixed-use district with a significant residential presence. This SUD is intended to serve as a transitionary zone between larger scale commercial areas downtown to the lower scale residential and neighborhood commercial areas to the west.

The physical division of an established community is typically associated with the loss of mobility through a neighborhood or between a community and outlying areas. For example, construction of a barrier to access within an existing neighborhood (such as a new freeway) or the removal of a means of access (such as a roadway) could result in division of an established community. As discussed in Section A, Project Description, the project site is located in the densely developed SoMa neighborhood, adjacent to residential, commercial, and civic uses. With the exception of the proposed streetscape improvements, the improvements under the proposed project or variant would be limited to the project site. The proposed project or variant would not make any changes to major roadways in the area that would inhibit access through the neighborhood, nor would the proposed project impede pedestrian or bicycle travel through the neighborhood. Both proposed streetscape designs would improve access for bicyclists and pedestrians through and in the vicinity of the project site by widening the

San Francisco Planning Department, Market & Octavia Area Plan, adopted May 30, 2008, last amended 2010, http://208.121.200.84/ftp/files/Citywide/Market_Octavia/Market_and_Octavia_Area_Plan_2010.pdf, accessed April 23, 2018.

sidewalks on 12th Street, providing a mid-block pedestrian alley to allow public access through the project site, and providing sidewalk bulb-outs along the east side of 12th Street to shorten the crossing distances at the intersections with Market Street and South Van Ness Avenue, and to reduce vehicle speed. Vehicle access on 12th Street would continue under both of the proposed streetscape designs. Neither the proposed project nor the variant would construct a permanent physical barrier to neighborhood access or remove an existing means of access. Thus, the proposed project or the variant, would not physically divide the established community. No impact would occur.

Impact LU-2: The proposed project or variant would not conflict with applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

Land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect directly address physical environmental issues and contain targets or standards which must be met to preserve or improve characteristics of San Francisco's physical environment.

As described in Section C, Compatibility with Existing Zoning and Plans, the proposed project and variant would not obviously or substantially conflict with any adopted environmental plan or policy, with the exception of historic preservation policies contained in the general plan and the Accountable Planning Initiative. Physical environmental impacts resulting from these conflicts with historic preservation policies are discussed in topic E.4, Cultural Resources, below, and will be evaluated in the EIR. To the extent that the proposed project or variant conflicts with any general plan objectives and policies that do not relate to physical environmental issues, those conflicts will be considered by decision-makers as part of their decision to approve or disapprove the proposed project or variant independent of the environmental clearance process. Potential conflicts with applicable general plan objectives and policies will continue to be analyzed and considered as part of the review of entitlements applications required for the proposed project and variant independent of environmental review under CEQA.

As designed, the proposed project or variant would require an exception from San Francisco Planning Code section 146(a) related to sunlight access to certain sections of Market Street. Because the proposed project or variant would result in wind comfort criteria exceedances, the proposed project or variant would require an exception from San Francisco Planning Code section 148-Reduction of Ground-level Wind Currents in C-3 Districts, which outlines wind reduction criteria for projects in C-3 Districts. The Planning Code sets criteria for both comfort and hazards and requires buildings to be shaped so as not to cause ground-level wind currents to exceed these criteria.

The proposed variant would exceed the existing height and bulk limits and would require the board of supervisors to approve an amendment to the Zoning Map Height and Bulk Districts (Sheet HT07) pursuant to San Francisco Planning Code section 302, through creation of a special use district. As discussed in Section C, Compatibility with Existing Zoning and Plans, these conflicts would be addressed through the project's entitlement process, including the required variances and exceptions from San Francisco Planning Code requirements.

The proposed project and variant would not conflict with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Impact-C-LU-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a substantial cumulative impacts related to land use and planning. (Less than Significant)

The cumulative projects shown in Table 3 are primarily mixed-use buildings of five or more stories that would support residential uses above ground-level retail uses. In some cases, the lower levels would support civic/institutional uses. Cumulative projects also include area plans and transportation improvement plans/projects that prescribe new zoning requirements for residential and commercial uses, and streetscape and other improvements to the transportation network. As shown in Figure 30, the cumulative projects are generally located in the vicinity of Octavia Boulevard in the Hayes Valley neighborhood and in the vicinity of Van Ness Avenue and Market Street, within the Civic Center and SoMa neighborhoods.

Consistent with the planning vision for the area, as adopted in the Market & Octavia Area Plan, the cumulative projects would develop housing on infill sites in proximity to major transit hubs. Cumulative projects located on the former Central Freeway parcels (along Octavia Boulevard) would be smaller in scale to complement the existing streetscape and the residential and retail uses within Hayes Valley. Taller residential towers would be developed along major thoroughfares, such as Van Ness Avenue and Market Street, and within SoMa. Objectives 1.1 and 1.2 of the Market & Octavia Area Plan identify development of high-density housing projects with active ground-floor uses and streetscape improvements in the area as an opportunity to site housing development of appropriate scale and revitalize the pedestrian experience within the project area.

Therefore, because the proposed project or variant, in combination with the cumulative projects considered in this analysis would reflect the City's desired outcome for this area, including adding transportation and streetscape improvements to improve the public realm of the city, cumulative impacts related to land use and land use planning would be considered less than significant.

Тор	pics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
2.	POPULATION AND HOUSING					
	Would the project:					
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)?					
b)	Displace substantial numbers of existing housing units, necessitating the construction of replacement housing?					
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?					

Population and Housing

For the purposes of this population and housing analysis, the project area is defined as the census tracts within 0.25 mile of the project site. This includes census tracts 124.02, 176.01, 177, 201, 168.02, and 162.

The proposed project and variant share a comparable program of development, with the same number of residential units and similar amount of commercial retail uses. For this reason, the associated population and housing impacts resulting from operation of the proposed variant are anticipated to be to the same as those resulting from the proposed project.

Impact PH-1: The proposed project or variant would not directly or indirectly induce substantial population growth in San Francisco. (*Less than Significant*)

According to the U.S. Census Bureau's most recent American Community Survey, ⁴⁵ the City and County of San Francisco had an estimated population of about 840,763 residents in 2015. Census Tract 201, which includes the project site and immediate vicinity, has a population of 5,548. The total number of housing units within Census Tract 201 is 3,266. In the six census tracts located within the project area (0.25 mile of the project site), the population is 23,863 persons and the total number of housing units is 15,588. ⁴⁶ The project site is currently used as an auto dealership, which employs 108 people. ⁴⁷

Plan Bay Area, which is the current regional transportation plan and Sustainable Communities Strategy that was adopted by the Metropolitan Transportation Commission and ABAG in July 2013, contains housing and employment projections anticipated to occur in San Francisco through 2040. Plan Bay Area calls for an increasing percentage of Bay Area growth to occur as infill development in areas with good transit access and where services necessary to daily living are provided in proximity to housing and jobs. With its abundant transit service

⁴⁵ U.S. Census Bureau, 5-Year Estimates, San Francisco County, Demographic and Housing Estimates, 2011–2015 American Community Survey, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml, accessed July 31, 2017.

⁴⁶ Ibid

Mejias, Luis, Project Manager, Crescent Heights real estate development company, email to Christine Wolfe of AECOM regarding existing employees on the project site, February 21, 2017.

and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth. In the last few years the supply of housing has not met the demand for housing within San Francisco. As described in ABAG's *Regional Housing Need Plan for the San Francisco Bay Area*: 2014-2022, San Francisco's projected housing need from 2014 to 2022 is 28,869 residential units, consisting of 6,234 within the very-low-income level (0–50 percent); 4,639 within the low-income level (51–80 percent); 5,460 within the moderate-income level (81–120 percent); and 12,536 within the above-moderate-income level (120 percent plus). 48,49

As part of the planning process for Plan Bay Area, San Francisco identified priority development areas, which are existing neighborhoods near transit that are appropriate places to concentrate future growth, and the project site is located in the Market-Octavia/Upper Market Priority Development Area of *Plan Bay Area* 2040.⁵⁰

Based on an average household size of 2.19 persons per household for San Francisco, the addition of 984 units under either the proposed project or variant could increase the population at the project site by approximately 2,155 residents. Therefore, the proposed project or variant would result in a residential population increase of approximately 39 percent over the existing population within Census Tract 201, an increase of approximately 9 percent over the existing population of the project area, and approximately 0.26 percent over the existing citywide population. The population increase attributable to the proposed project or variant would represent about 0.77 percent of the projected citywide increase in population of about 280,465 persons anticipated between 2010 and 2040. The growth associated with the proposed project or single tower project variant is anticipated in the San Francisco General Plan, including the Market & Octavia Area Plan. The increase in the number of dwelling units under the proposed project or variant is consistent with Policy 1.2.2 of the Market & Octavia Area Plan, which states: "maximize housing opportunities and encourage high-quality commercial spaces on the ground floor." 53

The proposed project or variant would introduce a new type of commercial activity and change in employment at the site resulting in a total of approximately 155 employees, approximately 87 associated with the retail uses and approximately 68 associated with the building management operations. ^{54,55} This would equate to a net increase of approximately 47 employees at the project site. San Francisco's employment base is projected to increase by approximately 233,500, from about 526,000 total jobs in 2015 to approximately 759,500 in 2040. ^{56,57} Even if all of

⁴⁸ Association of Bay Area Governments, Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022, adopted July 18, 2013, http://www.abag.ca.gov/planning/housingneeds/pdfs/2014-22_RHNA_Plan.pdf, accessed August 9, 2017.

The Area Median Income (AMI) in San Francisco in 2017 for a 4-person household was \$115,300. Therefore, for a 4-person household, the very-low-income level (0–50 percent of AMI) would be up to \$57,650, the low-income level (51–80 percent of AMI) would be \$57,651–\$92,250, the moderate-income level (81-120 percent of AMI) would be \$92,251–\$138,350, and above-moderate-income level (120 percent of AMI and above) would be greater than \$138,351.

Association of Bay Area Governments, Priority Development Area Showcase, http://gis.abag.ca.gov/website/PDAShowcase/, accessed August 4, 2017.

⁵¹ Based on the U.S. Census Bureau's most recent American Community Survey (2011–2015), the total number of housing units in San Francisco is 383,676 and estimated population is 840,763 (which gives an average of 2.19 persons per household).

San Francisco Planning Department, 2014 Housing Element, San Francisco General Plan, adopted April 27, 2015, http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf, accessed April 24, 2018.

San Francisco Planning Department, *Market & Octavia Area Plan*, adopted May 30, 2008, last amended 2010, http://sf-planning.org/market-octavia-area-plan, accessed April 23, 2018.

⁵⁴ San Francisco Planning Department, Transportation Impact Analysis Guidelines for Environmental Review, October 2002.

Mejias, Luis, Project Manager, Crescent Heights real estate development company, email to Christine Wolfe of AECOM regarding existing employees on the project site, February 21, 2017.

California Employment Development Department, Historical Data for Unemployment Rate and Labor Force (Not Seasonally Adjusted) in San Francisco County,

the approximately 47 additional employees associated with the proposed project or variant were conservatively assumed to be new to San Francisco, the project-related employment growth would represent considerably less than 1 percent (0.02 percent) of the city's estimated job growth between the years 2015 and 2040. This estimated increase in employment would be negligible in the context of total jobs in San Francisco.

In general, a project would be considered growth inducing if its implementation would result in substantial population increases and new development either directly or indirectly. The proposed project and the variant would result in the demolition of the existing auto dealership on the site and construction of an infill development including up to 984 residential units over ground-floor commercial uses. However, the proposed project and the variant would be located in an urbanized area and would not be expected to substantially alter existing development patterns in the neighborhood, or in San Francisco as a whole. Furthermore, the proposed project or variant would not indirectly induce substantial population growth in the project area, because it would not involve any extensions of area roads, utilities, or other infrastructure that could enable additional development in currently undeveloped areas.

As such, residential and employment population increases on the project site would be noticeable, compared with existing conditions in Census Tract 201. However, the project-related population and employment increases would not be substantial in relation to the existing number of residents and employees and to the expected increases in the residential and employment populations of San Francisco. Therefore, the proposed project or variant would not directly or indirectly induce substantial population growth or concentration of employment in the project area or citywide that would cause a substantial adverse physical change to the environment. This impact would be less than significant.

Impact PH-2: The proposed project or variant would not displace substantial numbers of existing housing units or people or create demand for additional housing elsewhere. (*No Impact*)

The project site is currently used as an auto dealership and does not contain any residential uses; therefore, no residential or housing unit displacement would result from the demolition of the existing building and construction of the proposed project or variant. However, the estimated project-related employment increase above existing conditions (approximately 47 new employees) would result in an incremental increase in the demand for housing and would contribute to the city's broader need for additional housing. As described in the City's 2014 Housing Element, San Francisco is undertaking rezoning efforts to increase the number of housing units that can be constructed such that the city can meet or exceed its regional housing targets. According to ABAG Projections 2013, in 2015 San Francisco had an estimated 1.27 workers per household. Based on this assumption about workers per household and the conservative assumption that all new employees would be new San Francisco residents, the estimated 47 new employees attributable to the proposed project or variant would generate a potential demand for about 37 new dwelling units, which would be equivalent to 0.1 percent of the overall housing needs allocation of 28,869 units between 2015 and 2022. This potential increase in employment-

 $http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSMoreResult.asp?menuChoice=localAreaPro&criteria=unemployment+rate\\ e&categoryType=employment&geogArea=0604000075&area=San++Francisco+County×eries=unemployment+rateTimeSeries, accessed\\ August 9, 2017.$

⁵⁷ San Francisco Planning Department, 2014 Housing Element, San Francisco General Plan, adopted April 27, 2015, http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf, accessed April 24, 2018.

⁵⁸ Ibid

⁵⁹ Association of Bay Area Governments, *Projections* 2013, December 2013.

related housing demand would not be considered substantial in the context of total housing demand in San Francisco and would be offset by the addition of residential uses provided by the proposed project or variant. In addition, the actual increase in housing demand due to the proposed project or variant may likely be lower, because some of the new employees may not be new to San Francisco.

The proposed project or variant is subject to the provisions of San Francisco Planning Code section 415, Inclusionary Affordable Housing Program, which requires projects of 10 or more residential units to contribute to the creation of below-market-rate housing. The requirements of the Inclusionary Affordable Housing Program differ for development projects based on their date of filing an environmental evaluation application with the San Francisco Planning Department. Based on the application date for the proposed project and variant, the proposed project or variant would be required to provide BMR residential units on the project site (equal to 14.5 percent of the project's overall number of residential units), within a separate building within 1 mile of the project site (equal to 30 percent of the project's overall number of residential units), or through an in-lieu payment to the Mayor's Office of Housing and Community Development (equal to 30 percent of the project's overall number of residential units).

The proposed project or variant would add 984 new residential units and would meet or exceed the requirements of San Francisco Planning Code section 415. Therefore, the proposed project or variant would contribute to the city's housing stock, including affordable housing stock, thereby helping to meet the city's overall housing demands.

In summary, the proposed project or variant would not remove existing housing units and would not displace residents. The proposed retail uses at the proposed project or variant would increase the number of employees at the project site by approximately 47 people, which would not create a significant demand for additional housing. This would be a very small increase compared to the total population of, and the available housing stock in, San Francisco and the Bay Area. Overall, the proposed project or variant would result in no impact related to displacement of housing or residents or creation of housing demand resulting in a need to construct additional housing elsewhere.

Impact-C-PH-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a cumulative impact related to population and housing. (Less than Significant)

As mentioned above, *Plan Bay Area* 2040 includes housing and employment projections anticipated to occur in San Francisco through 2040, and calls for focused growth and development in priority development areas. The *Plan Bay Area* 2040 projections provide the cumulative context for the population and housing analysis.

According to ABAG's *Regional Housing Need Plan for the San Francisco Bay Area*: 2014–2022 and the California Department of Housing and Community Development, the city's projected housing need from 2014 to 2022 is 28,869 residential units. Consistent with this projection, the Housing Element of the San Francisco General Plan states: "[B]ased on the growing population, and smart growth goals of providing housing in central areas like San Francisco, near jobs, and transit, the City must plan for the capacity for roughly 28,870 new units, 57 percent of which should be suitable for housing for the extremely low, very low, low, and moderate income households to

meet its share of the region's projected housing demand."⁶⁰ Further, in November 2014, the City voters enacted Proposition K, which established a directive to construct or rehabilitate at least 30,000 homes by 2020.

The jurisdictional allocation for San Francisco translates into an average annual need of approximately 4,124 net new residential units. As described above, *Plan Bay Area* 2040 anticipates future growth to be focused in priority development areas, such as the Market-Octavia/Upper Market Priority Development Area, where the proposed project and the majority of the cumulative projects shown in Table 3 are located. The past, present, and reasonably foreseeable projects shown in Table 3 would add approximately 3,777 new dwelling units to the area. Overall, these nearby cumulative development projects (including the proposed project or variant) would add approximately 10,325 new residents in 4,761 dwelling units in the project area, which would represent an estimated 186 percent increase in the area's residential population. All residential projects would be required to pay an affordable housing in-lieu fee or provide the required percentage of onsite or offsite BMR units, in accordance with Planning Code section 415.

In addition, past, present, and reasonably foreseeable future projects (including the proposed project or variant) would add up to approximately 118,146 gsf of retail uses, approximately 2,349 gsf of commercial uses, approximately 542,599 gsf of office uses, and approximately 142,125 gsf of institutional uses. The addition of these new uses could generate approximately 2,897 new employees as follows: 337 from retail uses, 9 from commercial uses, 1,966 from office uses, 517 from institutional uses, and 68 associated with the residential and building services portion of the proposed project or variant. ^{61,62}Approximately 1,646 of these new employees are anticipated to be staff of the San Francisco Planning, Building and Public Works Departments, who are being relocated from various buildings in the city, including from 1650 and 1660 Mission Street. ⁶³

Based on the conservative assumption that all new employees could be new San Francisco residents and the conversion and demolition of existing buildings for the cumulative projects would not result in employment decreases, an estimated 2,897 new employees (including new employees associated with the proposed project or variant) would be added within a 0.25-mile radius of the project site.⁶⁴ The approximately 2,897 new employees would generate a potential demand for about 2,282 new dwelling units. Based on information in ABAG's *Projections 2013* and the City's *2014 Housing Element*, the employment-related housing demand associated with the cumulative development projects could be accommodated by the city's projected housing growth of 84,910 units between 2015 and 2040. Furthermore, the cumulative development projects would add to the city's housing stock and could potentially accommodate some of the new employment-related housing demand. This estimated cumulative employment growth would account for less than 1 percent of projected citywide household growth between 2015 and 2040.

