



SAN FRANCISCO PLANNING DEPARTMENT

DATE: May 8, 2017

TO: Historic Preservation Commission

CC: Tina Tam, Senior Preservation Planner, Planning Department

FROM: Tim Johnston, Environmental Planning, Planning Department
(415) 575-9035

RE: **Memo to Architectural Review Committee (ARC) and Meeting Notes from Review and Comment at the July 20, 2016 ARC meeting for the Biosolids Digester Facilities Project, Case No. 2015-000644ENV**

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Attached is the memo presented at the ARC meeting on July 20, 2016, regarding the proposed Preservation Alternatives for the Biosolids Digester Facilities Project (BDFP), as well as a memo of staff notes summarizing comments made at that hearing, which are presented to the Historic Preservation Commission as additional background materials for its review of the draft Environmental Impact Report for said project, to occur at its regularly scheduled hearing on May 17, 2017.



SAN FRANCISCO PLANNING DEPARTMENT

MEMO

DATE: December 20, 2016

TO: Tina Tam, Senior Preservation Planner, Planning Department
Tim Johnston, Environmental Planning, Planning Department

CC:

FROM: Chris McMorris, JRP Historical Consulting, LLC, Architectural Historian,
Extension of Environmental Planning Division Staff
(530) 757-2521

REVIEWED BY:

RE: **Meeting Notes from Review and Comment at the July 20, 2016 ARC
meeting for the Biosolids Digester Facilities Project,
Case No. 2015-000644ENV**

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On July 20, 2016, the Planning Department (Department) and the San Francisco Public Utilities Commission (SFPUC) brought before the Architectural Review Committee (ARC) the proposed Preservation Alternatives for the Biosolids Digester Facilities Project (BDFP). At this meeting, the Department and SFPUC requested review and comment on the preservation alternatives. The following is a summary of the ARC comments from that meeting.

ARC Comments

Commissioner Pearlman noted the challenge of assessing the value and preservation of historic buildings in relationship to the value of the city's waste water infrastructure. He expressed the issue that the City needs to remain mindful of spending the public's money relevant to saving historic resources versus improving the sewer system. This is particularly true for buildings that are not open to the public, such as the Central Shops. Pearlman stated that the historic resources potentially affected by BDFP are not like the historical structures seen in other cities' infrastructure, such as Boston's nineteenth century / early twentieth century water structures. He remarked that he did not see a comparable value in preserving the historic resources that may be affected by BDFP in relationship to the City's efforts to improve the waste water infrastructure. As an aside, Pearlman also questioned why the digester tanks are contributors to the historic district. He specified that neither of the proposed preservation alternatives were particularly workable or had much value to the City. Pearlman indicated that he was not sure what specific input he could provide on the Preservation Alternatives, although he understood that there were significant design and

engineering issues if the system were to be bifurcated. He also noted the complexity of disassembling the Central Shops for their removal and that such efforts probably do not hold much value for the City. He further noted the relative importance of the project objectives to upgrade the City's sewage infrastructure compared with the profit that a developer could desire in a standard development project.

Commission Hyland found that the SFPUC / Department presentation did not match the information presented in the packet the ARC received. He advised the Department staff to be mindful of this issue when the project comes before the full HPC. Hyland expressed the need for the Preservation Alternatives to be vetted thoroughly and graphically represented. He acknowledged that this project is likely going to lead to the demolition of historic resources and thus significant and unavoidable impacts. He noted that he, and likely others on the HPC, do not have sufficient technical knowledge of the treatment process to identify other alternatives. Hyland emphasized that the legitimacy of the historic resources process (under the California Environmental Quality Act) is the question at hand, and he noted that there did not appear to be strong community interest in preserving the Central Shops.

The HPC's Department staff liaison, Tim Frye, discussed the process by which this project came before ARC and the exploration of potential Preservation Alternatives that is part of the steps to be taken for preparation of the project's Environmental Impact Report. He also summarized the need for improved graphics to illustrate the preservation alternatives and for the Department / SFPUC to provide layman descriptions that define the impacts.

The Commissioners acknowledged that the project is unlikely to be mitigated to a level that is less than significant for its impact on historic resources, but that the HPC needs more specific information regarding the project and the Preservation Alternatives to understand what the outcome of the impacts will be. While the ARC packet had a lot of information, it was not presented in a manner that made it clear to the Commissioners about the details regarding the Preservation Alternatives. The Commissioners concluded that they did not have any design recommendations that would refine the presented alternatives or would suggest other potential alternatives. The ARC stated that BDFP did not need to return to the ARC, but it would need to go before the full HPC as part of the process for review of the project's Draft Environmental Impact Report.



SAN FRANCISCO PLANNING DEPARTMENT

MEMO

DATE: July 11, 2016

TO: Architectural Review Committee of the
Historic Preservation Commission

FROM: Chris McMorris, JRP Historical Consulting, LLC, Architectural
Historian, Extension of Environmental Planning Division Staff (530) 757-
2521

REVIEWED BY: Steven Smith, Senior Environmental Planner, (415) 558-6373

RE: **Review and Comment for San Francisco Public Utilities Commission
Biosolids Digester Facilities Project
Preservation Alternatives for Draft EIR
Case No. 2015-000644ENV**

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The Planning Department ("Department") and the San Francisco Public Utilities Commission ("SFPUC") are requesting review and comment from the Architectural Review Committee (ARC) of the Historic Preservation Commission (HPC) regarding the proposed Preservation Alternatives for the Biosolids Digester Facilities Project (BDFP), consisting of a new solids treatment, odor control, energy recovery, and associated facilities. The proposed BDFP site encompasses the City and County of San Francisco Central Shops at 1800 Jerrold Avenue, the San Francisco Public Utilities Commission Southeast Water Pollution Control Plant (SEP) at 750 Phelps Street, and the decommissioned City and County of San Francisco Asphalt Plant at 1801 Jerrold Avenue in the southeast portion of San Francisco. See attached Project Location Map.

The subject project is being brought to the ARC for feedback as the Department and the SFPUC develop preservation alternatives to address the anticipated significant impact on historic resources. This feedback is sought in part as a response to HPC Resolution No. 0746, which was adopted on March 18, 2015 to clarify expectations for the evaluation of significant impacts to historic resources and the preparation of preservation alternatives in Environmental Impact Reports (EIR). Although the resolution does not specify ARC review of proposed preservation alternatives, the HPC, in their discussions during preparation of the resolution, expressed a desire to provide feedback earlier in the environmental review process – prior to publication of the Draft EIR – particularly for large projects, such as the BDFP.

The Planning Department is in the process of preparing a Draft EIR to evaluate the physical environmental effects of the proposed project. The EIR will address various environmental topics including cultural and paleontological resources, aesthetics, transportation and

circulation, noise, air quality / odor, utilities and service systems, hydrology and water quality, and hazardous materials. The proposed Preservation Alternatives (for historic architectural / built environment resources) are being brought to the ARC for comment prior to review by the HPC of the Draft EIR. The Draft EIR is anticipated to be released in late 2016.

DESCRIPTION OF PROPERTIES

The BDFP would be constructed in Bayview-Hunter's Point at the City and County of San Francisco Central Shops at 1800 Jerrold Avenue (Block and Lot 5262/009), San Francisco Public Utilities Commission SEP at 750 Phelps Street (Block and Lot 5262/009), and decommissioned City and County of San Francisco Asphalt Plant at 1801 Jerrold Avenue (Block and Lot 5281/001) (District 10). The project site is bordered by a freight rail spur and the Caltrain right-of-way on the west, Rankin Street on the northwest, and the existing SEP to the northeast, east, and southeast. The project is bisected by Jerrold Avenue and includes Quint Street between Jerrold Avenue and the Caltrain right-of-way. The existing solids processing facility located south of Jerrold Avenue and the existing liquid processing facility is located north of Jerrold Avenue. These areas are referred to as the southside and northside of SEP. Potential project alternatives and project staging areas also include parts of the Port of San Francisco Pier 94, Pier 94 Backlands, and Pier 96 on artificial fill reclaimed in the 1960s, as well as 1550 Evans Avenue, which includes a modern office building. The SFPUC is acquiring the Central Shops and Asphalt Plant properties, which are owned by the General Services Agency and San Francisco Public Works respectively, as part of separate projects.

The project has the potential to impact two historic resources: a portion of a historic district located within the boundaries of SEP and the project site, and the Central Shops comprised of a two-building historic resource. Both of these resources were found eligible for listing in the National Register of Historical Resources (NRHP) and the California Register of Historical Resources (CRHR). The Asphalt Plant is not a historic resource.

All aboveground buildings and structures at SEP were surveyed and evaluated for eligibility to the NRHP and CRHR. A portion of SEP, including buildings and structures that comprise most of the southside of SEP and a portion of the northside, qualifies as a NRHP/CRHR-eligible historic district: the *Southeast Treatment Plant Streamline Moderne Industrial Historic District*. (See attached map of the historic district.) The BDFP proposes to demolish one contributor (of 22) within SEP historic district: Building 870, located just west of the main gate within the northside behind the wall that encompasses the plant. Building 870 is a service building that is a high-bay, one-story building with an L-shaped plan, flat roof, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. It is approximately 95 feet long, 60 feet wide, and 20 feet tall. The parapet coping is terra cotta tile with a speedline motif. Cast concrete double moldings surround all windows and doors. Three service bays with replacement steel roll-up doors are located on the east elevation, as are three service bays on the north elevation (for a total of six bays). North and west elevations also have replacement steel-sash fixed windows covered by steel security grates. Fluted cast concrete pilasters are located between these windows and the garage doors. The row of windows on the west elevation is set within concrete sills and headers, which run the length of this façade and wrap around the corners of the building. A small concrete storage shed clad in asphalt roofing is located at the inside corner of the "L." Building 870 is one of the smaller buildings within the historic district that provides support to the wastewater treatment facility and is not instrumental in the overall

treatment process. It is also a relatively modest and utilitarian example of Streamline Moderne architecture, with much better examples remaining in the historic district.

The Central Shops facility, which was built and has been used as a maintenance facility for the City's vehicle fleet (cars, trucks, fire trucks, ambulances, etc.), was also evaluated under NRHP and CRHR criteria. A two-building historic resource was identified at the Central Shops, which is located on the north side of Jerrold Avenue adjacent to the Caltrain right-of-way. The survey recorded the two buildings as Building A and Building B and concluded that the resource was significant as an important example of Industrial Modern architecture in San Francisco. Constructed in 1959, the Central Shops Buildings A and B were built as a single facility and are of identical construction, the main difference being Building B is about twice as tall as Building A. These two buildings are rectangular with flat, metal deck roofs supported by clear span steel trusses. Wall framing is steel and the wall surface is largely industrial steel sash windows. Below the windows is a reinforced concrete apron wall about three feet high. Building A is 17,401 square feet divided into several bays housing offices and shops. Building A has several glazed metal personnel doors, glazed metal top-hung sliding doors, large glazed metal hinged doors, and two recessed personnel entrances. Building B is 49,976 square feet and is divided into various shops. Each bay is accessed by large top-hung glazed double sliding doors or metal roll-up doors. Several shops are drive through bays with top-hung doors on each end. Also, throughout the building are glazed metal personnel doors. Please note, the General Services Agency is in the process of relocating the Central Shops to a new facility under a project separate from the BDFP.

Additional description of the existing buildings within SEP historic district, including Building 870, and the Central Shops' Buildings A and B is provided in the attached DPR 523 forms for these two resources.

CEQA HISTORICAL RESOURCES EVALUATION

Historic resource surveys of the proposed project area were conducted and identified two historic resources that are eligible for the NRHP and CRHR, and are considered historical resources for compliance under the California Environmental Quality Act (CEQA).

The survey of SEP concluded that a historic district is located within that property and has tentatively been named the *Southeast Treatment Plant Streamline Moderne Industrial Historic District*. This historic district is eligible under NRHP Criterion A / CRHR Criterion 1 for its important historical associations with the implementation of San Francisco's 1935 Sewer System Master Plan; and under NRHP Criterion C / CRHR Criterion 3 as a significant representative of the use of Streamline Moderne architecture, which is rare in San Francisco, but is a consistent architectural theme in the early development of the City's wastewater facilities. The historic district also retains sufficient historic integrity to convey its significance. The proposed SEP Historic District includes 22 buildings and structures assessed as contributors to its significance, and 4 buildings and structures assessed to be non-contributing to its significance because they are less than 45 years old and because they do not share in the historic district's architectural style. The contributors were completed in 1952 during the initial phase of SEP's construction, which was the final phase of implementation of the 1935 Sewer System Master Plan. As was common for public and institutional buildings of the Streamline Moderne style, the majority of the contributory buildings represent a more rectilinear interpretation of the style, and they

feature horizontal orientation, glass block windows, tile coping at the roofline with a speedline motif, and cast concrete double moldings at the windows and doors. None of the buildings or structures within the historic district were identified as individually significant. The remaining buildings and structures at SEP were constructed between 1981 and 2005, are less than 45 years old, are not considered NRHP / CRHR eligible, and are not historic resources.

The two-building historic resource at the Central Shops (Building A and Building B) were found eligible for the NRHP under Criterion C and CRHR under Criterion 3. This historic resource has the distinctive characteristics of International Style Modernism. The buildings are a full expression of the pattern of features of this style and have an individuality of this property type not present in other vehicle repair/maintenance facilities in San Francisco. The property also illustrates the evolution of architectural design for support facilities in the City, presenting the contemporary style of its period when it was constructed, just as the International Style (and other iterations of Modern architecture) was coming into full prominence in San Francisco. Despite some minor physical alterations over the years, these buildings retain sufficient integrity to convey their associations with the Industrial Modern architectural style. The third building at the Central Shops, Building C, is an open sided shed roof structure on the north side of the facility that does not exhibit the architectural qualities of the other buildings and is not significant under NRHP / CRHR criteria.

Additional information regarding the historic significance and integrity of the SEP historic district, including its boundary and contributors, as well as the Central Shops are in the attached DPR 523 forms for these two resources.

CHARACTER-DEFINING FEATURES

The recordation of the SEP historic district and the Central Shops included identification of character-defining features for the two historic resources.

The SEP historic district contributing buildings have character-defining features that represent a rectilinear interpretation of the Streamline Moderne and include glass block windows, cast concrete double moldings around all windows and doors, flat roofs with tile coping at the roofline with a speedline motif, and smooth, board-formed concrete wall surfaces. Building 870 includes these architectural features. The historic district contributors also include ten large digester tanks that are utilitarian industrial facilities, which do not have features ascribed to this particular style, but were designed and built as functional units directly associated with buildings that are representative of this style.

The character-defining features of the Central Shops Buildings A and B are their original design and materials, including their exposed steel frame structures on concrete apron walls with steel sash exterior glazing, flat metal deck roofs supported on trusses exposed to the interior, wide interior open spaces that are divided into bays of varying function, and the various glazed metal doors (personnel doors, top-hung sliding doors, and large hinged doors). The design also includes recessed personnel entrances to the office and locker room. While the two buildings are located on a six-acre portion of the City-owned parcel, the boundary of this historic resource is limited to the immediate surroundings of Buildings A and B that are used for vehicle parking and maneuvering, roughly 40 to 100 feet around the buildings, including the space between the buildings.

PROJECT DESCRIPTION

For the BDFP, the SFPUC project proposes replacing the outdated solids treatment facilities at SEP where 80% of San Francisco's wastewater is processed. The project involves demolition of existing buildings and structures, and includes construction of multiple major new facilities, which would be multi-story buildings and structures that also require extensive subsurface areas up to 40 feet below grade. Many of the existing SEP solids treatment facilities are over 60 years old. They require significant maintenance, and they are operating well beyond their useful life. The project would construct new, state-of-the art digesters and other new facilities that produce higher quality biosolids,¹ capture and treat odors more effectively, and maximize biogas² utilization and energy recovery for the production of heat, steam, and energy. The existing digesters would continue to be used while the new facilities would be constructed at a new site within the expanded SEP boundary. The SFPUC anticipates that project construction would last five years (2018 to 2023), followed by two to three years of full facility commissioning.

The overall goal of the BDFP is to replace the existing aged and unreliable solids processing facilities at SEP with new, modern, and efficient facilities to ensure the long-term sustainability of SEP. Specific BDFP objectives are as follows:

- Replace the existing solids treatment facilities at SEP with new infrastructure with modern and more efficient treatment technologies to protect public health and safety and provide continued regulatory compliance;
- Maximize the efficiency of the current treatment process operations and maintenance, staffing resources, and the use of existing SFPUC infrastructure;
- Reliably meet treatment capacity for projected 2045 flows and loads;
- Beneficially use 100 percent of biosolids and biogas generated;
- Build critical processes with redundant infrastructure to provide reliability and operational flexibility;
- Improve seismic reliability;
- Limit noticeable odors from BDFP facilities to the SEP property boundary;
- Provide visual improvements that promote a cohesive architectural design and identity at the BDFP site, enhance the overall aesthetics, and improve the public edges in a manner consistent with the surrounding neighborhood and the rest of SEP
- Design and site new facilities to accommodate or adapt to expected sea level rise over their expected life;
- Allow for timely construction of the proposed BDFP; and
- Maintain rate payer affordability.

The project site is within P (Public), M-2 (Heavy Industrial), and M-1 (Light Industrial) Zoning Districts, the Bayview Hunters Point Planning Area, and 80-E and 65-J Height and Bulk Districts. The proposed project is eligible for State Water Resources Control Board funding that would require State Historic Preservation Officer concurrence under Section 106 of the National Historic Preservation Act.

¹ Biosolids are nutrient-rich organic materials resulting from the treatment of domestic sewage in a treatment facility.

² Biogas is gas produced by the biological breakdown of organic matter in the absence of oxygen. Biogas can be produced from the anaerobic digestion or fermentation of biodegradable materials such as wastewater solids (sludge), manure, municipal waste, food waste, and energy crops.

In the portion of the project site at the Central Shops, the project would build five anaerobic digesters (49,400 square feet, 65 feet tall, 35 feet below grade), a solids pretreatment facility (34,200 square feet, three stories and basement, 65 feet tall), digestion cooling tower (2,300 square feet, 25 feet tall), solids odor control facility (9,200 square feet, 25 to 35 feet tall), and operations / maintenance shops (1 to 2 stories, maximum 30 feet tall). In the portion of the project within the SEP historic district, the project would build a water pump station (4,500 square feet, 20 feet tall), and operations / maintenance shops (1 to 2 stories, maximum 30 feet tall). The project will also require extensive underground piping.

A Site Plan, Massing Diagram, and Conceptual Rendering are attached. For additional information about the proposed project, see the attached Notice of Preparation of an Environmental Impact Report.³

PROJECT IMPACTS

Project impacts to the historic resources are being analyzed for the Draft EIR. The Planning Department is in the process of preparing the Draft EIR and assessing appropriate and adequate mitigation measures. A project plan with an overlay showing the location of the historic resources is attached.

SEP Historic District

The project would result in the removal of Building 870 at SEP to accommodate a new maintenance shop and pump station. Analysis prepared to date has identified that demolition of Building 870 would not result in a substantial adverse change to the historic resource, but that effects from this project taken in combination with future projects would result in a cumulative impact that would be a significant and unavoidable impact, even with mitigation.

While Building 870 is one of 22 contributors to the *Southeast Treatment Plant Streamline Moderne Industrial Historic District*, removal of Building 870 would have a less-than-significant impact on the overall significance and historic integrity of the historic district. Building 870 is a single contributor to the significance of the historic district, and is not individually eligible for listing in the NRHP or CRHR. The remaining buildings and structures that contribute to the historic district would be unaffected by the project and would retain their ability to convey their significance. The loss of Building 870 would represent a reduction of approximately 4.5 percent of the historic district contributors, while 95.5 percent of the contributors would remain intact. In addition, Building 870 is located in the north side of the historic district and is separated from the majority of the other contributing facilities by a public street (Jerrold Avenue) and the south side perimeter wall around SEP. Building 870 is a service building that is a smaller facility providing support to the wastewater treatment facility and is not instrumental in the overall treatment process. Finally, among the buildings within the historic district Building 870 is a relatively modest and utilitarian example of Streamline Moderne architecture, with much better examples remaining in the historic district.

³ While the current BDFP is substantially similar to the project described in the July 2015 Notice of Preparation, revisions and refinements to the project design are ongoing. For example, while six digester tanks were originally proposed and described in the notice, the current design reflects five digester tanks.

In place of Building 870, the project would introduce two new non-contributing buildings within the boundaries of the historic district. Construction of these new facilities would have a less-than-significant impact on the historic district, as the vast majority of the historic district would remain intact. Although the number of non-contributors to the historic district would increase from four to six after completion of the project, the historic district would retain a relatively high ratio of 21 contributors to six non-contributors, or approximately 76 percent. In addition, introduction of these new elements to the historic district would be a less-than-significant impact because, after 1952, the facility's original master plan was abandoned and buildings of different architectural types were introduced over time and were sited based on individual project objectives, rather than on the original master plan. Furthermore, the new buildings would be of similar scale to the existing buildings, would be located inside the wall on the north side of Jerrold Avenue away from and minimally visible from the majority of the historic district's contributing buildings / structures, and would be constructed on the northwestern edge of the historic district boundary as opposed to its center. Therefore, the historic integrity of the historic district would not be significantly affected by new construction.

Other new construction associated with the proposed project would occur outside of the historic district and at least 50 feet from the other contributors. This distance would provide a sufficient physical and visual buffer between the new buildings and historic resource to ensure that no other significant, indirect impacts would occur.

There would be cumulative impact of the proposed project in combination with probable future projects that would result in a significant and unavoidable cumulative impact on the SEP historic district, even with mitigation. Cumulative projects at SEP with the potential to result in cumulative impacts on the historic district in combination with the impacts of the proposed project include: roof repairs and gas handling improvements to the existing digesters (Buildings 630-730, Anaerobic Digester Tanks 1-10); and the proposed, future demolition of all existing digesters and their central control buildings (Buildings 620 and 680), as part of the future Southside renovation project. These cumulative projects are all located within the proposed *Southeast Treatment Plant Streamline Moderne Industrial Historic District*.

The impacts associated with the loss of Building 870, as a contributor to the historic district, in combination with the proposed roof repairs and gas handling improvements to the existing digesters could potentially result in a cumulative impact on the historic district, but the cumulative impact in combination with these future projects would be less-than-significant. Based on the nature of the roof repairs and gas handling improvements, these projects would not substantially affect the character-defining features of the utilitarian concrete tanks, but rather would prolong the useful life and functionality of the digesters. These improvements would be similar to past physical alterations to the digesters, and the digesters would be expected to retain sufficient historic integrity to convey their significance.

Impacts associated with the loss of Building 870 in combination with the impact associated with the future demolition of all existing digesters (Buildings 630-730) and their control buildings (Buildings 620 and 680) as part of a southside renovation project, would however result in a significant, adverse cumulative impact to historic architectural resources. With these two projects combined, the historic district would lose approximately 13 of its 22 contributors, or 59 percent of the contributory buildings / structures as part of a future cumulative scenario. The material impairment of over 50 percent of the contributory buildings and structures would

result in the historic district no longer retaining sufficient integrity to convey its significance, which would be considered a significant and unavoidable impact.

Mitigation measures being considered to reduce the severity of the impact include documentation of the historic resource under Historic American Building Survey / Historic American Engineering (HABS / HAER) standards and other public history-type measures. As implementation of mitigation would not reduce the severity of the cumulative impact to a less-than-significant level, the cumulative impact would be considered significant and unavoidable with mitigation.

Central Shops

The project would result in the demolition of the Central Shops Building A and Building B, which comprise a historic resource that is individually eligible for listing in the NRHP and CRHR. The removal of Buildings A and B at the Central Shops would cause a direct impact that would cause a substantial adverse change in the significance of the historic resource because the project would demolish the physical characteristics that convey the resource's historical significance and that justify its individual eligibility for inclusion in the NRHP / CRHR, resulting in a significant impact under CEQA Guidelines Section 15064.5.

Mitigation measures being considered to reduce the severity of the impact of the demolition of the Central Shops include documentation of the historic resource under HABS standards and other public history-type measures. As implementation of mitigation would not reduce the severity of the impact to a less-than-significant level, the impact would be considered significant and unavoidable with mitigation.

PRESERVATION ALTERNATIVES

As the proposed project is anticipated to result in a significant impact on historical resources, the EIR will consider alternatives to the project. Under CEQA, an EIR is required to identify project alternatives that would avoid or reduce significant, adverse project impacts. In addition to this CEQA requirement, HPC Resolution No. 0746 recommended that projects that lead to the demolition of a historic (architectural) resource in the City and County of San Francisco include robust alternatives analysis. Specifically, the EIR alternatives evaluation, in addition to the required No Project Alternative, should include at least one full preservation alternative and one partial preservation alternative while taking into account the potential feasibility of the proposed alternatives and their ability to achieve the project objectives. The resolution also requests that EIRs provide text discussion of these alternatives.

To date, Department staff and the project team have analyzed a No Project Alternative, Full Preservation Alternatives, and Partial Preservation Alternatives. Project alternatives to be carried forward for detailed analysis in the EIR must meet most of the basic objectives of the project while avoiding or reducing identified significant impacts and be considered feasible. The analysis of a No Project Alternative is also required under CEQA. For those alternatives considered but rejected, the EIR will provide an explanation as to why they did not meet the applicable criteria. Multiple project options have been considered, though many of those options appear to be infeasible and are likely to be rejected. The intent of the full and partial preservation alternatives is to avoid or reduce the BDFP's significant adverse impacts on historic resources.

To date the Department and project team have identified three full preservation alternatives that may be feasible and for which the EIR may include detailed analysis, as follows:

- No Project Alternative (see FP1 in attached Preservation Alternatives Memorandum)
- Pier 94 Backlands Alternative (see FP3)
- Project plus Relocation of Historic Resources (see FP5)

The Department plans to address additional full/partial preservation alternatives identified to date in the EIR under “Alternatives Considered but Rejected.”

Full Preservation Alternatives

To date, two full preservation alternatives have been identified that are potentially feasible and capable of meeting most of the project’s basic objectives. These are the “Pier 94 Backlands Alternative” and the “Project plus Relocation of Historic Resources Alternative.”

In addition, the “No Project Alternative” would not implement the BDFP and would continue the existing SEP solids treatment operations. No demolition would occur and this alternative would fully avoid impacts to historic resources. While feasible, the No Project Alternative fails to meet all of the fundamental project objectives.

The “Pier 94 Backlands Alternative” would build the BDFP at Pier 94 and require construction of pipelines and tunnels to/from SEP to Pier 94, with no demolition, alterations, or additions to the historic resources at SEP or the Central Shops. This would avoid project-level impacts to historic resources, including the impact to the Central Shops and demolition of Building 870 within the historic district. However, similar to the project, this alternative would replace the function of the existing digesters and associated buildings and would allow for subsequent demolition of many of the contributors to the SEP historic district. Thus, the significant cumulative impact to the historic district would not be avoided. This alternative is considered potentially feasible and capable of meeting most of the project’s basic objectives. However, this alternative would bifurcate SEP wastewater treatment processes such that the solids handling facilities would be located at a satellite location away from the liquid processing facilities. It would require the construction of pipelines to carry diluted sludge and waste streams approximately one mile from and to SEP. This alternative would require additional redundant and operational features and create higher energy demands. The Pier 94 Backlands site is located on San Francisco Port property within State Lands Commission jurisdiction and Public Trust land, and use of the site would require special approvals. The alternative would require site acquisition and/or a land swap.⁴ A portion of the site is designated a port priority use area (protected for use as marine terminals and other directly related port activities), within which uses that would impair the future use of the area may be allowed only on a finite, interim basis. This alternative could meet most of the project objectives, but would not allow for timely construction of the BDFP.

The “Project plus Relocation of Historic Resources Alternative” would entail construction of the BDFP as planned, but includes relocation of Central Shops Buildings A and B to a similar industrial setting in San Francisco or local vicinity. It assumes rehabilitation/reuse can be

⁴ The approval of necessary exchange agreements can take two to three years and are at the discretion of the State Lands Commission. Alternatively, these types of agreements can be authorized through state legislation.

conducted in a manner that is consistent with Secretary of the Interior Standards. This alternative would reduce project-level impacts to a less-than-significant level by avoiding the impacts of demolishing the historic resource, by relocating the historic resource. Under this alternative Building 870 would still be demolished, but this would not significantly affect the historic district. However, similar to the project, this alternative would replace the function of the existing digesters and associated buildings and would allow for subsequent demolition of many of the contributors to the SEP historic district. Thus, the significant cumulative impact to the historic district would not be avoided. While this alternative would meet most of the project objectives, it is unclear at this time how feasible this alternative is, as the SFPUC has yet to identify an appropriate new location where placement of these buildings would not result in significant impacts to the historic resource and would not result in other significant environmental impacts.

Other full preservation alternatives have been previously considered. Analysis conducted to date has identified the following alternatives as not feasible:

- Preservation-in-place of the Central Shops' Buildings A and B (see FP2 in attached Preservation Alternatives Memorandum)
- Project plus Relocation of Central Shops' Buildings A and B within SEP (see FP5)
- Project plus Relocation of Central Shops' Buildings A and B at the new Central Shops location (see FP6)

The Central Shops' Buildings A and B are located in the middle of the proposed BDFP site and their location constrains the overall space available for the required aboveground and underground facilities necessary for the project. The extant buildings are not large enough to accommodate the proposed facilities, and retaining these buildings would lead to inefficient and potentially dangerous operations. The project also requires extensive excavation in and around where the Central Shops is situated. Even if Buildings A and B could be reused in the BDFP, this would require extensive redesign of project layout that would lead to substantial project delays. It would also likely require disassembling and temporarily relocating the two buildings while the new underground facilities were constructed.

As for other relocation options, there is insufficient space within SEP to accommodate the Central Shops' Buildings A and B. Further, it would not be possible to move Buildings A and B to the new Central Shops site while simultaneously allowing for the necessary ongoing operations of Central Shops. Furthermore, the schedule for moving the Central Shops to a new location would be greatly delayed in this scenario.

The full preservation alternatives are discussed in further detail in the attached Preservation Alternatives Memorandum.

Partial Preservation Alternatives

To date, four partial preservation alternatives have been considered. There are issues regarding their feasibility, their potential inability to meet most of the project objectives, their inability to reduce impacts to historic resources, and their lack of conformance with the Secretary of Interior's Standards. These partial preservation alternatives are as follows:

- Retain both Central Shops' Buildings A and B in Place and Alter (see PP1 in the attached Preservation Alternatives Memorandum)
- Retain a Portion of both Buildings A and B in Place (see PP2)
- Demolish Central Shops Building B and Relocate a Portion of Building A (see PP3)
- Demolish either Building A or B and Relocate the Other Building (see PP4)

Even if feasible, retaining even a portion of the Central Shops would require a complete redesign of the project layout that would result in substantial project delay, and it would require disassembling and temporarily relocating Buildings A and B to construct underground project components.

The partial preservation alternatives are discussed in detail in the attached Preservation Alternatives Memorandum.

REQUESTED ACTION

The Department seeks comments on the adequacy of the proposed Preservation Alternatives.

ATTACHMENTS

- Project Graphics – Project Location, Site Plan, Massing Diagram, Conceptual Rendering, Overlay with Historic Resources
- Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting, June 24, 2015
- Map of Southeast Treatment Plant Streamline Moderne Industrial Historic District
- DPR 523 forms: Southeast Treatment Plant Streamline Moderne Industrial Historic District and Central Shops, 1800 Jerrold Avenue
- Preservation Alternatives Memo

ATTACHMENTS

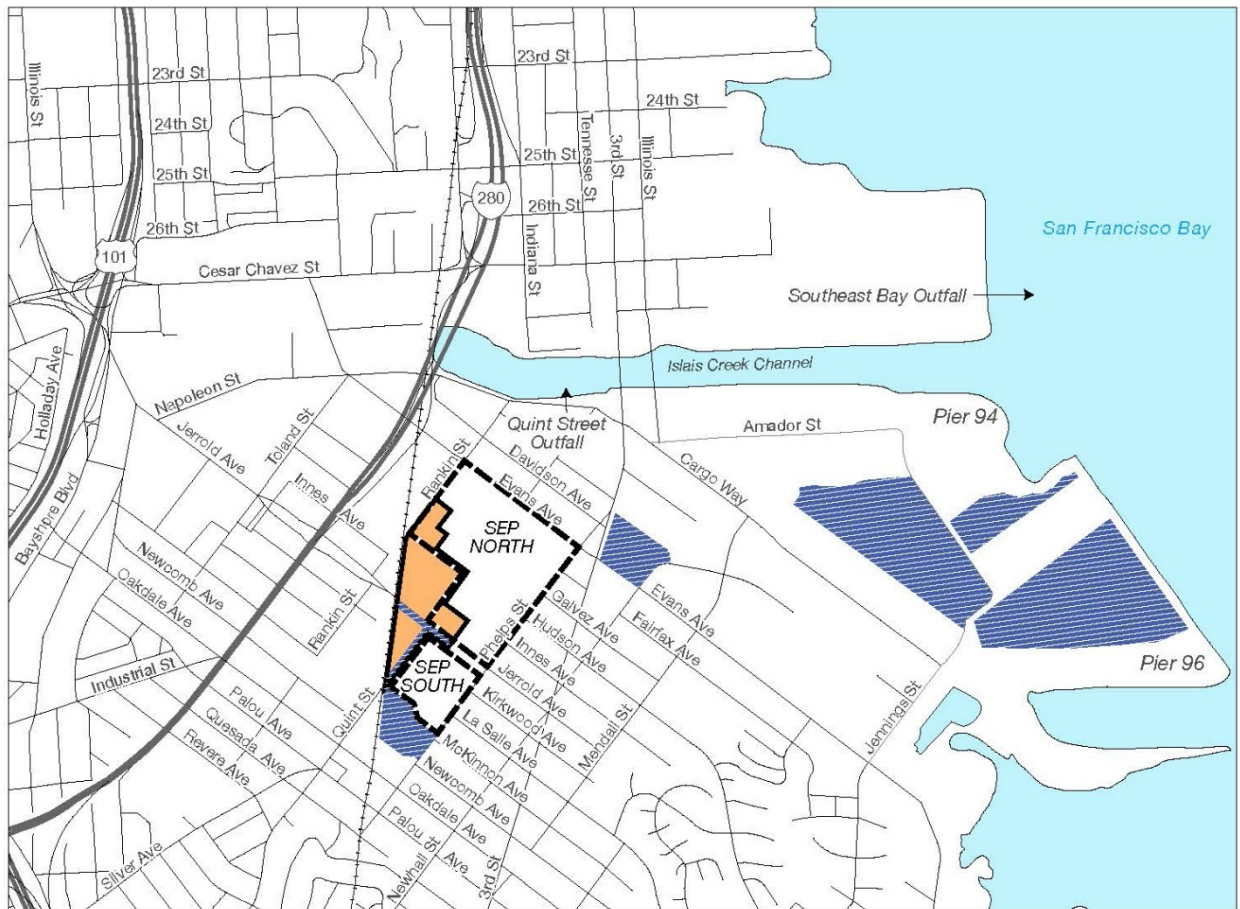
Biosolids Digester Facilities Project Case No. 2015-000644ENV

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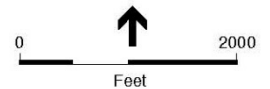
Biosolids Digester Facilities Project
Case No. 2015-000644ENV

Project Graphics

- Project Location
- Site Plan
- Massing Diagram
- Conceptual Rendering
- Overlay with Historic Resources



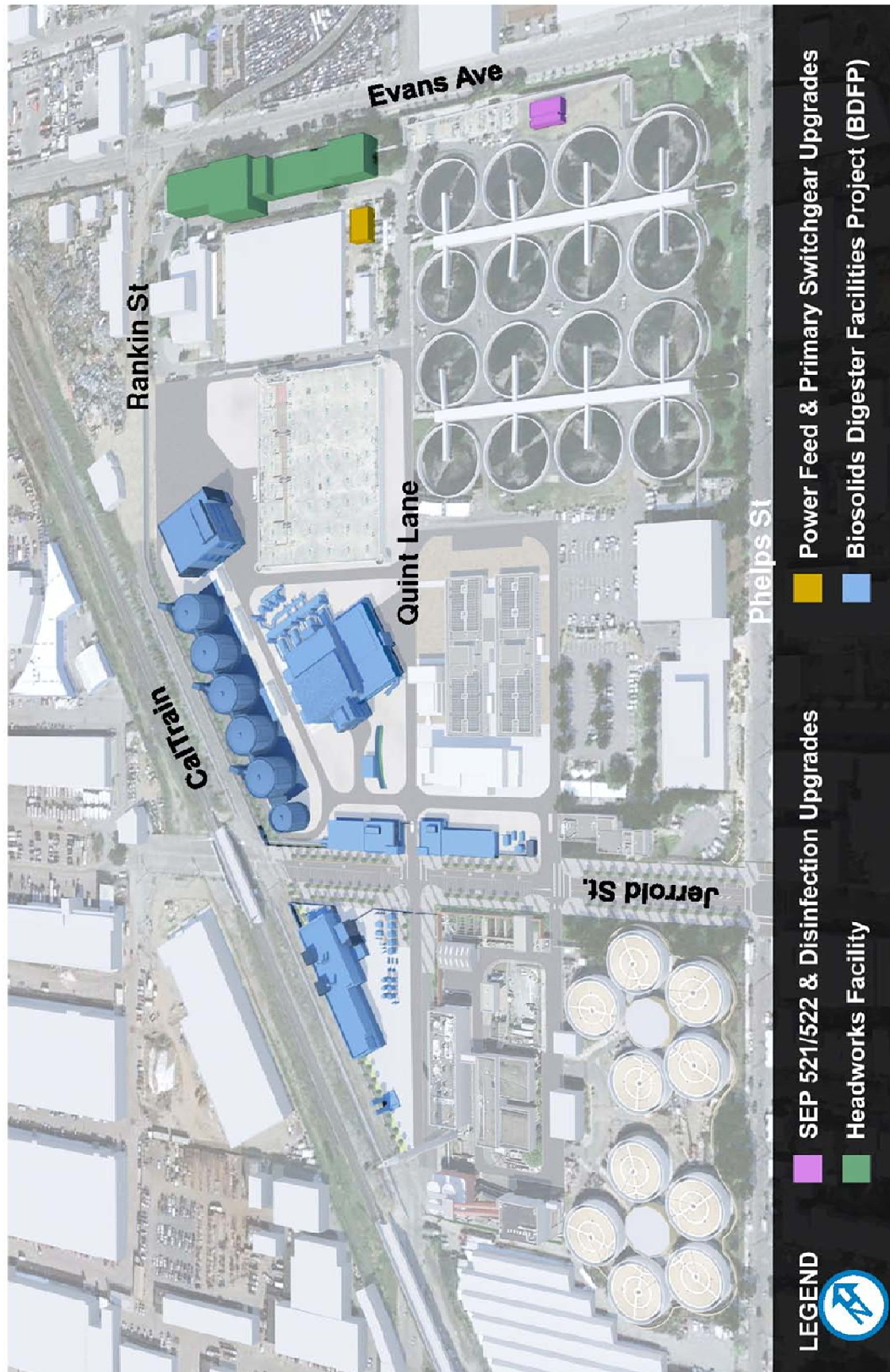
- SFPUC Southeast Plant (SEP) Boundary
- Project Site (Limited work at SEP North is also proposed to integrate liquid treatment facilities with BDFP facilities)
- Potential Construction Staging Areas (Staging may also occur within the existing SEP boundary)



SOURCE: ESA+Orion

SFPUC Biosolids Digester Facilities

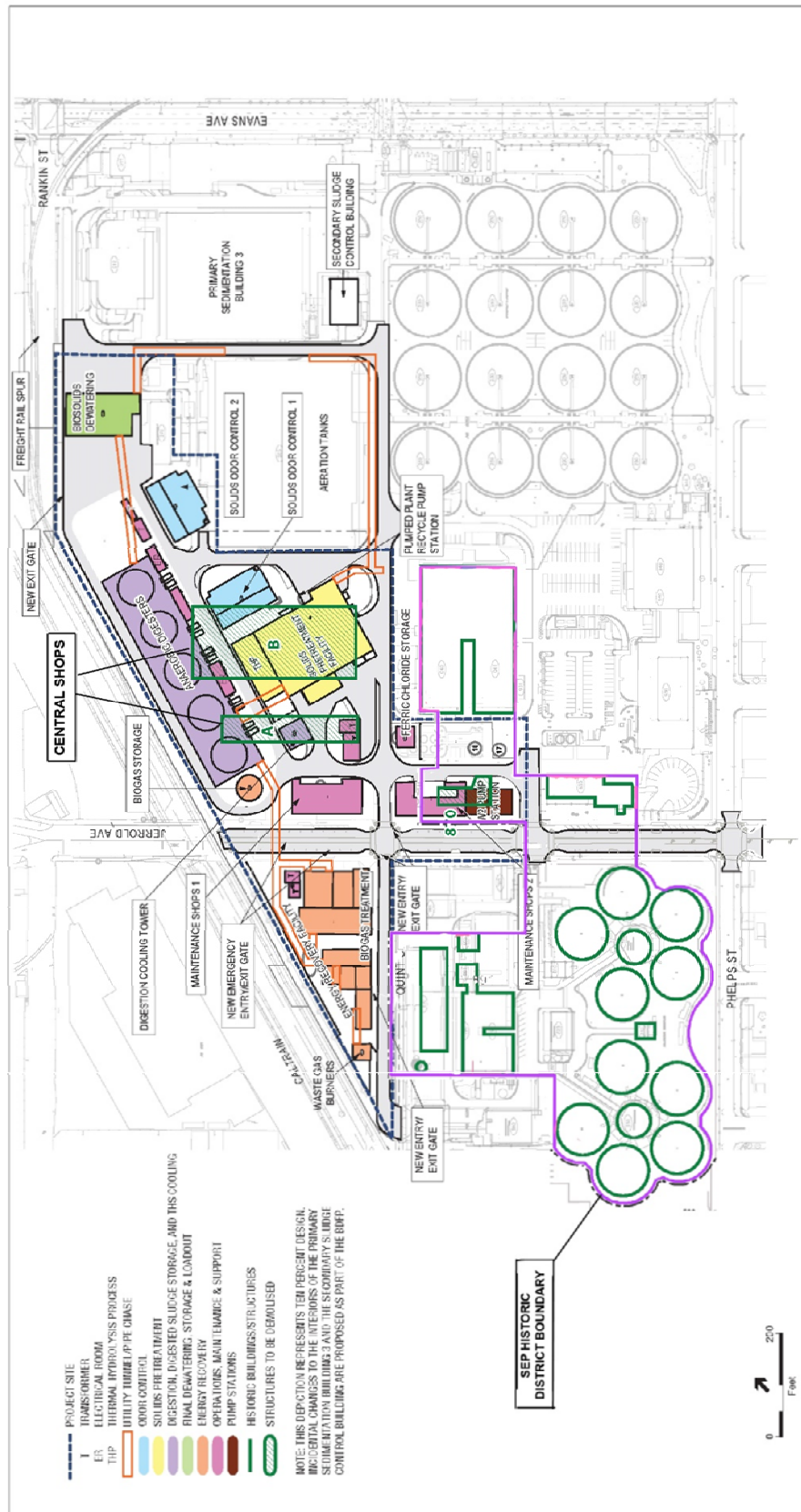
Figure 1
Project Location



Biosolids Digester Facilities Project Massing Diagram



Biosolids Digester Facilities Project Conceptual Rendering



SFPUC Biosolids Digester Facilities
Figure 2
 Preliminary Site Plan

Historic Resources Overlay on Biosolids Digester Facilities Project Site Plan

Biosolids Digester Facilities Project

Case No. 2015-000644ENV

Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting,
June 24, 2015



SAN FRANCISCO PLANNING DEPARTMENT

Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting

Date: June 24, 2015
Case No.: 2015-000644ENV
Project Title: **Biosolids Digester Facilities Project**
Location: 750 Phelps Street, 1700 Jerrold Avenue, 1800 Jerrold Avenue and
1801 Jerrold Avenue, San Francisco
BPA Nos.: N/A
Zoning: P (Public Facilities); M-1 (Light Industrial); and M-2 (Industrial)
65-J Height and Bulk District
Block/Lot: 5262/009; 5281/001
Lot Size: 1,607,292 square feet; 64,394 square feet
Project Sponsor: San Francisco Public Utilities Commission
Karen Frye (415) 554-1652
Lead Agency: San Francisco Planning Department
Staff Contact: Steven Smith – (415) 558-6373
Steve.smith@sfgov.org

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

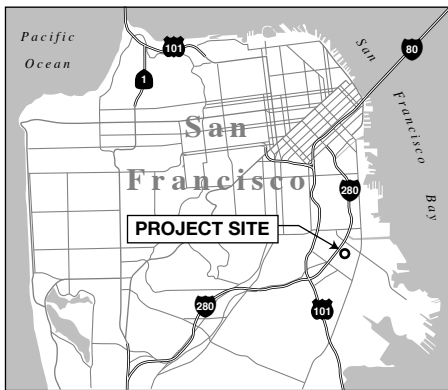
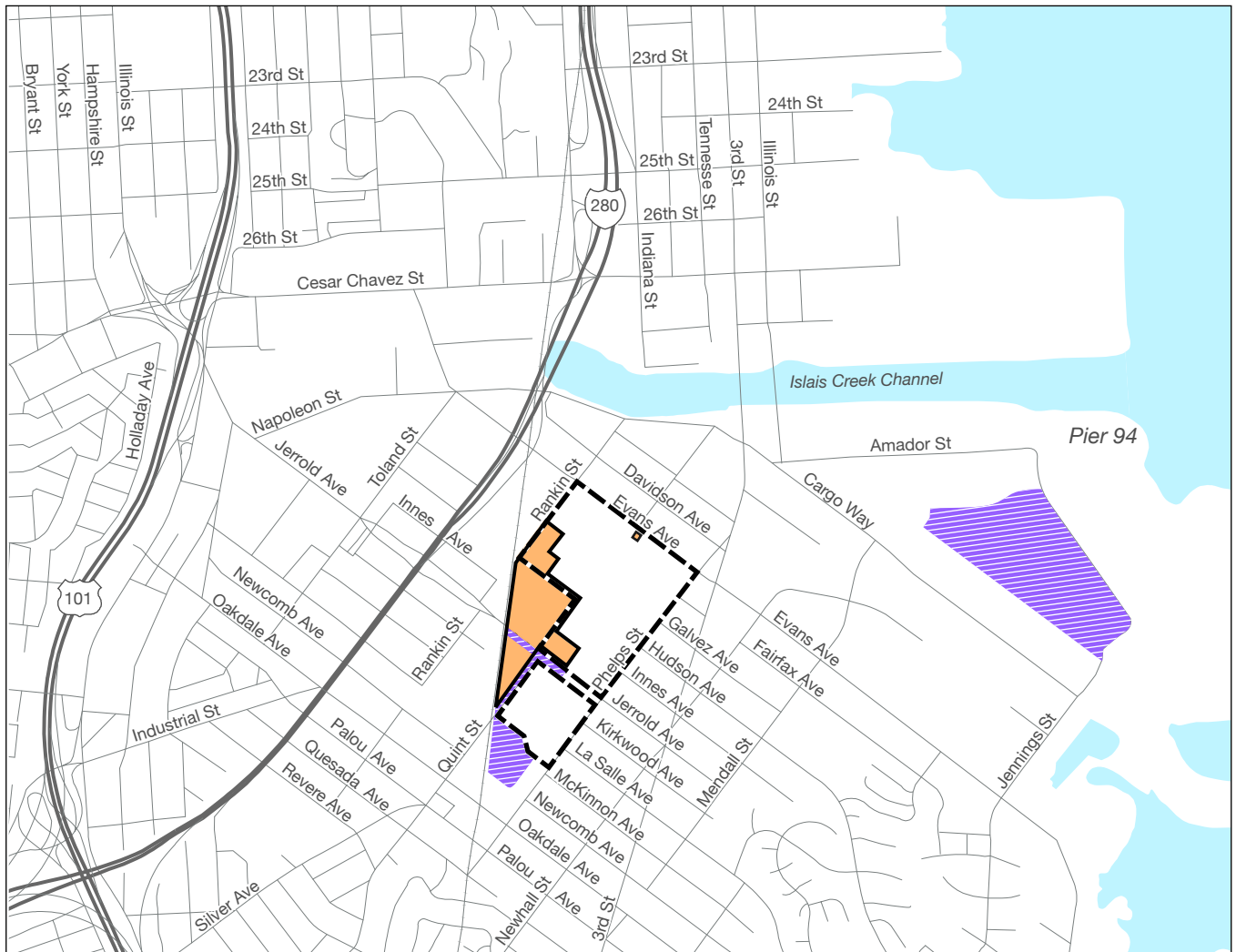
Planning
Information:
415.558.6377

This Notice of Preparation (NOP) of an Environmental Impact Report (EIR) has been prepared by the San Francisco Planning Department in connection with the project listed above. The purpose of the EIR is to provide information about potential significant physical environmental effects of the proposed project, to identify possible ways to minimize the significant effects, and to describe and analyze possible alternatives to the proposed project in compliance with the California Environmental Quality Act (CEQA). The San Francisco Planning Department is issuing this NOP to inform the public, responsible agencies, and interested parties about the proposed project and the intent to prepare an EIR. This NOP is also available online at: <http://www.sf-planning.org/puccases>.

PROJECT SUMMARY

The Biosolids¹ Digester Facilities Project (the “project” or BDFP) would construct new solids treatment, odor control, energy recovery, and associated facilities at the San Francisco Public Utilities Commission’s (SFPUC) Southeast Water Pollution Control Plant (SEP) located in the Bayview District of San Francisco (**Figure 1**). **Table 1** presents key features of the proposed project. The SFPUC is proposing new facilities to provide a modern and efficient solids treatment system to ensure treatment reliability, maintain regulatory compliance, protect public health and safety, meet current seismic standards, and provide advanced odor control. The BDFP would involve construction of new structures totaling approximately 200,000 square feet. To accommodate the proposed facilities, approximately 110,000 square feet of existing structures would be demolished.

¹ Biosolids are the recyclable organic product from the bacterial digestion of solids removed from wastewater.



- SFPUC Southeast Plant (SEP) Boundary
(Staging areas may be located within the SEP)
- Project Site
- Potential Off-Site Construction
Staging Areas

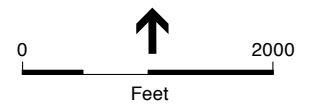


TABLE 1
KEY FEATURES OF BIOSOLIDS DIGESTER FACILITIES PROJECT

Feature	Existing Conditions	Future with Project
SEP Size	~40 acres	~47 acres
Digesters	10 digesters – 2 million gallons each ^a Distance to Closest Residence: <100 feet	6 digesters – 1.33 million gallons each Distance to Closest Residence: ~1,000 feet
SEP Design Flow	250 million gallons per day (mgd) (wet weather) ^b 85 mgd (dry weather design average) ^b	No Change
Solids Load	182,700 lbs/day (2010); 280,000 lbs/day (2045)	No Change
Solids Treatment Process	Thickening Dewatering Anaerobic Digestion ^c	Screening Thickening Dewatering Thermal Hydrolysis ^d Anaerobic Digestion ^c
Biogas ^e	Production: ~1.3 million cubic feet per day Flaring: Routine	Production: ~2.0 million cubic feet per day Flaring: Emergency Only
Electricity Generated	2 Mega watts	5 Mega watts
Biosolids	Production: 16,360 dry tons (2010) ^f Classification: Class B ^g	Production: 24,000 dry tons (2045) Classification: Class A ^g
Daily Biosolids Haul trips (Annual Average)	7-9 per day	8-10 per day (2022-2045) ^f
Odor Control	Existing odor control does not contain odors from existing biosolids facilities to within the SEP property	Designed to limit odors from BDFP within SEP fenceline
SEP Staffing Levels (plant wide including biosolids)	280 staff	No Change

NOTES:

^a The SEP has 10 digesters: 7 are active, 2 are used for storage, and one has been converted to a biogas storage facility.

^b Flows at wastewater treatment plants are often expressed in terms of dry weather and wet weather since rainfall can substantially increase flows. At the SEP, during dry weather the combined sewer system flow is essentially domestic wastewater, with small contributions from industrial wastewater and urban runoff. During wet weather, the combined flow of wastewater and stormwater is governed by storm patterns and intensity.

^c Anaerobic digestion is a method of treating wastewater solids using biological processes to inactivate bacteria and pathogens (a biological agent that causes disease or illness) and produce stabilized organic biosolids, biogas, and water.

^d Thermal hydrolysis process (THP) provides sludge pretreatment prior to anaerobic digestion. Essentially, the sludge is heated with steam under pressure, held for a specified time in order to destroy pathogens, and then pressure is rapidly reduced to rupture microbial cells.

^e Biogas is a byproduct of the bacterial digestion process and comprised mostly of methane and carbon dioxide.

^f In the “no project” scenario, the production of biosolids would increase from existing conditions (2010) to 2045 due to projected future increases in wastewater flows and loads; however, production of biosolids without the project would result in approximately 27,700 dry tons compared to 24,000 dry tons with the project. Associated with the expected increase in biosolids under the “no project” scenario, the SEP daily biosolids truck trips would also increase from existing conditions (2010) to 2045, but the proposed processes under the BDFP would enable the SEP to reduce the number of biosolids truck trips compared to the projected future growth baseline.

^g The Standards for the Use or Disposal of Sewage Sludge (Title 40 of the Code of Federal Regulations [CFR], Part 503), also known as the Part 503 rule, establish rules for biosolids application to land for different classes of biosolids. Class A biosolids contain no detectable levels of pathogens, low levels of metals, and do not attract vectors. According to the US Environmental Protection Agency Guide to Part 503 Rule, Class A biosolids are considered exceptional quality and have the fewest restrictions for land applications such as soil conditioning and fertilizer. Class B biosolids are treated but still contain detectable levels of pathogens. There are buffer requirements, public access, and crop harvesting restrictions for virtually all forms of Class B biosolids. Anticipated regulations may further restrict Class B biosolids use.

PUBLIC SCOPING PROCESS

Pursuant to the State of California Public Resources Code Section 21083.9 and CEQA Guidelines Section 15206, a public scoping meeting will be held to receive oral comments concerning the scope of the EIR. The meeting will be held on **Thursday, July 16, 2015 at 6:30 p.m.** in the Alex Pitcher Room at the **Southeast Community Facility, 1800 Oakdale Avenue, San Francisco**. The SFPUC will provide an informational open house from **5:30 to 6:30 p.m.** prior to the formal scoping meeting. To request a language interpreter or to accommodate persons with disabilities at the scoping meeting, please email or call the staff contact, Steven Smith, listed above at least 72 hours in advance of the meeting. Written comments will also be accepted at this meeting and until 5:00 p.m. on **Monday, July 27, 2015**. Written comments should be sent to Sarah B. Jones, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103; by fax to (415) 558-6409 (Attn: Sarah Jones); or by email to Sarah.B.Jones@sfgov.org.

If you work for a Responsible or Trustee agency, we need to know the views of your agency regarding the scope and content of the environmental information that are germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need the certified EIR when considering a permit or other approval for this project. Please include the name of a contact person in your agency.

Members of the public are not required to provide personal identifying information when they communicate with the Planning Commission or 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.

PROJECT BACKGROUND

The SFPUC operates and maintains the City's combined sewer system, which collects and treats wastewater and stormwater at one of three San Francisco treatment facilities: the Southeast Water Pollution Control Plant (SEP), the Oceanside Water Pollution Control Plant, or the North Point Wet-Weather Facility.² The system is called a "combined system" because it conveys both wastewater and stormwater in the same network of pipes. The broad components of wastewater treatment include:

- Liquid treatment processes
- Solids treatment processes
- Discharge of treated water through deepwater outfalls

The wastewater treatment operation at SEP consists of a number of sequential processes to separate and treat liquid and solids in the wastewater in compliance with all dry- and wet-weather³ regulatory discharge requirements (see below, under "Existing Southeast Water Pollution Control Plant" for further description of the SEP). The focus of the BDFP is on the solids treatment facilities at the SEP.

² The North Point plant operates only during wet weather (rainstorms).

³ Flows at wastewater treatment plants are often expressed in terms of dry weather and wet weather since rainfall can substantially increase flows. At the SEP, during dry weather the combined sewer system flow is essentially domestic wastewater, with small contributions from industrial wastewater and urban runoff. During wet weather, the combined flow of wastewater and stormwater is governed by storm patterns and intensity.

The existing solids treatment facilities at the SEP are over 60 years old and are operating well beyond their useful life. Since the SEP facilities were constructed, newer and more efficient wastewater treatment technologies have been developed. These technologies produce a higher quality and reduced volume of biosolids, capture and treat odors more effectively, and maximize biogas⁴ use for production of heat and energy. Because the aging solids treatment system is prone to wear and the existing system requires significant maintenance, the SFPUC is proposing the BDFP. The proposed project is identified in the SFPUC's Sewer System Improvement Program (SSIP), a 20-year, \$6.9-billion dollar citywide investment to upgrade the aging sewer infrastructure to ensure a reliable and seismically safe system.

PROJECT DESCRIPTION

Project Location

The SEP is located at 750 Phelps Street and occupies approximately 40 acres bounded by Evans Avenue to the northeast; Quint and Rankin Streets to the northwest; Phelps Street to the southeast; and the Caltrain railroad tracks and other City-owned properties to the southwest. Figure 1 shows the location of the proposed project site, including potential off-site construction staging areas. **Figure 2** shows the project site and existing SEP facilities. The SEP is located in San Francisco's Bayview-Hunters Point community (Supervisor District 10), in an area with a mix of residential and light/heavy industrial zones. Residential land uses are located directly across Phelps Street along the southeast boundary of the SEP.

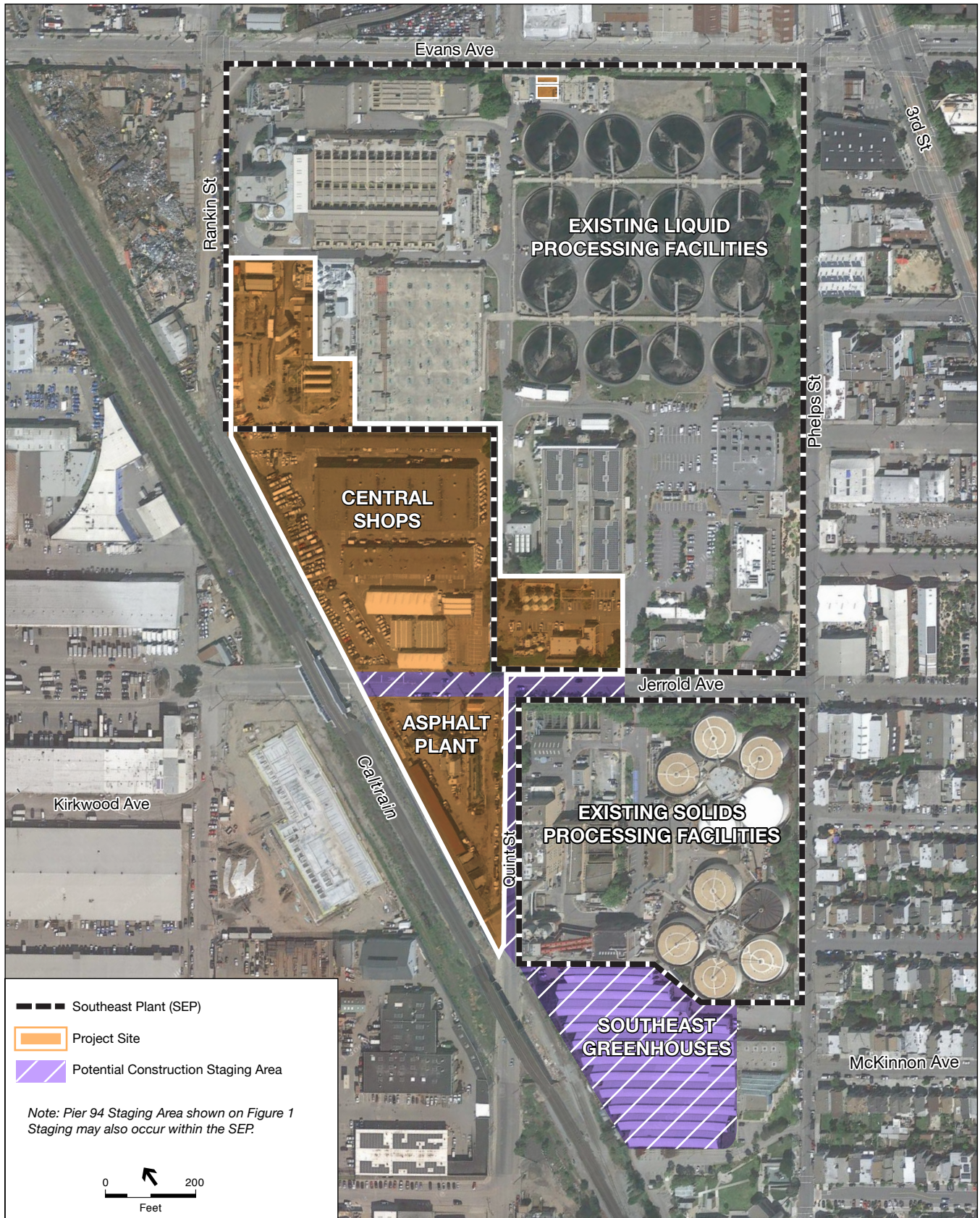
Project Site

Proposed facilities would be constructed on portions of the existing SEP property and on adjacent properties at 1800 Jerrold Avenue (the Central Shops facility) and 1801 Jerrold Avenue (the decommissioned Asphalt Plant facility). These sites total approximately 415,000 square feet. The Central Shops facility site is currently owned and operated by the City of San Francisco's General Services Agency (GSA), which provides vehicle and equipment maintenance services for multiple City agencies through the Fleet Management Department. Prior to BDFP construction, Central Shops would relocate and the existing site would be transferred to SFPUC; the location of the new Central Shops site has not yet been determined. The asphalt plant site, owned by the City of San Francisco's Department of Public Works, is non-operational and will also be transferred to SFPUC prior to project construction.

As shown on Figure 2, Jerrold Avenue bisects the SEP and the project site. During the project's five-year construction period, the SFPUC would temporarily close Jerrold Avenue to public through-traffic between the existing entrance to the SEP on Jerrold Avenue between Quint Street and Phelps Street and the Caltrain right-of-way to promote a safe construction work area. Truck deliveries needed for plant operations may be permitted access to the SEP via Jerrold Avenue.

In addition, the proposed project would require temporary use of other sites during the construction period. The BDFP will require up to 12 acres of construction staging area. The SFPUC is considering use of two off-site properties, shown on Figure 1, for a majority of the construction staging. In addition, several additional staging areas within and immediately adjacent to the SEP boundary have been identified as shown on Figure 2.

⁴ Biogas is a byproduct of the bacterial digestion process and comprised mostly of methane and carbon dioxide.



SOURCE: ESA+Orion; Google Maps

SFPUC Biosolids Digester Facilities
Figure 2
 Biosolids Digester Facilities Project Site

Description of Project Facilities

The new facilities would be designed to provide solids treatment for projected year 2045 wastewater flows and solids loads (the project's planning horizon) in accordance with the SSIP goals (see SSIP Goals and Levels of Service in Table 3 below). The project involves the replacement and relocation of the solids treatment facilities with more efficient, modern technologies and facilities designed to produce Class A biosolids⁵, which have no detectable levels of pathogens⁶ and expands options for beneficial reuse of these materials. The BDFP would require construction of new structures totaling approximately 200,000 square feet. To accommodate the proposed facilities, approximately 110,000 square feet of existing structures would be demolished. There would be a transition period of two to three years during which both old and new biosolids treatment systems would operate concurrently.

Figure 3 shows the sequence of individual processes (called "unit processes"), each of which accomplishes a specific function to prepare the solids for the next step. **Figure 4** shows the location of facilities that would house these processes within the project site, and **Table 2** shows the approximate size and height of each of the buildings or structures. The BDFP includes the following processes and associated facilities for handling and treatment of solids:

- **Predigestion Solids Processing.** Prior to digestion, solids would be mechanically screened, dewatered and sterilized. Processes used include screening, gravity belt thickening,⁷ dewatering centrifuges, and thermal hydrolysis pretreatment (THP)⁸ to sterilize the sludge and help produce Class A biosolids. The solids emerging from the THP would be cooled in a heat exchanger.
- **Digestion and Biosolids Storage.** In the digesters, anaerobic digestion⁹ would occur, producing stabilized biosolids, biogas, and water. The digesters (a total of six tanks each 65 feet in diameter, positioned 65 feet above grade and 45 feet below grade) would be constructed in a linear layout parallel to the Caltrain right-of-way. This location is approximately 1,000 feet from the nearest residences.
- **Final Dewatering, Storage and Load-out.** Following digestion, digested sludge would be dewatered to produce Class A biosolids "cake" that would be trucked off-site. The final dewatering and associated Class A biosolids storage and loadout facilities would be located north of the proposed digesters, adjacent to Rankin Street.