Lastly, cumulative projects would not result in the displacement of substantial numbers of housing units as the majority of the approved and proposed projects would demolish vacant buildings, construct new buildings on

San Francisco Planning Department, 2014 Housing Element, San Francisco General Plan, adopted April 27, 2015, http://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf, accessed April 24, 2018.

⁶¹ San Francisco Planning Department, Transportation Impact Analysis Guidelines for Environmental Review, October 2002.

Due to variability in staffing of residential buildings, employees associated with residential and building service uses at the cumulative projects are not factored into these totals, with the exception of the 68 employees anticipated for employment at the residential portion of the proposed project or variant.

Future plans for 1660 Mission Street are not factored into the area totals because future use of the site is not confirmed.

⁶⁴ It is anticipated that the number will be substantial lower than this, given the relocation of existing City of San Francisco staff.

surface parking lots, or otherwise intensify land uses, and the proposed project or variant would not displace any housing units. Although cumulative projects would increase the population and employment in the area, they would not induce substantial population and employment growth beyond what was planned for and anticipated. For these reasons, impacts related to housing displacement and population growth would be less than significant.

Тод	pics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
3.	CULTURAL RESOURCES					
	Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco <i>Planning Code</i> ?					
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?					
c)	Disturb any human remains, including those interred outside of formal cemeteries?					
d)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?					

Cultural Resources

The proposed project and the variant would both involve the demolition of the existing building on the project site and construction would involve the same activities, duration, and depth/amount of excavation. For these reasons, the potential impacts to historic resources, archeological resources, tribal cultural resources, and human remains resulting from construction of the proposed variant would be the same as those resulting from the proposed project.

Impact CR-1: The proposed project or variant would result in the demolition of the existing building at 10 South Van Ness Avenue, a historical resource pursuant to CEQA and the San Francisco Planning Code. (Potentially Significant)

The historic resource evaluation completed for the proposed project and variant found that the structure retains integrity of location, design, setting, and association due to the rareness of the resource and its sociocultural (rather than architectural design) significance as the location of the Fillmore West.⁶⁵ The finding is also based on the presence of extant character-defining features on the exterior and interior, and the reversibility of a number of alterations (including the attached metal screens on the exterior and the auto-lifts in the ballroom space). Therefore, the demolition of the existing structure located at 10 South Van Ness Avenue could cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5, a significant impact. As a result, this topic will be addressed in the EIR.

Impact CR-2: The proposed project or variant's construction could cause a substantial adverse change in the significance of an unknown archeological resource. (Less than Significant with Mitigation)

In addition to assessing impacts to archeological resources that would meet the requirements for listing as a historical resource, impacts to unique archeological resources are also considered under CEQA, as described in

⁶⁵ SWCA Environmental Consultants/Turnstone, Part I Historic Resources Evaluation 10 South Van Ness Avenue, September 2016.

section 15064.5 of the CEQA guidelines, as well as under the California Public Resources Code (section 21083.2). If an archeological site does not meet the criteria for inclusion in the California Register of Historical Resources but does meet the definition of a unique archeological resource as outlined in Public Resources Code section 21083.2, it is entitled to special protection or attention under CEQA. A unique archeological resource implies an archeological artifact, object, or site about which it can be clearly demonstrated that – without merely adding to the current body of knowledge – there is a high probability that it meets one of the following criteria:

- The archeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information.
- The archeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- The archeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archeological resource indicates an archeological artifact, object, or site that does not meet the above criteria. Impacts to non-unique archeological resources and resources that do not qualify for listing in the California Register of Historical Resources receive no further consideration under CEQA.

It should also be noted herein that a disturbed or secondarily deposited prehistoric midden is presumed to be significant for its information potential; under CEQA, and it is legally significant unless or until it is demonstrated to the contrary.

A preliminary archeological review was completed by the San Francisco Planning Department for the proposed project. ⁶⁶ According to the preliminary archeological review, no prehistoric archeological resources are known to occur on the project site. However, four sites, which include prehistoric components, are located within 0.5 mile of the project site. Due to the presence of these four previously identified prehistoric archeological sites in this portion of San Francisco in similar subsurface settings (i.e., dune sand); the site is considered to have moderate-high sensitivity for the presence of prehistoric archeological resources.

Project construction requires subsurface excavation for the construction of underground parking. As such, due to the moderate-high sensitivity of the project area the project has the potential to disturb unknown archeological resources, and these impacts would be considered significant.

Accordingly, to reduce potential impacts to significant archeological resources, the project sponsor has agreed to comply with **Mitigation Measure M-CR-1**: **Conduct Archeological Testing and, if Required, Archeological Monitoring,** which would require the project sponsor to retain the services of an archeologist from the Department Qualified Archeological Consultants List to develop and implement an archeological testing plan. Implementation of **Mitigation Measure M-CR-1** would reduce the impact to a less-than-significant level.

May 2, 2018

⁶⁶ San Francisco Planning Department, Environmental Planning Preliminary Archeological Review: Checklist, Case No. 2015-004568ENV, 10 South Van Ness Avenue, October 12, 2016.

Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring

Based on a reasonable presumption that archeological resources may be present within the project area, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational qualified archeological consultants list maintained by the Planning Department archeologist. The project sponsor shall contact the department archeologist to obtain the names and contact information for the next three archeological consultants on the qualified archeological consultants list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). 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. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).

Consultation with Descendant Communities. On discovery of an archeological site⁶⁷ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative⁶⁸ of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing program (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the department archeologist.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the Planning Department archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- (A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR
- (B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program reasonably before the commencement of any project-related soil-disturbing activities. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring), and site remediation shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to

assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological 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 archeological 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 proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources 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 onsite/offsite public interpretive program during the course of the archeological data recovery program.
- **Security Measures.** Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally 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 soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the coroner's determination that the human remains are Native American remains, notification of the Native American Heritage Commission, which shall appoint a Most Likely Descendant (California Public Resources Code section 5097.98). The archeological consultant, the project sponsor, ERO, and the Most Likely Descendant shall have up to but not beyond six days of 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 section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, 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 a Most Likely Descendant. 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.

Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the final archeological resources report shall be distributed as follows: California Archeological Site Inventory, Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the final archeological resources report 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 that presented above.

With implementation of **Mitigation Measure M-CR-1**, project construction would have a less-than- significant impact on prehistoric or historical archeological resources.

Impact CR-3: The proposed project or variant's construction could disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)

Section 15064.5 of CEQA assigns special importance to human remains, and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in Public Resources Code section 5097.98.

As discussed above, the project area exhibits elevated archeological sensitivity. Prehistoric archeological sites, including some that contain human remains, have been identified within San Francisco. The likelihood of inadvertently exposing currently unknown archeological resources, including those containing human remains, during construction of the proposed project or project variant cannot be dismissed. The inadvertent exposure of previously unidentified human remains, including those interred outside of formal cemeteries, would be considered a significant impact. To reduce this impact to a less-than-significant level, the project sponsor has agreed to comply with Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring, presented above, which includes the procedures required for appropriate treatment of human remains.

With implementation of **Mitigation Measure M-CR-1**, the proposed project or variant would have a less-than-significant impact related to the potential disturbance of human remains.

Impact CR-4: The proposed project or variant's construction could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. (Less than Significant with Mitigation)

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed or determined to be eligible for listing, the national, state, or local register of historical resources. Based on discussions with Native American tribal representatives, in San Francisco, prehistoric archeological resources are presumed to be potential tribal cultural resources. A tribal cultural resource is adversely affected when a project causes a substantial adverse change in the resource's significance.

Pursuant to CEQA section 21080.3.1(d), within 14 days of a determination that an application for a project is complete or a decision by a public agency to undertake a project, the Lead Agency is required to contact the Native American tribes that are culturally or traditionally affiliated with the geographic area in which the project is located. Notified tribes have 30 days to request consultation with the Lead Agency to discuss potential impacts on tribal cultural resources and measures for addressing those impacts. On August 15, 2017, the Planning Department contacted Native American individuals and organizations for the San Francisco area, providing a description of the proposed project and requesting comments on the identification, presence, and significance of tribal cultural resources in the project area. During the 30-day comment period, no Native American tribal representatives contacted the Planning Department to request consultation.

As described under Impact CR-2, there is the potential for archeological resources within the project area, and as described in Impact CR-3, there is the potential for human remains within the project area. Unknown archeological resources may be encountered during construction that could be identified as tribal cultural resources at the time of discovery or at a later date. Therefore, the potential adverse effects of the proposed project on previously unidentified archeological resources, discussed under Impact CR-2, also represent a significant impact on tribal cultural resources. Implementation of Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program, would reduce potential adverse effects on tribal cultural resources to a less-than-significant level. Mitigation Measure M-CR-2 would require either preservation-in-place of the tribal cultural resources, if determined effective and feasible, or an interpretive program regarding the tribal cultural resources developed in consultation with affiliated Native American Tribal Representatives.

Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program

If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for

installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

Implementation of **Mitigation Measure M-CR-2** would reduce potential impacts to tribal cultural resources to a less-than-significant level.

Impact C-CR-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, could result in cumulative impacts to historic resources. (*Potentially Significant*)

There are a number of historic properties in the vicinity of the project site, including several located within the Market Street Masonry Historic District. The vicinity of the project site has undergone various improvements and modernization at different times, and will continue to be developed as part. Therefore, past, present, and reasonably foreseeable projects in the vicinity of the project site could have a cumulative impact related to historic resources, and this topic will be evaluated in further detail in the EIR.

Impact C-CR-2: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would result in cumulative impacts to archeological resources, tribal cultural resources, and human remains. (Less than Significant with Mitigation)

Archeological resources, tribal cultural resources, and human remains are nonrenewable, finite resources. All adverse effects to archeological resources have the potential to erode a dwindling cultural/scientific resource base. Federal and state laws protect archeological resources in most cases, either through project redesign or by requiring that the scientific data present within an archeological resource be archeologically recovered.

As identified in the preliminary archeological review, the project site is part of a larger area that was 1850s residential development and cultivated field. Ground-disturbing activities of past, present, and reasonably foreseeable future projects in the project vicinity have the potential to disturb previously unidentified archeological resources, such as historic features associated with the 1850s residential and agricultural development that could yield information pertaining to agricultural processes during the Gold Rush period. Accordingly, the proposed project in combination with past, present, and reasonably foreseeable future projects could result in a significant cumulative impact on archeological resources associated with this 1850s development. As such, the potential disturbance of archeological resources within the project site could make a cumulatively considerable contribution to a cumulative loss of significant archeological information that would contribute to the development of California, Bay Area, and San Francisco history.

As discussed above, implementation of the approved plans for testing, monitoring, and data recovery would preserve and realize the information potential of archeological resources. The recovery, documentation, and interpretation of information about archeological resources that may be encountered within the project site would enhance knowledge of prehistory and history. This information would be available to future archeological studies, contributing to the collective body of scientific and historic knowledge. With implementation of Mitigation Measures M-CR-1 and M-CR-2, the proposed project's contribution to any potential cumulative impacts related to archeological resources, human remains, or tribal cultural resources would not be cumulatively considerable.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
4.	TRANSPORTATION AND CIRCULATION					
	Would the project:					
a)	Conflict with an applicable plan, ordinance or policy establishing the measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?					
b)	Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?					
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?					
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?					
e)	Result in inadequate emergency access?	\boxtimes				
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?					

Transportation and Circulation

Neither the proposed project nor the variant involves changes to air traffic patterns. Therefore, topic 4c is not applicable and is not discussed further.

The proposed project or variant would generate auto, transit, pedestrian and bicycle trips to and from the project site and would increase demands on the local transportation system, including the roadway network, transit service, pedestrian and bicycle facilities, and vehicle parking and freight loading/service vehicle accommodations, which could result in significant transportation impacts. The proposed streetscape design or the straight-shot streetscape option would change circulation of vehicle, bicycle, and pedestrian traffic in the project area. Also, the proposed project, variant or straight-shot streetscape option could conflict with plans, ordinances, or policies addressing the safety or performance of the circulation system or result in other project-level or cumulative transportation and circulation impacts, which will be discussed in the EIR.

Тор	sics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
5.	NOISE					
	Would the project:					
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?					
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?					
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?					
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?					
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?					

Noise

The project site is not located within an airport land use plan area, ⁶⁹ nor is it in the vicinity of a private airstrip. Therefore, topics 6e and 6f are not applicable and are not discussed further.

Construction activities and traffic as well as operation of the proposed project or variant could result in a substantial increase in ambient noise levels, above current levels, in the vicinity of the project site. In addition, construction and operation of the proposed project or variant would generate noise and vibration in a manner that could exceed local standards and expose sensitive receptors (including existing residents across Market Street to the north, and across 12th Street to the west of the project site, and future residents on the project site) to excessive levels potentially resulting in significant noise and vibration impacts. Noise impacts will be discussed in the EIR.

City/County Association of Governments of San Mateo County, Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport, November 2012. See also Alameda County Community Development Agency, Oakland International Airport, Airport Land Use Compatibility Plan, December 2012.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
6.	AIR QUALITY					
	Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?					
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?					
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?					
d)	Expose sensitive receptors to substantial pollutant concentrations?					
e)	Create objectionable odors affecting a substantial number of people?					

Air Quality

The proposed project or variant would generate emissions and odors and could increase health risk hazards to sensitive receptors (in a manner that could result in significant air quality impacts. Also, the proposed project or variant could also conflict with plans, guidelines, and policies addressing attainment and maintenance of air quality standards within the San Francisco Bay Area Air Basin. Air quality impacts will be discussed in the EIR.

Тор	oics:	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
7.	GREENHOUSE GAS EMISSIONS					
	Would the project:					
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					
b)	Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					

Greenhouse Gas Emissions

Construction of both the proposed project and the variant would involve the same activities, equipment, phasing, and duration. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses and associated energy and water use. Both the proposed project and the variant would be subject to the same regulations related to the reduction of greenhouse gas (GHG) emissions. For these reasons, the GHG emissions resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Greenhouse gas (GHG) emissions and global climate change represent cumulative environmental impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average surface temperature and, thus, cause the resulting climate change effects; instead, the combination of GHG emissions from past, present, and future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

The Bay Area Air Quality Management District has prepared guidelines and methodologies for analyzing GHG emissions. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared *Strategies to Address Greenhouse Gas Emissions*, which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA guidelines. These GHG reduction actions have resulted in a 23.3 percent reduction in GHG emissions in 2012 compared to 1990 levels, exceeding the year 2020 reduction goals outlined in the Bay Area Air Quality Management District's Bay Area 2010 Clean Air Plan, Executive Order (EO) S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).

Given that the City has met the state's and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under EO S-3-05 and EO B-30-15, the City's GHG reduction goals are consistent with EO S-3-05, EO B-30-15, Assembly Bill 32, and the Bay Area 2010 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans

or result in significant GHG emissions, and would, therefore, not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the impact of the proposed project or variant on climate change focuses on the contribution of the proposed project or variant to cumulatively significant GHG emissions. Because the analysis is in a cumulative context, this section does not include individual project-specific impact statements.

Impact C-GG-1: The proposed project or variant would not result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers, energy required to pump, treat, and convey water, and emissions associated with waste removal, disposal, and landfill operations.

The proposed project or variant would increase activity on the project site through the demolition of the existing two-story commercial building and the construction of a mixed-use residential building(s) with up to 984 dwelling units and approximately 30,000 gross square feet of retail commercial. Therefore, the proposed project or variant would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

The proposed project and variant would be subject to regulations adopted to reduce GHG emissions as identified in the GHG Reduction Strategy. As discussed below, compliance with the applicable regulations would reduce the proposed project's or single tower variant's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants.

Compliance with the City's Commuter Benefits Program, Emergency Ride Home Program, transportation management programs, Transportation Sustainability Fee, Jobs-Housing Linkage Program, bicycle parking requirements, low-emission car parking requirements, and car sharing requirements would reduce the transportation-related emissions associated with the proposed project or the variant. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of sustainable transportation modes with zero or lower GHG emissions on a per capita basis.

The proposed project or variant would be required to comply with the energy efficiency requirements of the City's Green Building Code, Stormwater Management Ordinance, and Water Conservation and Irrigation ordinances, which would promote energy and water efficiency, thereby reducing the energy-related GHG emissions associated with the proposed project or the variant. Additionally, the proposed project or variant would be required to meet the renewable energy criteria of the Green Building Code, further reducing energy-related GHG emissions.

Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump, and treat water required for the project.

The waste-related emissions associated with the proposed project or the variant would be reduced through compliance with the City's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote reuse of materials, conserving their embodied energy⁷¹ and reducing the energy required to produce new materials.

Compliance with the City's Street Tree Planting requirements would serve to increase natural carbon sequestration. Other regulations, including those limiting refrigerant emissions and the Wood Burning Fireplace Ordinance would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds.⁷² Thus, the proposed project and variant were determined to be consistent with San Francisco's GHG reduction strategy.⁷³

The project sponsor is required to comply with these regulations, which have proven effective as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the City has met and exceeded EO S-3-05, Assembly Bill 32, and the climate action plan GHG reduction goals for the year 2020. Other existing regulations, such as those implemented through Assembly Bill 32, will continue to reduce a project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of EO S-3-05, EO B-30-15, Senate Bill 32, and the climate action plan. Therefore, because the proposed project and variant are consistent with the City's GHG reduction strategy, they would also be consistent with the GHG reduction goals of EO S-3-05, EO B-30-15, Senate Bill 32, and the climate action plan, would not conflict with these plans, and would, therefore, not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project and variant would not have a cumulatively considerably contribution to GHGs and would result in a less-than-significant cumulative impact regarding compliance with plans established to reduce GHG emissions.

73 c

Embodied energy is the total energy required for the extraction, processing, manufacture, and delivery of building materials to the building site.

Although they are not GHGs, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing emissions of volatile organic compounds would reduce the anticipated local effects of global warming.

⁷³ San Francisco Planning Department, 2017, Greenhouse Gas Analysis: Compliance Checklist for 10 South Van Ness Avenue Mixed-Use Project, January 4, 2017.

Тор	oics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
8.	WIND AND SHADOW					
	Would the project:					
a)	Alter wind in a manner that substantially affects public areas?					
b)	Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?					

Wind and Shadow

The proposed project would demolish the existing building on site and construct two podiums with one approximately 400-foot-tall tower above each podium. Under the proposed variant, the existing building would be demolished and a 590-foot-tall building would be constructed. Similar to the proposed project, the variant would have stair/elevator penthouses extending up to 20 feet above the roof height, for a total height of 420 feet (proposed project) and 610 feet (variant), including roof screens and elevator penthouses. A podium would be constructed under the proposed variant that would rise up to a height of approximately 164 feet above the ground.