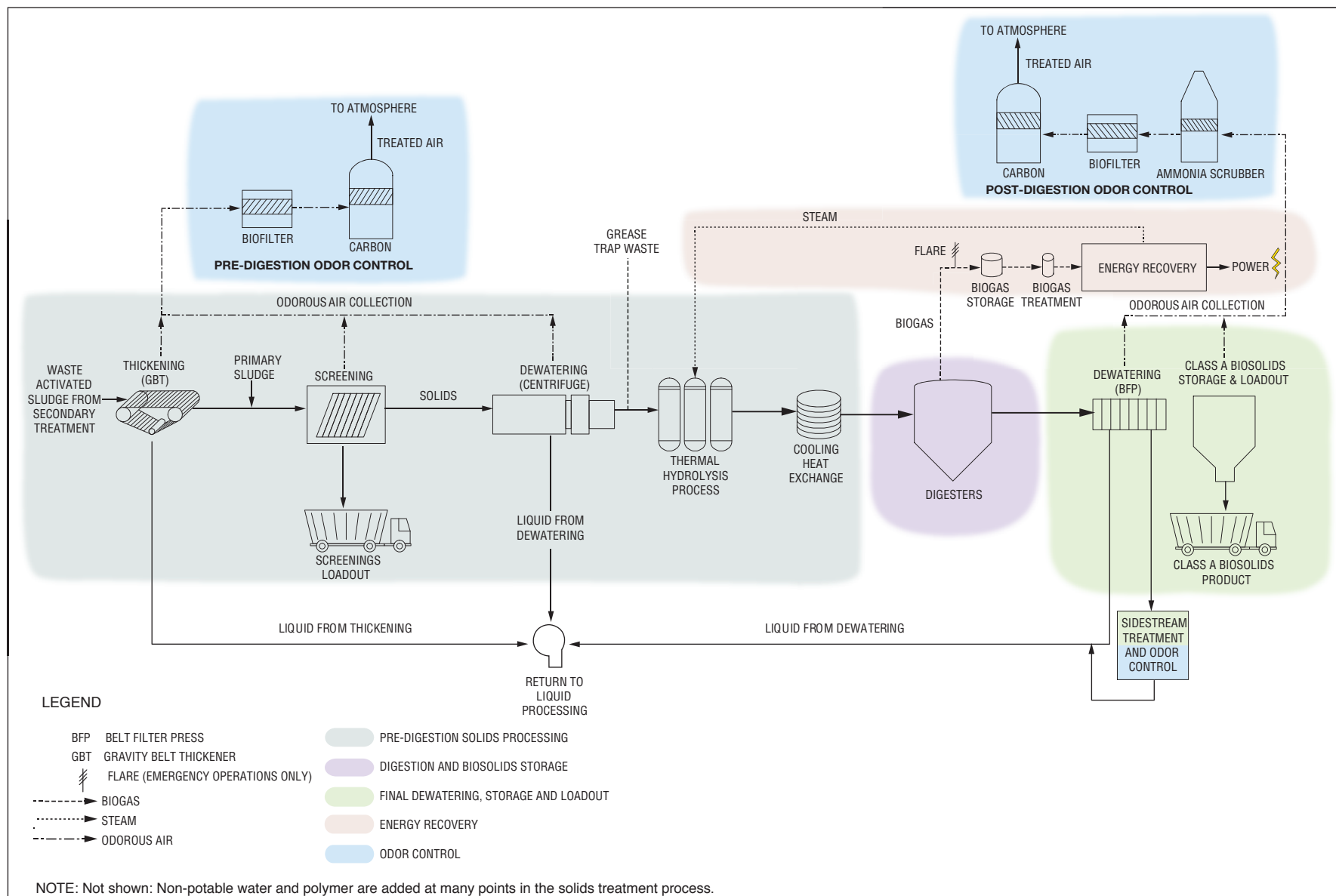
⁵ The Standards for the Use or Disposal of Sewage Sludge (Title 40 of the Code of Federal Regulations [CFR], Part 503), also known as the Part 503 rule, establish rules for biosolids application to land for different classes of biosolids. Class A biosolids contain no detectable levels of pathogens, low levels of metals, and do not attract vectors. According to the US Environmental Protection Agency Guide to Part 503 Rule, Class A biosolids are considered exceptional quality and have the fewest restrictions for land applications such as soil conditioning and fertilizer. Class B biosolids are treated but still contain detectable levels of pathogens. There are buffer requirements, public access, and crop harvesting restrictions for virtually all forms of Class B biosolids. Anticipated regulations may further restrict Class B biosolids use.

⁶ A pathogen is a biological agent that causes disease or illness.

⁷ Gravity Belt Thickeners are a method of condensing wastewater solids using gravity drainage of liquid through filter belt.

⁸ Thermal hydrolysis process (THP) provides sludge pretreatment prior to anaerobic digestion. Essentially, the sludge is heated with steam under pressure, held for a specified time in order to destroy pathogens, and then pressure is rapidly reduced to rupture microbial cells, prior to anaerobic digestion.

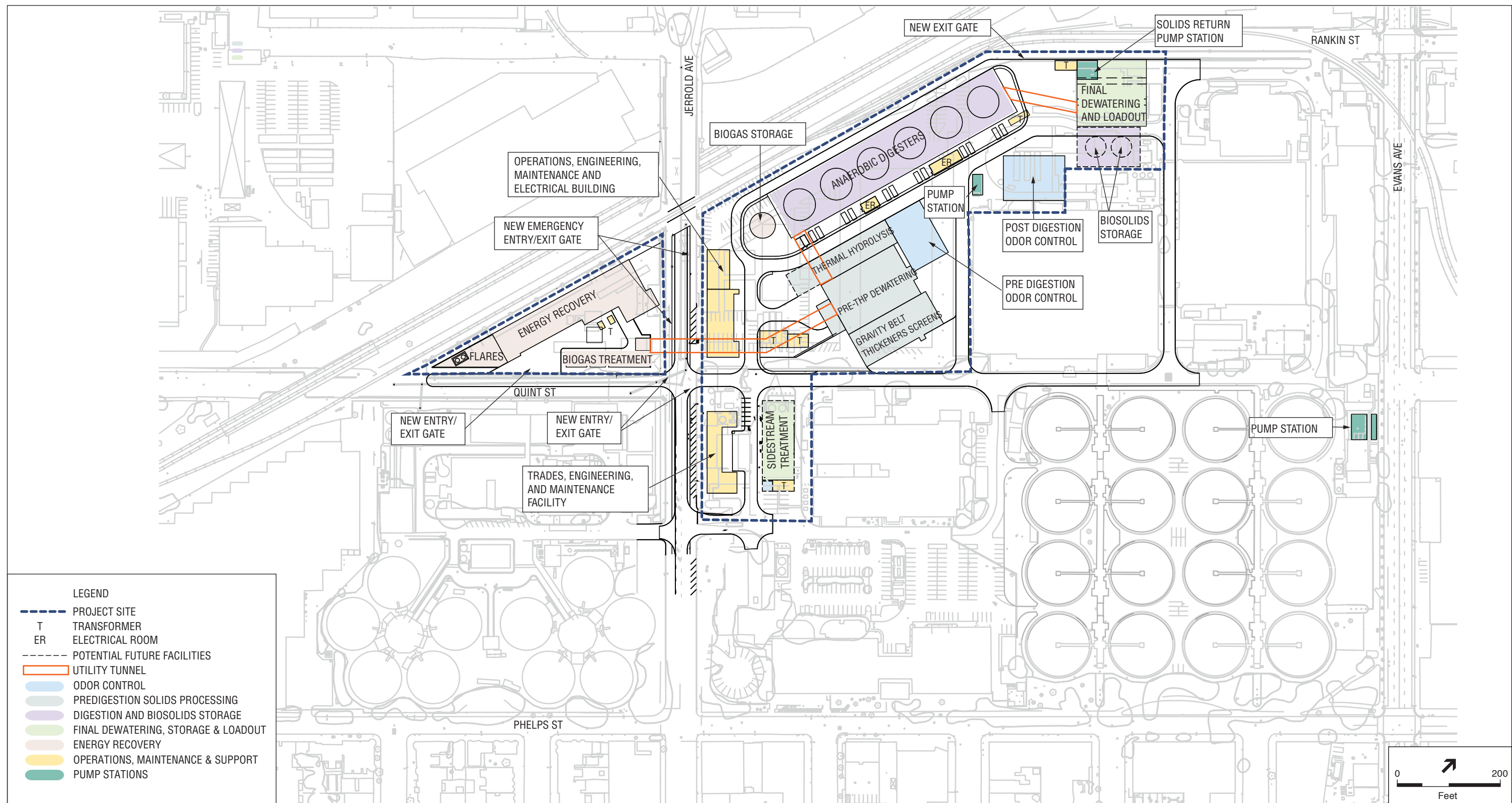
⁹ Anaerobic digestion is a method of treating wastewater solids using biological processes to inactivate bacteria and pathogens and produce stabilized organic biosolids, biogas and water.



SOURCE: Brown and Caldwell, CH2M, Black & Veatch; adapted by ESA + Orion

Biosolids Digester Facilities Project

Figure 3
Process Flow Diagram



SOURCE: Brown and Caldwell, CH2M, Black & Veatch; adapted by ESA + Orion

Biosolids Digester Facilities Project

Figure 4
Preliminary Site Plan

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TABLE 2
PROPOSED BIOSOLIDS DIGESTER FACILITIES

Purpose	Facility	Approximate Size (Square Ft; Diameter)	Maximum Height Above Grade (feet)^f
Pre-digestion Solids Processing	Gravity Belt Thickeners/Screens ^a	12,500	Up to 65 feet
	Pre-Thermal Hydrolysis Dewatering	20,000	Up to 65 feet
	Thermal Hydrolysis Process (THP) ^b	8,700	25
Digestion and Biosolids Storage	Anaerobic Digesters (6)	Pad: 49,800 Diameter (each): 65 feet	65
	Potential Future Biosolids Storage (2)	Pad: 9,500 Diameter (each): 45 feet	45
Final Dewatering, Storage and Loadout	Final Dewatering and Loadout	17,600	65
	Potential Future Sidestream Treatment ^c	11,200	Up to 15
Energy Recovery	Energy Recovery	22,200	45
	Biogas Treatment	4,400	At Grade
	Biogas Storage	50 feet diameter	50
	Flares (2 units)	500	20
Odor Control	Pre-digestion Odor Control	8,900	25
	Post-digestion Odor Control	10,500	25
	Sidestream Odor Control	400	15
Operations, Maintenance, and Support	Operations, Engineering, Maintenance, and Electrical Building	10,700	Up to 45
	Trades, Engineering, and Maintenance Facility	6,700	Up to 45
	Digester Electric Rooms (2 units)	2,100	10
	Transformers (6 units)	5,400	10
Water Systems and Pumping	Plant Water System ^d Pump Stations	1,500	At Grade
	Pathogen-free Water System ^e	800	At Grade
	Solids Return Pump Station	1,500	At Grade

NOTES:

- ^a Gravity Belt Thickeners are a method of condensing wastewater solids using gravity drainage of liquid through filter belt.
- ^b THP is a pre-treatment of solids used in combination with anaerobic digestion to produce Class A biosolids. THP processes preheat, hydrolyze, and sterilize solids. Essentially, the solids are heated with steam under pressure, held for a specified time in order to destroy pathogens, and then pressure is rapidly reduced to rupture microbial cells and allow for better methane production during anaerobic digestion.
- ^c Sludge dewatering can produce “sidestream” (reject) water, which contains elevated levels of nitrogen. The proposed process would remove nitrogen from the sidestream liquid through biological processes.
- ^d The “W3” system would provide W3 water, defined as non-potable chlorinated plant effluent.
- ^e The “W2” system would produce W2 water, defined as non-potable chlorinated plant effluent that is also filtered.
- ^f Height exemptions permitted under Planning Code Section 260(b) may exceed the 65 foot height limit.

- **Sidestream Treatment.**¹⁰ The final dewatering process would produce a “sidestream” (reject) liquid stream, which would contain elevated levels of ammonia. Sidestream treatment, which may be included in the project, would remove nitrogen (the primary nutrient in ammonia) from the dewatering reject stream through biological processes, and the resultant effluent would be returned to the existing SEP facilities for liquid treatment.
- **Energy Recovery.** One hundred percent of the biogas generated by the digesters would be used to produce both heat and power. New cogeneration facilities proposed as part of the project include low emission gas turbines that would generate up to 5.3 megawatts of electricity from the biogas produced by the digesters. The project would also include enclosed combustion flares for safe disposal of biogas in an emergency situation. Gas treatment systems would remove hydrogen sulfide, siloxanes,¹¹ moisture, and other volatile organic compounds from the biogas. The proposed turbines would meet or exceed Best Available Control Technology emissions standards of the San Francisco Bay Area Air Quality Management District. A heat recovery system would capture excess heat from the gas turbines and supply process steam that would be used to heat the thermal hydrolysis and digestion processes.
- **Odor Control.** The project includes pre-digestion and post-digestion odor control systems to collect and treat odors. Proposed odor control processes include carbon biofilters and ammonia scrubbers.¹² Odor control facilities would be designed with the goal of limiting odors to within the SEP property. A separate odor control system would be provided for the sidestream treatment process.
- **Operations and Maintenance, Support Facilities.** The project would include structures to house operations and maintenance staff, who will manage and maintain the existing and new treatment processes. In addition, miscellaneous support facilities (e.g., electrical buildings, transformers, yard piping) would be constructed, including a utility tunnel beneath Jerrold Avenue just west of Quint Street.
- **Water Systems and Pump Stations.** The project would construct two water systems for use in the biosolids treatment processes that would treat SEP plant effluent. One system (“W3”) would provide non-potable water for predigestion dilution and washwater requirements, and the other system (“W2”) would provide pathogen-free¹³ water for all processes after THP to ensure Class A biosolids requirements are met. Excess water from solids treatment processes would be returned to the existing liquid processing facilities in the SEP via a new pump station.

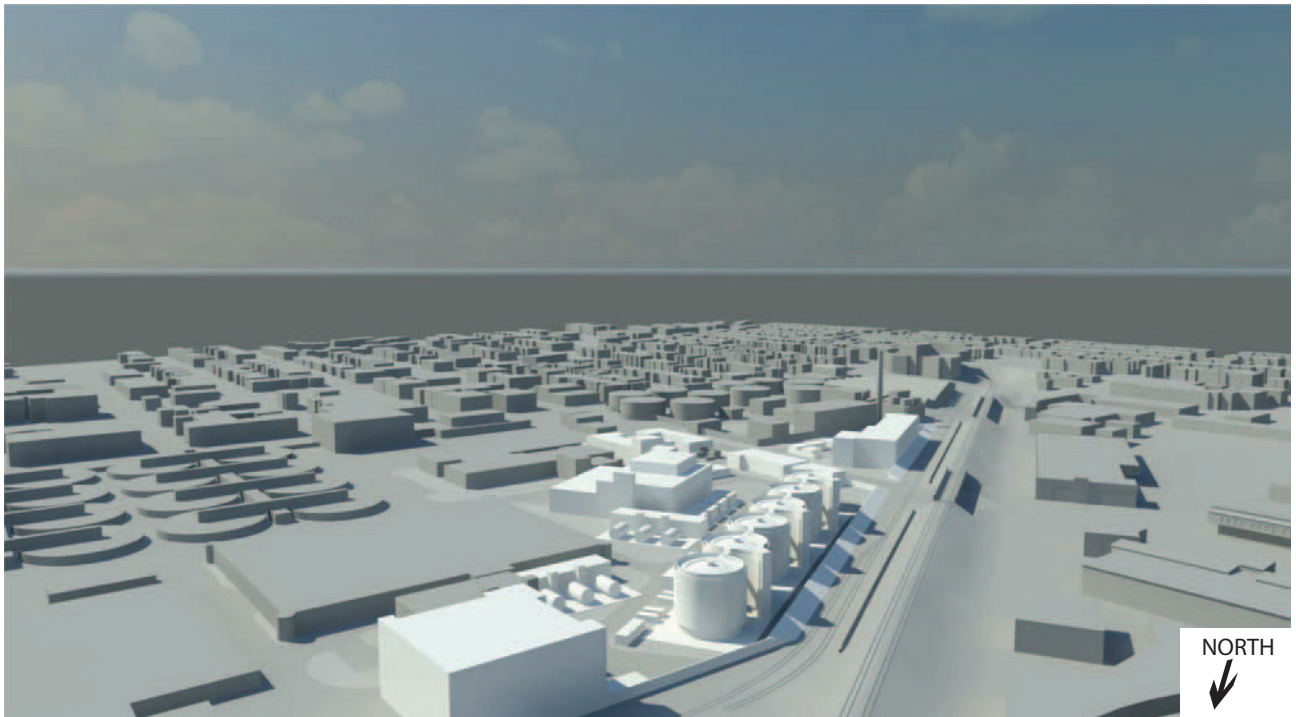
Figure 5 presents a conceptual visual representation of the general massing of the proposed project structures. Although project design is still in progress and many aspects of the project have not been finalized (e.g., the shape of the digesters), this figure provides an indication of the general physical characteristics of the BDFP.

¹⁰ The timing of implementing sidestream treatment could change. The BDFP would preserve space for a sidestream treatment facility.

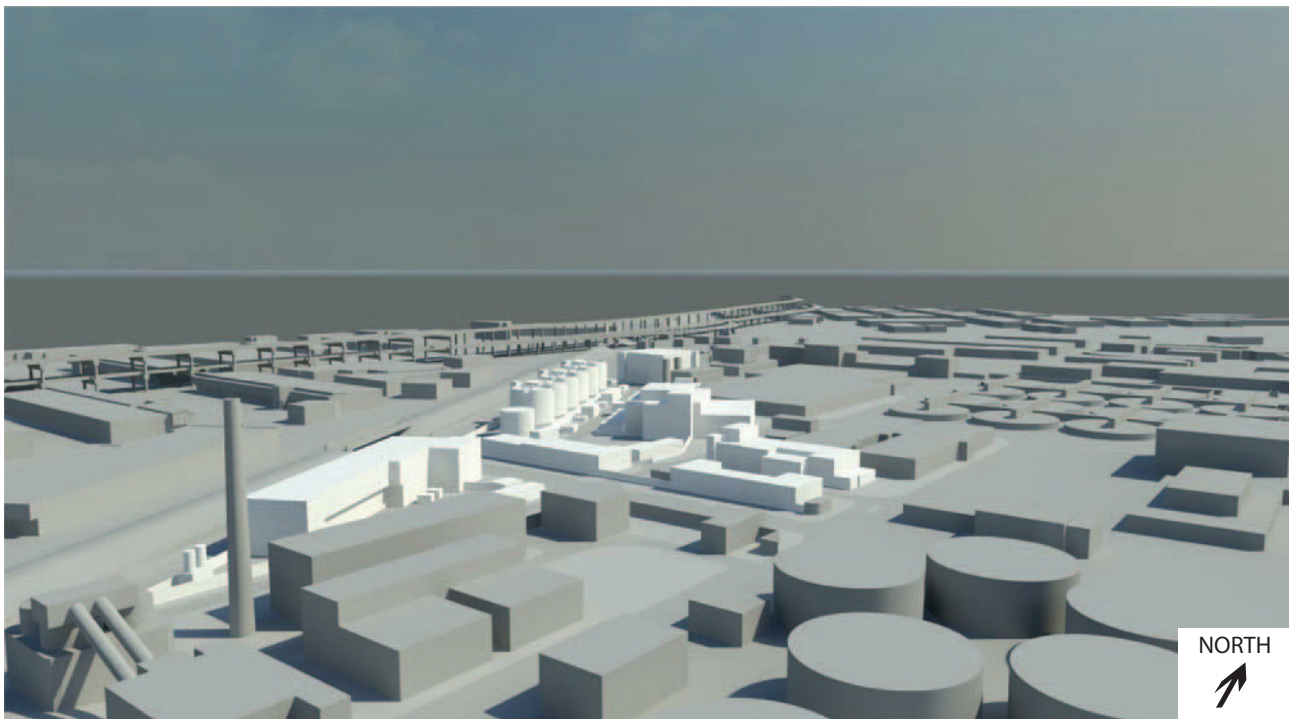
¹¹ Siloxanes are man-made organic compounds containing silicon, oxygen and methyl groups that are commonly used in personal hygiene, health care and industrial products, and consequently are found in wastewater. Removal of siloxanes from the biogas prior to combustion extends the life of the power generating equipment and reduces maintenance requirements.

¹² Biofilters and scrubbers are pollution control devices often used to remove odors from wastewater treatment plant operations.

¹³ Because the thermal hydrolysis process kills pathogens, the water used in subsequent processes must be pathogen free in order to produce Class A (i.e., pathogen free) biosolids.



Oblique View, Northwest Perspective



Oblique View, Southeast Perspective

Other Project Features

The project would include development of a new vehicular entrance and exit from the SEP onto Rankin Street to facilitate truck deliveries and biosolids loadout, thereby relocating some truck trips away from Phelps Street and Jerrold Avenue, and shifting truck traffic away from nearby residences. Two new entrances on Jerrold Avenue (as well as emergency access gates) and one on Quint Street are also proposed (Figure 4). The project would include redesign of on-site vehicular circulation to accommodate the new entrances and exits, and the new facility layout.

Architecture and landscaping would be designed consistent with the San Francisco Planning Code, the San Francisco Arts Commission Civic Design Review process and the Public Art Program, and the Planning Department Better Streets Plan. The project would include landscaping and street improvements. Proposed improvements to Jerrold Avenue would occur in accordance with Better Street Plan guidelines, and could include traffic calming, curb extensions (road narrowing), sidewalk improvements, lighting, street trees, and safer pedestrian/worker crossings.

Street trees at the project site would be removed during construction. A tree survey would be conducted to determine the species, number, and size of trees to be removed. Preliminary estimates are that up to 50 trees would be removed. Trees removed would be replaced pursuant to Article 16 of the San Francisco Public Works Code Section 806(a) and other City requirements as applicable. Trees adjacent to construction areas that are not proposed for removal would be protected by establishing a Tree Protection Zone around any tree or group of trees to be retained.

EXISTING SOUTHEAST WATER POLLUTION CONTROL PLANT

SEP Service Area, Plant Capacity, and Existing Flows

Built originally in 1952, the SEP is the City's largest wastewater treatment facility, treating 80 percent of San Francisco's sewage and stormwater flows. In order to meet the mandates of the Federal Clean Water Act, SEP was expanded in the early 1980s to provide secondary treatment of all dry weather flows from the Bayside Watershed (generally the east side of the City), with an average design capacity of approximately 85 million gallons per day (mgd) and peak-hour design flow of 142 mgd. In 1996, the plant's wet weather capacity was increased to 250 mgd. During wet weather, the SEP provides secondary treatment to up to 150 mgd of combined sewage and stormwater, and an additional 100 mgd receives primary treatment prior to disinfection and discharge. The SEP operates 7 days a week, 24 hours a day and treats wastewater from the Bayside Watershed as well as flows from a limited area of Daly City and Brisbane (about 2.5 percent of the total flow currently treated at SEP). In 2014 the SEP produced a total of 58,100 wet tons of biosolids; the average dry weather flow for that year was approximately 58 mgd.

Existing SEP Facilities and Operations

The existing 40-acre SEP site is bisected by Jerrold Avenue, dividing it into SEP North (i.e., facilities north of Jerrold Avenue) and SEP South (facilities south of Jerrold Avenue). Facilities on SEP North are associated with processing the liquids portion of the wastewater. Facilities on SEP South (i.e., south of Jerrold Avenue) are associated with processing the solids portion of the wastewater, including the existing digesters and energy recovery facilities.

SEP provides secondary treatment using a pure oxygen activated sludge process prior to effluent disinfection. Treated plant effluent of up to 110 mgd is discharged into the San Francisco Bay through the

Pier 80 deepwater outfall. During wet weather, secondary effluent of up to 140 mgd also is discharged to the Bay through an additional outfall at the shoreline of Islais Creek (Quint Street Outfall).

The existing solids treatment process consists of: thickening to remove excess liquid; anaerobic digestion to stabilize the solids; production of biogas and biosolids; chemical conditioning and dewatering to produce a drier material; and off-hauling of the biosolids. The process produces Class B biosolids that are beneficially reused. Class B biosolids are currently trucked from the SEP to Sonoma County and Solano County during the dry season (May to October) for land application and to Hay Road Landfill (outside of Vacaville) during the wet season for beneficial reuse, including a small percentage that is composted. The digester biogas is captured on site and used to produce heat and power and/or combusted via flares. The biogas fuels a cogeneration engine that produces about 2 megawatts of electricity for on-site use. In addition, SEP also includes odor control facilities for select process areas.

PROGRAM GOALS AND PROJECT NEED

Sewer System Improvement Program Goals and Levels of Service

The BDFP is the largest and most critical project in the SFPUC's SSIP, which is a 20-year, 6.9 billion dollar citywide program to upgrade the aging sewer infrastructure to ensure a reliable and seismically safe system. Endorsed by the SFPUC Commission in August 2012, the SSIP goals and levels of service shown in **Table 3** were established to facilitate technical analysis, planning, design, and environmental review for all SSIP projects, including the BDFP.

TABLE 3
SEWER SYSTEM IMPROVEMENT PROGRAM GOALS AND LEVELS OF SERVICE

Goals	Levels of Service
<i>Provide a compliant, reliable, resilient, and flexible system that can respond to catastrophic events</i>	<ul style="list-style-type: none"> • Full compliance with state and federal regulatory requirements applicable to the treatment and disposal of sewage and stormwater. • Critical functions are built with redundant infrastructure. • Primary Treatment, with disinfection, must be online within 72 hours of a major earthquake.
<i>Integrate green and grey infrastructure to manage stormwater and minimize flooding</i>	<ul style="list-style-type: none"> • Control and manage flows from a storm of a three hour duration that delivers 1.3 inches of rain.
<i>Provide benefits to impacted communities</i>	<ul style="list-style-type: none"> • Limit odors to within the treatment facility's fence line. • Be a good neighbor. All projects will adhere to the Environmental Justice and Community Benefits policies.
<i>Modify the system to adapt to climate change</i>	<ul style="list-style-type: none"> • New infrastructure must accommodate expected sea level rise within the service life of the asset. • Existing infrastructure will be modified based on actual sea level rise.
<i>Achieve economic and environmental sustainability</i>	<ul style="list-style-type: none"> • Beneficial reuse of 100% biosolids. • Use nonpotable water sources to meet 100% of nonpotable water demands. • Beneficially use 100% of biogas generated by treatment facilities. • Stabilize lifecycle costs to achieve future economic stability.
<i>Maintain ratepayer affordability</i>	<ul style="list-style-type: none"> • Combined sewer and water bill will be less than 2.5% of average household income for a single family residence.

SOURCE: SFPUC. 2012. Sewer System Improvement Program Report, Table 9. Adopted August 28, 2012.

Project Need

The SEP digesters are over 60 years old and are operating well beyond their useful life. As indicated above, since the SEP facilities were constructed, newer and more efficient wastewater treatment technologies have emerged. Because the existing solids treatment system is prone to wear and requires significant maintenance, the SFPUC is proposing the BDFP to ensure treatment reliability, regulatory compliance and protect public health and safety.

The existing SEP appearance, odors and noise have a negative effect on the adjacent residential community. The digesters and other solids handling components are not built to current seismic standards and would not withstand the maximum credible earthquake. Furthermore, regulations are expected to become increasingly restrictive with regard to the use and land application of Class B biosolids currently generated at the SEP (Class B biosolids contain detectable levels of pathogens). For this reason, the SFPUC has proactively adopted a goal to produce Class A biosolids for additional beneficial reuse options,¹⁴ which is an additional need for the project.

PROJECT CONSTRUCTION

Demolition, Earthwork, and Facility Construction

Overall, construction of the BDFP is anticipated to require five years (60 months). Site preparation for the BDFP would require the demolition of various structures within the project site to accommodate the proposed project facilities and associated operations. Existing structures to be demolished, including buildings at the Central Shops property, total about 110,000 square feet. Concrete, asphalt, and other demolition debris would be hauled off site for recycling or disposal as required by the San Francisco Construction and Demolition Debris Ordinance.

Following site clearing, secant retaining walls¹⁵ would be installed to prevent groundwater intrusion and to provide a dry work area during construction. The project site would be excavated to a depth of 20 feet, and up to 48 feet at the location of the proposed digester tank structures. During the peak excavation period (roughly six months), up to 200 to 250 truck trips per day would be needed for hauling of debris, excavated soil, and backfill.

During the other four and a half years of construction, approximately 50 truck trips per day are anticipated for deliveries of equipment and materials. Construction of new project facilities would generally include: installation of foundations (using pile driving) and subsurface utility conduits, building construction, concrete placement, and interior work such as mechanical and electrical equipment installation.

Initial performance testing of the new biosolids digester facilities would be conducted for approximately six months to one year following construction completion and prior to full operation. Operation of the existing digesters would be phased out over a period of one to two years while the new facilities are brought on line and the new system is stabilized.

¹⁴ Class A biosolids beneficial reuses include horticultural uses for products such as compost and blended soil used by landscapers, golf courses and nurseries, as well as agricultural uses as fertilizer or a fertilizer ingredient for crops that are not for human consumption.

¹⁵ Secant pile walls are formed by constructing a series of overlapping concrete-filled drill holes surrounding the area to be excavated to avoid the intrusion of groundwater into the excavated pit.

Construction Staging

Construction staging areas would be used for construction office trailers, construction equipment and materials, and parking for construction worker vehicles. Staging areas could also be used for temporary stockpiling of demolition debris and excavated soil prior to reuse or off-site disposal. Potential construction staging areas that have been identified include the following:

- ***Within SEP.*** Various available areas within the SEP may be used during construction for laydown of equipment and materials.
- ***Within Quint Street.*** Starting in October 2015, a Caltrain project¹⁶ will construct a berm under the Quint Street overcrossing that will result in the permanent closure of through traffic on Quint Street. This will result in a dead-end segment of Quint Street adjacent to the project site between the Caltrain railroad tracks and Jerrold Avenue. This segment of Quint Street is proposed as a staging/parking area during construction.
- ***Within Jerrold Avenue.*** The SFPUC proposes a temporary closure of approximately 1.5 blocks of Jerrold Avenue to public through-traffic (between the entrance to the SEP west of Phelps Street and the Caltrain right-of-way) during the five-year project construction period, to promote a safe construction work area. During this time, the closed segment of Jerrold Avenue may be used as a staging/parking area. Truck deliveries needed for plant operations may be permitted access to the SEP via Jerrold Avenue.
- ***Offsite location at Pier 94 Backlands*** (refer to Figure 1). Another potential offsite staging area would include a portion of the Pier 94 Backlands property owned by the Port of San Francisco located approximately 0.75 mile northeast of the SEP. This larger staging area would be used for construction office trailers, construction equipment and materials, and parking for construction worker vehicles. If selected, a shuttle service would be provided to transport construction workers between Pier 94 and the project site.

Offsite location adjacent to SEP at the Southeast Greenhouses (refer to Figure 2). A potential offsite staging area is the 4-acre site owned by the SFPUC and currently occupied by the Southeast Greenhouses (greenhouses), located southwest of the existing digester structures.¹⁷ The SFPUC has not yet determined potential future uses of the greenhouses site. However, if the area becomes available, the greenhouses would first be demolished and the area would be used for materials staging, parking and/or office trailers.

Existing Digesters Decommissioning

Following the successful operational performance of the new digester facilities, the existing digester tanks and solids handling facilities at SEP, located south of Quint Street and Jerrold Avenue, would be decommissioned, cleaned, and sealed. Demolition and future use of these areas would be determined in the future Phase II of the SSIP (when authorized) and are not part of the proposed project.

¹⁶ The Caltrain Quint Street Project will permanently close Quint Street between Oakdale Avenue and the Caltrain tracks, starting in October 2015, for replacement of the existing Quint Street Bridge. http://www.caltrain.com/projectsplans/Projects/Caltrain_Capital_Program/Quint_Street_Project.html, access May 29, 2015.