Wind

The proposed project and the variant could result in ground-level wind speeds on the project site and on adjacent sidewalks that exceed pedestrian comfort limits and hazard criteria set forth in the San Francisco Planning Code. Wind impacts will be evaluated further in the EIR.

Shadow

The proposed project and the variant could result in net new shading on several existing and future parks and open spaces in a manner that could affect the use and enjoyment of these facilities. Net new shadow could occur on: Patricia's Green, the Page & Laguna Mini Park, the Howard and Langton Mini Park, Hayes Valley Playground, Koshland Park, Buchanan Street Mall, and the future Natoma and 11th Park, all of which are under the jurisdiction of the San Francisco Recreation and Parks Department (RPD). Net new shading could also occur on the future Brady Park, a privately owned, publicly accessible open space. Shadow impacts will be evaluated further in the EIR.

Pursuant to Planning Code Section 260(b)(1)(B), the mechanical and elevator penthouses are exempt from the Planning Code height limits, but are considered in the context of environmental review.

Тор	pics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
9.	RECREATION					
	Would the project:					
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?					
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?					

Recreation

The proposed project would provide 45,175 sf of common usable open space and 2,975 sf of publicly accessible open space, while the proposed variant would provide 25,565 sf of common usable open space, 12,091 sf of publicly accessible open space, and 9,550 sf of private open space. Because development under the proposed variant represents comparable demand for recreational facilities, with the same number of units and similar amount of commercial retail and open space uses and associated park/recreational needs, the potential recreation impacts resulting from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact RE-1: The proposed project or variant would not result in a substantial increase in the use of existing parks and recreation facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated. (*Less than Significant*)

Currently, there are no parks or recreational space on the project site. The following RPD parks, open spaces, and recreational facilities are within 0.5 mile of the project site and are accessible by walking, bicycling, or transit:⁷⁵

- Patricia's Green, located at Octavia Street between Hayes Street and Fell Street, approximately 0.27
 mile north of the project site, is an approximately 0.41-acre park that includes a playground, picnic
 area, and art installations.
- Civic Center Plaza/Joe Alioto Piazza, located at the intersection of Grove Street and Larkin Street, approximately 0.28 mile northeast of the project site, is an approximately 5.4-acre plaza including lawn areas and children's play equipment, located adjacent to City Hall.
- Page and Laguna Mini Park, located mid-block on Rose Street between Laguna Street and Octavia Boulevard, approximately 0.30 mile northwest of the project site, is an approximately 0.16-acre community garden that includes a walkway and seating areas.

RPD administers more than 220 parks, playgrounds, and open spaces throughout the City. RPD also manages 25 recreation centers, nine swimming pools, five golf courses and numerous tennis courts, ball diamonds, soccer fields and other sports venues (San Francisco Recreation and Park Department, Who We Are, http://sfrecpark.org/about/who-we-are/, accessed July 31, 2017).

- Koshland Community Park and Learning Garden, located at the intersection of Page Street and Buchanan Street, approximately 0.36 mile northwest of the project site, is an approximately 0.82-acre park with children's play structures, a plaza, community garden plots, and a half basketball court.
- Hayes Valley Playground, located at the intersection of Hayes Street and Buchanan Street, approximately 0.40 mile northwest of the project site, is an approximately 0.75-acre playground with a stage and plaza to facilitate community gatherings, community garden plots, outdoor fitness equipment, and a 2,500-square-foot clubhouse.
- Page Street Community Garden, located mid-block on Page Street between Buchanan Street and Webster Street, approximately 0.45 mile northwest of the project site, is an approximately 0.08-acre community garden.

RPD is in the process of acquiring a new park property on 11th Street between Minna and Natoma Streets, approximately 0.17 mile southeast of the project site. The timing of construction and programming for the parking is unknown at this time. United Nations Plaza, located on Market Street in the Civic Center area, approximately 0.44 mile east of the project site, is a 2.6-acre pedestrian mall that is not managed by RPD. United Nations Plaza contains hardscaped and landscaped areas and limited seating and is used for weekly farmer's markets and art festivals. In addition, a new privately owned public open space, Brady Park, is proposed approximately 0.07 mile west of the project site. Brady Park is not yet designed and funding has not yet been approved.

The proposed project would add approximately 2,155 permanent residents and approximately 47 net new employees to the project site, increasing the demand for park and recreation facilities in the vicinity of the project site, including those listed above. The proposed project includes open space amenities in the form of commonly accessible terraces, as well as providing publicly accessible open space at the ground level in the form of the proposed mid-block alley, that meet the San Francisco Planning Code requirements for provision of open space. The common usable open space and publicly accessible open space would partially offset the demand for open space generated by project residents.

As such, additional demand for parks, open spaces, and recreational facilities generated by the proposed project or the variant would not be expected to increase use such that it would cause substantial additional physical deterioration of the facilities or require the construction or expansion of recreational facilities. Therefore, the proposed project or the variant would have a less-than-significant impact on parks and recreational facilities.

Impact-C-RE-1: The proposed project or the variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a cumulative impact on recreational facilities or resources. (Less than Significant)

Cumulative development in the project vicinity would result in an intensification of land uses and a corresponding increase in the demand for recreational facilities and resources. The City has accounted for such growth as part of the Recreation and Open Space Element of the general plan. ⁷⁶ In addition, San Francisco voters passed two bond measures, in 2008 and 2012, to fund the acquisition, planning, and renovation of the City's network of recreational resources. Moreover, in June 2016, San Francisco voters approved Local Measure

San Francisco Planning Department, San Francisco General Plan, Recreation and Open Space Element, April 2014, pp. 20–36, http://www.sf@planning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf, accessed July 31, 2017.

(Proposition) B, which extends until 2046 a funding set-aside in the City budget for RPD and also provides for annual increases through 2026–2027 in General Fund monies provided to RPD, meaning that, going forward, RPD will have additional funding for programming and park maintenance. As discussed above, there are seven parks, open spaces, or other recreational facilities within 0.5 mile of the project site, and two additional parks are being proposed. It is expected that these existing recreational facilities would be able to accommodate the increase in demand for recreational resources generated by nearby cumulative development projects. For these reasons, the cumulative projects considered in this analysis would not have a significant cumulative impact on recreational facilities or resources.

May 2, 2018 Planning Department Case No. 2015-004568ENV

Тор	ics:	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
10.	UTILITIES AND SERVICE SYSTEMS					
	Would the project:					
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					
d)	Have sufficient water supply available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?					
e)	Result in a determination by the wastewater treatment provider which 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?					
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?					
g)	Comply with federal, state, and local statutes and regulations related to solid waste?					

Less Than

Utilities and Service Systems

The proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses; thus, associated water use and wastewater generation would be substantially similar. In addition, both the proposed project and variant would reduce the amount of impervious surfaces on the project site, and would include stormwater detention features. For this reason, the potential utilities impacts resulting from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact UT-1: The proposed project or variant would not exceed wastewater treatment requirements of the applicable regional water quality control board, would not exceed the capacity of the wastewater treatment provider that would service the project, or require or result in the construction of wastewater treatment or stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

The San Francisco Public Utilities Commission (SFPUC) provides water, wastewater, and storm drainage services in San Francisco. San Francisco's combined stormwater and wastewater treatment system serves the project site and handles both sewage treatment and stormwater runoff. The Southeast Treatment Plant provides wastewater

and stormwater treatment and management for the eastern portion of the City, including the project site.⁷⁸ The Southeast Treatment Plant is permitted to accept 57 million gallons per day (MGD) during dry weather and up to 250 MGD under peak wet-weather conditions.⁷⁹

Stormwater

The San Francisco Stormwater Management Ordinance (as codified in section 147 of the San Francisco Public Works Code) requires that projects that create and replace at least 5,000 sf of impervious surface implement requirements for managing post construction stormwater runoff consistent with the Stormwater Management Requirements and Design Guidelines. Sites with more than 50 percent impervious surfaces (like the project site) must be designed such that stormwater runoff rate and volume do not exceed predevelopment conditions for the one- and two-year, 24-hour design storm. ⁸⁰ Compliance with the Stormwater Management Requirements and Design Guidelines would ensure that stormwater generated by the proposed project or the variant is managed onsite such that the project would not contribute additional volumes of polluted runoff to the City's stormwater infrastructure. The Stormwater Management Requirements and Design Guidelines also require that a stormwater control plan be prepared for projects proposing to replace 5,000 sf or more of impervious surface. Stormwater control plans are reviewed by the SFPUC to determine whether a proposed project meets performance requirements.

Implementation of the proposed streetscape improvements would not alter the flow of stormwater onsite because the public-right-of way is already paved, and there would be no increase in the volume of stormwater generated at the project site. The proposed project or the variant would include landscaped open space areas and would result in a net decrease in impervious surfaces overall. The proposed project or variant would replace at least 5,000 sf of impervious surface, thus the proposed project or variant would be required to prepare a stormwater control plan documenting compliance with the requirements of the site mitigation plan. The plan would be prepared as the design of the proposed project or variant is further refined. Furthermore, the proposed project or the variant would include rainwater and stormwater collection features that would detain rainwater and stormwater for reuse onsite. Due to the decrease in net impervious surface area on the project site, inclusion of rainwater and stormwater collection features for reuse onsite, and preparation of a stormwater control plan, the proposed project or the variant would not result in increased stormwater run-off that would require the construction of new wastewater treatment or storm drainage facilities, and impacts would be less than significant.

Wastewater

The proposed project or variant would add residential and retail uses to the project site, which would generate approximately 85,986 gallons per day of wastewater, representing a 0.15 percent increase of the SFPUC's Southeast Treatment Plant's overall capacity. To plan for growth in the SFPUC's service area and the resulting increase in wastewater generation, the SFPUC uses population growth estimates provided by the City. As stated in Impact PH-1, population growth at the project site is planned for in city planning documents. Therefore, the increase in wastewater generated at the project site would not represent an increase beyond the amount projected by the SFPUC and thus would be within the planned capacity of the existing combined system. Therefore, the

⁷⁸San Francisco Public Utilities Commission, San Francisco's Wastewater Treatment Facilities, June 2014, http://sfwater.org/modules/showdocument.aspx?documentid=5799, accessed January 24, 2017.

⁷⁹San Francisco Public Utilities Commission, Southeast Treatment Plant, http://sfwater.org/index.aspx?page=616, accessed January 24, 2017.

⁸⁰ San Francisco Public Utilities Commission, San Francisco Stormwater Management Requirements and Design Guidelines, May 2016, http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=9026, accessed August 10, 2017.

⁸¹ San Francisco Public Utilities Commission, Water Supply Assessment for the 10 South Van Ness Project, adopted February 2, 2017.

proposed project or variant would not result in the construction of new wastewater treatment facilities, and impacts would be less than significant.

Additionally, wastewater generated by the proposed project or variant would meet the wastewater pretreatment standards of the SFPUC, as required by the San Francisco Industrial Waste Ordinance. These requirements are aimed at implementing the San Francisco Bay Regional Water Quality Control Board standards. Therefore, the proposed project or variant would not exceed wastewater treatment requirements, and impacts would be less than significant.

Impact UT-2: The proposed project or variant would not require new or expanded water supply resources or entitlements or require or result in the construction of water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

SFPUC serves approximately 2.6 million customers in the Bay Area, with approximately one-third of water deliveries going to retail customers in San Francisco. As the water provider for San Francisco, SFPUC prepares an urban water management plan every five years to project future demand and evaluate the adequacy of existing and projected supply. Demands that are not met by local runoff are met with water diverted from the Tuolumne River through the Hetch Hetchy System. On average, the Hetch Hetchy System provides approximately 85 percent of the water delivered by the SFPUC. During dry years, the water received from the Hetch Hetchy System can amount to over 90 percent of the total water delivered. SFPUC's 2015 urban water management plan contains water demand predictions based on ABAG's 2013 projections for employment and housing growth. According to the 2015 urban water management plan, water supply will be 77.5 MGD in 2020. Water demand in 2020 is anticipated to be 77.5 MGD. Water demand and supply are projected to be equivalent (i.e., no shortages or surpluses are predicted) through 2040.⁸²

SFPUC plans to supplement water supply sources with increased groundwater extraction and recycled water projects, in addition to expanded recycled water and nonpotable water use requirements. With these projects and requirements, total water supply would increase to 79 MGD in 2025.⁸³ The 2015 urban water management plan indicates that the SFPUC would be able to meet retail water demand through 2040 during normal-year and single dry-year events.⁸⁴ During normal precipitation years, the SFPUC will have adequate supplies to meet its projected retail water demands. If a multiple dry year event occurs, the SFPUC would experience shortages in 2040 during years two and three without development of additional supply concepts.

The proposed project or variant would result in the addition of residential and retail uses to the site, which would increase water demand at the site. The proposed streetscape improvements would include more landscaping than is present at the site under current conditions, which would require water supply for irrigation. Based on the water supply assessment prepared for the proposed project and reviewed and approved by the SFPUC, the proposed project would have an estimated demand of 116,581 gallons per day for both potable and nonpotable water supplies. Because the proposed variant would include comparable residential uses, retail uses, and landscaping as the proposed project, the water supply and demand for the proposed variant is anticipated to be

⁸² San Francisco Public Utilities Commission, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016.

⁸³ Ibid.

 $^{^{84}}$ Ibid.

⁸⁵San Francisco Public Utilities Commission, Water Supply Assessment for the 10 South Van Ness Project, adopted February 2, 2017.

approximately the same as the proposed project. The project specific water supply assessment concluded that SFPUC would have adequate water supplies to accommodate the project.

Additionally, the project incorporates several water saving measures. For example, during project construction, the project sponsor and project building contractor must comply with article 21 of the San Francisco Public Works Code, which requires that nonpotable water be used for dust-control activities unless permission is obtained from SFPUC. Article 12C of the San Francisco Health Code, Alternate Water Sources for Non-Potable Applications, allows the collection, treatment, and use of alternate water sources for nonpotable applications. In addition, article 12C requires that all new development projects of 250,000 sf or more of gross floor area install onsite water systems to treat and reuse available alternate water sources for toilet and urinal flushing and irrigation. Developments over 250,000 sf of gross floor area must submit a water budget application and accompanying Water Use Calculator to the SFPUC. Because the proposed project or variant would be over 250,000 gsf, the proposed project or variant would employ a blackwater recycling system, which would recycle wastewater generated by in the building for onsite nonpotable uses, including toilet flushing, irrigation, and HVAC/cooling demand.

The entirety of the proposed project's or variant's toilet/urinal, HVAC, and irrigation water demands would be met by onsite sources, including the proposed blackwater recycling system and proposed stormwater/rainwater collection features. In addition, in compliance with Title 24 of the California Code of Regulations and the City's Green Building Ordinance, the proposed project or variant would include water-efficient fixtures to reduce the amount of potable water used for building functions. The proposed project or variant would comply with chapter 63 of the San Francisco Administrative Code, the San Francisco Water Efficient Irrigation Ordinance, which requires projects to design, install, and maintain efficient irrigation systems, utilize low water-use plantings, and set a maximum applied water allowance (an annual water budget). Overall, the proposed project or variant is anticipated to offset approximately 29 percent of the overall water demand of the proposed project or variant through compliance with this provision.⁸⁶

Because the water demand associated with the proposed project or the variant could be accommodated by SFPUC's existing and planned supplies, and because the proposed project or variant would include water saving measures, the proposed project or variant would not result in a substantial increase in water use on the project site that would result in the need for new water supply entitlements or resources or the construction of new water treatment facilities. Therefore, impacts related to water supply would be less than significant.

Impact UT-3: The proposed project or variant would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and would comply with federal, state, and local statutes and regulations related to solid waste. (Less than Significant)

In September 2015, the City approved an agreement with Recology, Inc. for the transport and disposal of the City's municipal solid waste at the Recology Hay Road Landfill in Solano County for approximately nine years or until 3.4 million tons of municipal solid waste have been disposed (whichever occurs first). The City would have an option to renew the agreement thereafter for an additional six years or until an additional 1.6 million tons have

³⁶ Ibid.			
ibia.			

been disposed (whichever occurs first).⁸⁷ The Recology Hay Road Landfill is permitted to accept up to 2,400 tons of waste per day, and, assuming the maximum throughput is transferred to the landfill each day, the landfill has permitted capacity to receive waste approximately through the year 2034.⁸⁸ The current estimated rate of disposal is approximately 1,851 tons, which would result in closure in approximately 2041.⁸⁹ Recology also operates San Francisco's Transfer Station, located at 501 Tunnel Avenue in San Francisco. The San Francisco Transfer Station has a maximum permitted throughput of 3,000 tons per day.

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires municipalities to adopt an Integrated Waste Management Plan to establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling. San Francisco Ordinance No. 27-06 requires a minimum of 75 percent solid waste diversion by 2010, which it exceeded by 5 percent, and has a goal of 100 percent solid waste diversion, or "zero waste," to landfill or incineration by 2020. 90 Chapter 14 of the San Francisco Environment Code, the Construction and Demolition Debris Recovery Ordinance, requires that construction and demolition debris be transported by a registered transporter and be processed by a registered facility that must recover for reuse or recycling and divert from landfill at least 65 percent of construction and demolition debris. Pursuant to section 4.103.2.3 of the San Francisco Green Building Code, new high-rise residential buildings are required to divert at least 75 percent of construction and demolition waste. Projects that would fully demolish an existing structure must submit a waste diversion plan to the Director of the San Francisco Department of the Environment at the time of application for a demolition permit. The waste diversion plan must provide a list of all material types and volumes anticipated from the demolition; the market or destination for each material; the estimated recovery rate (diversion from landfill) by material or market; and the anticipated transporter for each material type. Chapter 19 of the San Francisco Environment Code, the Mandatory Recycling and Composting Ordinance, requires all employees, visitors, residents, and businesses within the city to separate their recyclables, compostables, and landfill trash.

The rate of waste disposal of the proposed project or variant is anticipated to be consistent with waste disposal rates within the city as a whole. Furthermore, the Hay Road Landfill, as discussed above, has adequate capacity to serve increased demand from the proposed project or the variant. Through compliance with all City ordinances related to waste during both construction and operation, implementation of the proposed project or variant would not impede the City's waste diversion goals. Because the proposed project or variant would involve demolition of a building in full and would construct a high-rise residential building, the project sponsor would be required to prepare and implement a waste diversion plan and divert at least 75 percent of construction and demolition waste, as required by the Construction and Demolition Debris Recovery Ordinance and the San Francisco Green Building Code. Therefore, solid waste impacts would be less than significant.