¹⁷ As part of a previously planned renovation process for the greenhouses, the SFPUC commissioned a due diligence study that recommended significant reconfiguration or demolition of the structures.

Construction Schedule

Table 4 provides the general duration of work for overall project construction. Project construction would occur for five years, from approximately summer of 2017 through summer of 2022. For most of the project construction period, construction is expected to occur Monday through Friday from 7:00 a.m. to 3:00 p.m. and Saturdays as needed, with work on Sundays and holidays and 24-hour work occurring only if needed for critical facility connections. The peak construction period in terms of vehicular traffic, when over 500 workers would be on-site, would last approximately 17 months and would be conducted in two work shifts Monday through Saturday from 7:00 a.m. to 11:00 p.m. The most intensive construction activities would occur at the Central Shops site for construction of the six digester tanks, which are the largest individual BDFP structures and require the deepest excavation (to 48 feet below ground surface); construction of ancillary facilities on other portions of the project site would be more limited in duration and intensity.

TABLE 4
CONSTRUCTION SCHEDULE AND DURATION BY ACTIVITY TYPE

Construction Activity	Expected Duration	Estimated Schedule
Site Preparation (e.g., demolition, excavation, utility relocation)	6 months	July 2017 – Jan 2018
Construction	54 months	Jan 2018 – Jun 2022
<i>Total Biosolids Digester Facilities Construction</i>	<i>60 months</i>	<i>July 2017 – Jun 2022</i>
Startup and Testing	12 months	Dec 2021 – Dec 2022
Process Stabilization Period (no construction)	24 months	Jun 2022 – Jun 2024
Existing Digester Decommissioning	6 months	After 2024 ^a

NOTE:

^a Potential demolition of the existing digesters and solids handling facilities to be determined in Phase II of the SSIP.

OPERATIONS

Similar to current conditions, the new facilities constructed under the BDFP would operate 24 hours per day, seven days per week. No increase in existing operations staff levels (currently about 280 staff) is anticipated. The proposed project would not increase the wastewater treatment capacity of the SEP because the existing SEP design capacity is able to handle projected loads through 2045.

Proposed changes in entrances/exit locations and to on-site circulation would alter traffic patterns associated with the SEP's operations, shifting some truck traffic off of Jerrold Avenue and onto Rankin Street. The number of daily truck trips required for biosolids processing and disposal would remain substantially similar to existing conditions.

PERMITS AND APPROVALS REQUIRED

The permits and approvals needed for the project will be confirmed during EIR preparation. Below is a preliminary identification of potential approvals needed for project construction and operation. This list is not intended to be inclusive of all permits required.

- Bay Area Air Quality Management District – Authority to Construct and Permit to Operate

- State Water Resources Control Board:
 - Construction General Permit and Stormwater Pollution Prevention Plan, if more than one acre of land were disturbed¹⁸
 - State Revolving Fund (SRF) Loan Program requirements (e.g., consultation regarding Section 106 of the National Historic Preservation Act)
- San Francisco Port Commission – Approval of use of Pier 94 Backlands for construction staging
- San Francisco Bay Conservation and Development Commission – Potential approval of Pier 94 Backlands for construction staging if property is within 100 feet of the Bay shoreline (most of the Port Pier 94 property is not within BCDC jurisdiction)

ENVIRONMENTAL REVIEW PROCESS

The San Francisco Planning Department is preparing an EIR to evaluate the environmental effects of the proposed project on the environment. The EIR will be prepared in compliance with CEQA (California Public Resources Code, Sections 21000 *et seq.*), the *CEQA Guidelines*, and Chapter 31 of the San Francisco Administrative Code, and will address project-specific construction and operational impacts of the BDFP. The EIR is an informational document for use by governmental agencies and the public to aid in the planning and decision-making process. The EIR will disclose the physical environmental effects of the project and identify possible ways of reducing or avoiding potentially significant impacts.

Summary of Potential Environmental Issues

The proposed project could result in potentially significant environmental effects. The Planning Department will prepare an EIR to evaluate the physical environmental effects of the proposed project. As required by CEQA, the EIR will examine potentially significant effects, identify mitigation measures, and analyze whether the proposed mitigation measures would reduce the environmental effects to a less than significant level.

The EIR will address various environmental topics, each briefly summarized below.

Land Use and Land Use Planning

The topic of Land Use and Land Use Planning will describe existing land uses on and near the project site and analyze whether the proposed project would physically divide an established community or result in land use conflicts or with land use plans adopted in the project vicinity.

Aesthetics

Project construction and operation could affect aesthetics at the project site and surrounding areas. Potential impacts to be evaluated include impacts on scenic vistas or visual character.

Population and Housing

The topic of Population and Housing will include analysis of the proposed project's potential impact related to population, employment, and housing.

¹⁸ Applicable to areas that do not drain to the City's combined sewer system; therefore not applicable to the project site but potentially applicable to the Pier 94 Backlands staging area.

Cultural and Paleontological Resources

The EIR will assess the potential for the project to result in significant impacts to paleontological, archeological, and historical resources, including historic and prehistoric archeological deposits and historic buildings or structures (“historical resources”). The EIR will describe the historical resources and potential historical resources on the project site, assess the potential for subsurface archaeological resources to be present, and identify potential impacts of the project on these resources.

There are no known archaeological resources on the site surface. The three Central Shops buildings at 1800 Jerrold Avenue have been evaluated and two are considered historical resources under CEQA. The proposed project would demolish these buildings. The EIR will include an assessment of the significance of this impact.

The potential for effects of project-related excavation on subsurface paleontological resources (fossil plant or animal remains) also will be analyzed.

Transportation and Circulation

Once the proposed BDFP is in full operation, employee and truck trips associated with biosolids processing and disposal are expected to be substantially similar to existing conditions. During project construction, SFPUC would temporarily close Jerrold Avenue adjacent to the SEP, and also occupy a segment of Quint Street that is expected to be permanently closed to through traffic in October 2015. Project construction would generate new traffic to and from the project site, including off-site construction staging areas, and would increase transit ridership and parking and loading demand. A Transportation Impact Study will be prepared for the proposed project in accordance with the Planning Department’s Transportation Guidelines for Environmental Review (October 2002). The study will include an analysis of specific transportation impacts and mitigation measures associated with the proposed facility’s operations and construction-period impacts. The study will also analyze transit conditions, pedestrian and bicycle conditions, loading, and emergency access, and evaluate cumulative effects of anticipated development and changes in traffic circulation in the vicinity of the SEP. The EIR will summarize the findings of the transportation study.

Noise

The EIR will include analysis of noise compatibility standards for residential and other land uses, and discuss the long-term impacts of noise and groundborne vibration that could result from the proposed project. Short-term construction-related noise impacts also will be described, and the analysis will evaluate the potential for noise from the project to adversely affect nearby sensitive land uses.

Air Quality/Odor

The EIR will include analysis of consistency of the proposed project with applicable air quality plans and standards, the potential for the proposed project to result in emissions of criteria air pollutants and toxic air contaminants (TACs) at levels that may affect sensitive populations, as well as the potential for the project to result in sources of odors affecting a substantial number of people. The air quality analysis will include quantification of both construction-related and operational air pollutant emissions, and will evaluate potential health risk effects from emissions of TACs, including effects on residents near the project site. The air quality analysis will also include a discussion of the existing conditions at the project site, including the Air Pollutant Exposure Zone, and compliance with the Clean Construction Ordinance.

Greenhouse Gas Emissions

The topic of Greenhouse Gas Emissions will include an analysis of the proposed project's consistency with the City's Greenhouse Gas Reduction Strategy and the degree to which the proposed project's greenhouse gas emissions could result in a significant effect on the environment.

Wind and Shadow

Construction of aboveground project facilities could result in wind and shadow effects. Potential effects to be evaluated include alteration of wind in a manner that substantially affects public areas, and creation of new shadow in a manner that substantially affects outdoor recreation facilities or other public areas.

Recreation

The topic of Recreation will include an analysis of whether the proposed project could adversely affect existing parks and open spaces such that substantial physical deterioration of recreational facilities would occur or require the construction or expansion of recreational facilities.

Utilities and Service Systems

The proposed project involves improvements to the wastewater treatment system. The topic of Utilities and Service Systems will include an assessment of whether the proposed project would require the construction of new water supply and/or stormwater drainage facilities, and if so, whether that construction could result in adverse environmental effects. The analysis will also identify the potential for utility disruptions during construction. The topic will also discuss disposal of solid waste generated by the proposed project and potential effects on landfill capacity.

Public Services

The topic of Public Services will include analysis of whether existing public services (e.g., schools, police and fire protection, etc.) would be adversely affected by the proposed project during construction or operation. The analysis will determine whether project implementation would result in an inability of service providers to maintain adequate levels of service and/or a need for new or expanded facilities, the construction of which could result in adverse environmental effects.

Biological Resources

The topic of Biological Resources will include analysis of potential project effects on important biological resources or habitats, including tree removal, or the movement of any native resident or migratory bird species.

Geology, Soils, and Seismicity

The topic of Geology and Soils will include an analysis related to the susceptibility of the project site to seismic activity, liquefaction, landslides, erosion, soil stability, and consequent risks to life or property.

Hydrology and Water Quality

The topic of Hydrology and Water Quality will assess the potential for the proposed project to impact water quality standards or waste discharge requirements or result in adverse effects on groundwater. The analysis will also consider the degree to which the proposed project could affect drainage patterns or create water runoff that could affect stormwater drainage systems. Finally, the analysis will consider the potential of the project to expose people or structures to a significant risk of loss, injury or death involving flooding, including potential effects of sea level rise.

Hazards and Hazardous Materials

Studies prepared for the project site indicate the presence of contamination, including the potential for contaminated soils and groundwater. Project construction (mainly excavation) would result in the removal and cleanup of existing hazardous materials at the project site, but could temporarily expose people to those existing hazardous materials. Construction and operation of the proposed project would require the use of hazardous material, including fuels. Potential effects to be evaluated in the EIR include: creation of a significant hazard through the routine transport, use, or disposal of hazardous materials; creation of a significant hazard through upset or accident conditions involving the release of hazardous materials; emission of hazardous materials within the vicinity of a school; creation of a significant hazard associated with existing hazardous materials sites; conflict with adopted emergency response plan or evacuation plan; and exposure of people or structures to fires.

Mineral/Energy Resources

The EIR will include analysis of potential project impacts on existing mineral and energy resources.

Agriculture and Forestry Resources

The EIR will address the potential for the project to affect existing agricultural and forest resources.

Alternatives

Pursuant to CEQA, the EIR also will analyze a range of alternatives that would reduce or avoid significant environmental impacts identified in the EIR, including a No Project Alternative, as described in CEQA Guidelines Section 15126.6.

Other CEQA Considerations

The EIR will address other topics required by CEQA, including growth-inducing impacts. The EIR will also analyze significant unavoidable impacts; significant irreversible impacts; any known controversy associated with environmental effects; issues to be resolved by the decision-makers; and the potential for the project to contribute to significant cumulative effects.

FINDING

This project may have a significant effect on the environment and an Environmental Impact Report is required. This determination is based upon the criteria of the State of California Environmental Quality Act (CEQA) Guidelines, Sections 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and for the reasons documented in the above project description and description of potential environmental effects.

June 24, 2015

Date

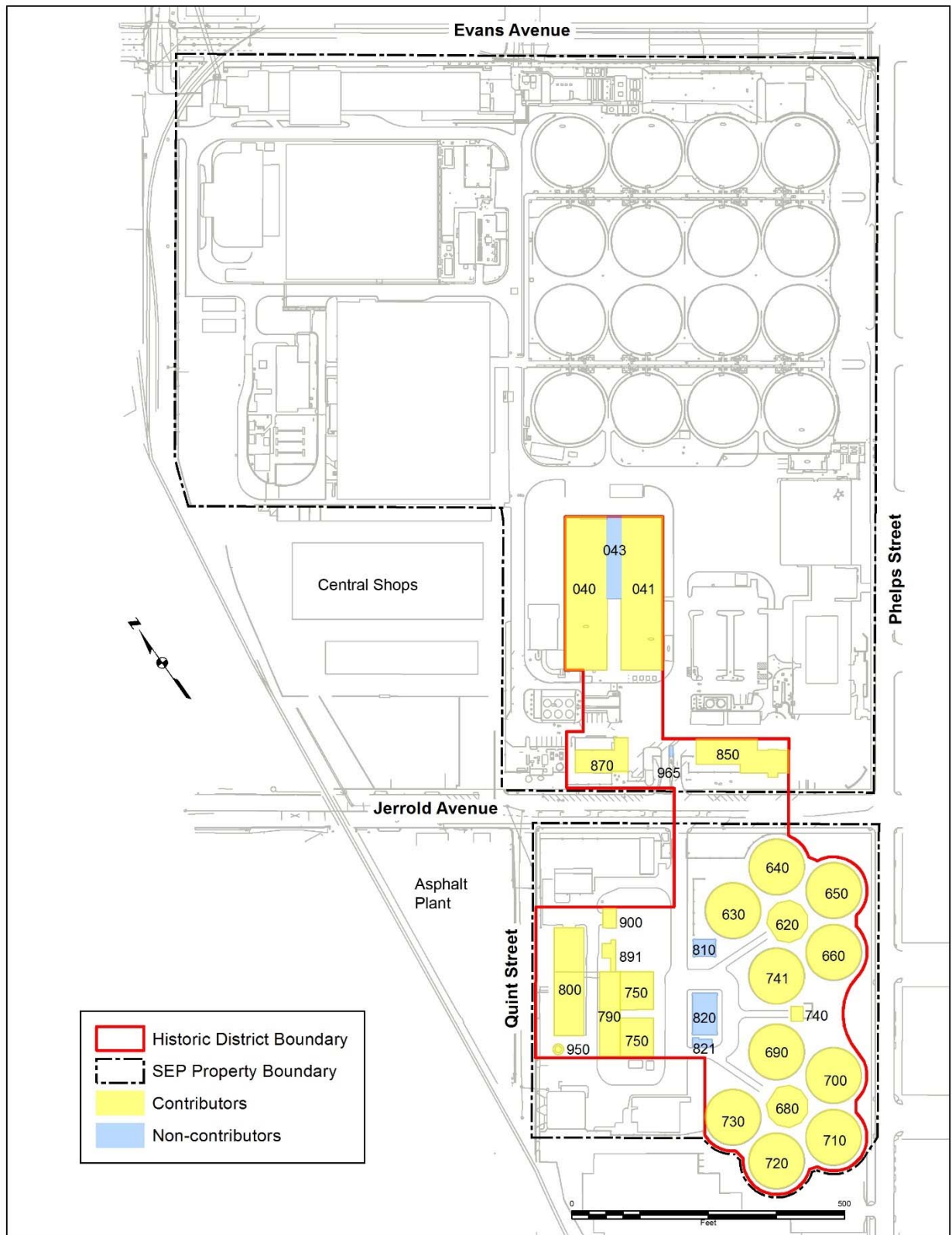
Sarah B. Jones

Sarah B. Jones

Environmental Review Officer

Biosolids Digester Facilities Project
Case No. 2015-000644ENV

Map of Southeast Treatment Plant Streamline Moderne Industrial Historic District



Map of Southeast Treatment Plant Streamline Moderne Industrial Historic District

Biosolids Digester Facilities Project
Case No. 2015-000644ENV

DPR 523 Forms

- Southeast Treatment Plant Streamline Moderne Industrial Historic District
- Central Shops, 1800 Jerrold Avenue

State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
DISTRICT RECORD

Primary # P-38-002474
HRI # _____
Trinomial _____

Page 1 of 42

*NRHP Status Code 3D

*Resource Name or # (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

D1. Historic Name: North Point Sludge Treatment Plant at Islais Creek

D2. Common Name: SFPUC Southeast Water Pollution Control Plant (SEP) Plant

*D3. Detailed Description (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.):

T.J. Kelley recorded the Southeast Water Pollution Control Plant on a DPR 523 form in 2002. Kelley's survey included the southern end of the plant and described it as having "five major buildings, ten prominent cylindrical tanks, associated piping, tunnels, roadways, equipment, etc. and a monumental cylindrical stack." Minimal building descriptions, photographs, and significance statements were provided on that form. The plant was only evaluated under Criterion C for the National Register of Historic Places (NRHP) and the author concluded that it was eligible for individual listing in the NRHP "for its design qualities at the local and regional levels of significance." This form was submitted to the Information Center and assigned Primary #P-38-004274 (see attached form). This record identifies and records the older, southern portion of San Francisco Public Utilities Commission's (SFPUC) Southeast Water Pollution Control Plant (SEP) at 750 Phelps Street as the Southeast Treatment Plant Streamline Moderne Industrial Historic District. (See Continuation Sheet.)

*D4. Boundary Description (Describe limits of district and attach map showing boundary and district elements.):

The Southeast Treatment Plant Streamline Moderne Industrial Historic District includes most of the buildings located in the south side of the plant, on the block bounded by Phelps Street, Jerrold Avenue and Quint Street, and also includes a few buildings in the southern part of the north side of the plant, located north of Jerrold Avenue, between Phelps Street and Quint Street. The boundary of the historic district, as well as all contributors and non-contributors, is shown on Figure 1 on page 3. (see Continuation Sheet.)

D5. Boundary Justification:

The boundary of the Southeast Treatment Plant Streamline Moderne Industrial Historic District was drawn to include all contributory buildings and structures, while excluding as many non-contributors as possible, resulting in a somewhat irregular boundary that encompasses Buildings 040-041 on the north side of the plant, to Building 720 (digester tank #9) on the south side of the plant, and many contributors in between, as well as a portion of Jerrold Avenue. See Figure 1 on page 3.

*D6. Significance: Theme Waste Water Treatment/Pollution Control and Architecture Area San Francisco
Period of Significance 1952 Property Type Wastewater Treatment Plant Applicable Criteria A/1 and C/3
(Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

The Southeast Treatment Plant Streamline Moderne Industrial Historic District, located within the SFPUC Southeast Treatment Plant (SEP) at 750 Phelps Street, appears to meet the criteria for listing in the National Register of Historic Places (NRHP) under Criteria A and C, and the California Register of Historical Resources (CRHR) under Criteria 1 and 3. The property is significant at the local level and it retains historic integrity to convey its significance. Its period of significance is 1952, when it was originally constructed. (See Continuation Sheet.)

*D7. References (Give full citations including the names and addresses of any informants, where possible.): (See Continuation Sheet.)

*D8. Evaluator: Brad Brewster, ESA Date: April 2016

Affiliation and Address: ESA, 550 Kearny Street, Suite 800, San Francisco, CA 94108

***D3. Detailed Description**, continued:

The SEP overall presently occupies approximately 11 city blocks in San Francisco's Bayview neighborhood, bound by Evans Avenue on the North, Phelps Street on the East, and Rankin and Quint Streets on the west. Oakdale Avenue is on the south end of the plan, approximately 650 feet south from the southernmost boundary of the plant, separated from the SEP by other city facilities. Jerrold Avenue runs southeast-northwest through the plant, separating it into the generally north and south sides of the plant. The south side of the plant occupies a 10-acre portion of parcel 5280-001, and the north side of the plant occupies a 31-acre portion of parcel 5262-009. SEP is divided into two functional areas separated by Jerrold Avenue. Liquids treatment generally occurs on the north side of the plant, north of Jerrold Avenue, and solids treatment generally occurs on the south side of the plant, south of Jerrold Avenue. The SEP functions under both dry and wet weather conditions, whereas the North Point Treatment Facility (NPF) located on Bay Street near Midway Street is used solely for wet weather operations and remains offline during dry weather.¹

The Southeast Treatment Plant Streamline Moderne Industrial Historic District encompasses approximately 15 acres of the overall plant, and includes 22 contributing buildings and structures, and 4 non-contributing buildings and structures.² The buildings and structures in the historic district are recorded individually on Primary Records following the District Record and its Continuation Sheets. The majority of the historic district is within the south side of the plant, although portions of it are also on the north side of the plant. The contributing elements share a common history, in that they represent the first phase of development of the wastewater treatment plant, which was completed in 1952, and represent the final phase of the implementation of the 1935 Sewer System Master Plan. The buildings and structures are also architecturally united by use of the Streamline Moderne style, in varying degrees of elaboration. Landscaping within the historic district is limited to street trees along Jerrold Avenue that do not contribute to the significance of the historic district.

The buildings and structures outside of the historic district are recorded and evaluated separately on another DPR 523 form for the SEP (ESA, 2015). A detailed description of the overall plant's function, by building name and location, is provided on that DPR form.

¹ The wastewater treatment process in San Francisco is divided into three geographic zones. In general, the NPF serves the northern zone, the Oceanside facility serves the western zone, and the SEP the eastern zone. The three plants operate in coordination depending on the amount of dry-weather and wet-weather flows.

² ESA inventoried exteriors of above-ground buildings and structures. Interiors of above-ground structures and all below-ground structures such as tunnels and pipes were not accessible, and were not considered in this documentation and evaluation.

*D4. Boundary Description continued:

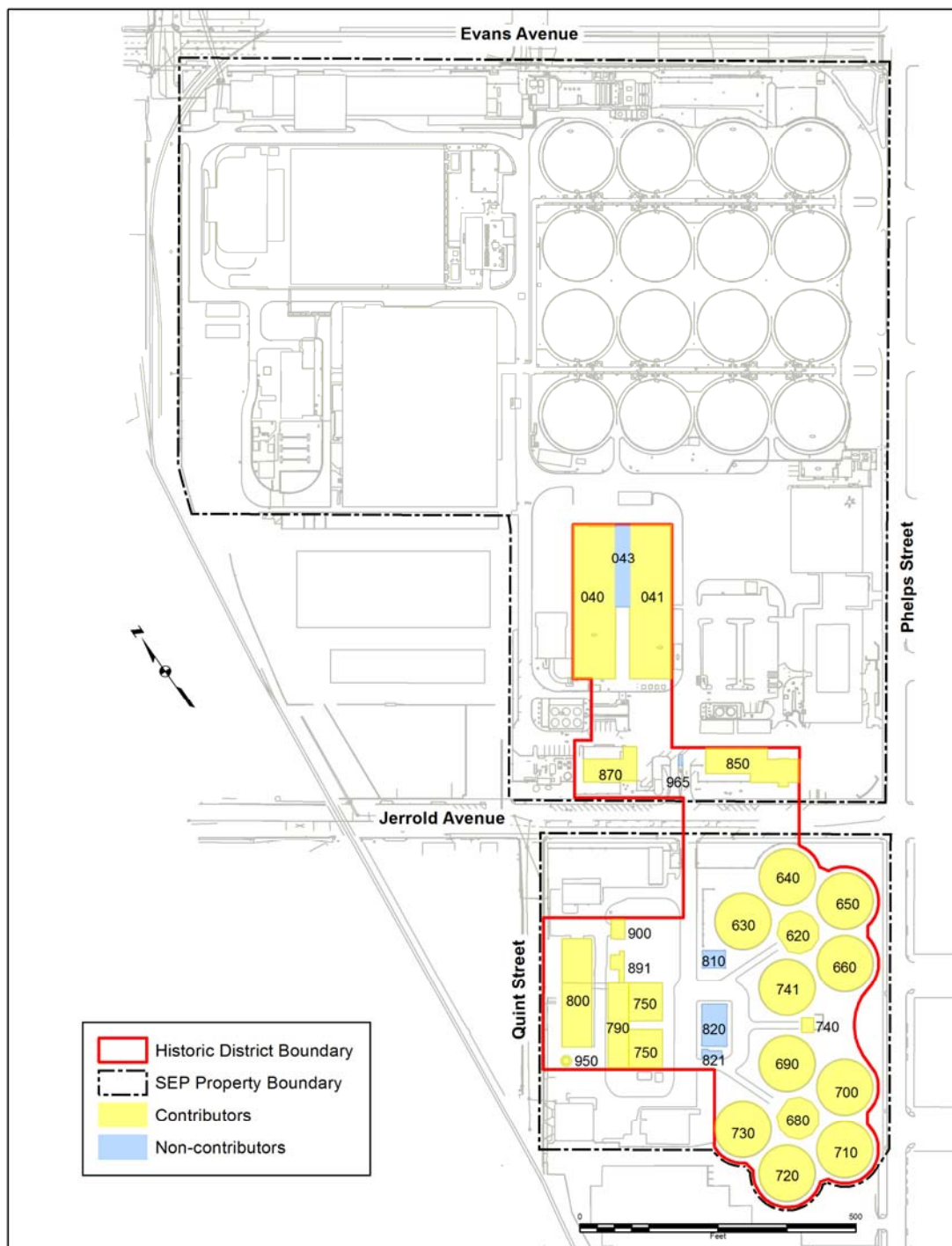


Figure 1. Southeast Treatment Plant Streamline Moderne Industrial Historic District Boundary

*Resource Name or # (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

***D6. Significance**, continued:

The Southeast Treatment Plant Streamline Moderne Industrial Historic District has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code and is a historical resource for the purposes of CEQA. This evaluation is consistent with San Francisco Preservation Bulletin 5, "Landmark and Historic District Designation Procedures," which directs that historic resources be evaluated for local designation using the California Office of Historic Preservation Recordation Manual (as per San Francisco Landmarks Board Resolution No. 527, June 7, 2000). The District was also evaluated in accordance with the National Register of Historic Places evaluation criteria A – D. The historic district is not significant under NRHP / CRHR criteria B/2, or D/4.

Provided below is a brief historic context of sewage treatment planning in San Francisco, including a history of the development of the SEP, a discussion of Modern architecture in San Francisco including the Streamline Moderne style, and concluding with an evaluation of the District in accordance with NRHP / CRHR Criteria A/1 - D/4.

Historic Context

The rapid development of San Francisco as a result of the California Gold Rush in 1849-52 transformed it into the largest city on the West Coast by the late 19th century. To support this burgeoning population, a collection system was designed and built to carry combined wastewater and stormwater flows to the shoreline. By 1899, over 300 miles of combined sewers had been completed. In that year, the City's first coordinated sewerage plan was developed; the 1899 Sewer System Master Plan. The main accomplishments of the 1899 plan were: 1) development of a standardized, coordinated sewer design to provide effective drainage, 2) construction of four pump stations, 3) consolidation to eliminate on-land discharges, and 4) construction of 700 miles of combined sewers (SFPUC, 2010).

Although many improvements to the city's sewer system occurred as a result of the 1899 plan, untreated sewage was still discharged directly into the Bay and Pacific Ocean, eventually resulting in unsanitary conditions along the coastlines (FoundSF.org, 2015). These conditions were recognized by the public early on, but could not be sufficiently addressed due to lack of financial resources. A sewer bond in 1933 made funds available for a board of consulting sanitary engineers to prepare studies and recommendations to remedy this situation, resulting in the 1935 Sewer System Master Plan (CSWA, 1940).

It became apparent to the engineers working on the 1935 Sewer System Master Plan that there was a much larger sewage disposal problem that needed to be addressed. In the report, the engineers noted that, "The shore waters of the City and County of San Francisco are more or less polluted with sewage throughout their entire length from the southeast boundary around to the southwest city limit." The report also stated that there were 31 sewer outfalls constantly discharging untreated sewage at the shore line or in small estuaries and channels, resulting in raw sewage along the beaches and in the coastal water. San Franciscans found the raw sewage both offensive to the senses, and understood it as a public health hazard. New neighborhoods were established closer to the shoreline in the early twentieth century, and consequently the public was less willing to accept beaches polluted with raw sewage. Engineers working on the issue established that the sewage polluting the city's north shoreline originated from the sewers discharging at Baker's Beach and the Marina, for example, and also from sewage discharged from other parts of the city with tidal patterns distributed sewage all over the shoreline. Thus it was essential to devise a plan of sewage disposal for the entire city (JRP(a), 2014).

To remedy the situation of untreated sewage being distributed throughout the city's shorelines, the 1935 plan proposed the following three major improvements to the city's sewer system: 1) sewage generated in the North

*Resource Name or # (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

Point and Marina districts to be treated at a plant at North Point; 2) sewage generated in the Baker's Beach or East Richmond district, West Richmond, and Sunset districts to be treated at the Richmond-Sunset Sewage Treatment Plant; and 3) sewage generated in the southeast quadrant of the city be treated at a treatment plant at Bayview/Hunter's Point (CSWA, 1940).

The priority was given to improve the areas along San Francisco's north shore and Great Highway, which were the main recreational areas of the city, as the completion of all three plants under this one bond issue was not possible. The Marina Pumping Plant and discharge sewer, as well as the Richmond-Sunset Plant in Golden Gate Park with its connecting tunnel and sewers, were built in 1939 and financed with the earlier bond issue with the assistance of the federal Public Works Administration (PWA) (Livingnewdeal.org, 2015) (See the discussion about the Public Works Administration in the Modern Architecture in San Francisco, 1935-1970 Section below.) Also constructed as a result of the 1935 plan was Seacliff Pump Station No. 2, completed in 1940, and built to pump effluent from the Seacliff neighborhood to the Richmond-Sunset Plant. This building was designed in the Streamline Moderne style of architecture (JRP(a), 2014). The Richmond-Sunset Plant was enlarged and improved in 1948-50.³ The NPF in the North Beach neighborhood was constructed in 1951, and the SEP in the Bayview neighborhood was constructed in 1952. The estimated expenditure of the program was \$30,000,000 including proceeds of the 1933, 1944 and 1948 bond issues and funds allocated to San Francisco by the State under the Construction and Employment Act of 1946 (SFPL Newspaper Clipping File, 1951).

Operation of these primary treatment facilities combined with discharge of the treated effluent through deep-water outfalls significantly reduced nearshore water pollution. In addition, the amount of untreated combined wastewater bypassed to the bay and ocean were substantially reduced. The main accomplishments of the 1935 plan were: 1) consolidation of sewer districts, 2) construction of three primary wastewater treatment plants (including the SEP), 3) construction of offshore deep-water effluent outfalls, 4) elimination of dry-weather sewage overflows, 5) construction of 900 miles of additional combined sewers and 35 miles of intercepting sewers, 6) construction of 56 sewage diversion structures, and 7) construction of additional pump stations, 22 in total (SFPUC, 2010).

History of the SEP

Historically, the land currently occupied by SEP was on the edge of the Islais Creek estuary, but was just outside of the area filled under the Islais Creek reclamation project in the 1930s. In the 1930s and 1940s, this area lacked development because it poorly drained, and thus contained only tanneries, livestock pens, a small lumber shed, an office near Jerrold Avenue and Quint Street. Atchison, Topeka and Santa Fe Railroad tracks ran up Quint Street. The only sizable development in this vicinity was the Scavengers Protective Association processing plant, which fronted Evans Avenue between Phelps Street and Quint Avenue, and nearby, the Lowrie Paving Company was on Evans Avenue between Rankin Street and Quint Street (JRP(b), 2015). Although the purpose and need for the SEP was clearly articulated in the 1935 Master Plan, the bond funding available for its construction was delayed until after World War II, and as a result, the start of construction was delayed until 1950. Construction of the SEP began on March 13, 1950 and was completed by mid-1952, with 18 buildings and two groupings of 5 digester tanks. The original contract award for the plant was \$2,132,118 (SFDPW, 1950). While the plant was expected to be open by mid-1951, construction delays put the final costs closer to \$4,500,000 (San Francisco Chronicle, 1950). An aerial photo of the plant under construction in 1950, and as completed in 1952, are provided on figures 2 and 3 on pages 6 and 7, respectively. The original layout plans of the north side and south side of the plant, are provided on Figures 4 and 5 on pages 7 and 8, respectively.

³ The Richmond-Sunset plant was demolished in 1996. The Oceanside Facility, completed in 1993, replaced and augmented the wastewater treatment processes provided at the earlier Richmond-Sunset plant.