94

⁸⁷ City and County of San Francisco, Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County, Final Negative Declaration, Planning Department Case No. 2014.0653E, May 21, 2015, and further amended July 20, 2015, http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf, accessed January 26, 2017.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰San Francisco Department of the Environment, 2016, Zero Waste – Frequently Asked Questions, https://sfenvironment.org/zero-waste-faqs, accessed January 26, 2017, and April 24, 2018.

Impact-C-UT-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a significant cumulative impact related to utilities and services systems. (Less than Significant)

As discussed above, the SFPUC provides water, wastewater, and stormwater services within the city and Recology provides solid waste service. The SFPUC has incorporated the demand associated with cumulative projects into its future water supply and wastewater service projections identified in the urban water management plan⁹¹ As discussed under Impact C-PH-1, cumulative projects would not result in population growth beyond what has been projected by the City and ABAG as the basis for water supply and wastewater service projections. The City and County of San Francisco currently exceeds statewide goals for reducing solid waste and is expected to reduce solid waste volumes further in the future through several ordinances. For these reasons, cumulative utilities and service systems impacts would be less than significant.

⁹¹San Francisco Public Utilities Commission, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
11.	PUBLIC SERVICES					
	Would the project:					
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 any of the public services such as fire protection, police protection, schools, parks, or other services?					

/ --- Th---

Public Services

Impacts to parks and recreational facilities are discussed under topic E.9, Recreation.

The proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses and associated police, fire, and school needs. For this reason, the potential public services impacts resulting from operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact PS-1: The proposed project or variant would increase demand for police or fire services but not to the extent that would require new or physically altered of facilities the construction of which could cause significant environmental effects. (Less than Significant)

The project site is served by the San Francisco Police Department and the San Francisco Fire Department. The San Francisco Police Department (SFPD), headquartered at 850 Bryant Street, divides the city into two divisions, Metro and Golden Gate, and each division is divided into five districts. The project site is located within the Metro Division and is part of the Southern Police District, which is made up of the South of Market, South Beach, Mission Bay areas. The nearest police stations are: the Tenderloin Task Force Police Station, at 301 Eddy Street, approximately 4,000 feet (0.76 mile) northeast of the project site, the Mission Police Station, at 630 Valencia Street, approximately 4,000 feet (0.76 mile) southwest of the project site and the Northern Police Station, at 1125 Fillmore Street, approximately 4,500 feet (0.85 mile) northwest of the project site. 92

The closest fire station is Station No. 36, at 109 Oak Street, approximately 400 feet (0.08 mile) northwest of the project site. Other nearby fire stations include Station 5, at 1301 Turk Street, approximately 4,000 feet (0.80 mile) northwest of the site; Station No. 6, at 135 Sanchez Street at Henry Street, approximately 4,500 feet (0.85 mile) southwest of the project site; Station No. 3, at 1067 Post Street at Polk Street, approximately 4,500 feet (0.85 mile) northeast of the project site, and Station No. 7, at 2300 Folsom Street at 19th Street, approximately 5,000 feet (0.95 mile) south of the project site. 93

⁹²San Francisco Police Department, Police District Maps, http://sanfranciscopolice.org/police-district-maps, accessed December 20, 2017.

⁹³ San Francisco Fire Department, Fire Station Locations, http://sf-fire.org/FIRE-STATION-LOCATIONS, accessed April 24, 2018.

The proposed project or variant would be equipped with fire prevention systems, such as fire sprinklers, smoke alarms, and fire alarms. Construction of the proposed project or variant would be required to comply with the California Fire Code, which establishes requirements pertaining to fire protection systems, including the provision of state-mandated fire alarms, fire extinguishers, appropriate building access and egress, and emergency response notification systems.

The proposed project or variant would add 984 residential units and approximately 30,350 or 30,450 gsf of retail uses, respectively, to the project site. Using the average household size of 2.19 persons per household in the city, 984 residential units would result in 2,155 additional permanent residents on the project site. ⁹⁴ This increase would result in more calls for police protection, fire protection, and emergency response services relative to the existing use onsite, which does not support any permanent residents. However, given the overall demand for these services in San Francisco, the increase in demand for police and fire services resulting from the proposed project would be incremental and would be accommodated by existing facilities and personnel. The project site is in close proximity to several San Francisco Police Department and Fire Department stations, which would minimize response times to calls received from the proposed project or variant. Implementation of the proposed project or variant would therefore not require the construction of new or alteration of existing police or fire facilities. This impact would be less than significant.

Impact PS-2: The proposed project or variant would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered schools. (*Less than Significant*)

Implementation of the proposed project or variant would result in 984 residential units and an anticipated population of 2,155 residents, ⁹⁵ which would result in the need to accommodate approximately 99 K–12 students in local schools. ^{96,97} Some of these students would attend schools operated by the San Francisco Unified School District (SFUSD), while others might attend private schools. It is anticipated that existing SFUSD schools in the project vicinity would be able to accommodate this minor increase in demand. Furthermore, the project sponsor would be required to pay a school impact fee based on the construction of net new residential square footage to fund SFUSD facilities and operations (through the DBI) pursuant to section 17620 of the California Education Code. Section 65995(h) of the California Government Code determines that such fees are considered full and complete mitigation of the impacts of development on local school systems. Because developer school fees would be paid, the impact related to provision of school services would be less than significant.

⁹⁴U.S. Census Bureau, 5-Year Estimates, San Francisco County, Demographic and Housing Estimates, 2011–2015 American Community Survey, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml, accessed July 31, 2017.

⁹⁵Based on the U.S. Census Bureau's most recent American Community Survey (2011–2015), the total number of housing units in San Francisco is 383,676 and estimated population is 840,763 (which gives an average of 2.19 persons per household).

⁹⁶San Francisco Planning Department, Transit Center District Plan and Transit Tower Final Environmental Impact Report, Case No. 2007.0558E and 2008.0789E, May 24, 2012, p. 548. Based on student generation rates of 0.25 students for BMR units and 0.05 students for market rate units.

⁹⁷The per unit student generation rate is greater for BMR residential units; therefore, this analysis conservatively assumes the proposed project or the variant would provide 25 percent BMR units onsite.

Impact PS-3: The proposed project or variant would not increase demand for other government services, and would not result in a substantial adverse impact due to the construction or alteration of facilities to provide such services. (Less than Significant)

The San Francisco Public Library (SFPL) provides library services in San Francisco, operating the Main Branch at Civic Center as well as 27 neighborhood branches. As of 2016, the public library system had a collection of 3,809,319 items, consisting of books, CDs, DVDs, sheet music, periodicals, government documents, and software. During the 2015–2016 fiscal year, the San Francisco Public Library had a total of 6,362,573 library visits; branch libraries averaged 150,945 library visits. Peighborhood branches provide reading rooms, book lending, information services, technological resources, and public programs, including youth-oriented programs. Peighborhood branches for the 2015–2016 fiscal year was 44,393 items, although any library branch can receive materials from the system's overall collection. A total of 10,778,428 items across all libraries were circulated in 2015–2016.

As stated above, the proposed project and the variant would construct 984 residential units, which would result in 2,155 additional permanent residents on the project site. This increase in permanent residents would result in increased demand for libraries and other government services. However, given the overall demand for these services in San Francisco, the increase in demand for libraries and other government services resulting from the proposed project would be incremental. Project-related increases to the city's tax base would support the provision of libraries and other government services in the city. The proposed project and variant would be closest to Main Branch of the San Francisco Public Library; however, the Main Branch and other public and private libraries available in the area and throughout San Francisco are available to serve the additional 2,155 permanent residents. In addition, the San Francisco Public Library regularly evaluates resources to ensure that adequate service is maintained. The Main Branch, other public and private libraries in the project area, and other government services would be able to accommodate the residents of the proposed project and variant. Impacts to library services and other government services would therefore be less than significant.

Impact-C-PS-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a significant cumulative impact related to public services. (Less than Significant)

Cumulative development in the project area would incrementally increase demand for police, fire, school, and library services, but not beyond levels anticipated and planned for by public service providers. The project sponsor and the sponsors of other development projects would contribute to the SFUSD through development fees, and property taxes generated by the projects would contribute to services from the San Francisco Police and Fire departments. Therefore, cumulative impacts to public services would be less than significant.

⁹⁸San Francisco Public Library, System-wide Statistics FY 2015–2016, September 2016, http://sfpl.org/pdf/about/administration/statistics-reports/Statisticsbylocation2015-16.pdf, accessed January 27, 2017.

⁹⁹San Francisco Public Library, Statistics by Location 2015–2016, June 30, 2016, http://sfpl.org/pdf/about/administration/statistics-reports/Statisticsbylocation2015-16.pdf, accessed October 17, 2016.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
12.	BIOLOGICAL RESOURCES					
	Would the project:					
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 California Department of Fish and Game or U.S. Fish and Wildlife Service?					
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					
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?					
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?					
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					
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?					

Less Than

Biological Resources

Construction for both the proposed project and the variant would involve the same location and activities, in an urban area of San Francisco. As under the proposed project, construction and operation of the proposed variant would result in 33 net new street trees. For these reasons, the potential biological resources impacts from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

The project site is located in a developed area almost entirely covered by impervious surfaces with a small number of non-native, ornamental plants and street trees in the project area. The project site does not include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service; therefore, topic 12b is not applicable. In addition, the project site does not contain any wetlands as defined by section 404 of the Clean Water Act; therefore, topic 12c is not applicable. Lastly, the project site does not fall within any local, regional, or state habitat conservation plans; therefore, topic 12f is not applicable.

Impact BI-1: The proposed project or variant 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, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (*Less than Significant*)

The project site is located within a dense urban environment with high levels of human activity. The project site includes an existing building and a small number of non-native, ornamental plants and trees. Eight street trees are along South Van Ness Avenue, six along Market Street, and 14 along 12th Street. The plants and trees on the project site are not considered sensitive habitat for rare or endangered species. Further, the project site and surrounding area are entirely covered with impervious surfaces and do not include riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Therefore, the project site does not provide habitat for any rare or endangered plant or animal species. Thus, the proposed project or variant would not adversely affect or substantially diminish plant or animal habitats directly or through modifications. Given the existing conditions of the project site, neither the proposed project nor the variant would affect any rare, threatened, or endangered species.

The proposed project's location, height, and materiality, particularly the inclusion of transparent or reflective glass, may present risks for birds as they travel along their migratory paths. As discussed in Item BI-2 below the proposed project and variant would comply with Planning Code section 139, Standards for Bird-Safe Buildings, which establishes building design standards to reduce avian mortality rates associated with bird strikes. ¹⁰⁰ Additionally, the proposed project would be subject to, and would comply with, City-adopted regulations for bird-safe buildings, and federal and State migratory bird regulations. Even though incidental bird strikes may occur, and may involve special status avian species the proposed project or variant would not interfere with the movement of native resident or wildlife species or with established native resident or migratory wildlife corridors. This impact would be less than significant.

Impact BI-2: The proposed project or variant 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 sites. (Less than Significant)

Nesting Birds

As discussed in Item BI-3, below, the project would include tree removal. Nesting birds may be present in the existing street trees and foliage surrounding the project site. As such, if tree removal would occur during the nesting season (January 15 through August 15) or during the breeding season (March through August), nesting birds could be disturbed. This would be considered a potentially significant impact.

The project would comply with California Fish and Game Code section 3500 et al., including sections 3503, 3503.5, 3511, and 3513, which provide that it is unlawful to take or possess any migratory nongame bird, or needlessly destroy nests of birds except as otherwise outlined in the code. Staff at the California Department of Fish and Wildlife (CDFW) enforce the code by requiring that projects incorporate measures to avoid and minimize impacts to nesting birds if any tree removal would occur during the nesting or breeding season. For example, a qualified biologist would conduct a tree survey within 15 days before the start of construction occurring in March through

San Francisco Planning Department, *Standards for Bird-Safe Buildings*, adopted by the San Francisco Planning Commission July 14, 2011, http://default.sfplanning.org/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%2011-30-11.pdf, accessed April 24, 2018.

May; or 30 days before the start of construction occurring in June through August. These surveys would help establish the presence of any nesting birds that would need to be protected through avoidance and minimization measures. Additionally, CDFW staff may require notifications if any active nests are identified including consultation with CDFW and establishment of construction-free buffer zones.

Compliance with these existing state regulations would ensure that project impacts relating to nesting birds would be less-than-significant.

Migratory Birds

Migrating birds traveling through San Francisco are subject to risks associated with collision with tall structures, depending on the location, height, and material of the building, particularly those with transparent or reflective glass. Thus, the tall tower(s) proposed under the project and variant could have a potentially significant impact on migrating birds.

San Francisco Planning Code section 139, Standards for Bird-Safe Buildings, sets building design standards to reduce avian mortality rates associated with bird strikes for location-related hazards where the siting of a structure creates a high risk to birds, ¹⁰¹ and feature-related hazards that include building design features for structures that create a high risk to birds, due to height, fenestration, etc. ¹⁰² The project would be subject to section 139 requirements as it includes a tall tower that may incorporate standing transparent/reflective glass sidings, wind barriers, and balconies, which are considered feature related hazards to migratory birds. As such, the project would use bird safe glazing treatment on the building's glass sliding, as well as any other glass architectural elements. With incorporation of section 139 requirements, project impacts to migratory birds would be less-than-significant.

Compliance with applicable local, state, and federal requirements protecting biological resources would ensure that potential impacts of the proposed project related to the movement of native resident wildlife species, migratory wildlife corridors, or native wildlife nursery sites would be considered less-than-significant.

Impact BI-3: The proposed project or variant would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (*Less than Significant*)

The City's Urban Forestry Ordinance, San Francisco Public Works Code section 801 et seq., requires a permit from San Francisco Public Works for removal of any protected trees. Protected trees include landmark trees, significant trees, or street trees located on private or public property anywhere within the territorial limits of the City and County of San Francisco. The designations are defined as follows.

• Landmark trees are designated by the board of supervisors upon the recommendation of the Urban Forestry Council, which determines whether a nominated tree meets the qualification for landmark designation by using established criteria (section 810). Special permits are required to remove a landmark tree on private property or on City-owned property.

¹⁰¹ Projects must be located less than 300 feet from an Urban Bird Refuge to pose location-related hazards under San Francisco Planning Code section 139.

¹⁰² Examples of feature-related hazards under San Francisco Planning Code Section 139 include standing transparent or reflective glass sidings, wind barriers, skywalks, and balconies.

- Significant trees are those trees within the jurisdiction of the San Francisco Public Works, or trees on private property within 10 feet of the public right-of-way, that meet certain size criteria. To be considered significant, a tree must have a diameter at breast height of more than 12 inches, a height of more than 20 feet, or a canopy of more than 15 feet (section 810[A][a]). The removal of significant trees on privately owned property is subject to the requirements for the removal of street trees. As part of the determination to authorize removal of a significant tree, the director of San Francisco Public Works is required to consider certain factors related to the tree, including (among others) its size, age, species, and visual, cultural, and ecological characteristics (section 810A[c]).
- *Street trees* are trees within the public right-of-way or on land within the jurisdiction of the San Francisco Public Works. Their removal by abutting property owners requires a permit.

No landmark or significant trees exist on the project site. ¹⁰³ The proposed project or variant would remove 28 street trees. As such, the project sponsor would be required to obtain a tree removal permit in accordance with San Francisco Public Works Code section 806. The project sponsor would plant 61 new trees, resulting in 33 net new street trees in compliance with San Francisco Planning Code section 138.1, the Better Streets Plan. San Francisco Planning Code section 138.1 requires new construction, significant alterations, or relocation of building projects within any zoning district to include the planting of one 24-inch box tree for every 20 feet along the project site's street or alley frontage, with any remaining fraction of 10 feet or more requiring an additional tree. The new trees that would be planted under the proposed project or variant would be required to comply with the requirements of the Better Streets Plan, the Better Market Street Project, and the Safer Market Street Project.

Compliance with existing regulations would ensure that the proposed project or variant would not conflict with local policies or ordinances protecting biological resources and would have less-than-significant impacts.

Impact-C-BI-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in a significant cumulative impact related to biological resources. (Less than Significant)

The cumulative development projects noted in Table 3, Cumulative Projects, would result in the intensification of land uses within a dense urban environment that does not include any candidate, sensitive, or special-status species, any riparian habitat, or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Cumulative development would add tall buildings that can injure or kill birds in the event of a collision. In addition, nearby cumulative development projects would result in the removal of existing street trees or other vegetation. However, nearby cumulative development projects would be subject to the California Fish and Game Code regulations, as well as City bird-safe building and urban forestry ordinances applicable to the proposed project and variant. Compliance with existing ordinances would reduce the effects of nearby cumulative development projects to less-than-significant levels.

In summary, implementation of the proposed project or variant in combination with other past, present, and reasonably foreseeable projects would not modify any natural habitat and would have a-less-than-significant impact on any candidate, sensitive, or special-status species, any riparian habitat, or other sensitive natural community, and would not conflict with any local policy or ordinance protecting biological resources or an

¹⁰³ San Francisco Department of the Environment, Map of San Francisco's Landmark Trees, https://sfenvironment.org/article/landmark-tree-program/map-of-san-francisco%E2%80%9A%27s-landmark-trees, accessed August 3, 2017.

approved conservation plan. For these reasons, the proposed project or variant would not combine with past, present, and reasonably foreseeable future projects in the vicinity to result in a significant cumulative impact related to biological resources, and impacts would be less than significant.

103

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
13.	GEOLOGY AND SOILS Would the project:					
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 Division of Mines and Geology Special Publication 42.					
	ii) Strong seismic ground shaking?			\boxtimes		
	iii) Seismic-related ground failure, including liquefaction?					
	iv) Landslides?			\boxtimes		
b)	Result in substantial soil erosion or the loss of topsoil?					
c)	Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, (1994) creating substantial risks to life or property?					
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?					
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					

Less Than

Geology and Soils

The proposed project or variant would connect to the existing sewer system, and there would be no use of septic tanks or alternative wastewater disposal systems for the proposed project or variant. Therefore, topic 13e, impacts resulting from use of septic tanks or alternative wastewater disposal systems on unstable soils, is not applicable to the proposed project or variant and will not be addressed further.

This section describes the geology, soils, and seismicity characteristics of the project area as they relate to the proposed project and variant. The analysis in this section is based on geotechnical reports prepared for the

proposed project and variant by an independent consultant. ^{104,105} These reports are the primary sources of information included in this section. The scope of the geotechnical investigation included reviewing test boring logs previously carried out at the site; consultation with BART and SFMTA representatives; evaluation of soil classification, subsurface conditions, seismicity, slide potential; and design recommendations.

Geology of the Site

Based on borings and collected data in the geotechnical investigations, ^{106,107} the project site is underlain by 10–30 feet of sandy fill and native Dune Sand, which are loose to dense and exhibit low to moderate strength. The sands are underlain by an approximately 5- to 10-foot-thick marsh deposit consisting of loose to dense silty and clayey sand. Below the marsh deposit, starting at approximately 25 feet below ground surface (bgs) is dense to very dense fine sand, silty sand, and clayey sand, referred to as the Colma formation. The Colma formation extends to at least 194 feet bgs, and includes strong residual soil (weathered rock) consisting of very stiff to hard sandy clay and clay with gravel. The geotechnical investigation states that Colma formation would be capable of supporting the load of the proposed project or variant whether a mat foundation or deep piers are used. The borings revealed that bedrock, comprised of shale of the Franciscan formation, was encountered at approximately 211 feet bgs.

Project Features

The northern third of the project site includes a subsurface easement for the existing BART tunnel, which is located 19.62 feet below grade. The invert of the BART tunnel is approximately 85 feet below ground surface. ^{108,109} This northern half of project site is within the BART zone of influence (ZOI)¹¹⁰; therefore, structural loads associated with the proposed project must remain equal to or less than existing loads on the BART tunnel. At this location, the foundation for the podium structures under the proposed project and variant could be supported by a mat foundation approximately 35 feet bgs without putting any additional stress on the BART tunnel. However, the towers under both the proposed project and variant on top of the BART zone of influence would need to be supported by a deep foundation system to a depth of approximately 50–80 feet bgs consisting of piers with double casings that would derive supporting capacity from the soil beneath the BART zone of influence. The deep foundation system would be drilled cast-in-place piers, which would be constructed by digging cylindrical shafts and then filling them with wet concrete. Thus, no pile driving would be required. Outside of the BART ZOI, the tower and podium structures could be supported by either a deep foundation system or a mat foundation. ¹¹¹ The final lengths will be determined once the foundation system is designed,

¹⁰⁴ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2015-004568ENV.

¹⁰⁵ Langan Engineering and Environmental Services, Inc., *Geotechnical Investigation* [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

¹⁰⁶ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

¹⁰⁷ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

^{108 &}quot;Invert" refers to the bottom of the tunnel.

¹⁰⁹ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 South Van Ness Avenue, March 16, 2017

¹¹⁰ The BART zone of influence is defined by drawing imaginary lines from the critical point of BART's substructure at a slope of 1-1/2 (horizontal) to 1 (vertical) toward the ground surface.

¹¹¹ Ibid.

reviewed by BART and has gone through the rigorous code-mandated design peer review process for all high-rise construction, commonly known as SDRP (Structural Design Review Panel).

BART would review the project's structural plans and final geotechnical and geological hazards evaluation reports for the design to ensure compliance with its guidelines for construction over and adjacent to its subway structures. The reports will include an engineering geology map, a site plan showing the location of subway structures, BART easements, a soil reworking plan, and the geotechnical conclusion and recommendations.

The project site would be excavated up to approximately 40 feet below grade in the northern portion and 50 feet below grade in the southern portion of the site. Excavation in the northern portion of the site would be shallower due to the presence of the subsurface BART tunnel, which at its lowest point is approximately 85 feet bgs. At this location, the foundation for the podium structures under the proposed project could be supported by a mat foundation approximately 35 feet bgs and satisfy the requirement that structural loads associated with the proposed project can be no greater than the existing loads on the BART tunnel. The proposed project or variant would require that approximately 100,000 cubic yards of excavated soil be removed from the project site and disposed of at an appropriate facility. Soundwater was encountered on the project site ranging from 15 to 25 feet bgs at different locations; therefore, dewatering may be required.

The 55-story single tower variant (590 feet tall [up to 610 feet including the elevator penthouse]) would fundamentally have the same foundation type and design methodology as the 41-story double tower (400 feet tall [up to 420 feet including the elevator penthouse]) under the proposed project. In both cases the tower columns and shear walls would be founded on a common pile cap. 114 This pile cap would be supported by drilled piers extending below the BART Zone of Influence, to a depth of approximately 50–80 feet bgs, but not to the depth of the underlying bedrock because the Colma formation is strong enough to support the proposed project or variant. The proposed project with two towers would require more columns, shear walls, and piers compared to the single tower variant. However, because the proposed project and variant would have similar foundation designs and are anticipated to be constructed with a combination of a mat foundation and deep foundation piers, the potential geology and soils impacts resulting from construction and operation of either the proposed project or variant are anticipated to be the same.

Regulatory Framework

Under the direction and management of the seven-member Building Inspection Commission, the mission of the San Francisco Department of Building Inspection (the building department) is to oversee the effective, efficient, fair and safe enforcement of the City and County of San Francisco's Building, Housing, Plumbing, Electrical, and Mechanical Codes, along with the Disability Access Regulations. To ensure that the potential for adverse geologic, soils, and seismic hazards is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Standards Code (state building code, California Code of Regulations, title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code; the building department's

¹¹² Ibid., p. 13.

¹¹³ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017, p. 12.

A pile cap is a thick concrete mat that is placed on and fastened to the top of a group of piles that have been driven into soft or unstable ground to transmit loads and provide a suitable stable foundation.

implementing procedures including Administrative Bulletins and Information Sheets, and the State Seismic Hazards Mapping Act of 1990 (seismic hazards act), located in Public Resources Code sections 2690 to 2699.6.

The California Building Standards Code, or state building code, is codified in title 24 of the California Code of Regulations. The state building code provides standards that must be met to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the state. The state building code generally applies to all occupancies in California, with modifications adopted in some instances by state agencies or local governing bodies. The current state building code incorporates, by adoption, the 2016 edition of the International Building Code of the International Code Council with the California amendments. These amendments include significant building design and construction criteria that have been tailored for California earthquake conditions.

Chapter 16 of the state building code addresses structural design requirements governing seismically resistant construction (section 1604), including, but not limited to, factors and coefficients used to establish a seismic site class and seismic occupancy category appropriate for the soil/rock at the building location and the proposed building design (sections 1613.5 through 1613.7). Chapter 18 includes, but is not limited to, the requirements for foundation and soil investigations (section 1803); excavation, grading, and fill (section 1804); allowable loadbearing values of soils (section 1806); foundation and retaining walls, (section 1807); and foundation support systems (sections 1808 through 1810). Chapter 33 includes, but is not limited to, requirements for safeguards at work sites to ensure stable excavations and cut-or-fill slopes (section 3304) and the protection of adjacent properties including requirements for noticing (section 3307). Appendix J of the state building code includes, but is not limited to, grading requirements for the design of excavations and fills (sections J106 and J107) specifying maximum limits on the slope of cut and fill surfaces and other criteria, required setbacks and slope protection for cut and fill slopes (J108), and erosion control in general and regarding the provision of drainage facilities and terracing (sections J109 and J110). San Francisco has adopted Appendix J of the state building code with amendments to J103, J104, J106, and J109 as articulated in the local building code.

The seismic hazards act, enacted in 1990, requires the California State Geologist to create maps identifying seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. The seismic hazard act includes guidelines for the preparation of seismic hazard maps, policies and criteria regarding the responsibilities of city, county, and state agencies; criteria for project approval, and guidelines for evaluating seismic hazards and recommending mitigation measures.¹¹⁵

All projects located within a state-designated seismic hazard zone for liquefaction or landslide hazard are subject to state seismic hazards act requirements, which include the preparation of a geotechnical investigation to delineate the area of hazard and propose mitigation measures to address any identified seismic hazards. The local building official must incorporate the recommended mitigation measures to address such hazards into the conditions of the building permit. The project site is within a seismic hazard zone (liquefaction zone), as discussed below; thus, site design and construction must comply with the requirements of the seismic hazard act.

.

¹¹⁵ In the context of the seismic hazards act, "mitigation" refers to measures that are consistent with established practice and that will reduce seismic risk to acceptable levels, rather than the mitigation measures identified in the California Environmental Quality Act (CEQA) to reduce or avoid the environmental impacts of a proposed project.

In addition to compliance with the building code and seismic hazards act, the proposed project and variant would follow the building department's local implementing procedures including Administrative Bulletins (AB) (which are part of the local building code) and Information Sheets (IS), which clarify building department requirements and procedures. On December 27, 2017, the building department issued IS S-18, Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings (interim guidelines). The interim guidelines supplement and clarify the information in AB 082 (Guidelines and Procedures for Structural Design Review) as well as AB 083 (Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures). Tall buildings are defined as those 240 feet or taller, which includes the subject building. The interim guidelines specify requirements for Geotechnical Engineering peer reviews including the scope of geotechnical and structural review conducted by qualified geotechnical reviewers as part of a Geotechnical Engineering Design Review Team (review team). The interim guidelines are defined as those 240 feet or taller, which includes the subject building. The interim guidelines specify requirements for Geotechnical Engineering peer reviews including the scope of geotechnical and structural review conducted by qualified geotechnical reviewers as part of a Geotechnical Engineering Design Review Team (review team).

The project sponsor's engineer of record for the project or variant would work with the two-member review team to and resolve all comments related to the foundation design in order to achieve consensus on the adequacy of the building's foundation and structural design. A report of the findings from the review team shall be provided to the director of the building department. The report will provide findings and address following issues: the foundation type (shallow or deep), foundation design, interpretation of geotechnical and geological investigations, soil-foundation-structure interaction under static and seismic loading conditions, effects of dewatering and construction-related activities on the site and in the vicinity, and foundation or building settlement. The interim guidance also requires that prior to the completion of the proposed project or the variant, the project sponsor would contract with qualified monitoring surveyors and instrumentation engineers to monitor the effects of settlement on the building and foundations of the project for a period of ten years after the issuance of the certificate of final completion and occupancy. The findings from the post-occupancy surveys shall be provided to the building department annually within this 10-year period.

Approach to Analysis

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015, ¹²⁰ the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except where the project would significantly exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing or future seismic hazard area or an area with unstable soils are not considered impacts under CEQA unless the project would significantly exacerbate the seismic hazard or unstable soil conditions. Thus, the following analysis evaluates whether the proposed project would exacerbate future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death. The impact

San Francisco Department of Building Inspection, December 27, 2017, Information Sheet No. S-18, Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings, http://sfdbi.org/sites/default/files/IS%20S-18.pdf, accessed April 24, 2018.

San Francisco Department of Building Inspection, December 19, 2016, Administrative Bulletin 082, *Guidelines and Procedures for Structural Design Review, http://sfdbi.org/sites/default/files/AB-082.pdf*, accessed April 24, 2018.

San Francisco Department of Building Inspection, March 25, 2008 (updated January 1, 2014 for code references), Administrative Bulletin 083, Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures, http://sfdbi.org//sites/default/files/Documents/Administrative_Bulletins/2013_AB/AB_083_updated_010114.pdf, accessed April 24, 2018.

¹¹⁹ A qualified geotechnical reviewer for Engineering Design Review Teams shall be a geotechnical engineer (G.E.) registered in California or a Civil Engineer (C.E.) registered in California with substantially demonstrated geotechnical experience.

¹²⁰ California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal.4th 369, opinion filed December 17, 2015.

would be significant if the proposed project would exacerbate existing or future seismic hazards or unstable soils by increasing the severity of these hazards that would occur or be present without the project.

Impact GE-1: The proposed project or variant would not exacerbate the potential to expose people or structures to seismic and geologic hazards, including the risk of loss, injury, or death involving rupture, ground shaking, liquefaction, or landslides. (*Less than Significant*)

As discussed above under "Regulatory Framework," the building department oversees the effective, efficient, fair and safe enforcement of the City and County of San Francisco's Building, Housing, Plumbing, Electrical, and Mechanical Codes, along with the Disability Access Regulations. To ensure that the potential for adverse geologic, soils, and seismic hazards is adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Standards Code (state building code, California Code of Regulations, title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code; the building department's implementing procedures including Administrative Bulletins and Information Sheets, and the state seismic hazards act (Public Resources Code sections 2690 to 2699.6).

The project site is within a seismic hazard zone (liquefaction zone), as discussed below; thus, site design and construction must comply with the requirements of the seismic hazards act.

Fault Rupture

The project site is not within an earthquake fault zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known fault or potentially active fault exists within the project site. ¹²¹ In a seismically active area, such as the San Francisco Bay Area, the remote possibility exists for future faulting in areas where no faults previously existed, but the likelihood of such fault rupture is extremely low. Therefore, this impact would be less than significant.

Ground Shaking

The San Andreas, Hayward, and Calaveras faults are the major faults closest to the site. The site is approximately 7 miles east of the San Andreas Fault, 11 miles west of the Hayward Fault, and 22 miles west of the Calaveras Fault. The proposed project or variant would likely experience periodic minor earthquakes and perhaps a major earthquake (moment magnitude greater than 6) on one of the nearby faults during its service life. The intensity of earthquake ground motion at the site would depend upon the characteristics of the generating fault, distance to the earthquake epicenter, magnitude, and duration of the earthquake. The ground shaking at the project site during a major earthquake on one of the nearby faults would be very strong.

ABAG has classified the Modified Mercalli Intensity Shaking Severity Level of ground shaking in vicinity of the proposed project or variant due to an earthquake on the North San Andreas Fault as "VIII-Very Strong." 122 "Very strong" is defined as shaking that would result in damage to some masonry buildings, fall of stucco and some masonry walls, fall of chimneys and elevated tanks, and shifting of unbolted wood frame structures off their foundations. In accordance with the state and local building code requirements described above, the geotechnical

¹²¹ California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the City and County of San Francisco, California, Seismic Hazard Zone Report 043, November 17, 2000.

Association of Bay Area Governments, Earthquake Hazard Map for San Francisco Scenario: Entire San Andreas Fault System, http://resilience.abag.ca.gov/earthquakes, accessed March 21, 2018.

investigation analyzed the potential for very strong seismic shaking and recommended that the proposed project's seismic design be in accordance with the provisions of the building code. ¹²³ With implementation of these recommendations, as incorporated into and required by the building code, the impact of strong seismic ground shaking would be less than significant.

The proposed project and variant would comply with the latest requirements of the state and local building codes, the building departments implementing guidance and procedures as well as the seismic hazards act. The final building plans (construction documents) and the structural report would be reviewed by the building department for conformance with recommendations in the site-specific, design-level geotechnical investigation(s) to ensure compliance with state and local building code provisions related to structural safety. Furthermore, the proposed project and variant would follow the requirements of IS S-18, AB-082, and AB-083 related to structural, geotechnical, and seismic hazard design review for tall buildings 240 feet in height or more. 124 As discussed under "Regulatory Framework" above, this requires peer review of the project's site conditions and design by a two-member engineering design review team, along with monitoring for settlement during a 10-year period after the certificate of final completion and occupancy is issued.

Additional information related to vibration impacts to adjacent structures will be discussed in the EIR cultural resources and noise sections.

The building department permit review process to ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and as a result of the recommendations made by the engineering design review team as required by IS S-18, AB-082, and AB-083¹²⁵ would result in less-than-significant impacts related to strong seismic ground shaking.

Landslides, Liquefaction, Lateral Spreading, and Seismic Settlement

With respect to landslides, based on the general plan, the project site is relatively level and is not located within a mapped landslide zone. ¹²⁶ The site is not within a designated earthquake-induced landslide zone as shown on the California Geological Survey seismic hazard zone map for the area. Therefore, the proposed project or variant would have a no impact with respect to potential for landslides, and this topic is not discussed further.

Lateral spreading typically forms on gentle slopes that have rapid fluid-like flow movement and can occur when there is potential for liquefaction in underlying, saturated soils. Liquefaction occurs when saturated soils lose strength and stiffness when there is an applied stress such as an earthquake which causes solid soils to behave like a liquid when there is no cohesion, resulting in ground deformations. Ground deformations can take on many forms, including, but not limited to, flow failure, lateral spreading, lowering of the ground surface, or ground settlement, loss of bearing, ground fissures, and sand boils. Liquefaction of subsurface layers, which could occur during ground-shaking associated with an earthquake, could potentially result in ground settlement.

¹²³ It should be noted that the proposed building must be built to the California Building Standards Code standards in effect at the time of application.

San Francisco Department of Building Inspection, Information Sheet No. S-18, Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings, http://sfdbi.org/sites/default/files/IS%20S-18.pdf, accessed April 24, 2018.

¹²⁵ Ibid

San Francisco General Plan, Community Safety Element, Map 4, http://www.sf-planning.org/ftp/General_Plan/Community_Safety_Element_2012.pdf, accessed September 30, 2016.

As described above, the site is within a state designated liquefaction hazard zone. ¹²⁷ This means that there is a potential for permanent ground displacement onsite, such as liquefaction. ¹²⁸ The California Geological Survey provided recommendations for the content of site investigation reports within seismic hazard zones in Special Publication 117A, which recommends that at least one exploration point extend to a depth of at least 50 feet to evaluate liquefaction potential. Review of borings from the geotechnical investigations indicates that loose to medium dense sand is likely present both above and below the natural groundwater table in the site area. Loose sand above the groundwater table may densify and loose to medium dense sand below the groundwater table may liquefy during strong ground shaking due to a seismic event on a nearby fault.

Based on the geotechnical investigation borings, the potential for liquefaction was analyzed. The analysis determined that soils in the Dune Sand, marsh deposit and isolated zones within the Colma formation contain potentially liquefiable material and recommended that these be removed and improved during excavation down to 50 feet bgs. The soil encountered at 50–60 feet bgs and beyond proved to have stronger layers within the Colma formation with a low likelihood to liquefy or settle. Some of the on-site sand could generally be re-used and combined to make engineered fill around the foundation including use of crushed rock or other controlled density fill to strengthen the existing soil. Where the marsh deposit and/or loose sands are present and thicker than 2 feet, the soil may have to be improved in situ using a soil-cement mixing method to create columns of soil-cement. These soil improvements would secure the foundation reducing the potential for the proposed project or variant to exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading.

Layers of loose to medium dense sand were identified during testing below the water table that could be susceptible to liquefaction and strength loss during a major earthquake. These layers were encountered within the Dune sand and marsh deposit, and isolated, discontinuous zones within the Colma formation. The geotechnical engineers applied the standard Youd et al. (2001)¹²⁹ and the Tokimatsu and Seed (1987)¹³⁰ methods for evaluating earthquake-induced liquefaction settlement. Using these methods, it was estimated that liquefaction-induced ground settlement, or lowering of the ground surface, could be approximately 2 inches during a major earthquake. For these reasons, the proposed project or variant could result in exposure of people and structures to potential substantial adverse geologic effects.