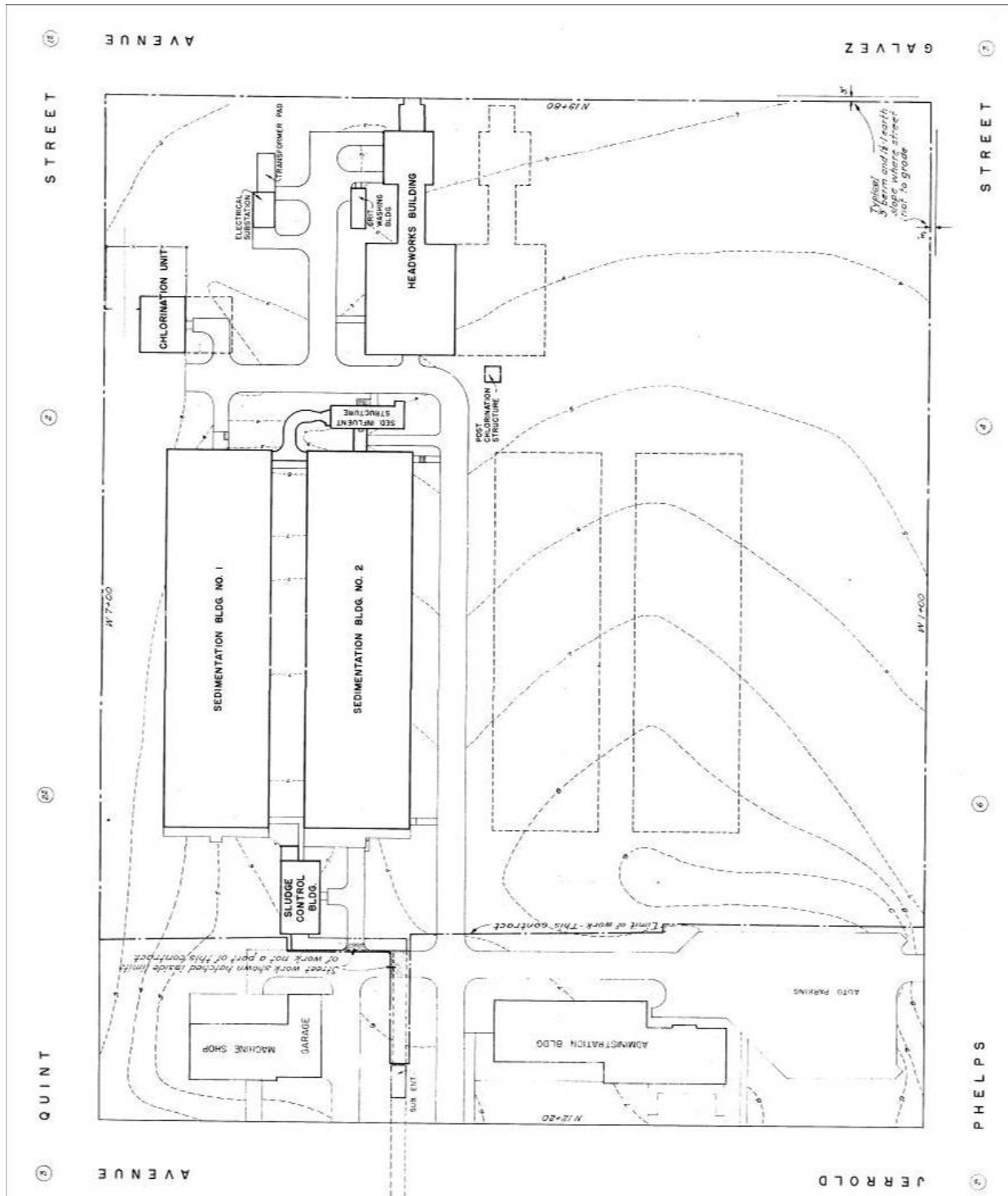


Figure 2. SEP Under Construction in 1950, Looking South.

Source: SFPUC Photo Archives (Permission to Publish)



Figure 3. SEP Completed 1952, Looking South
Source: SFPUC Photo Archives (Permission to Publish)



Figure

4. SEP General Layout Plan, North Side, 1948

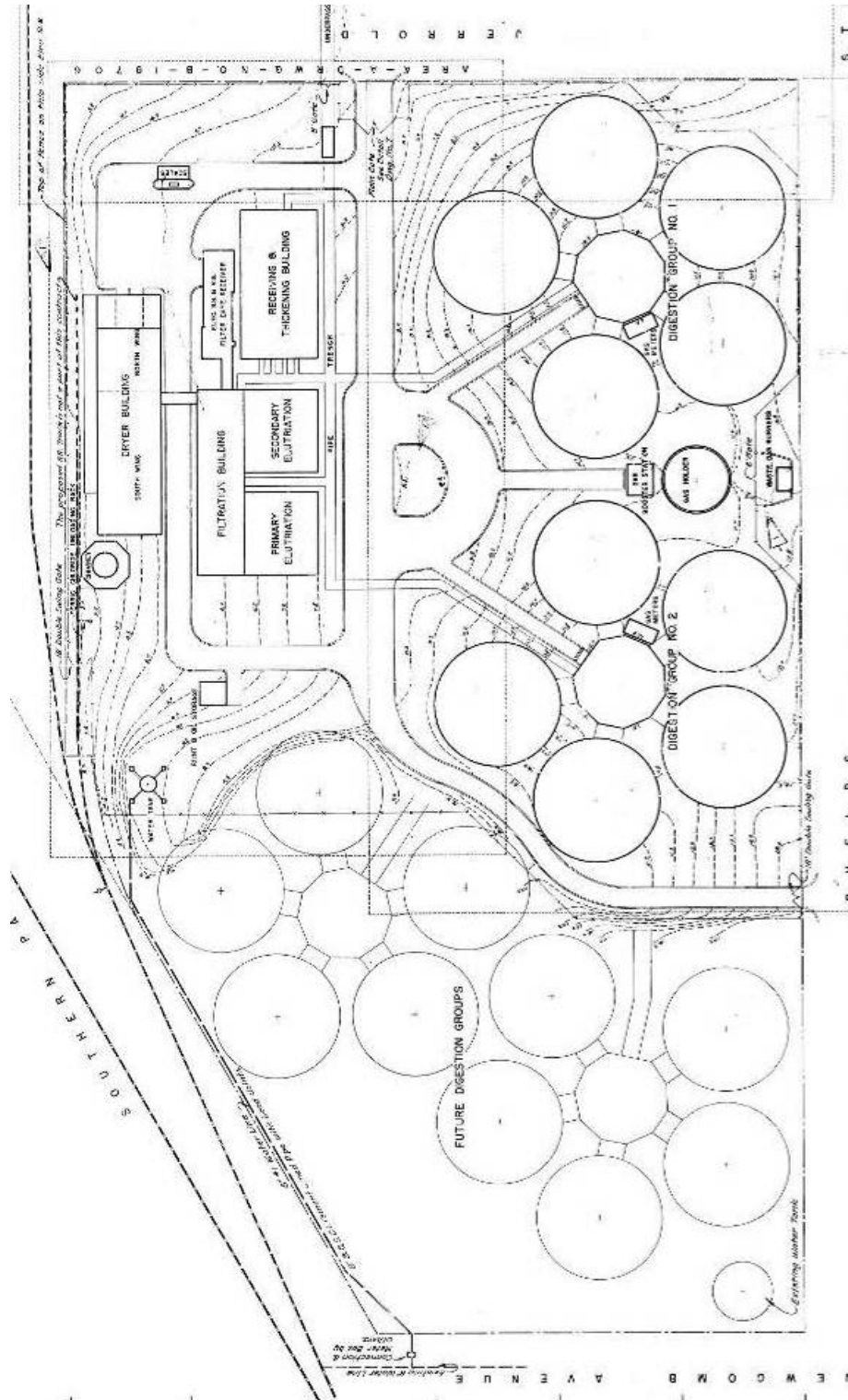


Figure 5. SEP General Layout Plan, South Side, 1948.

The plant was constructed on both sides of Jerrold Avenue, and original layout plans indicate that it was designed to be expanded on both the north and south sides of this street. The plant could be expanded to the south to accommodate two groupings of 5 additional digester tanks, and the north side could be expanded to accommodate two additional sedimentation buildings, immediately east of existing Buildings 040 and 041. None of these expansions occurred as planned; however, greenhouses currently exist where the additional digester tanks would have been constructed and internal parking lots currently exist where the additional sedimentation buildings would have been constructed. The greenhouses south of SEP were completed as compensation for the expansion of the SEP in the early 1980s.

The physical layout of the SEP remained essentially unchanged from 1952 to 1979. During this time, the passage of the 1972 Federal Water Pollution Control Amendments (33 U.S.C. §1251), also known as the “Clean Water Act,” prompted the SFPUC to create the 1974 Sewer System Master Plan.⁴ The plan led to numerous construction projects which were implemented over an approximately 25-year period. The main accomplishments resulting from this plan were: 1) the provision of secondary treatment for all dry-weather flows, 2) decommissioning of the Richmond Sunset Water Pollution Control Plant and construction of the Oceanside Water Pollution Control Plant, 3) upgrade and expansion of the SEP, 4) construction of the Southwest Ocean Outfall, 5) provision of expanded wet-weather treatment, and 6) construction of 17 miles of transport/storage (T/S) structures and large connecting sewers to provide 197 million gallons of storage (SFPUC, 2010).

Compliance with the Clean Water Act necessitated a modernization and expansion program at the SEP primarily to provide secondary treatment for dry-weather flows. This project resulted in the construction of many new buildings on the north side of the plant related to secondary treatment, as well as multiple new buildings on the south side of the plant related primarily to biosolids production. A review of historic aerial photography at the SEP from 1950 to 2005 shows that plant modernization and expansion projects eliminated 6 of the original 18 buildings constructed in the early 1950s, including a headworks building, a chlorination building, and an electrical substation that existed to the north of Buildings 040 and 041, as well as a sludge control building that existed to the south of these buildings. Original buildings removed on the south side of the plant included a receiving and thickening building north of Building 750, and a gas holding tank between the two digester tank groups. These former structures are visible on the aerial photo of the plant in 1952 on pages 5 and 6, and on the layout plans on pages 7 and 8.

In addition, 21 new buildings or groupings of identical structures were constructed throughout the north and south sides of the plant between 1952 - 2005 (SFPUC aerial photos, 1950-1952, and www.historicaerials.com, 2015). Fifteen of the new buildings at the SEP were designed in 1977 by the San Francisco Bureau of Engineering, Department of Public Works to address the Clean Water Act requirements, and reflected the Brutalist style of Modern architecture (SFPUC, 2009). The modernization and expansion effort at the SEP began in 1979 and was largely completed by 1981. Most of this newer construction is located outside the boundaries of the Southeast Treatment Plant Streamline Moderne Historic District. Six other buildings that were added to the SEP between the late 1980s and the mid-2000s were also designed by the San Francisco Bureau of Engineering, Department of Public Works, reflecting the Post Modern and Modern/Industrial styles of architecture. These later buildings were primarily related to enhanced biosolids production and storage, as well as energy generation through methane gas recapture.

The following provides a brief historical context of Modern architecture in San Francisco, including brief

⁴The City and County of San Francisco also prepared the Sewer System Master Plan in response to abatement orders that would have resulted in a building moratorium if the City was not brought into compliance with the Clean Water Act.

discussions of the Streamline Moderne, which is the architectural style used for buildings in the Southeast Treatment Plant Streamline Moderne Historic District.

Modern Architecture in San Francisco, 1935-1970

The following context about Modern architecture in San Francisco, including information about the Streamline Moderne was excerpted from Brown (2010).

San Francisco witnessed a tremendous increase in public institutional buildings and infrastructure during the Modern Age (1935-1970). Dozens of schools, recreational buildings, playgrounds, playing fields, medical facilities, libraries, firehouses, police stations, and other municipal buildings were constructed. In the decade following the end of World War II, San Francisco voters approved over \$241,700,000 in numerous bond issues to construct and upgrade municipal infrastructure. Infrastructure investments included: schools; a new San Francisco International Airport; new sewers, streets, tunnels, and bridges; municipal water improvements; municipal recreation; parks and squares; and San Francisco General Hospital improvements. New construction occurred throughout the City, with particularly intense building activity in the developing neighborhoods to the west, southwest, and southeast. Waves of construction were also linked to the New Deal federal programs and to San Francisco's numerous postwar bond measures.

To combat massive unemployment and economic stagnation related to the Depression, in 1933 newly elected President Franklin D. Roosevelt implemented the New Deal. The New Deal consisted of a series of new policies and agencies to provide relief and employment to Americans and to bring about the recovery of the economy and reform of the U.S. financial system. Federal agencies of the New Deal included the Public Works Administration (PWA), Civil Works Administration, Works Progress Administration (WPA), Civilian Conservation Corps, Farm Security Administration, and the National Youth Administration.

Two key New Deal agencies were active in San Francisco beginning in the mid-1930s. The PWA was part of the National Industrial Recovery Act of June 1933 and was headed by Secretary of the Interior Harold Ickes. It allowed \$3,300,000,000 to be spent nationwide on the construction of public works to provide employment, stabilize purchasing power, improve public welfare, and contribute to a revival of American industry. The WPA, a New Deal agency created in 1935, was likewise designed to create jobs while shoring up the infrastructure needs of local communities. The WPA's scope was broad, encompassing projects from large-scale infrastructure projects to murals, drama, writing, and other public art under its Federal Arts Project. The WPA's scope and name was changed in 1939 to the Work Projects Administration. It was active in San Francisco from 1935 to 1942.

In San Francisco, the PWA and WPA were involved in the construction of public and educational buildings, military projects, parks and recreation facilities, public utilities, sanitation, flood erosion and control, road construction and widening projects, and port-related facilities. San Francisco provided the labor and materials and the federal government paid the majority of a project's expenses. There is no unifying "New Deal Style." Local architects designed New Deal projects in San Francisco in a variety of styles, ranging from rustic to Mediterranean Revival to a classically influenced version of the Streamline Moderne style.

The postwar era witnessed a boom in construction of municipal buildings. In 1948, just three years after the end of World War II, San Francisco voters approved 10 bond measures allocating \$173,690,000 for the construction of transportation, water, sewer, airport, and school facilities. In the 1950s, taxpayer-funded projects were designed with a priority on efficiency, expediency, and low cost.

Architectural Style: Streamline Moderne

Twelve of the buildings in the Southeast Treatment Plant Streamline Moderne Historic District were designed in 1947-49 and completed in 1952 reflect a late and more rectilinear iteration of the Streamline Moderne style. The

buildings are horizontally oriented and have character-defining features of the Streamline Moderne style including glass block windows, cast concrete double moldings around all windows and doors, flat roofs with tile coping at the roofline with a speedline motif, and smooth, board-formed concrete wall surfaces. The ten digester tanks (structures) completed in 1952 are utilitarian industrial facilities that cannot be ascribed to this particular style, but were designed and built as functional units directly associated with buildings that are representative of this style.

Described as a unique American style, Streamline Moderne is considered the first “modern” style to gain widespread acceptance in mainstream America. Streamline Moderne, also referred to as Art Moderne, Moderne, Modernistic, or Depression Modern, was a conscious architectural expression of the speed and sleekness of the Machine Age. The style referenced the aerodynamic forms of airplanes, ships, and automobiles of the period with sleek, streamline rounded corners and curves, and evoked a machine made quality. It evolved from the Art Deco movement and incorporated design elements associated with the International Style. Nationwide, construction in this style began in the 1930s and peaked around 1940 (Brown, 2010).

In San Francisco, the period of construction of Streamline Moderne buildings began in the mid-1930s and continued through the early 1950s. The style incorporated newly developed products such as Vitrolite glass and Carrara glass (tinted structural glass), decorative plastic laminates, porcelain enamel, extruded aluminum and stainless steel fittings and fixtures, ceramic veneer, glass block, and advancements in building technologies such as the ability to bend structural glass (Brown, 2010).

The Streamline Moderne style was used less frequently in the design of large institutional buildings. Boxier, and less curvilinear Moderne interpretations of the style were incorporated in public schools, post offices, and other institutional buildings, such as the Rincon Annex Post Office built in 1940. Buildings and structures constructed under the WPA and PWA New Deal programs frequently utilized a stripped down version of the Moderne style, occasionally referred to as Classical Moderne or WPA Moderne (Brown, 2010).

Architects, Engineers, and Builders

The SEP, including the contributors in the Southeast Treatment Plant Streamline Moderne Historic District, was designed in 1947-49 by the San Francisco Bureau of Engineering, Department of Public Works, with the advice of Clyde C. Kennedy, Consulting Sanitary Engineer, and the assistance of Ambrose and Spencer, Consulting Architects, and Harold B. Hamill, Consulting Structural Engineer.⁵ The construction contract for the SEP was awarded to Walsh Construction Co., Bates & Rogers Construction Corp., and J. H. Pomeroy & Co. Inc., Joint Ventures, for \$2,132,118 SFDPW, 1951).⁶

Clyde C. Kennedy was the city engineer for the City of Berkeley, and opened an engineering office in San Francisco in 1919.⁷ By 1927, Kennedy designed the first sewage treatment plants for the Cities of Reno and Sparks. In 1933, Harry N. Jenks, who worked for Clyde Kennedy, started his own engineering practice, and by 1948, Jenks had designed a secondary treatment plant for the Marin County Sanitary District. By the late 1950s, the firms merged to become Kennedy Jenks Consultants. The firm continues to be active today and is based in

⁵ A review of the original architectural plans of the SEP reveals that it was designed concurrently with the NPF by the SFDPW with same team of assisting architects and engineers. For example, all of the plans for the SEP from 1947-49 were labeled as the “North Point Sludge Treatment Plant Near Islais Creek.” In addition, Sedimentation Buildings 040 and 041 at the SEP are nearly identical in design to the ones with the same names found at the NPF. Planning for the North Point plant began in 1944 and construction was completed in 1950.

⁶ Unlike the SEP, the NPF was constructed by noted California builder MacDonald & Kahn Corporation, in a joint venture with Stolte, Fred J. Early Co., Inc. and Haas and Rothschild (SFPL Newspaper Clipping File, 1951).

⁷ Just after the end of WWI, Kennedy was involved in designing the first all-concrete ship, the 300-ton freighter *Atlantus*, for the Liberty Ship Building Company in Brunswick, Georgia, launched on December 5, 1918 (Engineering News-Record, *First Government Concrete Ship is Launched*, 1918, Vol. 81).

California (kennedyjenks.com, 2015).

The architectural firm Ambrose and Spencer was founded by William Clement Ambrose (b. 1888 – d. 1962), AIA, and Eldridge T. Spencer (b. 1892 – d. 1978), FAIA (AIA.org, 2015). In 1945, Spencer became Stanford University's campus architect and director of planning (spencerassoc.com, 2015). Some of the firm's more well-known buildings include the Stanford University Stern Hall (1948) and Wilbur Hall (1955); the Plant Sciences Building at UC Davis (1949); the Home Economics Building at UC Berkeley (1954); and the Francisco Plaza Housing Project (1956) (AIA.org, 2015). Spencer Associates continues to be active today and is based in Palo Alto (spencerassoc.com, 2015).

The Walsh Construction Company, now the Walsh Group, was founded in 1898 by civil engineer Matthew Myles Walsh, and been involved in general building construction since this time. Walsh Construction was incorporated in the State of Illinois in 1949, and became the Walsh Group when Archer Western joined the company as a subsidiary in 1983. The firm is headquartered in Chicago, Illinois, and has a regional office in Concord, California (www.walshgroup.com, 2015). Bates & Rogers Construction Corp. and J. H. Pomeroy & Co. Inc., and Harold B. Hamill are no longer active construction or engineering firms, and limited information is available about them.

Evaluation

Criterion A/1 – Association with significant events

Criteria A/1 applies to properties associated with events that have made a significant contribution to the broad patterns of our history. Although the SEP was originally proposed in the 1935 Sewer System Master Plan, and received some financial assistance by the PWA, it was not completed until 1952. As such, the SEP is not significantly associated with important historical events such as the New Deal or its WPA programs. However, the SEP is significantly associated with the completion of the 1935 Sewer System Master Plan, which allowed for all sewage generated in the southeast quadrant of the city to be treated at the SEP, and was the largest, most expensive, and final element of the plan. The combined operation of SEP, along with the North Point and the Richmond-Sunset Sewage Treatment Plants and their associated outfalls, substantially reduced nearshore water pollution along San Francisco Bay and the Pacific Ocean. The SEP was key to fulfilling the main components of the 1935 plan, which were to: 1) consolidate sewer districts, 2) construct three primary wastewater treatment plants, 3) construct offshore deep-water effluent outfalls, 4) eliminate dry-weather sewage overflows, and 5) construct many miles of additional combined sewers, intercepting sewers, as well as numerous sewage diversion structures and pump stations. As such, all 22 buildings and structures completed in 1952 contribute to the Southeast Treatment Plant Streamline Moderne Industrial Historic District, which is eligible for listing in the NRHP/CRHR under Criterion A/1, at the local level, for its significant contributions to the completion of the 1935 Sewer System Master Plan and the resulting reduction of water pollution.

The buildings and structures within the Southeast Treatment Plant Streamline Moderne Historic District, completed in 1981 (Building 043 [Sedimentation Control Room], Security Fence and Building 965, [Entrance Control Building], as well as those completed in 2002 (Building 810 [Cogeneration Building] and Building 820/821 [Digester Heater Boilers/Waste Gas Burners]) are non-contributory to the district because they represent later improvements to the SEP for enhanced function, security, and waste-recovery, rather than the plant's primary and original purpose. As such, they lack significance under NRHP/CRHR Criteria A/1.

Criterion B/2 – Persons

Criteria B/2 applies to properties associated with the lives of significant persons in our past. The SEP was designed by the San Francisco Department of Public Works (SFDPW), Bureau of Engineering, and is owned and maintained by the San Francisco Public Utilities Commission (SFPUC). While SFDPW and the SFPUC are important San Francisco institutions, there are no individual persons associated with the property that have

significance to our past. Therefore, the Southeast Treatment Plant Streamline Moderne Industrial Historic District does not have any significant associations with important persons that would make it eligible for listing in the NRHP or CRHR under this criterion.

Criterion C/3 – Architecture and Construction

Criteria C/3 asks whether the subject property embodies the distinctive characteristics of a type, period, or method of construction, or it represents the work of a master, or it possesses high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction. The SEP contains 12 buildings designed in 1947-49 and completed in 1952 which are significant under NRHP/CRHR Criterion C/3, at the local level, for their distinctive characteristics of a type, period, and method of construction as important examples of Streamline Moderne architecture in San Francisco (see Table 1, below). As is common for public and institutional buildings of this style, they represent a more rectilinear interpretation of the style, and feature horizontally-oriented buildings, glass block windows, tile coping at the roofline with a speedline motif, and cast concrete double moldings at the windows and doors, all of which are their character-defining features. The SEP also contains 10 tank structures built in 1952 (Buildings 630-730 [Digester Tanks 1 – 10]). Although these are simple utilitarian concrete tanks, they are historically and functionally associated with their central control buildings (Buildings 620 and 680), which are important examples of the Streamline Modern style. As such, the digester tanks are included as contributors to the historic district. In sum, the original buildings and structures at the SEP represent a significant and distinguishable entity comprised of 22 buildings and structures that contribute to the proposed Southeast Treatment Plant Streamline Moderne Industrial Historic District which is significant under NRHP/CRHR Criterion C/3.

Table 1. Southeast Treatment Plant Streamline Moderne Industrial Historic District Contributing Buildings and Structures

Building Number	Building Name/Location	Year Built
040	Sedimentation Building No. 1/North Side	1952
041	Sedimentation Building No. 2/North Side	1952
620	Digestion Control Building No.1/South Side	1952
630	Anaerobic Digester Tank No. 1/South Side	1952
640	Anaerobic Digester Tanks No. 2/South Side	1952
650	Anaerobic Digester Tanks No. 3/South Side	1952
660	Anaerobic Digester Tanks No. 4/South Side	1952
680	Digestion Control Building No. 2/South Side	1952
690	Anaerobic Digester Tank No. 6/South Side	1952
700	Anaerobic Digester Tanks No. 7/South Side	1952
710	Anaerobic Digester Tanks No. 8/South Side	1952
720	Anaerobic Digester Tanks No. 9/South Side	1952
730	Anaerobic Digester Tanks No. 10/South Side	1952
740	Gas Booster Station/South Side	1952
741	Gas Storage Facility (formerly Tank No. 5) /South Side	1952
750	Digested Sludge Thickening (formerly Filtration Building) /South Side	1952
790	Sludge Filtration Building (formerly Filtration Building) /South Side	1952
800/950	Dryer Building/Chimney	1952
850	Operator's Building (formerly Administration)/North Side	1952
870	Service Building (formerly Machine Shop & Garage)/North Side	1952
891	Southside Substation/South Side	1952

900	Maintenance Shop (formerly Cake Receiver Bin)/South Side	1952
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The design of the contributors to the Southeast Treatment Plant Streamline Moderne Historic District cannot be attributed to any one architect or engineer employed by the SFDPW, or at any of the private architecture, engineering, or construction firms that assisted this city department. While some of these private firms are active today in various forms, research did not reveal that any of them would be considered especially noteworthy architects, engineers, or builders to the extent that the contributors to the district would be considered eligible under NRHP/CRHR Criterion C/3 as the work of an important creative individual, either individually or as a group.

The buildings and structures within the Southeast Treatment Plant Streamline Moderne Historic District, completed in 1981 (Building 043 [Sedimentation Control Room], Security Fence and Building 965, [Entrance Control Building], as well as those completed in 2002 (Building 810 [Cogeneration Building] and Building 820/821 [Digester Heater Boilers/Waste Gas Burners]) are non-contributory to the district because they were completed in Modern industrial and minimally Brutalist-styles which depart stylistically from the Streamline Moderne buildings and structures completed in 1952. These buildings and structures are also less than 45 years old, and there is no indication they would be considered exceptionally significant, as is required for listing resources of recent construction. As such, they lack significance under NRHP/CRHR Criteria C/3.

Criterion D/4 – Information Potential

Criterion D/4 asks whether the subject property has yielded, or may be likely to yield, information important in prehistory or history. Archival research provided no indication that the buildings or structures in the Southeast Treatment Plant Streamline Moderne Historic District have the potential to yield information important to the prehistory or history of the local area, California, or the nation. As described above, the sewage treatment technologies employed at the SEP in the early 1950s, and again in the early 1980s, were well established prior to those periods and the SEP would not provide information about the primary or secondary treatment of wastewater that is not already understood. The property does not appear to be eligible for listing in the NRHP/CRHR under Criterion D/4.

Integrity

In addition to their significance, the 12 buildings and 10 structures in the Southeast Treatment Plant Streamline Moderne Historic District built in 1952 retain sufficient historic integrity to qualify for NRHP/CRHR listing. They remain as originally designed with original materials and workmanship of this type of construction, providing the property a sense of time and integrity of feeling, along with a direct link to a period of construction and integrity of association. Modest changes to the buildings include limited window and door infill, and installation of additional vents and pipes along various elevations, although these changes do not diminish the resources' ability to convey their significance. Their integrity of setting has been reduced to a 'fair' level with the removal of six original buildings, as well as the addition of several more recently constructed buildings situated throughout the north and south sides of the plant. Overall, these changes do not affect the ability for these remaining buildings to convey their significance. An assessment of the integrity of the historically significant buildings in the Southeast Treatment Plant Streamline Moderne Historic District is summarized in Table 2, below. The recommended historical significance of all inventoried buildings and structures in the Southeast Treatment Plant Streamline Moderne Historic District is provided in Table 3, below.

Table 2. Southeast Treatment Plant Streamline Moderne Industrial Historic District Integrity Assessment

Aspect of Integrity	Integrity Assessment
Location	Excellent
Setting	Fair
Design	Excellent
Workmanship	Excellent
Materials	Very Good
Feeling	Excellent
Association	Excellent

Table 3. Recommended Historic Status of District Buildings and Structures, By Number, Name, and Year Built/Style

Building Number	Building Name	Year Built/Style	Contributing?
<i>North Side of Plant</i>			
Building 040	Sedimentation Building No. 1	1952/Modern - Streamline Moderne	Yes
Building 041	Sedimentation Building No. 2	1952/Modern - Streamline Moderne	Yes
Building 043	Sedimentation Control Room	1981/Modern - Brutalist	No
Building 850	Operator's Building and Engineering Offices	1952/Modern - Streamline Moderne	Yes
Building 870	Service Building	1952/Modern - Streamline Moderne	Yes
Building 965	Entrance Control Building	Circa 1981 - Utilitarian	No
<i>South Side of Plant</i>			
Building 620	Digestion Control Building No. 1	1952/Modern - Streamline Moderne	Yes
Building 630	Anaerobic Digester Tank No. 1	1952/Modern - Industrial	Yes
Building 640	Anaerobic Digester Tanks No. 2	1952/Modern - Industrial	Yes
Building 650	Anaerobic Digester Tanks No. 3	1952/Modern - Industrial	Yes
Building 660	Anaerobic Digester Tanks No. 4	1952/Modern - Industrial	Yes
Building 680	Digestion Control Building No. 2	1952/Modern - Streamline Moderne	Yes
Building 690	Anaerobic Digester Tank No. 6	1952/Modern - Industrial	Yes
Building 700	Anaerobic Digester Tanks No. 7	1952/Modern - Industrial	Yes
Building 710	Anaerobic Digester Tanks No. 8	1952/Modern - Industrial	Yes
Building 720	Anaerobic Digester Tanks No. 9	1952/Modern - Industrial	Yes
Building 730	Anaerobic Digester Tanks No. 10	1952/Modern - Industrial	Yes
Building 740	Gas Booster Station	1952/Modern - Streamline Moderne	Yes
Building 741	Gas Storage Facility (former Tank No. 5)	1952/Modern - Industrial	Yes
Building 750	Digested Sludge Thickening Tanks	1952/Modern - Streamline Moderne	Yes
Building 790	Sludge Filtration Building	1952/Modern - Streamline Moderne	Yes
Building 800/950	Dryer Building and Chimney	1952/Modern - Streamline Moderne	Yes
Building 965	Entrance Control Building	Circa 1981 - Utilitarian	No
Building 810	Cogeneration Building	2002/Modern - Industrial	No

Building Number	Building Name	Year Built/Style	Contributing?
Building 820/821	Digester Heater Boilers/Waste Gas Burners	2002/Modern – Industrial	No
Building 891	Southside Substation	1952/Modern – Streamline Moderne	Yes
Building 900	Maintenance Shop – Southside	1952/Modern – Streamline Moderne	Yes
Security Fence	Security Fence	Circa 1981 - Utilitarian	No

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LOCATION MAP

Primary #

P-38-002474

HRI #

Trinomial

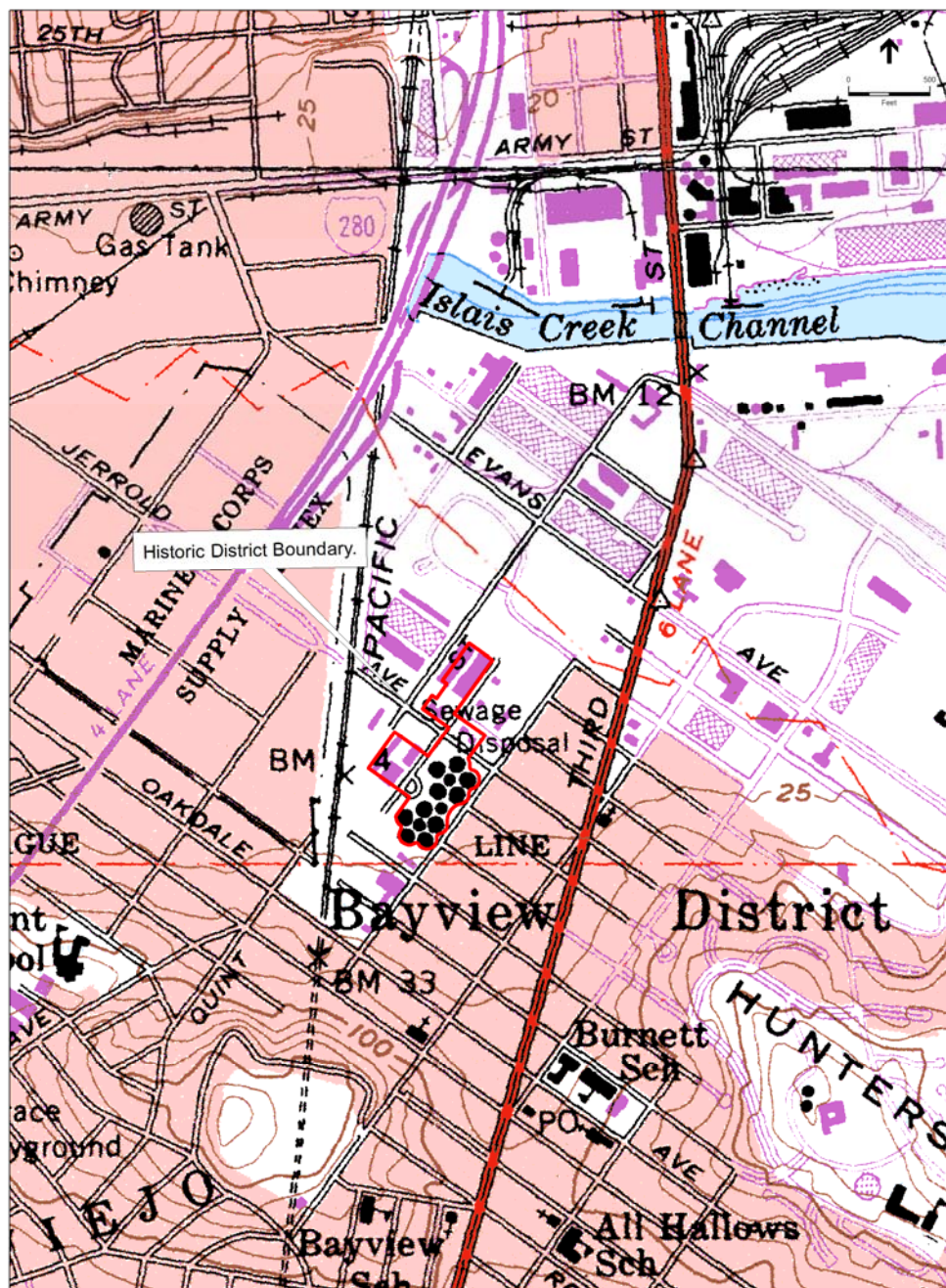
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*Resource Name or # (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

*Map Name: San Francisco South 7.5' Quadrangle

*Scale: 1: 24,000

*Date of map: 1980



PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 040

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 040 is one story in height with a smaller, second-floor penthouse located in the approximate center of the building. The building is located near the middle of the facility next to the Central Shops. It has a flat roof and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. The building is approximately 280 feet long, 80 feet wide, and 15 feet tall. The second-floor penthouse is approximately 35 feet square and about 10 feet tall. The parapet coping is terra cotta tile with a speedline motif. Fenestration consists of glass block windows (4-over-3 blocks) in groups of 6 or 8. Cast concrete double moldings surround all windows and doors. Some windows on the south elevation are infilled with steel-louvered vents. Replacement steel-frame double doors are also on the south elevation. A large, steel ventilation shaft runs the length of the north elevation of the building, attached near the roofline, leading to two large, steel fans and vent stacks on the northwest corner of the building (later additions). Newer electrical utility lines and steel junction boxes were also added to the south and north elevations. This building is a contributor to the Southeast Treatment Plant Streamline Moderne Industrial Historic District. Additional photos of Building 040 are provided below. (see Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 040 - Camera facing north.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

DPR 523A (1/95)

*Required information

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District



West and South Elevations (partial)



North and West Elevations (partial), Showing Newer Ventilation Shafts and Stacks

PRIMARY RECORD

Primary # _____

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____
Review Code _____ Reviewer _____ Date _____

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***Resource Name or #** (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 041

***P2. Location:** ☐ Not for Publication ☒ Unrestricted

***a. County** San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** San Francisco South **Date** 1993 T 2S; **R** 5W; **Sec** _____; _____ **B.M.**

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Nearly identical to Building 040 and just east from it, is Building 041, which is also one story in height with a smaller, second- floor penthouse. The building has flat roofs and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. This building is also approximately 280 feet long, 80 feet wide, and 15 feet tall. The second-floor roof vent is approximately 35 feet square and about 10 feet tall. The parapet coping is terra cotta tile with a speedline motif. Fenestration consists of glass block windows (four-over-three blocks) in groups of six or eight. Cast concrete double moldings surround all windows and doors. Some windows on the east elevation are infilled with steel-louvered vents. Original wood frame folding doors are located on the south elevation. A doorway on the east elevation has been infilled with newer steel-frame double doors and plaster. (See Continuation Sheet)

***P3b. Resource Attributes:** (List attributes and codes) HP8 – Industrial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 041 - Camera facing west.