However, in accordance with the provisions of the 2016 state building code and Special Publication 117A, the preliminary geotechnical reports provide recommendations to address these hazards. The building department permit review process would ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and recommendations made by the engineering design review team as required by IS S-18, AB-082, and AB-083 would ensure that the proposed project would not exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading. Therefore, this impact would be *less than significant*.

¹²⁷ California Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the City and County of San Francisco, California, Seismic Hazard Zone Report 043, November 17, 2000.

¹²⁸ Ibid.

T. L. Youd, I. M. Idriss, R. D. Andrus, I. Arango, G. Castro, J. T. Christian, R. Dobry, W. D. L. Finn, L. F. Harder Jr., M. E. Hynes, K. Ishihara, J. P. Koester, S. S. C. Liao, W. F. Marcuson III, G. R. Martin, J. K. Mitchell, Y. Moriwaki, M. S. Power, P. K. Robertson, R. B. Seed, and K. H. Stokoe II, "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils," Journal of Geotechnical and Geoenvironmental Engineering 124(10), 2001.

H. Tokimatsu and H. B. Seed, "Evaluation of Settlements in Sands Due to Earthquake Shaking," *Journal of Geotechnical Engineering* 113(8), pp. 861–878, 1987.

Impact GE-2: The proposed project or variant would not result in substantial loss of topsoil or erosion. (*Less than Significant*)

The project site is relatively flat, and entirely covered with impervious surfaces. The ground surface elevation of the project site is approximately 40 feet above mean sea level (msl) along Market Street and approximately 32 feet above msl at the southern end of the site. During demolition of the existing structures and foundation and construction of the proposed project or the variant, erosion could occur due to soil exposure during subgrade work. The project site would be excavated up to approximately 40 feet below grade in the northern portion, and 50 feet in the southern portion. Excavated soil would be approximately 100,000 cubic yards and would be improved and reused on site to the extent possible.

Relevant regulations related to erosion prevention include the following:

- National Pollutant Discharge Elimination System
- San Francisco Public Works Code, article 4.2, section 146.7, Erosion and Sediment Control Plan
- San Francisco Environment Code, chapter 14, Construction and Demolition Debris Recovery Ordinance

The project site is presently covered entirely with impervious surfaces; therefore, it does not contain native topsoil. Grading and excavation would expose topsoil onsite and could potentially result in erosion. However, construction-related activities would be required to comply with best management practices and standard erosion-control measures to minimize short-term construction-related erosion pursuant to the National Pollutant Discharge Elimination System Construction General Permit and San Francisco Public Works Code article 4.2. The proposed project or variant would require San Francisco Public Works approval of any grading permit and analysis for efficient stormwater management during construction activities. The construction contractor would be required to implement an erosion and sediment control plan for construction activities in accordance with article 4.2 of the San Francisco Public Works Code (as discussed in more detail in Section E.15, Hydrology and Water Quality). The SFPUC must review and approve the erosion and sediment control plan before the plan's implementation. Contractors and site supervisors are responsible for ensuring that best management practices are implemented and maintained throughout the construction process, and failure to comply would result in citation and civil penalties. Compliance with the plan would ensure that the proposed project or variant would not result substantial loss of topsoil or in soil erosion. Therefore, impacts related to loss of topsoil or substantial soil erosion would be less than significant.

Impact GE-3: The proposed project or variant would not be located on a geologic unit or soil that is unstable, or that could become unstable as a result of the project or variant, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant)

The project site is not located within a state designated landslide hazard zone or area subject to the Slope Protect Act. The site is a flat urban area and does not include hills or cut slopes likely to be subject to landslide. As discussed above, the project site is located within a state designated seismic hazard zone for liquefaction and would be subject to the requirements of the state seismic hazards act.

The project sponsor would be required to provide geotechnical reports prepared by a qualified geotechnical professional that include recommendations for demolition and site preparation, excavation and construction of the proposed project or variant based on site and soil conditions. These recommendations, which would address

the potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, would be implemented by the project sponsor's engineer of record and peer reviewed as required by IS S-18, AB-082, and AB-083.

In addition, as discussed in Section A, Project Description, and at the start of this section, the majority of the project site is either within the BART easement or the BART ZOI. The southernmost portion of the project site is outside of the BART ZOI. The ZOI is an area above an imaginary line drawn upward from the critical point of the BART substructure at an inclination of 1.5:1 (horizontal: vertical). Relevant BART regulations include *General Guidelines for Design and Construction Over or Adjacent to BART's Subway Structures*¹³¹ and *Procedures for Permit and Plan Review*. ¹³²

The foundation for either the proposed project or the variant would differ within and outside of the BART easement. A mat-supported 12-story podium under the proposed project, or a mat-supported 15-story podium under the variant, above two levels of below-grade parking is planned in the area within the BART easement. Within the BART easement, no loads greater than the existing loads can be imposed on the BART tunnels. According to preliminary calculations, the portion of the proposed project or variant that would be within the BART easement would not impose greater stresses on the soil subgrade than currently exist within the portion of the project site within the BART easement. ^{133,134} Soil improvement would be designed to address loads on the BART structure within the BART easement. Therefore potential impacts to the BART tunnel associated with soil improvements would be less than significant.

Outside of the BART easement, but within the BART ZOI, the building would be supported on a deep foundation system to approximately 50–80 feet bgs, consisting of drilled cast-in-place piers. Construction in the BART easement and ZOI and placement of additional loads in the easement and ZOI could cause adverse effects on the BART structure if the proposed project or variant is not properly designed and constructed. The drilled piers would be used to support the deep foundation and the pier sections of the foundation within the ZOI would be double cased to avoid surcharging (i.e., creating additional loads on) the BART tunnels. BART would review the project or variant's structural plans, and the building department would not issue permits without receiving confirmation of BART's review. Coordination, design approval and construction monitoring would meet BART's construction requirements to ensure that impacts related to the project's lateral surcharge pressures on the BART structure would be less than significant.

Outside the BART easement and ZOI, the tower structure would be supported on a deep foundation system (drilled cast-in-place piers). The podium structure outside of the BART ZOI could be supported by a mat foundation, provided the subgrade soil is dense and not subject to loss of support during an earthquake. If weak or potentially liquefiable soil is present beneath the mat, a potentially significant impact would occur.

Bay Area Rapid Transit District, General Guidelines for Design and Construction Over or Adjacent to BART's Subway Structures, 2003, http://www.bart.gov/sites/default/files/docs/Gen_Guide_Subway_062012.pdf, accessed June 2, 2016.

Bay Area Rapid Transit District, *Procedures for Permit and Plan Review*, 2012, http://www.bart.gov/sites/default/files/docs/Permits_and_Plan_Review_062012.pdf, accessed June 2, 2016.

Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

During excavation, the shoring system could yield and deform laterally if not properly designed, which would cause the surrounding improvements, including the Muni stairway adjacent to the northern property boundary, to settle and move laterally. This would result in a potentially significant impact associated with soil instability. To avoid settlement and lateral deformation, as discussed in the geotechnical studies, the project would require the installation of shoring systems during basement excavation on all sides of the property. ^{135,136}

Furthermore, the building department permit review process to ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports and recommendations made by the engineering design review team along with BART permit review requirements would ensure that the proposed project or variant would not result in unstable soil conditions that could result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

In addition, the proposed project and variant would follow the requirements of IS S-18, and require monitoring for the effects of settlement on the building and foundations of the project or variant for a period of ten years after the issuance of the certificate of final completion and occupancy. Therefore, through compliance with these regulations, the proposed project or variant would not exacerbate the potential for soil to become unstable or to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse as a result of the project or variant, and this impact would be *less than significant*.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive soil. (Less than Significant)

Expansive soils expand and contract in response to changes in soil moisture, particularly when near-surface soils fluctuate from saturated to low-moisture-content conditions and back again. As outlined in the preliminary geotechnical investigation, the site is underlain by 5–10 feet of fill, 5–20 feet of Dune Sand beneath the fill, and 5– 10 feet of marsh deposit beneath the Dune Sand. The bottom of the Colma formation was reached at 194 feet bgs, which is underlain by residual soil and bedrock, which was encountered at 211 feet bgs. The fill contains loose to medium dense sand and gravels intermixed with layers of medium stiff clays. Due to the low clay content within the dune sands, there would be a low likelihood for expansion, although the Colma sand below could result in some expansion-related affects. Areas not excavated, including sidewalks and other adjacent improvements, may also be affected by expansive soils, if present. Loose sand above the groundwater level may be subject to differential compaction and settlement during strong ground shaking. The available subsurface information indicates loose unsaturated sand is present beneath the site. Because the sand would be removed during basement excavation, differential compaction should not be an issue at the project site. Additionally, the San Francisco Building Code requires that the project applicant include analysis of the potential for soil expansion impacts for DBI review and approval as part of the design-level geotechnical investigation and address these effects in the design documents prepared for the proposed project. As such, potential impacts related to expansive soils would be less-than-significant.

Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

Impact GE-5: Construction activities for the proposed project or variant would directly or indirectly result in damage to, or destruction of, as-yet unknown paleontological resources or sites, should such resources, sites, or features exist on or beneath the project site. (Less than Significant with Mitigation)

Paleontological resources include the fossilized remains or traces of animals, plants, and invertebrates from a previous geological period. Paleontological resources are deposited and preserved within particular lithologic (rock) units. Lithologic units that may contain fossils include sedimentary and volcanic formations. Collecting localities and the geologic formations containing those localities are also considered paleontological resources, as they represent a limited, nonrenewable resource that, once destroyed, cannot be replaced. Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. ¹³⁷

Paleontological resources are lithologically dependent; that is, deposition and preservation of paleontological resources are related to the lithologic unit in which they occur. Particularly important are fossils found in situ (undisturbed) in primary context (e.g., fossils that have not been subjected to disturbance subsequent to their burial and fossilization). As such, they aid in stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphological evolution, paleoclimatology, the relationships between aquatic and terrestrial species, and evolution in general.

Note that significance may also be stated for a particular rock unit, predicated on the research potential of fossils suspected to occur in that unit. Such significance is often stated as "sensitivity" or "potential." In most cases decisions about how to manage paleontological resources must be based on this potential because the actual situation cannot be known until construction excavation for the project is underway.

The results of the geotechnical investigation indicate that the project site is underlain by 10 to 30 feet of sandy fill and native Dune Sand. The sands are underlain by an approximately 5- to 10-foot-thick marsh deposit consisting of loose to dense silty and clayey sand. Below the marsh deposit is dense to very dense fine sand, silty sand, and clayey sand, referred to as the Colma formation which extends approximately 194 feet bgs. ^{138,139}

Previous occurrences of large late Pleistocene vertebrate remains from three individuals of Colombian Mammoth (*Mammuthus columbi*) and remains from a single Giant Bison (*Bison latifrons*) have been recovered from gravelly, sandy clay of the Colma formation exposed in an excavation at the intersection of Pacific Avenue and Kearny Street, San Francisco, California. The proposed project or the variant would have similar foundations and would both entail the same excavation techniques during construction through the depth of the Colma formation, and as a result the project site has a moderate potential to destroy as-yet unknown paleontological resources.

Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of

Society of Vertebrate Paleontology, Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, 2010, http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx, accessed February 2, 2017.

Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 South Van Ness Avenue, San Francisco, California, March 16, 2017.

¹³⁹ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [variant], 10 South Van Ness Avenue, San Francisco, California, June 6, 2017.

¹⁴⁰ P. U. Rodda and N. Baghai, "Late Pleistocene Vertebrates from Downtown San Francisco, California," *Journal of Paleontology* 67(6), pp. 1058–1063 (1993), http://www.jstor.org/discover/10.2307/1306122?uid=3739560&uid=2129&uid=2&uid=70&uid=4&uid=3739256&sid=2110167512486, accessed February 2, 2017.

Paleontological Resources would be implemented to reduce potentially significant adverse effects on paleontological resources, including fossils and associated contextual data.

Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources

Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find and a qualified paleontologist notified, who shall evaluate the significance.

If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and San Francisco Planning Department. There shall be no construction work in the area to allow for the recovery of the resource in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan compliant with the standards of the Society for Vertebrate Paleontology. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City and County of San Francisco shall determine which of the recommendations in the recovery plan are necessary and feasible, and these recommendations shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.

With implementation of Mitigation Measure M-GE-4, impacts on paleontological resources would be less than significant.

Impact GE-6: Construction activities for the proposed project or variant would not directly or indirectly result in damage to, or destruction of, unique geologic features. (*No Impact*)

The project site is located in an urbanized area and is entirely developed with impervious surfaces. There are no undisturbed soils or rock outcroppings located on or near the project site that would constitute unique geologic features. As mentioned above, the proposed project would not substantially change the general topography of the site, and therefore, would have no impact on unique geologic features.

Impact C-GE-1: The proposed project or variant in combination with other past, present, or reasonably foreseeable future projects would not result in substantial cumulative impacts on geology and soils, and paleontological resources. (*Less than Significant*)

Geology, soils, and paleontological impacts are generally site-specific and localized. Past, present, and reasonably foreseeable projects could require various levels of excavation or cut-and-fill, which would affect local geologic conditions and may affect paleontological resources. However, the cumulative projects are also subject to the building department requirements for geotechnical review and would be required to comply with the state and local building codes.

In addition, site-specific geotechnical review and monitoring for paleontological resources would reduce each project's impacts associated with geology, seismic safety, and paleontological resources, and that site-specific mitigation would be developed, when necessary, based on site conditions. Similar to the proposed project or variant, all projects listed in Table 3 would be subject to these mandatory seismic safety standards and design review procedures. Compliance with these standards and procedures would ensure that the effects from nearby cumulative projects would be reduced to less-than-significant levels. Therefore, in combination with cumulative projects, the proposed project or variant would result in a less-than-significant cumulative impact.

	_	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No	Not
	Topics:		Incorporated	Impact	Impact	Applicable
14.	HYDROLOGY AND WATER QUALITY Would the project:					
a)	Violate any water quality standards or waste discharge requirements?			\boxtimes		
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 which would not support existing land uses or planned uses for which permits have been granted)?					
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 that would result in substantial erosion or siltation on- or off-site?					
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- or off-site?					
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					
f)	Otherwise substantially degrade water quality?			\boxtimes		
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 authoritative flood hazard delineation map?					
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?					
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?					⊠
j)	Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?					

Less Than

Hydrology and Water Quality

Construction for the proposed project and the variant would involve the same activities, duration, and depth/amount of excavation. Like the proposed project, dewatering would be necessary for construction of the proposed variant. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses, and a comparable amount of impermeable surfaces. For these reasons, the potential hydrology and water quality impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

The City and County of San Francisco is a participant in the National Flood Insurance Program. As a condition of participating in the program, San Francisco has adopted and enforces a floodplain management ordinance intended to reduce the risk of damage from flooding in the city. The Floodplain Management Ordinance governs construction in flood-prone areas and designates the City Administrator's Office as the City's Floodplain Administrator. For the purposes of assessing flood hazards, the City and County of San Francisco has developed an interim floodplain map to identify special flood hazard areas within the city limits, based on data from the Federal Emergency Management Agency. ¹⁴¹

The project site is not located either: (1) within a special flood hazard area identified on San Francisco's Interim Floodplain Map;¹⁴² (2) within the "blocks of interest" identified by SFPUC as prone to flooding;¹⁴³ or (3) adjacent to a shoreline that could be affected by sea-level rise. Furthermore, given its flat elevation and siting away from water storage facilities, coastlines, and hillsides, the project site is also not located within an area that would be: (1) flooded as the result of levee, dam, or reservoir failure;^{144,145} (2) inundated in the event of a tsunami along the San Francisco coast, based on a 20-foot water level rise at the Golden Gate Bridge;¹⁴⁶ or (3) subject to landslides and mudflow. ¹⁴⁷ Therefore, topics 14g, 14h, 14i, and 14j are not applicable.

Impact HY-1: The proposed project or variant would not impact water quality standards or waste discharge requirements. (Less than Significant)

During construction and operations stormwater and wastewater from the project site would continue to flow into the City's combined stormwater/sewer system and would be treated to the standards contained in the City's National Pollutant Discharge Elimination System permit for the Southeast Water Pollution Control Plant, before

¹⁴¹ City and County of San Francisco, San Francisco Interim Floodplain Map (Preliminary), November 12, 2015, http://sfgsa.org/sites/default/files/Document/SF_Citywide.pdf, accessed August 10, 2017.

¹⁴² Ibid.

San Francisco Planning Department, Review of Projects in Identified Areas Prone to Flooding, April 1, 2007, http://ec2-50-17-237-182.compute-1.amazonatws.com/docs/PlanningProvisions/info%20sheet%20v1.3.pdf, accessed February 7, 2017.

San Francisco Planning Department, San Francisco General Plan Community Safety Element, October 2012, http://generalplan.sfplanning.org/Community-Safety-Element-2012.pdf, accessed August 9, 2017.

California Emergency Management Agency, California Geological Survey, and University of Southern California, Tsunami Inundation Map for Emergency Planning San Francisco North Quadrangle/San Francisco South Quadrangle (SF Bay), June 15, 2009, http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanFrancisco/Documents/Tsunami_Inundation_SouthSFNorthSF_SFBay_SanFrancisco.pdf, accessed August 10, 2017.

¹⁴⁶ San Francisco Planning Department, San Francisco General Plan Community Safety Element, October 2012, http://generalplan.sfplanning.org/Community_Safety_Element_2012.pdf, accessed August 9, 2017.

California Division of Mines and Geology, Seismic Hazard Zone Report for the City and County of San Francisco, California, http://gmw.consrv.ca.gov/shmp/download/quad/SAN_FRANCISCO_NORTH/maps/ozn_sf.pdf, accessed April 18, 2016.

discharge into San Francisco Bay. Treatment would be provided pursuant to the effluent discharge standards contained in the City's National Pollutant Discharge Elimination System permit for the plant.

To reduce the discharge of construction-related pollution to the local storm drain system, the Construction Site Runoff Control Ordinance was adopted in 2013 and the respective program is managed by SFPUC to ensure that all construction sites implement best management practices to control construction site runoff. Because the project would disturb 1.17 acres during construction, the project sponsor would be required to develop a storm water pollution prevention plan (SWPPP) describing the BMPs the contractor would implement to prevent erosion and discharge of sediment and other pollutants in stormwater runoff. To prevent any duplicative efforts, the project sponsor may submit the SWPPP in lieu of an erosion and sediment control plan to comply with the Construction Site Runoff Control Program.

Additionally, the proposed project or variant would be required to meet the standards for stormwater management identified in the San Francisco Stormwater Management Ordinance and meet the SFPUC stormwater management requirements per the 2016 Stormwater Management Requirements and Design Guidelines. The project sponsor would be required to submit, and have approved by the SFPUC, a stormwater control plan for managing operational stormwater runoff that complies with the City's 2016 Stormwater Management Requirements and Design Guidelines using a variety of BMPs. The stormwater management approach must reduce the existing runoff flow rate and volume through employment of a hierarchy of BMPs set forth in the Stormwater Management Requirements. The required BMP Hierarchy prioritizes infiltration-based BMPs, rainwater harvesting, vegetated roofs, and lined bioretention features (commonly known as a flowthrough planter). The proposed project or the variant would include rainwater collection features to capture stormwater that would be treated and reused onsite.

Article 12C of the San Francisco Health Code also requires that all new development projects of 250,000 gross square feet or more of gross floor area install onsite water systems to treat and reuse alternate sources of water for toilet and urinal flushing and irrigation. The proposed project and variant, which are both more than 250,000 gsf, would use an onsite blackwater recycling system to treat wastewater.

Groundwater was encountered approximately 20 feet below ground surface (bgs) during the geotechnical investigation. 148, 149 The proposed project or variant would necessitate excavation up to approximately 40 feet bgs in the northern portion of the project site and up to 50 feet bgs in the southern portion of the project site. Excavation in the northern portion would be to a shallower depth due to the presence of the subsurface BART tunnel and associated easement. The deep foundation cast-in-place piers would be constructed up to 250 feet bgs. Because groundwater would be encountered on site, temporary dewatering activities would be necessary. The Bureau of Systems Planning, Environment, and Compliance of the SFPUC must be notified of projects necessitating dewatering. The SFPUC may require water analysis before discharge. The proposed project or variant would be required to obtain a batch wastewater discharge permit from the SFPUC Wastewater Enterprise Collection System Division before any dewatering activities. Groundwater encountered during construction of the proposed project or variant would be subject to the requirements of Public Works Code article 4.1, Industrial Waste, which requires that groundwater meet specified water quality standards before it may be discharged into the sewer system. These measures would ensure protection of water quality during construction.

¹⁴⁸ Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [proposed project], 10 Van Ness Avenue, March 16, 2017.

Langan Engineering and Environmental Services, Inc., Geotechnical Investigation [variant], 10 Van Ness Avenue, June 6, 2017.

Therefore, the proposed project or variant would not substantially degrade water quality, and water quality standards or waste discharge requirements would not be violated. As such, the proposed project or variant would have a less-than-significant impact on water quality.

Impact HY-2: The proposed project or variant 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. (Less than Significant)

San Francisco overlies seven groundwater basins: Westside, Lobos, Marina, Downtown, Islais Valley, South San Francisco, and Visitacion Valley. The project site is located above the Downtown Groundwater Basin, which is generally inadequate to supply a significant amount of groundwater for municipal supply due to low yield. ¹⁵⁰ Based on semi-annual monitoring, the groundwater currently used for irrigation and other nonpotable uses in San Francisco meets or exceeds the water quality needs for these end uses. ¹⁵¹

Currently, there is negligible recharge of groundwater at the project site, because the site is almost completely covered with impervious surfaces. Therefore, the proposed project or variant would not substantially increase the amount of impervious surface and would not result in any substantial change in infiltration or runoff on the project site.

While the proposed project or variant would encounter groundwater no substantial ongoing groundwater extraction activities would occur beyond incidental dewatering for construction. Therefore, groundwater resources would not be substantially depleted, and the proposed project or variant would not substantially interfere with groundwater recharge. Thus, there would be a less-than-significant impact on groundwater supplies.

Impact HY-3: The proposed project or variant would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation (or flooding) onsite or offsite. (*Less than Significant*)

No surface bodies of water traverse the project site. The project site is almost entirely covered by impervious surfaces, and runoff from these impervious surfaces flow to the curb and are discharged into the combined stormwater and wastewater system. Impervious surfaces at the project site would decrease under the proposed project or variant, but drainage patterns would remain generally the same. In addition, as discussed under Impact HY-1, the proposed project and single tower variant would include a rainwater capture and recycling system, and therefore less water would discharge from the project site to the combined sewer system in compliance with the Stormwater Management Ordinance. This would in turn reduce potential erosion and flooding in down-gradient areas. Therefore, the proposed project and variant would not be expected to result in substantial erosion or flooding associated with changes in drainage patterns, and impacts would be less than significant.

¹⁵¹ Ibid.

¹⁵⁰ San Francisco Public Utilities Commission, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016.

Impact HY-4: The proposed project or variant would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant)

Stormwater generated and collected at the project site flows into SFPUC's combined stormwater/sewer system. During construction and operation of the proposed project or variant, all wastewater and stormwater runoff from the project site would be treated at the Southeast Water Pollution Control Plant. Treatment would be provided pursuant to the effluent discharge standards contained in the City's National Pollutant Discharge Elimination System permit for the plant. During construction and operation, the proposed project or variant would be required to comply with all local wastewater discharge, stormwater runoff, and water quality requirements, including the 2016 San Francisco Stormwater Management Requirements and Design Guidelines. The Stormwater Management Requirements and Design Guidelines would ensure that stormwater runoff generated by the proposed project or variant would be managed on site to reduce the existing runoff flow rate and volume such that the project would not contribute additional peak volumes of polluted runoff to the city's stormwater infrastructure. The Stormwater Management Ordinance would ensure that the proposed project or variant implements and installs appropriate stormwater management systems that retain runoff on site, promote stormwater reuse, and limit site discharges from entering the city's combined stormwater/sewer system. Specifically, the proposed project and variant would include a rainwater capture and recycling system to reduce the amount of stormwater discharged from the project site to the combined stormwater/sewer system. This would reduce the potential for the site to generate substantial amounts of polluted runoff. Therefore, the proposed project or variant would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and this impact would be less than significant.

Impact HY-5: The proposed project or the variant would not otherwise substantially degrade water quality. (Less than Significant)

A phase I environmental site assessment was prepared for the property at 10 South Van Ness Avenue in 2014. ¹⁵² No evidence of any significant staining, spillage, and ponded liquids or uncontained solids was discovered on the project site during site reconnaissance. No recognized environmental conditions associated with the storage of hazardous materials at the project site were observed. No potential underground storage tanks, ponds, stressed vegetation or stained soil; or mining, oil and gas exploration, production and distribution were noted at the site, and no apparent signs of chemical releases or leaks were noted at any nearby facilities.

Impact HY-1 discusses potential effects to surface water and groundwater quality. There are no sources of existing contamination identified at the site and the proposed project or variant would not include uses that would be anticipated to substantially degrade water quality. In addition, measures would be implemented during construction to mitigate impacts on water quality. Therefore, impacts would be less than significant.

¹⁵² Langan Treadwell Rollo, Updated Phase I Environmental Site Assessment, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

Impact C-HY-6: The proposed project or variant in combination with other past, present, or reasonably foreseeable future projects would not result in substantial cumulative impacts on hydrology and water quality. (Less than Significant)

Cumulative development in the project area would result in intensified uses and thus a cumulative increase in wastewater generation. The SFPUC has accounted for such growth in its service projections. ¹⁵³ Cumulative development could also result in an increase in polluted runoff and stormwater discharges. However, other development projects would be subject to the same water conservation, stormwater management, and wastewater discharge ordinances applicable to the proposed project or variant. The proposed project or variant would also be required to adhere to existing drainage control requirements that address water quality and quantity similar to that of other nearby current and future projects. Because other development projects would be required to follow drainage, dewatering, and water quality regulations, similar to the proposed project or variant, peak stormwater drainage rates and volumes for the design storm would gradually decrease over time with new development, meaning that no substantial cumulative effects would occur. Compliance with these ordinances would reduce the effects of nearby cumulative projects to less-than-significant levels. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects to create a significant cumulative impact related to hydrology and water quality, and the impact would be less than significant.

¹⁵³ San Francisco Public Utilities Commission, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
15.	HAZARDS AND HAZARDOUS MATERIALS					
	Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
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?					
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
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, would the project result in a safety hazard for people residing or working in the project area?					
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?					
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?					

Less Than

Hazards and Hazardous Materials

The project site is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, checklist topics 15e and 15f are not applicable.

Construction for both the proposed project and the variant would involve the same activities, duration, depth/amount of excavation, and removal/disposal of building materials. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail, which would typically use the same common cleaning products. For these reasons, the

potential hazards and hazardous materials impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact HZ-1: The proposed project or variant would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

Construction of the proposed project or variant would involve the demolition of an existing structure, excavation of the site, construction of a mixed-use residential building with retail spaces, dwelling units, and an underground parking structure, and streetscape improvements. Construction activities would require the use of and transport of limited quantities of hazardous materials such as fuels, oils, solvents, paints, and other common construction materials. These materials could be released during transport or disposal of building materials and cause a hazard to the public. San Francisco requires the project sponsor and its contractor to implement BMPs as part of their grading permit requirements that would include hazardous materials management measures, which would reduce short-term construction-related impacts related to transport, use, and disposal of hazardous materials to less-than-significant levels.

Operation of the proposed project or the variant would, likely, result in the use of common types of hazardous materials typically associated with retail/commercial and residential uses, such as cleaning products and disinfectants. These products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. However, most of these materials are consumed through use, resulting in relatively little waste. Businesses are required, by law, to ensure employee safety by identifying hazardous materials in the workplace, providing safety information to workers who handle hazardous materials, and adequately training workers. For these reasons, hazardous materials used during project operation would not pose substantial public health or safety hazards resulting from routine use, transport, or disposal of hazardous materials. Therefore, the proposed project or variant would result in less-than-significant impacts related to the use of hazardous materials.

Impact HZ-2: The proposed project or variant would not result in a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment. (Less than Significant)

In 2005, a phase I/II environmental site assessment was prepared for the project site. ¹⁵⁴ The site assessment confirmed that the project site includes an auto sales and services repair facility that regularly uses hazardous materials, including oil and hydraulic fluids, used oil, filters, rags, and 55-gallon drums, which are stored on site in bulk storage and aboveground tanks, with secondary containment where necessary. The roof top parking area contains a small area where car washing/detailing is performed. ¹⁵⁵ The project site overlies soils that contain remnants of the 1906 earthquake and fire. ¹⁵⁶ Approximately 100,000 cubic yards of existing soil would be excavated during construction of the proposed project or variant to accommodate deep foundation cast in-place piers and an underground parking structure.

There are certain areas of San Francisco that are located on fill and fall under the jurisdiction of the Maher Ordinance. These areas, were once highly industrialized and contaminated and are underlain by imported fill

¹⁵⁴ Green Environment, Inc., Phase I/II Environmental Site Assessments, 10 South Van Ness Avenue, San Francisco, California, August 2, 2005.

¹⁵⁵ Langan Treadwell Rollo, Updated Phase I Environmental Site Assessment, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

¹⁵⁶ AEI Consultants, Phase I Environmental Site Assessment: 10 South Van Ness Avenue, San Francisco, California 94103, September 2, 2009.

consisting of soil and debris from the 1906 earthquake. As such, these sites often contain lead and other pollutants. To protect public and worker health and safety projects that involve disturbance of more than 50 cubic yards of such soils require investigation, site management, and reporting subject to article 22A of the San Francisco Health Code (also known as the "Maher Ordinance"), which is administered and overseen by the Department of Public Health. The proposed project or variant would disturb more than 50 cubic yards of soil and is located within a Maher area, and, therefore, the proposed project or variant is subject to the Maher Ordinance.

The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare an environmental site assessment that meets the requirements of Health Code section 22.A.6. A site assessment determines the potential for site contamination and level of exposure risk as a result of a project. Based on that information, a project sponsor may be required to conduct soil and groundwater sampling and analysis, and where such analysis reveals the presence of hazardous substances in excess of state or federal standards, a project sponsor is required to submit a site mitigation plan to the Department of Public Health or other appropriate state or federal agencies, and to remediate any site contamination in accordance with an approved site mitigation plan before the issuance of any building permit. The project sponsor submitted a Maher application on March 18, 2016.

The 2005 environmental site assessment identified issues and provided the results of remedial actions for potential hazards identified in the report. Also, in compliance with the Maher Ordinance, an updated environmental site assessment was prepared to assess the current potential for site contamination based upon the conclusions and evidence presented in the 2005 environmental site assessment combined with current conditions. The updated environmental site assessment included: (1) a reconnaissance field survey of the site and vicinity; (2) review of previous site investigations and reports; (3) review of public local, state, and federal records pertinent to an environmental site assessment; (4) review of relevant documents and maps regarding local geologic and hydrogeologic conditions; and (5) review of historical documents including aerial photographs and topographic maps.

The updated environmental site assessment determined that there was:

- No observed evidence during site reconnaissance of any significant staining, spillage, and ponded liquids or uncontained solids on the project site
- No observed evidence of any recognized environmental conditions associated with the storage of hazardous materials at the project site
- No potential underground storage tanks, ponds, stressed vegetation or stained soil, or mining, oil, and gas exploration, production, or distribution
- No apparent signs of chemical releases or leaks at any nearby facilities.¹⁵⁹

Based on the information and conclusions from the updated environmental site assessment, the proposed project or variant would not result in a significant hazard to the public or the environment from the release of hazardous materials associated with contaminated soil, groundwater, and storage areas.

 $^{157 \} Green \ Environment, Inc., \textit{Phase I/II Environmental Site Assessments}, 10 \ \textit{South Van Ness Avenue, San Francisco, California, August 2, 2005}.$

¹⁵⁸ Langan Treadwell Rollo, *Updated Phase I Environmental Site Assessment*, 10 Van Ness Avenue, San Francisco, California, May 24, 2014. ¹⁵⁹ Ibid.

Although the project site does not contain any underground storage areas identified as containing hazardous materials, according to the environmental assessment ¹⁶⁰ and updated environmental site assessment, ¹⁶¹ demolition of the existing structure would involve removal of building materials that could contain asbestos and lead based paint. Therefore, these hazardous materials could be released into the environment during construction activities and could cause a hazard to the public. However, any hazardous materials currently on the site, such as asbestos or lead-based paint, would be removed during or prior to demolition of the existing building and prior to project construction, and would be handled in compliance with applicable laws and regulations.

The California Department of Toxic Substance Control considers asbestos hazardous and removal is required. Asbestos-containing materials must be removed in accordance with local and state regulations, BAAQMD, the California Occupational Safety and Health Administration (CALOSHA), and California Department of Health Services requirements. This includes materials that could be disturbed by the proposed demolition and construction activities. Specifically, Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

The California legislature vests the BAAQMD with the authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and the BAAQMD is to be notified ten days in advance of any proposed demolition or abatement work. Any asbestos-containing material disturbance at the project site would be subject to the requirements of BAAQMD Regulation 11, Rule 2: Hazardous Materials—Asbestos Demolition, Renovation, and Manufacturing. The local office of CAL OSHA must also be notified of asbestos abatement to be carried out. Asbestos abatement contractors must follow state regulations contained in Title 8 of California Code of Regulations Section 1529 and Sections 341.6 through 341.14, where there is asbestos related work involving 100 gsf or more of asbestos-containing material. Pursuant to California law, DBI would not issue the required permit until the applicant has complied with the requirements described above.

For buildings constructed prior to 1978, such as the existing building, it is highly likely that lead-based paint was used in their construction. Work that could result in disturbance of lead-based paint must comply with Section 3423 of the Building Code, Work Practices for Exterior Lead-Based Paint on Pre-1979 Buildings and Steel Structures. Section 3423 identifies prohibited practices that may not be used in disturbance or removal of lead paint, and notification requirements. Where there is any work that may disturb or remove lead paint on the exterior of any building, or the interior of occupied buildings built prior to or on December 31, 1978, Section 3407 requires specific notification and work standards and identifies prohibited work methods and penalties.

These regulations and procedures already established as part of the building permit review process would ensure that any potential impacts due to the presence of asbestos or lead based paint on the project site are reduced to a less-than significant level.

Other hazardous building materials that could be present include fluorescent light ballasts that could contain polychlorinated biphenyl (PCBs) or diethylhexyl phthalate, and switches, thermostats, and fluorescent light tubes that could contain mercury vapors. Disruption of these materials could pose health threats for construction

_

¹⁶⁰ Green Environment, Inc., Phase I/II Environmental Site Assessments, 10 South Van Ness Avenue, San Francisco, California, August 2, 2005.

¹⁶¹ Langan Treadwell Rollo, Updated Phase I Environmental Site Assessment, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

workers if not properly disposed of, a potentially significant impact. Each of these materials is subject to federal and state regulation to ensure that they are properly handled during removal and disposal, before the start of building demolition or renovation. PCBs have been prohibited in most uses since 1978, although some electrical transformers still in use today use oils that contain PCBs.

However, disposal of PCBs is regulated at both the federal level (the Toxic Substances Control Act, U.S. Code, title 15, chapter 53; and implementing regulations in title 40, part 761 of the Code of Federal Regulations) and at the state level (22 CCR section 66261.24), and diethylhexyl phthalate is covered under federal regulations (Code of Federal Regulations title 40, section 261.33). Disposal of these materials as hazardous waste must be in compliance with applicable laws and regulations and may involve incineration or other treatment or disposal in an approved chemical waste landfill. Mercury is regulated as a hazardous waste under 22 CCR sections 66262.11 and 66273.4, and its disposal as hazardous waste under 22 CCR section 66261.50. Because they are considered a hazardous waste, all fluorescent lamps and mercury-containing switches and thermostats must be recycled or taken to a handler of universal waste. Compliance with the existing legal and regulatory framework noted here would ensure that potential impacts of exposure to such other hazardous building materials would be less than significant. Therefore, with mandatory compliance with existing laws and regulatory requirements the potential hazard to the public and the environment from reasonably foreseeable conditions involving the release of hazardous materials into the environment would be less than significant with mitigation.

Impact HZ-3: The proposed project or variant would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (*Less than Significant*)

One school is located within 0.25 mile of the project site: the French American International School, approximately 0.14 mile north of the project site across Market Street at 150 Oak Street. The proposed project or variant would not store, handle, or dispose of significant quantities of hazardous materials and would not otherwise include any uses that would include emissions of hazardous substances. Any hazardous materials currently on the project site, such as asbestos-containing materials and lead-based paint would be removed before or during demolition of the existing building, and before construction, and would be handled in compliance with applicable laws and regulations, as described above. With adherence to these regulations, there would be no potential for such materials to affect this nearest school. Thus, the proposed project or variant would have a less-than-significant impact related to hazardous emissions or materials within 0.25 mile of a school.