***P6. Date Constructed/Age and Sources:**

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

***P7. Owner and Address:**

SFPUC

525 Golden Gate Avenue
San Francisco, CA 94102

***P8. Recorded by:** (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800
San Francisco, CA 94108

***P9. Date Recorded:** May 27, 2015

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") SFPUC, *Biosolids Digester Draft EIR*, 2016

***Attachments:** ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

Newer electrical utility lines and steel junction boxes were also added to the south and north elevations. A steel shed with corrugated roofing was added to the east elevation (see top photo below), as well as storage areas encircled by chain link fencing. A large, steel ventilation shaft runs through one of the windows on the north elevation, along the partial length of the roofline, leading to the two fans/stacks on the west side of Building 040 (see Primary Record for Building 040). This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.



PRIMARY RECORD

Primary # P-38-002474
HRI # _____
Trinomial _____
NRHP Status Code 3D
Other Listings _____
Review Code _____ Reviewer _____ Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 043

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Buildings 040 and 041 are connected by Building 043, the Sedimentation Control Room, a single-story concrete building with a rectangular plan and a flat roof, approximately 80 feet long, 25 feet wide, and 15 feet tall. This building is within the northern end of the 25-foot-wide courtyard which separates Buildings 40 and 41. The was not accessible to the surveyors and could not be photographed. Building 044, the Primary Influent Control Structure, is attached to the northern end of Building 043. It is a small, concrete structure with a flat roof, and external steel stairs leading to the roof (pictured here). Ornamental plum trees have been planted to the north and south sides of Building 044. This building is not a contributor to the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 044/043 - Camera facing south.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1981 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 620

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 620 is one story in height with a 10-sided (decagon) plan, flat roof, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. Building 620 is at the center of five concrete digester tanks (Buildings 630, 640, 650, 660, [Anaerobic Digester Tanks 1-4] and 741 [Gas Storage Facility/former Tank 5]). This building is approximately 65 feet in diameter and about 15 feet tall. The parapet has terra cotta tile coping with a speedline motif. Windows are comprised of glass blocks stacked four-over-three, and clustered in groupings of six in a three-over-three arrangement on the north, south, and east elevations. The west elevation contains the building entry, which consists of steel-frame double doors with glass insets accessed by a concrete ramp. Stacked glass block windows form sidelights and a transom surrounding the doorway. Cast concrete double moldings surround all windows and doors. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 620 - Camera facing east.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, *Biosolids Digester Draft EIR*, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

An open metal shed has been attached to the west elevation, and metal pipes hang from steel brackets placed on this and other elevations. Five steel catwalks connect the roof of Building 680 with each of the adjacent five digester tanks. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

State of California & The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-38-002474
HRI # _____
Trinomial _____
NRHP Status Code 3D
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 27 of 42

*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 680

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 680 is identical to Building 620, and is centered within a cluster of five digester tanks (Buildings 690, 700, 710, 720 and 730 [Anaerobic Digester Tanks 6-10]). An open metal shed has been attached to the west elevation, and metal pipes hang from steel brackets on this and other elevations. The interior of this building was accessible and shows a central concrete post in the center of the building with concrete beams radiating outward, supporting the flat roof. The building contains pumps, pipes, and electrical control machinery. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 680 - Camera facing south.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, *Biosolids Digester Draft EIR*, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

State of California ♦ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-38-002474
HRI # _____
Trinomial _____
NRHP Status Code 3D
Other Listings _____
Review Code _____ Reviewer _____ Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 740

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 740 is one story in height with a rectangular plan, a flat roof with projecting eaves, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. The building is approximately 20 feet long, 10 feet wide, and 10 feet tall. It is located in between Buildings 690 and 741. The building is open on the west elevation and enclosed by chain link fencing. It houses a generator and pump machinery. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 740 - Camera facing southeast.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 750

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 750 consists of two separate but nearly identical buildings immediately east from, and attached, to Building 790. Each two-story building consists of a square plan with flat roofs, concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. Each building is approximately 65 feet square and about 20 feet tall. The parapet has terra cotta tile coping with a speedline motif. Windows are comprised of glass blocks stacked four-over-three, and arranged in groups of six on the east elevation, and groups of four on the north and south elevations (second floors only). Cast concrete double moldings surround all windows and doors. The east elevation of both buildings also contains two open loading bays on the second floor level. A narrow courtyard is formed between the two buildings, which is connected by a concrete pedestrian bridge on the second floor level, east elevation. Although two separate structures, Building 750 is part of a complex of buildings that are functionally and stylistically related to Buildings 790, 800, and 900/950. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 750 - Camera facing west.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

Page 30 of 42

*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 790

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 790 is two stories in height with a rectangular plan, flat roof, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. This building is attached to Buildings 750 to the east. It is approximately 150 feet long, 40 feet wide, and about 30 feet tall. The parapet has terra cotta tile coping with a speedline motif. Windows are comprised of glass blocks stacked four-over-three. The windows on the second floor, west elevation, are grouped in clusters of fifteen, arranged five-over three, and grouped in clusters of four, arranged two-over-two, on the first floor. Cast concrete double moldings surround all windows and doors. Some of the windows on the first floor have been in-filled with plywood. A large loading bay with a steel roll-up type garage door is located on the second floor of the western elevation. The south elevation has a steel loading bay door on the second floor and steel double door on the ground floor. These openings are mirrored on the north elevation. The north elevation also has a shed-roofed element made of concrete construction, which connects Building 790 with Building 891 (Southside Substation). Three sets of glass block windows arranged in a diamond pattern are located on the east and west elevations of this shed-roofed element. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 790 - Camera facing east.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 800/ 950

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 800 is three stories in height with a rectangular plan, flat roof, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. This building is adjacent to Quint Street on the west side of the facility, and it is approximately 200 feet long, 50 feet wide, and about 65 feet tall. A small, single-story element is located on the north elevation. The parapet coping is terra cotta tile with a speedline motif. Windows are comprised of glass blocks stacked four-over-three. The windows are grouped in clusters of six, arranged three-over three on the west and east elevations, and paired in groups of two arranged horizontally on the north elevation. Cast concrete double moldings surround all windows and doors. Paired vehicular openings with steel roll-up garage doors are located on the north elevation, as are two steel pedestrian doors accessed by concrete steps. Another vehicular door is located on the east elevation. A board-formed concrete conveyor bridge on the east elevation connects Building 800 with Building 790 immediately east of it. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 800 at left, base of Building 950 at right- Camera facing east.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

CONTINUATION SHEET

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Trinomial _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

The bridge has a row of three glass block windows on the north and south elevations, also with cast concrete double moldings. The bridge is about 10 feet above ground level, and is approximately 20 feet long. Functionally associated with Building 800 and immediately south of it is Building 950 (Chimney), a cylindrical concrete ventilation stack approximately 200 feet tall and about 15 feet diameter at the base, tapering to about a 10-foot diameter opening at the top. Although Buildings 800 and 950 are no longer operational, liquids were separated from the biosolids by drying them in the Dryer Building, and the adjacent chimney released the spent gasses. Building 850 and associated Chimney (Building 950) are contributors of the Southeast Treatment Plant Streamline Moderne Industrial Historic District. The functions of these buildings were replaced by the processes in Building 840 (Centrifuge), completed in 1989, which separates the liquids from the biosolids through centrifugal action, rather than through heating or drying. Building 840 is located outside of the District boundaries.

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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***Resource Name or #:** (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 810

***P2. Location:** ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***a. County** San Francisco

***b. USGS 7.5' Quad** San Francisco South **Date** 1993 T 2S; **R** 5W; **Sec** _____; _____ **B.M.**

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 810 is a high-bay, single-story building with a rectangular plan, flat roof, and concrete construction with vertically scored and rounded concrete corners, smooth-finish concrete cornices, and brick veneer infill within recessed bays. The building is located west of Building 630 adjacent to the entry of the facility. It is approximately 40 feet long, 30 feet wide, and 20 feet tall. Fenestration is minimal, with a large, steel double door located on the west elevation and a single steel-frame pedestrian door located on the south elevation. The roof is accessed by an exterior steel ladder attached to the south elevation. The building has numerous steel tanks and pipes held within a steel framework on the west elevation. This building is not a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

***P3b. Resource Attributes:** (List attributes and codes) HP8 – Industrial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 810 - Camera facing east.

***P6. Date Constructed/Age and Sources:**

☒ Historic ☐ Prehistoric ☐ Both

2002 (SFPUC, 2009)

***P7. Owner and Address:**

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

***P8. Recorded by:** (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

***P9. Date Recorded:** May 27, 2015

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") SFPUC, *Biosolids Digester Draft EIR*, 2016

***Attachments:** ☐ NONE ☒ Location Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 820/Building 821

*P2. Location: ☐ Not for Publication ☒ Unrestricted

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 820 (Digestion Heating Boilers) is a high-bay, single-story building with a rectangular plan, flat roof, and concrete construction with vertically scored and rounded concrete corners, smooth-finish concrete cornices, and brick veneer infill within four recessed bays on the east and west elevations. It is architecturally similar to Building 810. The building is located west of Building 741 and east of Building 750. It is approximately 75 feet long, 45 feet wide, and 20 feet tall. Fenestration is minimal, with a large, steel double door and steel louver vent above on the north elevation, and a single steel-frame pedestrian door on the east and west elevations. Two cylindrical steel vent stacks (Building 821 [Waste Gas Burners]), each about 40 feet tall and about 5 feet in diameter and supported on a rectangular concrete base, are located immediately south of Building 820. Pipes and machinery connect Building 820 with these stacks. These buildings are not contributing elements of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 820/Building 821 - Camera facing south.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

2002 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List)

:

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-38-002474
HRI # _____
Trinomial _____
NRHP Status Code 3D
Other Listings _____
Review Code _____ Reviewer _____ Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 850

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 850 is a one- and two-story building with an irregular plan, flat roof, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. The building is located at the southeast corner of the property along the north side of Jerrold Avenue. It is approximately 160 feet long, 45 feet wide, and 30 feet tall (15 feet tall on the single-story portion). The parapet coping is terra cotta tile with a speedline motif. Cast concrete double moldings surround all windows and doors. The main entry on the north façade is recessed, with replacement aluminum-framed double doors with inset glass and fixed sidelights and transoms. The windows at the entry are paired, double-height fixed windows with glass block. Other windows are replacement aluminum-frame fixed and awning type windows with tinted glass, many covered by steel security grates on the west and south facades. The west wing has two rows of ribbon windows containing replacement four-pane, aluminum-frame fixed and awning type windows, as well as some in-filled with steel louvered vents. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 850 - Camera facing northeast.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Modern Industrial Historic District

These ribbon windows are set within concrete sills and headers which wrap around the corners of the building. Fluted cast concrete pilasters are located between these windows. Three of the window bays on the ground floor, north façade, have been in-filled with newer steel frame double doors. Other alterations include exterior steel pipes and steel electrical junction boxes on the north façade. The original entry to the building facing Jerrold Avenue has been in-filled, and reoriented to the north (parking lot-facing) façade. Landscaping on the north and south sides of the building appears to have been installed in the 1980s. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.



South Elevation (partial) from Jerrold Avenue

PRIMARY RECORD

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HRI #

Trinomial

NRHP Status Code 3D

Other Listings

Review Code

Reviewer

Date

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 870

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec ____; ____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone ____; ____ mE/ ____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 870 is a high-bay, one-story building with an L-shaped plan, flat roof, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. The building is west of the main gate adjacent to Jerrold Avenue. It is approximately 95 feet long, 60 feet wide, and 20 feet tall. The parapet coping is terra cotta tile with a speedline motif. Cast concrete double moldings surround all windows and doors. Three service bays with replacement steel roll-up doors are located on the east elevation, as are three service bays on the north elevation (for a total of six bays). North and west elevations also have replacement steel-sash fixed windows covered by steel security grates. Fluted cast concrete pilasters are located between these windows and the garage doors. The row of windows on the west elevation is set within concrete sills and headers, which run the length of this façade and wrap around the corners of the building. A small concrete storage shed clad in asphalt roofing is located at the inside corner of the "L." This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



*P5b. Description of Photo: (View, date, accession #) Building 870 - Camera facing south.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

State of California & The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-38-002474
HRI # _____
Trinomial _____
NRHP Status Code 3D
Other Listings _____
Review Code _____ Reviewer _____ Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Building 891

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 891 is one story in height with a rectangular plan, flat roof with projecting eaves, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. The building is next to the northside of Building 790. It is approximately 20 feet long, 10 feet wide, and 10 feet tall. Fenestration is limited to a steel double door on the south elevation, a single four-over-three glassblock window on the north elevation, and a single pedestrian wood panel door on the west elevation. Cast concrete double moldings surround all windows and doors. While the majority of Building 790 has a flat roof, a small, shed-roofed portion of Building 790 is shown in the background. This building is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 891 - Camera facing east.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, *Biosolids Digester Draft EIR*, 2016

*Attachments: ☐ NONE ☒ Location Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code 3D

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

Other Identifier: Building 900

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 900 is a high-bay, single-story building with a rectangular plan, flat roof with a shallow eave, and concrete construction with smooth-textured, horizontal board-formed and painted concrete walls. The building is approximately 30 feet long, 20 feet wide, and about 20 feet tall. It is located north of Building 891 in the northwest section of this facility. A large, vehicular entry is located on the west elevation, with a steel roll-up garage door. Pedestrian entries are located on either side and contain steel paneled doors. Windows are comprised of glass blocks stacked four-over-three, and clustered in groupings of six in two-over-three arrangements on the north and south elevations. Cast concrete double molding surrounds all windows and the vehicular door. A steel gantry crane and winch projects from the southwest corner of the building. Building 900 is a contributor of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Building 900 - Camera facing east.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC

525 Golden Gate Avenue

San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster

ESA

550 Kearny Street, Suite 800

San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code _____ 3D _____

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

P1. Other Identifier: Digesters (Buildings 630, 640, 650, 660, 690, 700, 710, 720, 730, 741)

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County San Francisco

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Buildings 630-741 consist of two groupings of five nearly identical tanks (total 10 tanks). Buildings 630, 640, 650, 660 (Tanks 1 – 4) and 741 (former Tank 5) surround Building 620 (Digestion Control Building No. 1). Buildings 690, 700, 710, 720, and 730 (Tanks 6 – 10) surround Building 680 (Digestion Control Building No. 2). Each tank is approximately 100 feet in diameter and 30 feet tall, and constructed of poured, smooth-finish concrete side walls about 1-foot thick. Each tank has a floating, dome-shaped cover made of steel with wood roofing material. Although these tanks are Modern/Industrial in style, they are historically and functionally related to the Digestion Control Buildings No. 1 and 2, which are Streamline Moderne in style. These structures are contributors of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Digesters Building 630 at far left, Building 741 at center, Building 690 on right - Camera facing northeast.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both
1952 (SFPUC, 2009)

*P7. Owner and Address:

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

*P9. Date Recorded: May 27, 2015

*P10. Survey Type: Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

PRIMARY RECORD

Primary # P-38-002474

HRI # _____

Trinomial _____

NRHP Status Code _____ 3D _____

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

P1. Other Identifier: Security Fence/Building 965

***P2. Location:** ☐ Not for Publication ☒ Unrestricted

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T 2S; R 5W; Sec _____; _____ B.M.

c. Address 790 Phelps Street City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone _____; _____ mE/ _____ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Encircling the entire plant on both its north and south sides are concrete perimeter walls topped with painted steel security bars. The walls are about twelve feet tall and about one foot thick. The walls are constructed of poured concrete and have regularly-spaced concrete columns, concrete sills, and recessed panels between the columns clad in brick veneer. The walls have two gated openings directly across from one another on the north and south side of Jerrold Avenue. The vehicular entries consist of mechanized steel security gates that slide horizontally. Constructed concurrently with the walls and gates is Building 965 (Entrance Control Building), a small, utilitarian guardhouse at the entrance to the north side of the plant. The security walls are primarily rectilinear, although they curve around the digester tanks in the northeast and southeast corners of the SEP property. (See Continuation Sheet)

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Security Fence on north side - Camera facing north.

***P6. Date Constructed/Age and Sources:**

☒ Historic ☐ Prehistoric ☐ Both
Circa 1981 (SFPUC, 2009)

***P7. Owner and Address:**

SFPUC
525 Golden Gate Avenue
San Francisco, CA 94102

***P8. Recorded by:** (Name, affiliation, address)

Brad Brewster
ESA
550 Kearny Street, Suite 800
San Francisco, CA 94108

***P9. Date Recorded:** May 27, 2015

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") SFPUC, Biosolids Digester Draft EIR, 2016

***Attachments:** ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record

☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List):

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*Resource Name or #: (Assigned by recorder) Southeast Treatment Plant Streamline Moderne Industrial Historic District

In these locations, decorative tiles of children's drawings have been placed along the wall that were incorporated by the Public Art Program of the San Francisco Arts Commission. Portions of the walls terminate at certain windowless buildings which are on the peripheral edges of the plant, providing complete security around the property. The Security Fence and Building 965 are not contributing elements of the Southeast Treatment Plant Streamline Moderne Industrial Historic District.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 3S

Other Listings _____
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*Resource Name or # (Assigned by recorder) 1800 Jerrold Avenue

P1. Other Identifier: 1800 Jerrold Avenue

*P2. Location: ☐ Not for Publication ☒ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County San Francisco

*b. USGS 7.5' Quad San Francisco South Date 1993 T ____; R ____; Sec ____; ____ B.M.

c. Address 1800 Jerrold Avenue City San Francisco Zip 94124

d. UTM: (give more than one for large and/or linear resources) Zone ____; ____mE/ ____mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Assessor Parcel Number (APN): 5262-009

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This form documents the City and County of San Francisco's Central Shops facility at 1800 Jerrold Avenue. The facility occupies a 6-acre portion of APN 5262-009. The remainder of the parcel contains the Southeast Wastewater Treatment Plant, which is not subject to this inventory. The Central Shops facility consists of three permanent buildings that are designated from south to north Building A, Building B, and Building C. At the south end of this facility are several recently installed temporary buildings not associated with Central Shops. Building A and Building B are of identical construction, the main difference being Building B is about twice as tall as Building A (**Photograph 1**). These two buildings are both rectangular with flat, metal deck roofs supported by clear span steel trusses. Wall framing is also steel and the wall surface is largely industrial steel sash windows. Below the windows is a reinforced concrete apron wall about three feet high. Building A is 17,401 square feet divided into several bays housing the administration office, locker room, body shop, small equipment repair, paint shop, boiler room, and pattern shop (**Photograph 2**). Building A has several glazed metal personnel doors, glazed metal top-hung sliding doors, large glazed metal hinged doors, and two recessed personnel entrances providing access to the office and locker room (**Photographs 3 and 4**). On the south side are a few horizontal sliding sash windows. (See Continuation Sheet.)

*P3b. Resource Attributes: (List attributes and codes) HP8 – Industrial Building

*P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Photograph 1: Building B, camera facing northwest, 8/20/2014

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

1959 (CCSF Purchasing Dept. Annual Report, 1959)

*P7. Owner and Address:

City and County of San Francisco
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

*P8. Recorded by: (Name, affiliation, address)

Steven J. Melvin & Heather Miller
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618

*P9. Date Recorded: August 20, 2014

*P10. Survey Type: (Describe) Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") None

*Attachments: NONE ☐ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record

☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record

☐ Other (list) _____

DPR 523A (1/95)

*Required Information

BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

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*NRHP Status Code 3S

*Resource Name or # (Assigned by recorder) 1800 Jerrold Avenue

B1. Historic Name: City and County of San Francisco Central Shops

B2. Common Name: City and County of San Francisco Central Shops

B3. Original Use: vehicle and equipment maintenance and repair B4. Present Use: vehicle and equipment maintenance and repair

*B5. Architectural Style: Industrial Modern; utilitarian

*B6. Construction History: (Construction date, alteration, and date of alterations) Buildings A, B and C were constructed in 1959; a few windows replaced on Building A, date unknown.

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

B9. Architect: unknown b. Builder: unknown

*B10. Significance: Theme Architecture Area San Francisco

Period of Significance 1959 Property Type Vehicle Maintenance Facility Applicable Criteria C/3

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Central Shops at 1800 Jerrold Avenue appears to meet the criteria for individual listing in the National Register of Historic Places (NRHP) under Criterion C and the California Register of Historical Resources (CRHR) under Criterion 3. The property is significant at the local level and it retains historic integrity to convey its significance. Its period of significance is 1959, when it was constructed, and the boundary of the historic property / historical resource is the footprint and layout of Building A and Building B described herein. This property has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code and is a historical resource for the purposes of CEQA. This evaluation is consistent with San Francisco Preservation Bulletin 5, "Landmark and Historic District Designation Procedures," which directs that historic resources be evaluated for local designation using the California Office of Historic Preservation Recordation Manual (as per San Francisco Landmarks Board Resolution No. 527, June 7, 2000). The property is not significance under NRHP / CRHR criteria A/1, B/2, or D/4. There is also no known or potential historic district to which this property would be a contributor. (See Continuation Sheet.)

B11. Additional Resource Attributes: _____

*B12. References: CCSF Purchasing Department Annual Reports, various years; Sanborn Fire Insurance Maps, various years; Kelley & Ver Planck, *Bayview-Hunters Point Area B Survey, Historic Context Statement*, 2010; *San Francisco Chronicle*; Betsy Hunter Bradley, *The Works: the Industrial Architecture of the United States*, (New York: Oxford University Press, 1999); William Kostura, "Van Ness Auto Row Support Structures: A Survey of Automobile-Related Buildings along the Van Ness Avenue Corridor," prepared for the Department of City Planning, San Francisco, California; Mary Brown, San Francisco Planning Department, *San Francisco Modern Architecture and Landscape Design, 1935-1970, Historic Context Statement*, (San Francisco Planning Department, 2010). (See B10 footnotes for additional references.)

B13. Remarks:

*B14. Evaluator: Steven J. Melvin and Christopher McMorris

*Date of Evaluation: November 2014

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

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P3a. Description (continued):

Building B is 49,976 square feet and is divided into the car shop, truck shop, outfitting shop, spray booth, fire engine and apparatus shop, welding shop, machine shop, storeroom, and tire shop (**Photograph 1**). Each bay is accessed by large top-hung glazed double sliding doors or metal roll-up doors (**Photograph 5** and **6**). The car shop, truck shop, and fire shop all are drive through bays with top-hung doors on each end (**Photograph 7** and **8**). Also throughout the building are glazed metal personnel doors.

Building C is at the north end of the facility and is an open sided shed roof building of 13,200 square feet (**Photograph 9**). It is made of reinforced concrete with steel beams supporting the wood board deck of the shed roof. The building has six bays divided by reinforced concrete walls (**Photograph 10**). The bays appear to be used for smog checking, miscellaneous repairs and maintenance, and storage. At the west end of this building is the former facility gas station (**Photograph 11**). It has a small indoor area sheathed in stucco walls and topped by a wide, projecting shed roof porte-cochere supported by steel posts. This element of Building C has a horizontal band of multi-pane windows and glazed metal personnel doors.

B10. Significance (continued):

Historic Context

Industrial Development of Bayview-Hunters Point

The Central Shops at 1800 Jerrold Avenue is located in the Bayview-Hunters Point area in southeast San Francisco that is generally bounded by Cesar Chavez Boulevard (formerly Army Street) on the north, San Francisco Bay on the east, U.S. Highway 101 on the west, and Candlestick Hill on the south. The Bayview-Hunters Point area, along with the Potrero Point area just to the north, developed as one of San Francisco's early industrial districts. Ordinances in the early 1850s pushed slaughterhouses from South of Market to the edge of the city in southeastern San Francisco, where shipbuilding was already established, and the area has retained its industrial nature ever since.¹

The blocks and lots around the Central Shops were historically occupied by a variety of industries since the late 1800s. This area provided proximity to Islais Creek and Islais Estuary, which factories used for water in their production processes and to carry away wastewater. Some industries located here in the 1880s were the Pacific Rolling Mills Company, Union Iron Works, San Francisco Cordage Factory and Rope Works, California Sugar Refinery, and the City Gas Company. Others included more noxious industries such as tanneries, slaughterhouses, and manufacturers of paints, oils, and petroleum based products.²

The Islais Creek area of the San Francisco was served by multiple railroads by the early twentieth century, including Southern Pacific Railroad, Ocean Shore Railroad, and Western Pacific Railroad. Southern Pacific built its Bayshore Cutoff rail line between 1904 and 1907 using several cuts, bay fill, bridges, tunnels, and trestles to move its main line along the bay instead of through Colma. Tunnel No. 3 through Hunters Point Hill is just south of the Central Shops and the Bayshore Cutoff line forms the westside of 1800 Jerrold Avenue. Another railroad, the Ocean Shore Railroad, began operations in 1905 and ran both freight and passenger service. This line passed through the west side of Bayview-Hunters Point, well west

¹ Kelley & VerPlanck, *Bayview-Hunters Point Area B Survey, Historic Context Statement*, 2010, 1; San Francisco, *Manual of the Corporation of the City of San Francisco: Containing a Map of the City, the Declaration of Independence, the Constitution of the United States, the Constitution of the State of California, the Charters of the City, the Revised Ordinances Still in Force, and Certain Laws Relating Particularly to the City of San Francisco* (San Francisco: Published by authority, 1852), 94; San Francisco, *Ordinances and Joint Resolutions of the City of San Francisco* (San Francisco: Published by authority, 1854), 386; Roger W. Lotchin, *San Francisco 1846-1856: From Hamlet to City* (Lincoln, NB: University of Nebraska Press, 1974), 12.

² Sanborn Map Company, *San Francisco, California* (New York: Sanborn Map Company, 1886-1887, 1900); USGS, *San Francisco Quadrangle*, 1:62500, 15 minute (Washington: USGS, 1895, 1899); Richard Walker, *Industry Builds Out the City: The Suburbanization of Manufacturing in the San Francisco Bay Area, 1850-1940* http://oldweb.geog.berkeley.edu/PeopleHistory/faculty/R_Walker/IndustryBuildsOut.pdf (accessed February 28, 2014), 6.

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of the Central Shops. In 1920 the railroad ceased operations and Western Pacific Railroad acquired the trackage in Bayview-Hunters Point to serve local industries and connect with its freight slip and terminal located at Potrero Point at 25th Street.³

In the early decades of the twentieth century real estate developers looked to southeastern San Francisco as an underutilized area for industrial growth. The main impedance to development was the vast swampy area of the Islais Creek estuary, adjacent to the future Central Shops parcel. In 1909, a reclamation plan proposed condemnation by the State of California to purchase 173 acres of privately owned land in the Islais Creek estuary, but the plan's high cost stalled the project.⁴ The project started moving again in 1930 and by September work to reclaim the estuary property and create a new 280-acre industrial district began. Dredged material from the channel was used to fill land on the north side of the creek for a lumber, factory, and railroad district. North of Army Street (now Cesar Chavez Street), the Western Pacific Railroad Company leveled a hill and reclaimed several acres of its own property to provide more useable land for industries and customers for its new peninsula rail line. Reclamation of Islais Creek estuary was officially completed in 1936 and industries began construction on the former swamplands. The reclamation project, however, stopped west of the Southern Pacific railroad line and did not include the site of the future Central Shops, which was on the edge of the estuary, but east of the railroad. As reclamation opened the way for development nearby, the Central Shops site remained swampy and sparsely developed with a few scattered buildings. Improvements to Bayshore Boulevard and Army Street through the area further spurred development, as did the construction of Highway 101 (Bayshore Freeway) and I-280 in the 1950s. These roadways facilitated the movement of products and people in and out of Bayview-Hunters Point and encouraged further development.⁵

Efforts to continue industrial expansion in Bayview-Hunters Point continued after World War II. The first was the creation of an industrial zone called Apparel City. This group of ten industrial buildings bounded by Barneveld Avenue, Oakdale Avenue, and Industrial Avenue, just southwest of the Central Shops, housed apparel and textile assembly businesses. Another large project promoted by the San Francisco Redevelopment Agency was the creation of the San Francisco Wholesale Produce Market, four two-story industrial warehouses on a 25-acre tract of land facing Jerrold Avenue. The market was part of larger industrial park bounded by Rankin Street, Toland Street, Newcombe Avenue, and Hudson Avenue. This area is just west of the Central Shops on the other side of the railroad tracks. Industrial growth continued into the 1960s, with the redevelopment of Butchertown south of Islais Creek, and the India Basin Industrial Park, completed in 1973. India Basin Industrial Park slowly brought more industry and commercial businesses to the area, and is considered an ongoing project. Other industrial and housing redevelopment projects started and stalled throughout the 1970s and 1980s. Into the Twenty-First Century, Bayview-Hunters Point remains the focus of redevelopment efforts such as a 2000 Community Revitalization Concept Plan, but it still retains its industrial character.⁶

³ Southern Pacific Bureau of News, "Historical Outline," 77; Loren Nicholson, *Rails Across the Ranchos*, Centennial Edition (San Luis Obispo, CA: California Heritage Publishing Associates, 1993), 133-138; "Construction on the Bay Shore Line of the Southern Pacific Co.," *The Railway and Engineering Review* (October 20, 1906): 807-809; Sanborn Map Company, *San Francisco, California* (New York: Sanborn Map Company, 1914, 1950); Jack R. Wagner, *The Last Whistle: Ocean Shore Railroad* (Berkeley: Howell-North Books, 1974), 17, 107; Islais Creek Reclamation District, *Map Showing Property Owners*, May 23, 1927, on file at the San Francisco Public Library History Center, San Francisco Ephemera Collection; USGS, *San Francisco South Quadrangle*, 1:24000, 7.5 minute (Washington: USGS, 1956 [photorevised 1968, 1980]).