Impact HZ-4: The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. (Less than Significant)

According to the updated environmental site assessment, the project site is not listed on the Hazardous Waste and Substances Sites List (commonly referred to as the "Cortese List") compiled by the California Department of Toxic Substances Control pursuant to Government Code section 65962.5. In addition, the State Water Resources Control Board's GeoTracker database indicates that the project site does not contain any active

¹⁶² California Department of Toxic Substances Control. EnviroStor Hazardous Waste and Substances Site List, http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&stat us=ACT%2CBKLG%2CCOM&reporttitle=HAZARDOUS%20WASTE%20AND%20SUBSTANCES%20SITE%20LIST, accessed February 1, 2017.

underground storage tanks, cleanup sites, or other remediation efforts. ¹⁶³ While a regulatory agency database report (EDR) for the project site did not identify any recognized environmental conditions for the site, due diligence detailed in the 2005 environmental site assessment, as cited in the updated environmental site assessment, identified some potential sources of contamination, including a buried fuel oil storage tank on the property, evidence of a historic fuel service station onsite, two abandoned monitoring wells in adjacent public sidewalk off of 12th Street, and three below-grade remnant hydraulic lift components. However, the current site owner responded to the environmental site assessment results in 2005 by permanently closing the monitoring wells, removing the hydraulic lift components, and testing the soil below, and investigating and sampling soil to address the historic fueling station and possible buried fuel tank; and the updated environmental site assessment concluded that all issues were determined to be resolved as a result of such actions. ¹⁶⁴

As a result, the project site is not included on the Cortese List, and impacts would be less than significant.

Impact HZ-5: The proposed project or variant would not interfere with the implementation of an emergency response plan nor expose people or structures to a significant risk of loss, injury, or death involving fires. (Less than Significant)

San Francisco ensures fire safety primarily through provisions of the Building and Fire Codes. Final building plans are reviewed by the San Francisco Fire Department to ensure conformance with these provisions. As such, potential fire hazards, including those associated with hydrant water pressures and emergency access, would be addressed during the permit review process

Implementation of the proposed project or variant could contribute incrementally to congested traffic conditions in the immediate area in the event of an emergency evacuation. However, because the proposed project or variant would be located within a dense urban setting, it is expected that traffic would be dispersed within the existing street grid such that there would be no significant adverse effects on nearby traffic conditions.

Therefore, the proposed project or variant would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan, and this impact would be less than significant.

Impact-C-HZ-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in significant cumulative impacts related to hazards and hazardous materials. (*Less than Significant*)

Impacts from hazards and hazardous materials are generally site-specific, and typically do not result in cumulative impacts. Any hazards that are present at surrounding sites would be subject to the same safety requirements discussed above for the proposed project and variant, which would reduce any hazards impacts to less than significant. Therefore, the proposed project or variant in combination with past, present, and reasonably foreseeable future projects would not result in cumulative impacts related to hazards and hazardous materials, and the impact would be less than significant.

¹⁶³ State Water Resources Control Board, GeoTracker database and webmap,

 $https://geotracker.waterboards.ca.gov/map/?CMD=runreport\&myaddress=10+van+ness+ave\%2C+san+francisco\%2C+ca,\ accessed\ February\ 1,\ 2017.$

Langan Treadwell Rollo, Updated Phase I Environmental Site Assessment, 10 Van Ness Avenue, San Francisco, California, May 24, 2014.

Topics:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16.	MINERAL AND ENERGY RESOURCES					
a)	Would the project: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?					
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?					
c)	Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?					

/ --- Th---

Mineral and Energy Resources

All land in San Francisco, including the project site, is designated by the California Division of Mines and Geology as Mineral Resource Zone 4 under the Surface Mining and Reclamation Act of 1975. This designation indicates that adequate information does not exist to assign the area to any other mineral resource zone; thus, the area is not one designated to have significant mineral deposits. The project site has previously been developed, and future evaluations of the presence of minerals at this site would therefore not be affected by the proposed project. Because of this, the development and operation of the proposed project or variant would not affect operational mineral resource recovery sites. Therefore, topics 16a and 16b are not applicable to the proposed project or variant.

Construction for both the proposed project and the variant would involve the same activities, duration, and depth/amount of excavation. Similarly, the proposed project and variant share a comparable program of development, with the same number of units and similar amount of commercial retail uses and associated energy use. For these reasons, the potential mineral and energy resources impacts resulting from construction and operation of the proposed variant are anticipated to be the same as those resulting from the proposed project.

Impact ME-1: The proposed project or variant would not encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (Less than Significant)

The proposed project or variant would introduce new residential, commercial and assembly uses, and an increased intensity of uses to the project site, although not to an extent that would exceed anticipated growth in the area.

As new buildings in San Francisco, the proposed project or the variant would be subject to the energy conservation standards included in the San Francisco Green Building Code that require the project to meet a number of conservation standards, including installation of water efficient fixtures and energy efficient

¹⁶⁵ California Department of Conservation, Division of Mines and Geology, Open File Report 96-03 and Special Report 146, Parts I and II.

¹⁶⁶ California Department of Conservation, Division of Mines and Geology, Special Report 146, Parts I and II (1986) and DMG Open File Report 96 03 (1996), http://www.conservation.ca.gov/cgs/minerals/mlc/Pages/index.aspx, accessed August 18, 2016.

appliances, and the proposed project or variant would provide features that encourage alternative modes of transportation, such as bicycle racks and car-share parking spaces. Documentation showing compliance with the San Francisco Green Building Code would be submitted with the application of the building permits, and would be enforced by the DBI. In addition, the proposed project or variant would be required to comply with California Code of Regulations title 24, which regulates energy consumption for the heating, cooling, ventilation, and lighting of residential and nonresidential buildings and is enforced by the DBI. Compliance with title 24 and the San Francisco Green Building Code would ensure reduction in the use of fuel, water, and energy by the proposed project or variant.

In addition, San Francisco has a lower vehicle miles traveled ratio than the San Francisco Bay Area region as a whole. The transportation analysis zone in which the project site is located (transportation analysis zone 578) has between 40 and 78 percent fewer daily VMT than the San Francisco Bay Area regional average. Furthermore, the following transportation-related aspects of the proposed project or variant would discourage single-occupancy vehicle trips: proximity to transit, bicycle storage, and a TDM Plan with strategies to discourage the use of automobiles and to encourage transit and other modes of transportation. Because the proposed project or variant is an infill mixed-use development in a transit-rich area, the vehicle trips and associated fuel use for the proposed project or the variant would not constitute wasteful use of energy and therefore would be consistent with the Plan Bay Area 2040 167 land use strategy, which seeks to reduce per capita VMT. Operation of the proposed project or variant would provide opportunities to minimize VMT, use public transit, and use nonmotorized modes of transportation (e.g., walking, biking, transit) to reach residential and employment destinations and amenities.

Therefore, the proposed project or variant would not result in the use of large amounts of fuel, water, or energy, or result in the use of these resources in a wasteful manner, and effects related to the use of these resources would be less than significant.

Impact-C-ME-1: The proposed project or variant, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project site, would not result in substantial cumulative impacts related to energy and minerals. (Less than Significant)

The cumulative development projects shown in Table 3 would be required by the DBI to conform to the requirements of Title 24 and the San Francisco Green Building Code regarding minimizing the use of large amounts of fuel, water, or energy by, for instance, installing energy efficient appliances and water efficient fixtures. Conformance with Title 24 and the San Francisco Green Building Code would preclude significant cumulative impacts related to the use of fuel, water, or energy. In addition, the City plans to reduce GHG emissions to 40 percent below 1990 levels by 2025 and 80 percent below 1990 levels by 2050, which would be achieved through a number of different strategies, including energy efficiency. As such, the proposed project and variant, in combination with other past, present or reasonably foreseeable projects, would result in a less-than-significant cumulative impact related to the use of fuel, water, and energy resources.

The *Plan Bay Area* 2040 is collaboration among the Association of Bay Area Governments, Bay Area Air Quality Management District, Metropolitan Transportation Commission, and the San Francisco Bay Conservation and Development Commission. *Plan Bay Area* 2040 is a long-range transportation, land-use and housing plan that will support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area. The *Plan Bay Area* 2040 was approved on July 26, 2017.

Less Than Significant Potentially with Less Than Significant Mitigation Significant No Not Topics: Impact Incorporated Impact Impact Applicable 17. AGRICULTURE AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as a model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding State inventory of forest land, including the Forest and Range Assessment and Forest Legacy Assessment projects; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: \boxtimes Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? \boxtimes Conflict with existing zoning for agricultural use, or a Williamson Act contract? П П П П \boxtimes Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? \boxtimes Result in the loss of forest land or conversion of forest land to non-forest use? \boxtimes Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to

Agriculture and Forestry Resources

use?

non-agricultural use or forest land to non-forest

The project site is located within an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any land designated as prime farmland, unique farmland, or Farmland of Statewide Importance to nonagricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts. ¹⁶⁸ No land in San Francisco is designated as forest land or timberland by the California Public Resources Code. Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. For these reasons, topics 17a, 17b, 17c, 17d, and 17e are not applicable to the proposed project or variant.

San Francisco is identified as "Urban and Built-Up Land" on the California Department of Conservation Important Farmland in California Map, 2012, http://www.consrv.ca.gov, accessed January 12, 2017.

Тор	ics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
18.	MANDATORY FINDINGS OF SIGNIFICANCE					
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?					
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)					
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?					

Note: Authority cited: Sections 21083 and 21083.05, 21083.09 Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21073, 21074 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21080.3.1, 21080.3.2,21082.3, 21084.2, 21084.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

Mandatory Findings of Significance

The foregoing analysis identifies potentially significant impacts to cultural resources (historic architectural resources only), transportation and circulation, noise, air quality, wind, and shadow, all of which will be analyzed further in the EIR.

- A. As discussed in the various topics in this initial study, the proposed project and variant are anticipated to have less-than-significant impacts on most of the environmental topics discussed in this initial study. Where necessary, mitigation measures have been identified to reduce impacts to less than significant levels. Mitigation measures are included in the following topics: cultural resources, geology and soils and hazards and hazardous materials. However, the proposed project or variant could have potentially significant impacts related to cultural resources (historic architectural resources only), transportation and circulation, noise, air quality, wind, and shadow. These impacts will be discussed and analyzed further in the EIR.
- B. The proposed project or variant, in combination with past, present, and reasonably foreseeable projects described in the Cumulative Setting would not result in cumulative impacts to land use, population and housing, cultural resources (archeological resources, human remains, and tribal cultural resources), greenhouse gas emissions, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral and energy resources, and agricultural and forest resources with implementation of identified mitigation. However,

- the proposed project or variant, in combination with the past, present and foreseeable projects could result in cumulative impacts related to historic architectural resources, transportation and circulation, noise, air quality, wind, and shadow. These cumulative impacts will be discussed and analyzed further in the EIR.
- C. As discussed above, the proposed project or variant have the potential to result in significant impacts with respect to historic architectural resources, transportation and circulation, noise, air quality, wind, and shadow, which could adversely affect human beings. The EIR will assess these topics and identify mitigation measures where applicable.

F. MITIGATION MEASURES

The following mitigation measures are also included under each relevant topic area above.

Cultural Resources

Mitigation Measure M-CR-1: Conduct Archeological Testing and, if Required, Archeological Monitoring

Based on a reasonable presumption that archeological resources may be present within the project area, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational qualified archeological consultants list maintained by the Planning Department archeologist. The project sponsor shall contact the department archeologist to obtain the names and contact information for the next three archeological consultants on the qualified archeological consultants list. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). 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. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines sections 15064.5(a) and 15064.5(c).

Consultation with Descendant Communities. On discovery of an archeological site ¹⁶⁹ associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group, an appropriate representative ¹⁷⁰ of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing program (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project,

 $^{^{169}}$ The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the department archeologist.

the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the Planning Department archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- (A) The proposed project shall be redesigned to avoid any adverse effect on the significant archeological resource. OR
- (B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program reasonably before the commencement of any project-related soil-disturbing activities. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring), and site remediation shall require archeological monitoring because of the risk these activities pose to potential archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the
 deposit shall cease. The archeological monitor shall be empowered to temporarily redirect
 demolition/excavation/pile driving/construction activities and equipment until the deposit is

evaluated. If in the case of pile driving activity (foundation, shoring), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological 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 archeological 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 proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources 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 onsite/offsite public interpretive program during the course of the archeological data recovery program.
- **Security Measures.** Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally 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 soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the coroner's determination that the human remains are Native American remains, notification of the Native American Heritage Commission, which shall appoint a Most Likely Descendant (California Public Resources Code section 5097.98). The archeological consultant, the project sponsor, ERO, and the Most Likely Descendant shall have up to but

not beyond six days of 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 section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, 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 a Most Likely Descendant. 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.

Final Archeological Resources Report. The archeological consultant shall submit a draft final archeological resources report to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the final archeological resources report shall be distributed as follows: California Archeological Site Inventory, Northwest Information Center shall receive one copy and the ERO shall receive a copy of the transmittal of the report to the Northwest Information Center. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the final archeological resources report 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 that presented above.

Mitigation Measure M-CR-2: Tribal Cultural Resources Interpretive Program

If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

Geology and Soils

Mitigation Measure M-GE-6: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources

Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find and a qualified paleontologist notified, who shall evaluate the significance.

If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and San Francisco Planning Department. There shall be no construction work in the area to allow for the recovery of the resource in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan compliant with the standards of the Society for Vertebrate Paleontology. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City and County of San Francisco shall determine which of the recommendations in the recovery plan are necessary and feasible, and these recommendations shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.

G. PUBLIC NOTICE AND COMMENT

On July 12, 2017, the Planning Department mailed a notice of preparation of an EIR and notice of public scoping meeting to property owners within 300 feet of the project site, tenants, and other potentially interested parties. Subsequently, the Planning Department held a public scoping meeting on Wednesday, August 2, 2017, to receive input on the scope of the environmental review for the proposed project and variant. Five speakers provided oral comments at the public scoping meeting. No comment letters were received during the public scoping meeting. During the public review and comment period on the notice of preparation, a total of 13 comment letters, comment cards, and emails were submitted to the Planning Department. The written and oral comments raised the following issues:

- Potential impacts related to the proposed provision of parking at a dwelling unit to parking space ratio that would require conditional approval by the Planning Commission
- Potential transportation impacts associated with tech shuttle services, transportation network companies, and e-commerce delivery services
- The appropriateness of using an average vehicle miles traveled metric to determine significance of transportation impacts
- Desire for community benefits, such as public open space and art displays
- Potential wind impacts to bicyclists and pedestrians traveling in the vicinity of the project site
- Provision of two- and three-bedroom units in new residential projects in the project vicinity
- Provision of affordable housing
- The need to mitigate demolition of historic resources
- Cumulative impacts

The issues raised in the written and oral comments have either been addressed in this initial study or will be addressed in the EIR, as appropriate.

H. DETERMINATION

On the	n the basis of this initial study:	
	I find that the proposed project COULD NOT have a significant effect on and a NEGATIVE DECLARATION will be prepared.	the environment,
	I find that although the proposed project could have a significant effect of there will not be a significant effect in this case because revisions in the period by or agreed to by the project proponent. A MITIGATED NEGATI will be prepared.	roject have been
	I find that the proposed project MAY have a significant effect on the envi ENVIRONMENTAL IMPACT REPORT is required.	ronment, and an
	I find that the proposed project MAY have a "potentially significant imposing significant unless mitigated" impact on the environment, but at least one adequately analyzed in an earlier document pursuant to applicable legal been addressed by mitigation measures based on the earlier analysis as disheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must effects that remain to be addressed.	effect 1) has been standards, and 2) has escribed on attached
	I find that although the proposed project could have a significant effect of because all potentially significant effects (a) have been analyzed adequate or NEGATIVE DECLARATION pursuant to applicable standards, and (b) or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION or mitigation measures that are imposed upon the proposed project, no f documentation is required. Lisa Gibson	ely in an earlier EIR b) have been avoided , including revisions
	Environmental Review Offi	cer
	for	
	John Rahaim	
	Director of Planning	
DATE	DATE: May 2, 2018	

I. INITIAL STUDY PREPARERS

Planning Department, City and County of San Francisco (Lead Agency)

Environmental Planning Division

1650 Mission Street, Suite 400

San Francisco, CA 94103

Environmental Review Officer: Lisa Gibson Principal Environmental Planner: Rick Cooper Senior Environmental Planner: Rachel Schuett

AECOM (Environmental Planning Consultant)

300 California Street, Suite 600

San Francisco, CA 94104

Project Director: David Reel

Project Manager: Florentina Craciun

Deputy Project Manager: Elliott Schwimmer

Land Use/Planning: Christine Wolfe Population/Housing: George Smyth

Cultural Resources: Mark Hale

Transportation/Circulation: Anthony Mangonon

Noise: Mark Storm

Air Quality and GHG Emissions: Jason Paukovits

Mary Kaplan Paola Peña Kelsey Bennett

J. Abrams Law, P.C.

One Maritime Plaza Suite 1900 San Francisco, California 94111

Jim Abrams

Dana Lovisolo

BMT Fluid Mechanics (Wind Consultant)

81 Prospect Street Brooklyn, NY 11201

Project Manager: Max Lee

FASTCAST (Shadow Consultant)

34 Corte Madera Avenue

Mill Valley, CA 94941

Managing Partner: Adam Noble

Wind and Shadow: Elliott Schwimmer

Recreation: George Smyth

Utilities/Service Systems: Christine Wolfe

Public Services: Christine Wolfe Biological Resources: Lidia D'Amico Geology/Soils: Christine Wolfe

Hydrology/Water Quality: Elizabeth Nielsen Hazards/Hazardous Materials: Galen Peracca Mineral/Energy Resources: Kelsey Bennett

Agriculture/Forestry Resources: Lidia D'Amico

Jason Paukovits

CHS Consulting (Transportation Consultant)

220 Montgomery Street, Suite 346

San Francisco, CA 94104

Senior Transportation Planner: Andrew Kluter

Transportation Planner: Charles Felder

SWCA (Historic Preservation Consultant)

330 Townsend Street, Suite 216

San Francisco, CA 94107

Senior Architectural Historian: Debi Howell-Ardila

Architectural Historian: Natalie Loukianoff

Steven Treffers

Page & Turnbull (Historic Preservation Consultant)

417 Montgomery Street, 8th Floor

San Francisco, CA 94104

Christina Dikas

Carolyn Kiernat

Maggie Smith

SITELAB urban studio

156 2nd Street

San Francisco, CA 94102

Laura Crescimano

Eri Suzuki

Mu-Ping Cheng

Michel St Pierre

10SVN, LLC (Project Sponsor)

530 Bush Street, Suite 800

San Francisco, CA 94108

Vice President: Adam Tartakovsky

Project Manager: Luis Mejias