⁴ Kelley & VerPlanck, *Bayview-Hunters Point Area B Survey, Historic Context Statement*, 73-80.

⁵ "Islais Creek District Development Project Will Ne Begun Tomorrow," *San Francisco Chronicle*, September 2, 1930, 7:6; Kelley & VerPlanck, *Bayview-Hunters Point Area B Survey, Historic Context Statement*, 83, 110; Richard Walker, *Industry Builds Out the City: The Suburbanization of Manufacturing in the San Francisco Bay Area, 1850-1940* http://oldweb.geog.berkeley.edu/PeopleHistory/faculty/R_Walker/IndustryBuildsOut.pdf (accessed February 28, 2014), 10; "Islais Creek District Development Project Will Be Begun Tomorrow," *San Francisco Chronicle*, September 2, 1930, 7:6; Sanborn Map Company, *San Francisco, California* (New York: Sanborn Map Company, 1950); USGS, *San Francisco South Quadrangle*, 1:24000, 7.5 minute (Washington: USGS, 1956 [photorevised 1968, 1980]).

⁶ Kelley & VerPlanck, *Bayview-Hunters Point Area B Survey, Historic Context Statement*, 101, 102, 120-121, 153-154.

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City and County of San Francisco Central Shops

The Central Shops is a City bureau responsible for the maintenance of city-owned vehicles (except for the Department of Public Utilities) as well as mechanical apparatus, fire apparatus, and a variety of other mechanical and machines works and equipment. In the 1950s the Bureau of Central Shops operated under the City and County of San Francisco (CCSF) Purchasing Department and was responsible for approximately 1,200 City vehicles. At this time the Bureau of Central Shops had three major shops, Shops Nos. 1, 2, and 3, and eleven sub-shops and garages. Shop No. 1 was located at 313 Francisco Street and was responsible for fire department maintenance and repairs; Shop No. 2, at 2800 Alameda Street, maintained the automobile fleet; and Shop No. 3 at 1745 California Street (also referred to as 1765 California Street) maintained police vehicles. The various sub-shops and garages were also scattered throughout the City.⁷ By the mid-1950s, these multiple facilities had become inadequate and inefficient. Specific problems included lack of space for vehicle repair, lack of modern equipment, and the need to move vehicles that required multiple repairs, such as painting and upholstery work, from one specialty shop to another. In 1956 the Purchasing Department Annual Report described plans to build a new consolidated shop facility: “The hope has arisen that the inadequacy of the City’s central repair shops, which has handicapped efficiency and caused delays and high automotive repair costs, is scheduled to be overcome.” The plan was to bring Shops Nos. 1, 2 and 3 together at the 1800 Jerrold Avenue site, described in the report as “surplus land acquired for the Southeast Sewage Treatment Plant.” The site was ideal because the land was already owned by the City and it was in an industrial area.⁸

The Southeast Sewage Treatment Plant currently occupies the tract of land bounded by Evans Avenue, Phelps Street, Rankin Street and Jerrold Avenue, north and east of the Central Shops Jerrold Avenue facility. Just prior to the construction of the sewage treatment plant, this tract of land was sparsely developed. In the 1940s and 1950s the area contained only scattered small buildings, including livestock pens, a small lumber shed, and an office near Jerrold Avenue and Quint Street. Railroad tracks of the Atchison, Topeka and Santa Fe ran up the middle of Quint Street. The only sizable development was on the north end of this large tract – north of where the Central Shops was later built – where the Scavengers Protective Association processing plant fronted on Evans Avenue between Phelps Street and Quint Avenue. The Lowrie Paving Company was also on Evans Avenue between Rankin Street and Quint Avenue. Historically, the land currently occupied by the sewage treatment plant and the Central shops was on the edge of the Islais Creek estuary, but was just outside of the reclamation project, which stopped on the other side of the railroad tracks. Historic mapping and aerial photographs from the 1940s and 1950s shows this parcel to be low and poorly drained, a condition that likely explains its continued lack of development at this late date.⁹

Construction of the new Central Shops facility was well underway by the spring of 1958 at an estimated cost of \$1 million. In June of the following year, Bureau of Central Shops Superintendent Aylmer W. Petan oversaw the move into the three new buildings, which had an address at that time of 800 Quint Street. As planned, the new facility consolidated the operations of Shops Nos. 1, 2, and 3 and thenceforth the majority of the work of the Bureau of Central Shops was conducted at the new facility, while small sub-shops remained in operation throughout the City. The Jerrold Avenue facility was divided into three main areas: automobile, truck, and fire apparatus, as well as several auxiliary shops such as machine shop, blacksmith shop, upholstery shop, paint shop, fire hose shop, ladder shop, tire shop, and wood working shop (**Figure 1, Figure 2, Figure 3 and Figure 4**). The facility also housed Central Shops administration offices. By 1959, the fleet of vehicles serviced by Central Shops had increased to 1,400. This increased again the following year to 1,600 vehicles.¹⁰

⁷ City and County of San Francisco, Purchasing Department, “Annual Report to the Mayor for 1954-1955,” September 21, 1955, 5-6; City and County of San Francisco, Purchasing Department, “Annual Report to the Mayor for 1955-1956,” September 1956, 7-8; City and County of San Francisco, Purchasing Department, “Annual Report to the Mayor for 1957-1958,” September 1958, 9.

⁸ City and County of San Francisco, Purchasing Department, “Annual Report to the Mayor for 1955-1956,” September 21, 1955, 7-8.

⁹ Sanborn Map Company, *San Francisco, California* (New York: Sanborn Map Company, 1950), Sheets 807, 808, 817, 818; USGS, *San Francisco South Quadrangle*, 1:24,000, 7.5 minute (Washington: USGS, 1947); HistoricAerials.com, historic aerial images, 1946, 1956.

¹⁰ City and County of San Francisco, Purchasing Department, “Annual Report to the Mayor for 1957-1958,” September 1958, 9; City and County of San Francisco, Purchasing Department, “Annual Report,” September 1959, 11-12; “Directory of City and County Officers,” *City-County Record* 26, no. 6 (June 1959): 9; City and County of San Francisco, Purchasing Department, “Annual Report,” September 1960, 18.

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During the period when the new Central Shops facility was built, the City was generally interested in improving the efficiency of its various departments. In 1952, Board of Supervisors established the Municipal Government Survey Advisory Committee to study and make recommendations on how to improve the operations of City departments to reduce costs. Budget constraints, however, limited the scope of the study, which did not review all departments and did not include the Central Shops. Interest in cost-saving persisted and in late 1960 Mayor George Christopher formed the Mayor's Committee for Municipal Management to study reducing costs of operation of the City and County of San Francisco government. The consolidation of the Central Shops occurred in this era of heightened efforts by San Francisco to improve efficiency.¹¹

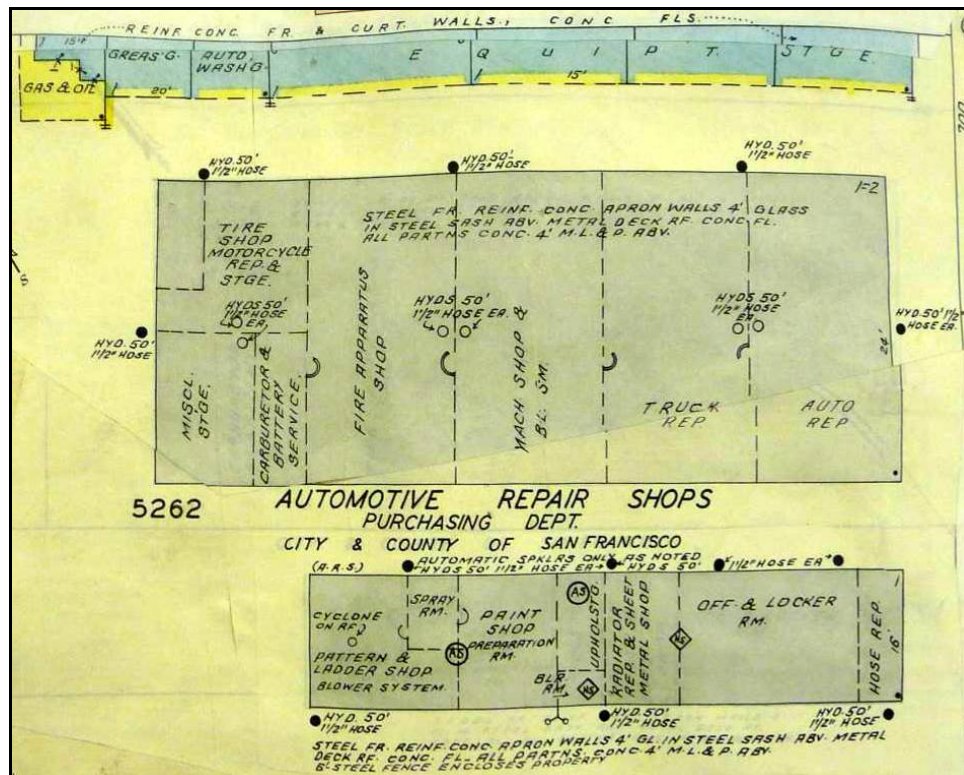


Figure 1. Image from Sanborn Fire Insurance Map. Sanborn Maps were revised on a regular basis and it is not clear when the above plan of the Central Shops was produced, but the image appears to have been revised.¹²

The function of the Central Shops Jerrold Avenue facility continued virtually unchanged in the following decades. In 1960, Albert M. Flaherty assumed the position of Bureau of Central Shops Superintendent and held the position into the 1980s. During that time the Central Shops continued in its primary function as the main repair and maintenance facility for the City's vehicle fleet, as well as maintaining other City equipment and machines. The number of vehicles in the city fleet maintained by Central Shops steadily grew in subsequent years to 1,678 in 1963, 2,408 in 1971, 2,961 vehicles in 1979, and over 4,000 vehicles by 1985. At various times, this facility has also been referred to as the "Quint Street Corporation Yard" or "800 Quint Street." The Central Shops remained under the Purchasing Department of the City into the 1990s. Currently the Central Shops is under the General Services Administration and has five maintenance and repair facilities that provide fleet services to over 6,000 vehicles from 70 City departments. It is also responsible for vehicle acquisitions and dispositions,

¹¹ City and County of San Francisco, Mayor's Committee for Municipal Management, "A Report to the Blythe-Zellerbach Committee on Modern Management for San Francisco, Summary" Vol. 1, June 1961, 1, 2; City and County of San Francisco, "Report of the Municipal Government Survey Advisory Committee," February 25, 1952, 1, 2.

¹² Sanborn Map Company, *San Francisco, California* (New York: Sanborn Map Company, 1950, revised, 1959, 1963).

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equipment specifications, and alternative fuel programs. Central Shops currently completes approximately 34,000 work orders annually.¹³



Figure 2. Central Shops, view looking north, ca. 1963. Building A is in the foreground with Building B behind. Building C is largely obscured.¹⁴

¹³ City and County of San Francisco, Purchasing Department, "Annual Report, Fiscal Year 1962-1963," September 5, 1963, 14; City and County of San Francisco, Purchasing Department, "Annual Report, Fiscal Year 1970-1971," September 1971, 14; City and County of San Francisco, Board of Supervisors Budget Analyst, "Report to the Board of Supervisors of the City and County of San Francisco: Review of the Operations of the San Francisco Automotive Fleet and the Central Shops Division of the Purchasing Department," July 1979, 1-3; City and County of San Francisco, Purchasing Department, "Annual Report, Fiscal Year 1985-1986," October 1, 1986, 44; "Directory of City and County Officers," *City-County Record* 27, no. 2 (Feb. 1960): 9; City and County of San Francisco, Purchasing Department, "Annual Report, Fiscal Year 1980-1981," February 10, 1982, 17; City and County of San Francisco, Board of Supervisors Budget Analyst, "Report to the Board of Supervisors of the City and County of San Francisco: Review of the Operations of the San Francisco Automotive Fleet and the Central Shops Division of the Purchasing Department," July 1979, 1-3; City and County of San Francisco, "Purchasing Department Quarterly Report, FY 1994-1995, 4th Quarter," July 20, 1995, 9; City and County of San Francisco, General Services Administration, Central Shops, available at <http://sfgsa.org/index.aspx?page=45>

¹⁴ City and County of San Francisco, Purchasing Department, "Annual Report," September 5, 1963.

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Figure 3. Interior of Central Shops Building B, automobile shop in 1964.¹⁵



Figure 4. Truck outside of Central Shops Building B in 1971.¹⁶

¹⁵ City and County of San Francisco, Purchasing Department, "Annual Report, Fiscal Year 1963-1964" August 28, 1964.

¹⁶ City and County of San Francisco, Purchasing Department, "Annual Report, Fiscal Year 1970-1971" September 1971.

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Industrial Modern Architecture

The historic context for the design of the Central Shops at 1800 Jerrold Avenue is Industrial Modern architecture, which incorporates twentieth century Modern architectural aesthetic with the design qualities of engineering, manufacturing, and industrial facilities that were built for utility and functionality. Constructed in 1959 to help improve the City's vehicle fleet repair and maintenance services, the Central Shops' straight-forward design shared qualities with industrial design and Modern architecture of its period, including the simple cubic forms, walls of glass on steel frames, open interior floor plans, and lack of applied ornamentation. The design included highly functional expansive glazing that brought extensive natural light into the facility and wide clear spans to maximize flexibility in which to maneuver vehicles and operations. Assimilation of the Modern architectural aesthetic into industrial facilities such as the Central Shops marks an integration of design objectives that merged utilitarian construction with refined architectural concepts of International Style Modernism, such as the purposeful abstraction of building form and expressive visible structure.

During the nineteenth century a schism in industrial design formed that left much of the functional and utilitarian factory and manufacturing facility designs to engineers, as architects of the period remained mostly committed to eclecticism and historicism. Engineer-designed late nineteenth century and early twentieth century industrial buildings were conceived and built to maximize functionality, efficiency, and economy. While some industrial properties included architectural character to aesthetically enhance buildings, the focus of such properties was primarily on the technical and economic aspects of the business for which the property functioned. Industrial buildings often lacked the applied ornamentation, adherence to tradition, and artistic intention practiced by architects at the time for institutional, commercial, residential, and ecclesiastic buildings. Engineers were also at the forefront of the development of modern materials and technologies, and they embraced new building materials and construction methods for their industrial designs. Advances in the manufacture of steel and concrete improved the strength and tensile properties of the materials, allowing them to be used in building framing, for example, that lead to taller structures and wider clear spans that benefited the industrial and manufacturing processes housed therein. Such developments shaped and altered the appearance of industrial buildings. Steel framing allowed wider spans and open interiors, decreasing the area of walls required for structural framing that in turn allowed for larger windows. Maximizing natural light was a priority in industrial buildings and with steel framing engineers could devote a greater amount of wall space to glazing, a trend that culminated in fully glazed curtain walls enclosing and concealing the steel frame. Coinciding with these developments was the innovation of industrial steel sash windows. As compared to wood sash, steel sash was non-combustible, admitted more light, and required less maintenance. With these advantages, steel sashes quickly became the standard window type used in industrial buildings.¹⁷

Early twentieth century industrial development in San Francisco's Bayview-Hunters Point area included various factories and manufacturing plants with wide open interiors that had plentiful natural light made possible by extensive steel framing and steel sash windows. Remaining examples include the former Link Belt Company facility at 300-400 Paul Avenue, built in 1930, that has a sprawling utilitarian industrial plant behind its Spanish Colonial Revival-style office building. This plant had a massive steel-frame and steel-clad shop with a sawtooth roof and an extensive wall of steel sash glazing. This property illustrated the functional and utilitarian designs of industrial architecture, with its architectural character limited to Link Belt's office building fronting Paul Avenue.¹⁸ Similarly, the Central Waterfront's Union Iron Works / Bethlehem Steel Shipyard at Pier 70 (Illinois Street and 20th Street), north of Bayview-Hunters Point, illustrates the range of architectural character of industrial buildings from the 1880s to the 1940s. The property includes massive utilitarian buildings constructed in brick, concrete, wood frame, and steel frame, with office and administrative buildings fronting the public streets designed in architectural styles popular in the 1890s and 1910s. While various utilitarian buildings on the property from the initial decades of the twentieth century included some traditional stylistic elements, many integrated new building technologies of the period, including steel sash windows and concrete / steel framing. Later buildings from the 1930s and 1940s show the

¹⁷ Betsy Hunter Bradley, *The Works: the Industrial Architecture of the United States*, (New York: Oxford University Press, 1999) 144-145, 166-170, and 203-221.

¹⁸ San Francisco Planning Department, Final Mitigated Negative Declaration 320-400 Paul Avenue Data Center and associated Extension of PG&E 12kV Electrical Distribution Circuits, Case No. 2011.0408E, July 2014; *San Francisco California 1950* (New York: Sanborn Fire Insurance Company, 1950), 887.

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effects of mass production on industrial architecture and the growing influences of Modernism. This influenced is illustrated in the Moderne style office on Illinois Street, as well as in the multiple steel frame buildings that lack traditional styling seen on earlier buildings. Many of the steel frame utilitarian structures were built with expansive glazing and open interiors. The Light Warehouse, Building 6, (constructed in 1941) (**Figure 5**) is a prominently situated example along the waterfront. It is a large steel frame building with gable roof trusses creating an expansive open interior lit by steel sash windows running along most of the walls.¹⁹



Figure 5: Light Warehouse, Building 6, Pier 70²⁰

The Central Shops' predecessor automobile and motor vehicle repair facilities in San Francisco developed in the early twentieth century mostly in the vicinity of the Van Ness Avenue Auto Row and included many brick or concrete buildings with large steel sash windows, large interior spaces lit by skylights, and ornamented façades facing the street. While they had less ornate façades than automobile show rooms along Van Ness Avenue, many of the vehicle repair shops from the 1910s and 1920s incorporated Classical-architecture pilasters, molding, and cornices, with some having Romanesque or Mission Revival style elements. As noted, the City used the repair facility at 1765 California Street (also listed as 1745 California Street) (**Figure 6**) as one of its multiple shops for vehicle maintenance. This property, constructed in 1921/1927 and now a grocery store, is a large-scale example of an auto repair shop with a façade that included both large steel sash windows and prominent historic-period revival ornamentation. Many of these properties continued to operate as automobile maintenance buildings into the mid to late twentieth century (and some still do), such as 55 Oak Street and 1641 Jackson Street. Automobile sales and maintenance businesses diffused throughout the City during the mid-twentieth century, with some in the Bayview-Hunters Point area by the late 1950s and early 1960s. These auto repair shops were established in utilitarian buildings, usually with no architectural detail incorporated into the street façades. Such business included Leonard's Automotive Service at 4040 3rd Street (at Hudson Avenue), which is a concrete tilt-up building constructed in 1954 with an addition built in 1960; Harold's Auto & Truck Repair at 1313 Quint Street, which is a concrete block building constructed in 1956; and Bayshore Engine Rebuilders at 271 Bayshore Boulevard, which is a metal building constructed in 1963.²¹

¹⁹ Carey & Co., National Register Nomination Form, Pier 70 /Union Iron Works Historic District, San Francisco, California, 2013. The historic district was listed in the NRHP on April 17, 2014. The nomination and the notification of listing are available at Port of San Francisco website: <http://www.sfport.com/index.aspx?page=1498>.

²⁰ Photograph courtesy www.sfport.com.

²¹ William Kostura, "Van Ness Auto Row Support Structures: A Survey of Automobile-Related Buildings along the Van Ness Avenue Corridor," prepared for the Department of City Planning, San Francisco, California, 2010, 23-25 and 48-53; *Polk's San Francisco City Directory* 1960 and 1964/65; San Francisco Property Information Map, <http://propertymap.sfplanning.org/?dept=planning> (accessed November 2014).

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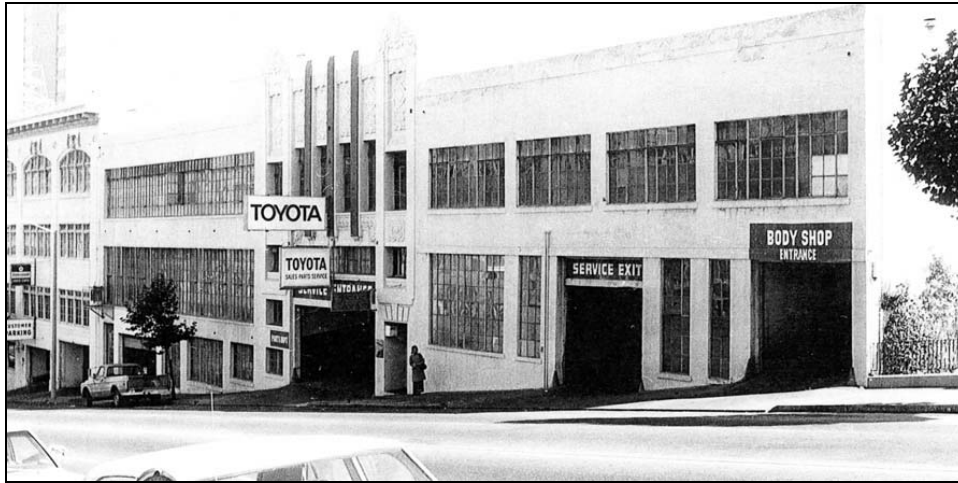


Figure 6: 1765 California Street, San Francisco.²²

In architecture during the early twentieth century, designs were shifting as architects began seeking greater purity of architectural form and function, increasing use of new technologies, materials, and construction methods, and eschewing applied ornamentation derived from historic architecture. In part, this shift away from historical-based designs came as designers recognized the aesthetic qualities achieved in industrial designs during the late nineteenth century. This recognition was an element in the efforts of Modern design to reconcile the underlying principles of architecture with the progressive transition of contemporary society and culture. In general, Modernism emerged as a dominate influence in architecture in the United States starting in the 1920s, evolving from Art Deco and Moderne (1920s to 1940s) to International Style (1930s to 1960s) and later iterations with various names (1950s to present) that explored design qualities related to form, light, and structure. Use of the Modern architectural aesthetic in industrial, institutional, and commercial properties dates to the 1910s, 1920s, and 1930s, initially as part of the development of new architecture in Europe that became known as the International Style. A seminal industrial example of the International Style is the Fagus Shoe Factory in Germany designed by Walter Gropius and Adolph Meyer, built in 1911-13, which is noted for its curtain wall employed to impress a sense of lightness, as opposed to the weight of traditional masonry exteriors, and its uniform design that presented all portions of the facility with equal aesthetic treatment. The use of Modernism in industrial architecture in the United States began later and is seen in designs like those of Albert Kahn who embraced the primacy of functionalism and new materials, bringing an architect's sense of aesthetics to industrial buildings. Kahn is best known for many Ford Motor Company plants, including the Ford Assembly Plant in Richmond that illustrates his successful integration of highly efficient and effective spaces for manufacturing with an exterior that includes modestly abstracted ornamentation based on the classical tradition.²³

During the 1930s, 1940s, and 1950s, there was increased construction of Modern style buildings in San Francisco, initially in the Art Deco and Moderne styles and later in the International Style, as well as in its regional Second Bay Area Tradition variation. In San Francisco modernist buildings included the Moderne style Chevrolet dealer at 999 Van Ness Avenue built

²² William Kostura, "Van Ness Auto Row Support Structures: A Survey of Automobile-Related Buildings along the Van Ness Avenue Corridor," prepared for the Department of City Planning, San Francisco, California, 2010, 53.

²³ Mary Brown, San Francisco Planning Department, *San Francisco Modern Architecture and Landscape Design, 1935-1970, Historic Context Statement*, (San Francisco Planning Department, 2010) 76, 78, 88-95, 167-189; Bradley, *The Works: the Industrial Architecture of the United States*, 244-258; Jurgen Tietz, *The Story of Architecture of the 20th Century*, (Cologne: Konemann, 1999) 20; Kenneth Frampton, *Modern Architecture: A Critical History*, (London: Thames and Hudson, Ltd., 1992) 114; "Ford Motor Company Assembly Plant," National Park Service World War II in the San Francisco Bay Area website: <http://www.nps.gov/nr/travel/wwiibayarea/for.HTM> (accessed November 2014); "Ford Richmond Assembly Plant," Ford Motor History website: <http://www.fordmotorhistory.com/factories/richmond/index.php> (accessed November 2014); Barbara Lamprecht and Christopher Hetzel, ICF Jones & Stokes, "Ford Motor Company Assembly Plant, 4735 East Marginal Way, Seattle" National Register Nomination Form, 2008-2013, listed in the NRHP 10/9/13.

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in 1937 that incorporated large plate glass windows and streamlined architecture, which departed from earlier historic revival styled auto show rooms and repair facilities. After World War II architects and clients were increasingly drawn to the Modernist approach, having been exposed to war-time building efficiencies. During the 1940s and 1950s increasing numbers and types of buildings in San Francisco were constructed with the steel framing and extensive glazing enclosing flexible open interiors that followed the highly influential works of Mies van der Rohe and his glass box expression of the International Style. Such designs highlighted expressive exterior framing with taut glazing, and they became linked with mid-twentieth century corporate architecture. Examples of the Mies-influenced version of the International Style include skyscrapers like the Crown Zellerbach Building at 1 Bush Street, constructed in 1959 and designed by Edward Bassett of Skidmore Owings & Merrill (City of San Francisco Landmark #183), along with lower rise office buildings such as the Fireman's Fund Indemnity Company Building at 3333 California Street, designed by Edward Page and built in 1957.²⁴ The Hunters Point Ordnance and Optical Shop, Building 253, (**Figure 7**) designed by Ernest Kump and built in 1947 incorporates features that correspond with the Mies glass box archetype. While the design likely derives, in part, from other large scale factory-like Navy facilities, such as the massive 1910s and 1920s curtain wall steel / concrete and glass buildings at Mare Island in Vallejo, the Ordnance and Optical Shop includes vast walls of glass hung on an uncluttered structural frame providing very large clear interior spaces and an exterior appearance that highlights volume over mass that makes a stylistic statement that its Naval predecessors do not.²⁵ The design of the Central Shops is also reminiscent of some metal frame and glass prefabricated automobile service stations from the 1920s and 1930s, which make a similar stylistic statement as the Ordnance and Optical Shop highlighting volume over mass and celebrating the efficiency and functionality of the building's program. This was noted in the book that accompanied the 1932 Museum of Modern Art's exhibition on the International Style (which helped promulgate the International Style in the United States) that featured the Standard Oil Company filling station in Cleveland, Ohio (**Figure 8**). A similar, albeit more modest, example of a prefabricated service station was located near the San Francisco's Central Waterfront at the corner of 3rd and 18th streets (not extant).²⁶

Although research for this evaluation did not uncover documentation of the direct or indirect intentions of the Central Shops' designers (nor were the architects of the facility identified), the extant property illustrates an effort to emphasize the importance of this modern consolidated City facility by incorporating the contemporary International Style aesthetic to enhance its vehicle repair and maintenance services. This use of International Style is seen in the Central Shops in its flat roof; simple, boxy massing; steel framing; curtain walls of industrial sash; lack of ornamentation; and uniformity of aesthetic treatment that emphasizes efficiency of the buildings' function and the value of such purpose.

²⁴ Brown, *San Francisco Modern Architecture and Landscape Design*, 15, 60, 135, Appendix B, 4; "New Fireman's Fund Building," *Architect and Engineer*, September 1957, 11-19.

²⁵ JRP Historical Consulting Services / PAR Environmental Services, Mare Island Historic District National Register Nomination, 1996 (listed in the National Register in January 23, 1997); JRP Historical Consulting Services, "Historic Context and Inventory and Evaluation of Buildings and Structures, Hunters Point Shipyard, San Francisco, California," prepared for Engineering Field Activity, West, Naval Facilities Engineering Command, September 1997. Mare Island's Building 271 (1918) and the complex Buildings 386, 388, 390 (1922) are excellent examples of early large-scale industrial steel frame curtain wall design.

²⁶ Henry-Russell Hitchcock and Philip Johnson, *The International Style*, (New York: W.W. Norton & Co, 1995), 120-121 (republished from 1932); San Francisco Public Library Historical Photograph Collection, Photo #aax-0162, available online at <http://sflib1.sfpl.org:82/search/a?searchtype=i&searcharg=aax-0162&SORT=D> (accessed November 2014).

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Figure 7: Ordnance and Optical Shop, Hunters Point Naval Shipyard, 1949.²⁷



Figure 8: Filing Station, Standard Oil Company, Cleveland, Ohio, 1931.²⁸

²⁷ SF Public Historical Photograph Collection, Photograph AAB-9060, San Francisco Public Library.

²⁸ Henry-Russell Hitchcock and Philip Johnson, *The International Style*, (New York: W.W. Norton & Co, 1995), 121 (republished from 1932).

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Evaluation

Criteria A/1, B/2, and D/4

Under NRHP Criterion A and CRHR Criterion 1, the CCSF Central Shops property at 1800 Jerrold Avenue is not significant within the context of the post-war industrial development in the Bayview-Hunters Point area or within the context of the evolution and development of CCSF government departments, bureaus, and agencies. This property, built in 1959, is located in an industrial area of the Bayview-Hunters Point neighborhood. Industrial development in this area began in the late nineteenth century and continued in the following decades. Industrial growth intensified after the reclamation of Islais Creek estuary in 1936, just north and west of 1800 Jerrold Avenue and continued after World War II. As such, the construction of the Central Shops Jerrold Avenue facility occurred in a well-established industrial zone and does not have significant associations with the industrial development of this area. The Bureau of Central Shops, a sub-agency of the Purchasing Department, moved to this new facility at 1800 Jerrold in 1959 in an effort to merge vehicle maintenance activities and improve efficiency, consolidating functions that had been in multiple facilities. Creation of this Central Shops facility occurred during a period in which City government worked toward greater efficiency, yet its establishment does not appear to have been prominent within any particular efficiency program in City government. Rather, construction of the new facility was simply part of the Bureau of Central Shops general improvements and resulted in a modern facility with modern equipment and improved efficiency. This property, therefore, does not have significant associations with any events, trends, or patterns of development that would make it eligible for listing in the NRHP or the CRHR under this criterion.

The property is not significant under NRHP Criterion B and CRHR Criterion 2 for an association with the lives of persons important to history. Research did not reveal that any of the individuals associated with the development or operation of this property, including superintendents Aylmer W. Petan and Albert M. Flaherty, made demonstrably important contributions to history that rise to the level of significance under this criterion.

Under NRHP Criterion D and CRHR Criterion 4, this property is not a significant or likely source of important information regarding history. The property does not appear to have any potential of yielding important information about historic construction materials or technologies.

Criteria C/3

The Central Shops is significant under Criterion C / 3, at the local level, for distinctive characteristics of a type, period, and method of construction as an important example of Industrial Modern architecture in San Francisco. This is illustrated in the two fully enclosed shop buildings at the facility, Building A and Building B. The property's period of significance is 1959 when the buildings were constructed. The open sided shed roof building on the north end of the facility, Building C, does not exhibit the architectural qualities of the other buildings and is not significant under Criterion C / 3. Furthermore, the Central Shops is not significant under this criterion as a work of a master as research for this evaluation did not identify the architect of the Central Shops. Also, this property is not one that fully expresses an artistic ideal and is not significant for possessing high artistic value.

As an important example of Industrial Modern architecture for its type, period, and method of construction, the Central Shops Building A and Building B have the distinctive characteristics of International Style Modernism, as articulated in industrial-type buildings. They are a full expression of the pattern of features of this style and have an individuality of this property type not present in other vehicle repair / maintenance facilities in San Francisco. The property also illustrates the evolution of architectural design for support facilities in the city presenting the contemporary style of its period when it was constructed in 1959, just as the International Style (and other iterations of Modern architecture) was coming into full prominence in San Francisco. The Central Shops Building A and Building B have flat roofs; simple, boxy massing; expressed steel structure on concrete apron walls with open interiors; curtain walls of industrial sash; and lack of ornamentation. Emphasizing volume rather than mass, the buildings have a uniformity of aesthetic treatment and do not project an architectural style on a street façade, unlike earlier vehicle maintenance buildings. During the 1950s and 1960s there were multiple design options for constructing a vehicle repair and maintenance facility, like the Central Shops. Small industrial buildings included utilitarian pre-engineered steel frame metal clad buildings, as well as buildings constructed of

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concrete block or concrete tilt-up walls, examples of which can be seen throughout San Francisco's industrial areas, including Bayview-Hunters Point. The Central Shops illustrates functional planning that serves the simplicity and clarity of building form and the assemblage of the whole design, expressing the Modernist architectural value of reducing building design to its essence. This also shows the maturity of International Style by the late 1950s, wherein the design of the Central Shops employs the tenants of Modernism based on actual, not symbolic, functionality. Although the Central Shops lacks some of the sophistication of the seminal works of the International Style and Industrial Modern, such as specialized building forms dictated by enclosed machinery, refined exterior detailing, and use of innovative materials, the property demonstrates important values of this style.

The character-defining features of the significant buildings at the Central Shops (Buildings A and B) are their original design and materials, including their exposed steel frame structures on concrete apron walls with steel sash exterior glazing, flat metal deck roofs supported on trusses exposed to the interior, wide interior open spaces that are divided into bays of varying function, and the various glazed metal doors (personnel doors, top-hung sliding doors, and large hinged doors). The design also includes recessed personnel entrances to the office and locker room. While located on a six-acre portion of the City-owned parcel, the boundary of this historic property / historical resource is limited to the immediate surroundings of Building A and Building used for vehicle parking and maneuvering, roughly 40 to 100 feet around the buildings, including the space between the buildings (see Sketch Map on Continuation Sheet). None of the interior machinery or lighting is specifically character-defining to this property and its significance.

Historic Integrity

In addition to its significance, the Central Shops retains historic integrity. Modest changes to the property include installation of some horizontal sliding windows, painted window panes, additional vents / HVAC equipment on the roof, contemporary flood lights, and several recently constructed temporary buildings situated on the same parcel to the south. These changes do not affect the ability for this property to convey its significance. The enclosed shop facilities (Buildings A and B) retain integrity because they are in their original location with few changes to their setting, and they remain as originally designed with original materials and workmanship of this type of construction providing the property a sense of time and integrity of feeling, along with a direct link to period of construction and integrity of association.

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Photographs (continued):



Photograph 2. Building A, camera facing west, August 20, 2014.



Photograph 3. Building A, north corner, camera facing southeast, August 20, 2014.

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Photograph 4. Building A showing entrance to office area, camera facing southwest, August 20, 2014.



Photograph 5. Building B showing car shop, camera facing northeast, August 20, 2014.

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Photograph 6. Building B, camera facing northeast, August 20, 2014.



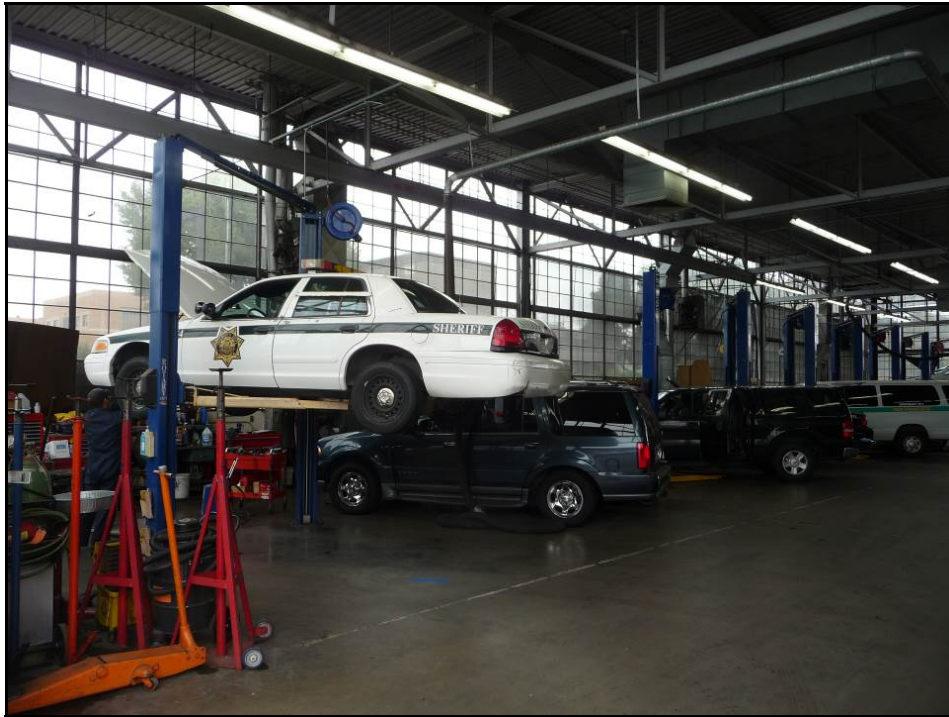
Photograph 7. Building B, camera facing southeast, August 20, 2014.

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Photograph 8. Building B showing inside of car shop, camera facing southeast, August 20, 2014.



Photograph 9. Building C, camera facing northwest, August 20, 2014.

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Photograph 10. Building C, camera facing east, August 20, 2014.



Photograph 11. Building C, north end, camera facing northwest, August 20, 2014.

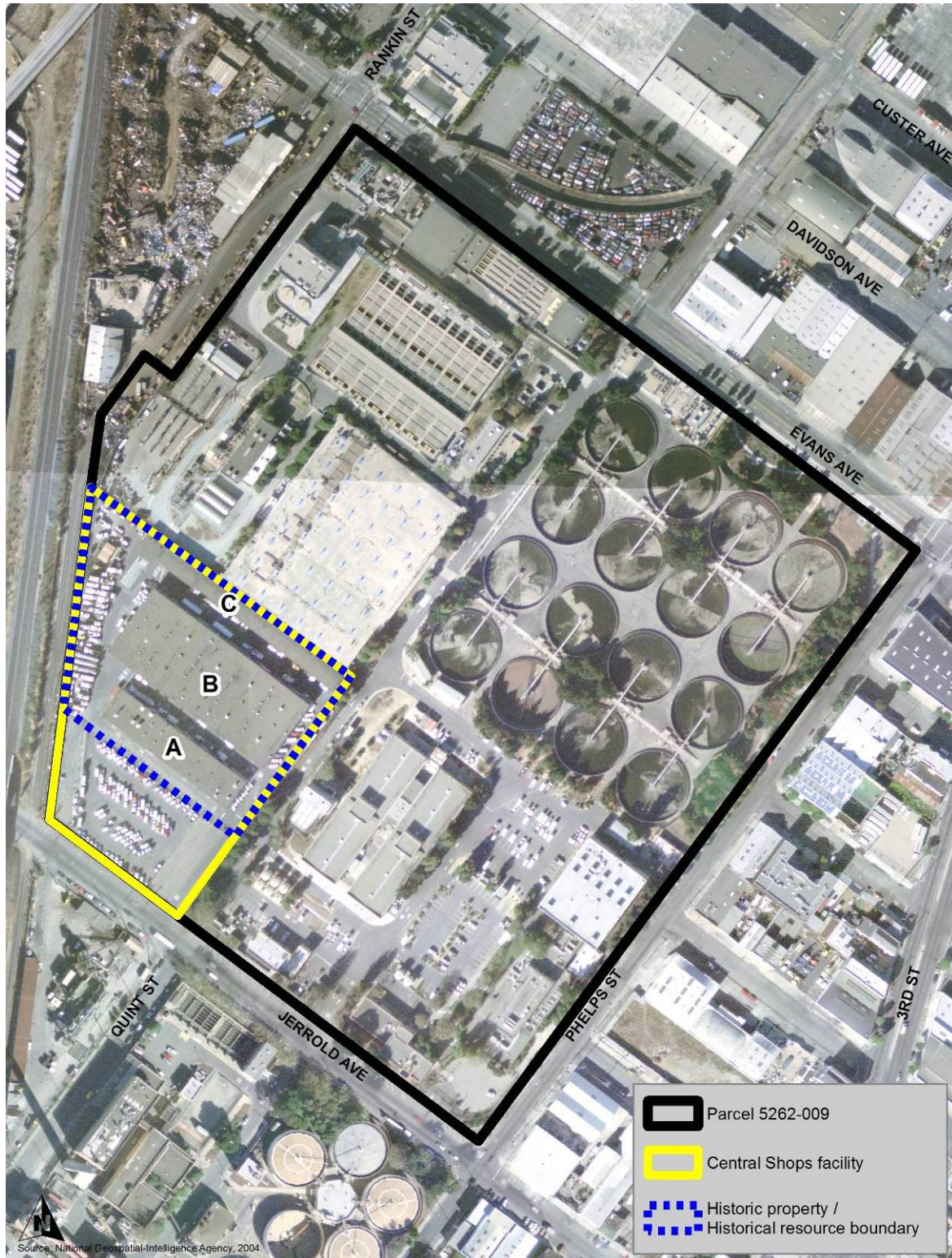
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Sketch Map:



Biosolids Digester Facilities Project
Case No. 2015-000644ENV

Preservation Alternatives Memo

memorandum

date May 25, 2016

to Steve Smith, San Francisco Planning Department, Environmental Planning (EP)
Christopher McMorris, JRP Historical Consulting LLC

cc Karen Frye, San Francisco Public Utilities Commissions (SFPUC)

from Brad Brewster, ESA
Jill Hamilton, ESA
Joyce Hsiao, Orion Environmental Associates

subject SFPUC Biosolids Digester Facilities Project EIR Preservation Alternatives

Introduction

As discussed at our meetings at the San Francisco Planning Department on March 7 and April 14, 2016, the EIR being prepared for the Biosolids Digester Facilities Project (BDFP) will address full and partial preservation alternatives, consistent with the recommendations of Historic Preservation Commission (HPC) Resolution No. 0746. The intent of the full and partial preservation alternatives is to avoid or reduce the BDFP's significant adverse impacts on historic architectural resources. Provided below is a brief project description, resource identification, discussion of project effects on the resources, and discussion of candidate full and partial preservation alternatives that will be addressed in the EIR as outlined in the HPC resolution. The purpose of this memorandum is to seek your concurrence with our approach to addressing these alternatives in the EIR, which is based on the preliminary feedback we received at the March 7 and April 14 meetings.

Project Description

Under the BDFP, the SFPUC proposes to construct new solids treatment processes, odor control, energy recovery, and associated facilities at the existing Southeast Water Pollution Control Plant (SEP) and adjacent parcels in San Francisco. The BDFP would replace the outdated existing solids treatment facilities with more reliable, efficient, modern technologies and facilities. Many of the existing SEP solids treatment facilities are over 60 years old, require significant maintenance, and are operating well beyond their useful life. The project would construct new, state-of-the art digesters and other new facilities that produce higher quality biosolids,¹ capture and treat odors more effectively, and maximize biogas² utilization and energy recovery for the production of heat, steam, and energy. The existing digesters would continue to be used, while the new facilities would be constructed at a

¹ Biosolids are nutrient-rich organic materials resulting from the treatment of domestic sewage in a treatment facility.

² Biogas is gas produced by the biological breakdown of organic matter in the absence of oxygen. Biogas can be produced from the anaerobic digestion or fermentation of biodegradable materials such as wastewater solids (sludge), manure, municipal waste, food waste, and energy crops.

new site within the expanded SEP boundaries. The SFPUC anticipates that project construction would last five years (2018 to 2023), followed by two to three years of full facility commissioning.

Project Objectives

The overall objective of the BDFP is to replace the existing solids treatment facilities at the SEP with new infrastructure with modern and more efficient treatment technologies to protect public health and safety, and to provide continued regulatory compliance. Other key project objectives include maximizing the efficiency of the current treatment process operations and maintenance and use of existing SFPUC infrastructure, beneficially using 100 percent of the biosolids and biogas generated, building critical processes to provide reliability and operational flexibility, and allowing for timely construction of the BDFP.

Project Site

The project site, shown on **Figure 1**, encompasses approximately 559,300 square feet. It includes areas located within the west side of the existing SEP property boundaries at 750 Phelps Street and 1700 Jerrold Avenue (Block and Lot 5262/009) and also includes the adjacent properties located at 1800 Jerrold Avenue (the Central Shops site, Block and Lot 5262/009) and 1801 Jerrold Avenue (the decommissioned Asphalt Plant site, Block and Lot 5281/001).

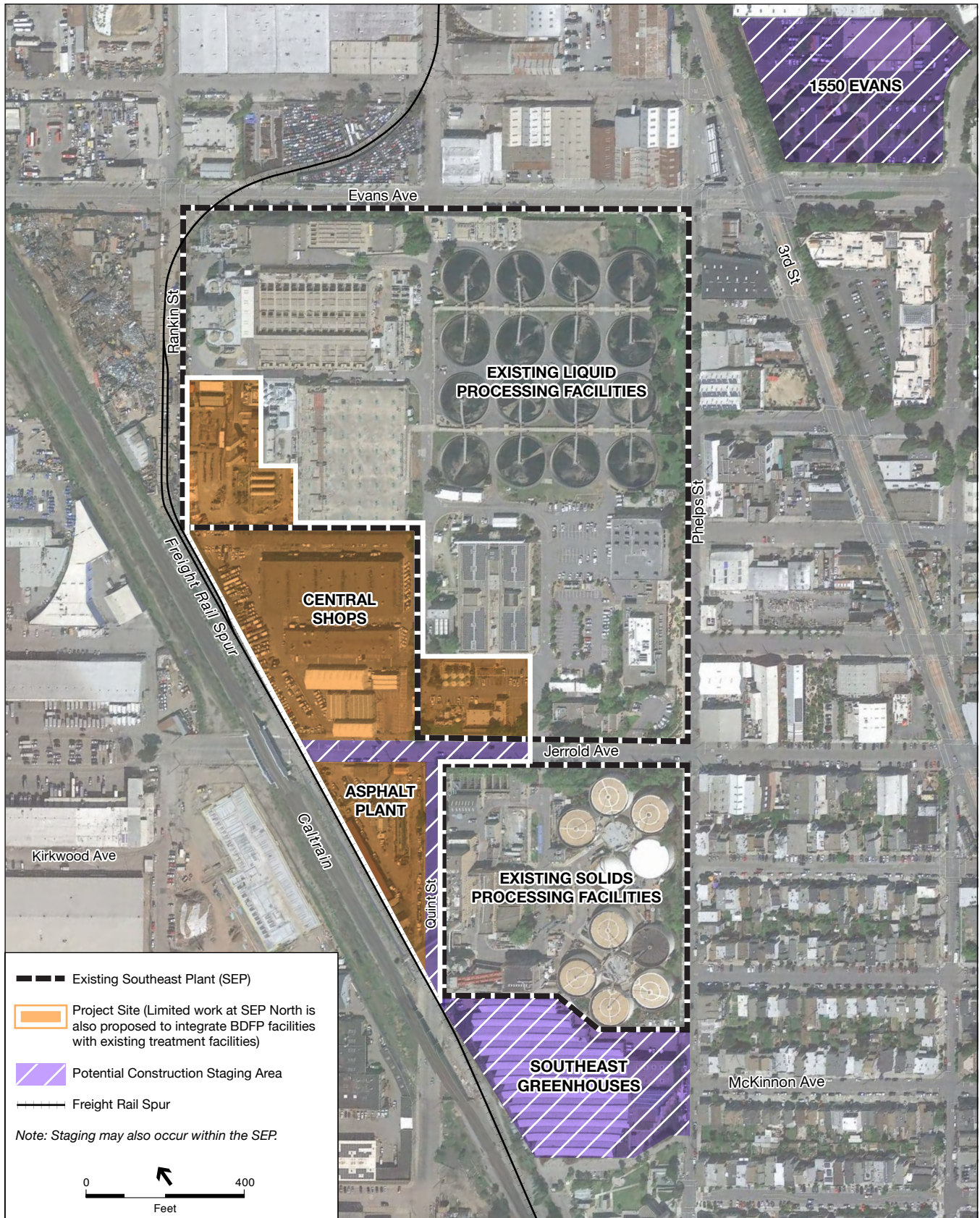
Part of the project site, the Central Shops site is currently owned and operated by the City and County of San Francisco's General Services Agency. It provides vehicle and equipment maintenance services for multiple City agencies through the Fleet Management Department. The Central Shops site contains three main buildings ranging in size from 13,000 to 50,000 square feet, numerous smaller structures, and parking and storage areas. As part of an action separate from the BDFP, the General Services Agency is in the process of relocating the Central Shops operations and transferring the site to the SFPUC.

Also part of the project site, the Asphalt Plant is owned by the City's Department of Public Works, was built in 1954, and was decommissioned in December 2009. Decommissioned facilities currently occupy the site and include a three-story steel asphalt mixing, heating, and sorting facility and related ancillary facilities. The site is currently used as a vehicle dispatch center and parking area for City vehicles. Similar to the Central Shops site, this site is in the process of being transferred to the SFPUC as a separate action and will be part of the expanded SEP boundaries.

Demolition and New Construction Included in BDFP

The BDFP includes construction of new structures totaling approximately 280,000 square feet. Some of these new facilities, including the digesters and ancillary buildings, would be up to 65 feet tall and would also include extensive underground infrastructure to connect the facilities.

The project would require demolition of currently used facilities owned by the SFPUC and located within the existing SEP boundaries, including a service building, pump stations, and an electrical substation, and relocation of office trailers. These structures range in size from 800 to 3,800 square feet. The project would also require demolition of the existing structures at the Central Shops site, including the three main buildings. At the Asphalt Plant site, demolition of existing structures is being conducted as part of a separate project, but the BDFP would demolish the belowground structures.



SOURCE: ESA+Orion; Google Maps

SFPUC Biosolids Digester Facilities
Figure 1
 Biosolids Digester Facilities Project Site

Resource Identification

The SEP, adjacent Asphalt Plant site, and adjacent Central Shops site were surveyed and evaluated for their potential historic significance in 2014 and 2015 by ESA and JRP Historical Consulting, LLC (JRP). The sites were recorded on three separate California Department of Parks and Recreation (DPR) forms 523 A and B.

Figure 2 depicts the proposed site plan for the BDFP with the outlines of historic buildings shown in green. Historically, the SEP, Asphalt Plant, and Central Shops were separate properties designed, built, and used for different purposes and with separate historic contexts.

Southeast Water Pollution Control Plant

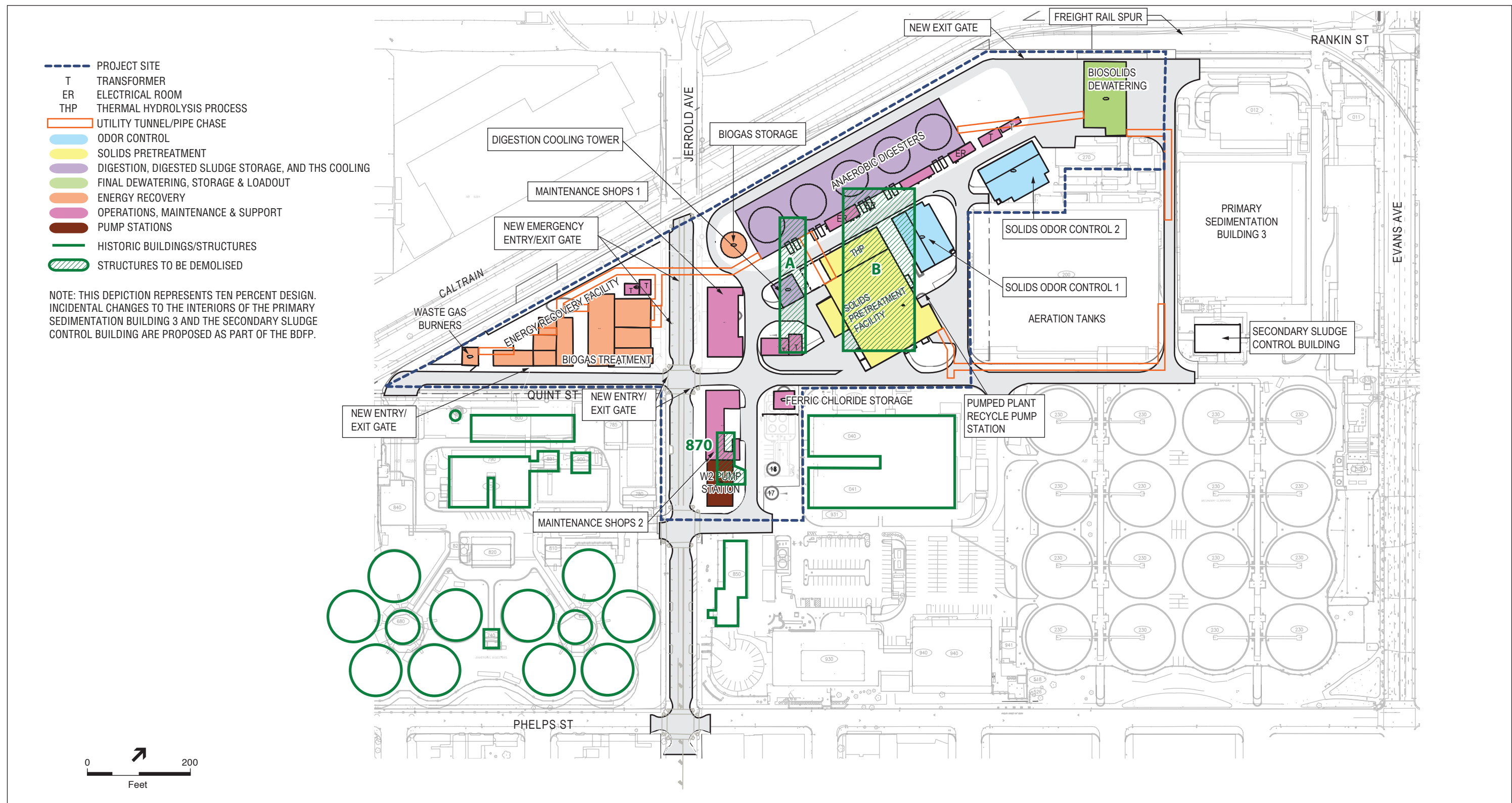
The resources survey and evaluation determined that the facilities representing the first phase of development of the SEP, in 1952, represent an eligible historic district under both the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP). Named the *Southeast Treatment Plant Streamline Moderne Industrial Historic District* (potential District), the potential District was found to be eligible under Criterion A/1 as the first phase of implementation of the SFPUC's Works Progress Administration (WPA)-period Sewer System Master Plan; and under Criterion C/3, as representative of the use of Streamline Moderne architecture, which is rare in San Francisco but a consistent architectural theme in the early development of the SFPUC's wastewater facilities. The potential District includes 22 buildings or structures that contribute to its significance and four buildings and structures determined to be non-contributing both because they are less than 45 years old and because they do not share in the potential District's architectural style or have significant associations with the 1935 Sewer System Master Plan. The south side of the SEP (south of Jerrold Avenue), with 18 eligible structures, constitutes the majority of the potential District, with four eligible structures north of Jerrold Avenue in the southwest quadrant of the north side of the SEP. **Figure 3** depicts potential boundaries for the potential District, and **Figure 4** shows an example of one of the buildings (Building 870), which would be a contributor to the potential District. The remainder of the SEP outside of the potential District consists of post-1981 buildings. All were assessed as ineligible for listing in the NRHP and CRHR.

Central Shops

The Central Shops, built in 1959 was recommended eligible for listing in the NRHP and CRHR because its buildings (Buildings A and B shown on **Figure 5**) are significant for their International Modern style of architecture. The two buildings that comprise the historic resource have been assessed as significant outside of the *Streamline Moderne Industrial SEP Historic District* because they do not contribute to the potential District's significance and have a different historical context, construction period, and architectural design from the potential District. A third building at the Central Shops, Building C, was not recommended eligible for listing in the NRHP or CRHR.

Asphalt Plant

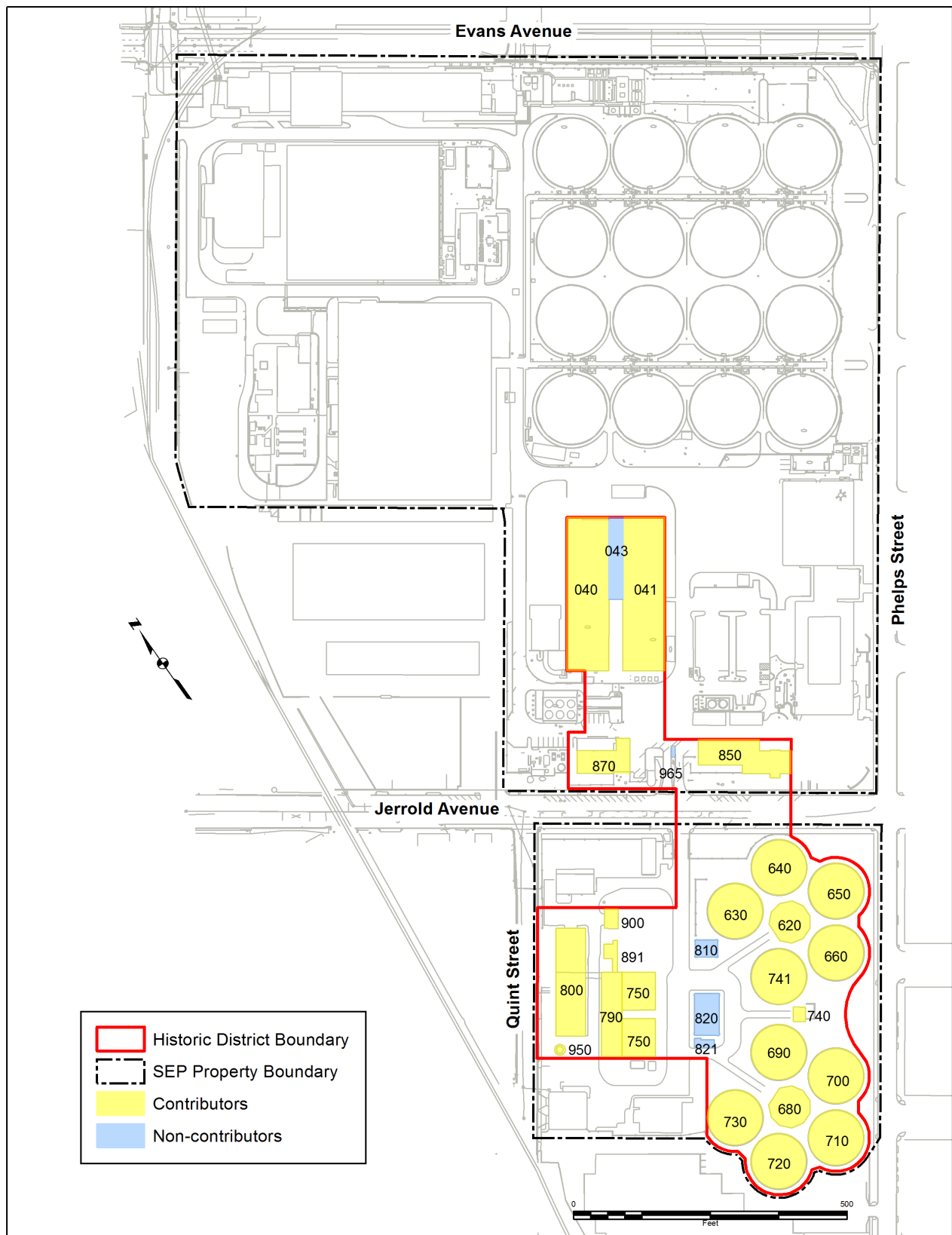
No buildings or structures at the Asphalt Plant were identified as eligible historic resources, either as a district or individually.



SOURCE: SFPUC, Conceptual Engineering Report, December 2015; adapted by ESA+Orion

SFPUC Biosolids Digester Facilities

Figure 2
Preliminary Site Plan



SOURCE: ESA+Orion; Brewster, 2016

SFPUC Biosolids Digester Facilities

Figure 3
Proposed Southeast Treatment Plant Streamline
Moderne Industrial Historic District Boundary



SOURCE: ESA+Orion

SFPUC Biosolids Digester Facilities

Figure 4
Building 870, within the Southeast Treatment Plant
Streamline Moderne Industrial Historic District



Building A facing southeast



Building A facing west



Building A facing southwest



Building B facing northeast



Building B facing southeast



Building B facing northeast with car port

Project Impacts

Impacts on Southeast Treatment Plant Streamline Moderne Industrial Historic District

The project would demolish Building 870 (formerly the Machine Shop and Garage and now a paint shop, plumber shop, and carpenter shop that also houses some operational staff/laborers), which was identified as a contributor to the potential District. This building would be replaced with a new operations, maintenance, and support facility and an underground pump station (referred to as the No. 2 water pump station), which would be sited in the same general footprint as Building 870 within the potential District boundaries. Building 870 is the only contributing building to the potential District that would be affected by the project. Twenty-one of the 22 contributing resources of the potential District on the SEP site are outside the project footprint and would be retained.

The demolition of this one contributor to the potential District would have a negligible impact on the overall significance and historic integrity of the potential District for several reasons. First, the remaining buildings and structures would be unaffected and would retain their ability to convey the significance of the first phase of SEP development, and would continue to provide good representation of the Streamline Moderne architectural style that characterizes the SFPUC's original SEP wastewater facilities. Second, Building 870 is located on the north side of the potential District and is separated from many of the contributing facilities by a public street and the south side perimeter wall. Finally, Building 870 is a modest and utilitarian example of Streamline Moderne architecture; much better examples would be retained in the historic district.

The project would introduce new construction—the proposed operations, maintenance, and support structure and an underground pump station—on the north side of the potential District. This too would likely have a less-than-significant impact on the potential District, as the vast majority of the potential District would not be affected by the project. In addition, introduction of new elements to the potential District would have a less-than-significant impact because after 1952, when the original Sewer System Master Plan was superseded, buildings of different architectural types were introduced over time and were sited based on individual project objectives, rather than on the original master plan.

The new building would be about 30 feet high, compared to the 20-foot-high Building 870, and could be partially visible from the main southside complex. However, the general scale and functions of the new structures would be similar to the remaining structures in the potential District .

Therefore, the overall historical integrity of the potential District would not be significantly affected by either the demolition of Building 870 or new construction of BDFP facilities at that same location. As such, the project would have a less-than-significant impact on the potential District as a historic resource under CEQA (as the CEQA resource could be considered the potential District as a whole, rather than its individual buildings). For these reasons, project impacts on the potential District will be identified in the EIR as less than significant, and the EIR alternatives analysis will not address strategies to avoid or reduce impacts on the potential District.

Central Shops Complex

Implementation of the project would demolish the Central Shops and in its place would be constructed the anaerobic digesters, a pre-treatment facility, an odor control facility, and maintenance support structures that would comprise the majority of the BDFP. The Central Shops is individually eligible for listing in the NRHP and

CRHR, and the demolition of Buildings A and B would result in a significant impact on the historic resource under CEQA. (The Central Shops is a single historic resource that is comprised of two buildings, Buildings A and B.) Mitigation measures available to reduce this impact include documentation of the resource; however, implementation of such measures would not reduce the impact of the loss to a less-than-significant level (CEQA Guidelines Section 15126.4(b)(2)). As such, the proposed demolition of Buildings A and B at the Central Shops site would be a significant and unavoidable impact of the BDFP on a historic resource, even with implementation of feasible mitigation measures, and this project impact will be fully disclosed in the EIR. The EIR alternatives analysis will address strategies to avoid or reduce impacts on this historic resource.

Asphalt Plant

Implementation of the project would demolish the underground facilities at the Asphalt Plant site and replace them with the proposed energy recovery facilities component of the BDFP. As no buildings or structures at this site were identified as eligible historic resources, either as a district or individually, the EIR will identify this change as a less-than-significant impact of the project, and this impact will not be discussed in the EIR alternatives analysis.

Alternatives, Including Full and Partial Preservation Alternatives

Under CEQA, an EIR is required to identify project alternatives that would avoid or reduce significant, adverse project impacts. In addition to this CEQA requirement, the San Francisco Historic Preservation Commission (HPC) approved Resolution No. 0746 in 2015 recommending that EIRs that identify demolition of a historic architectural resource in the City and County of San Francisco include a robust alternatives evaluation. The EIR alternatives evaluation, in addition to the required No Project Alternative, should include at least one full preservation alternative and one partial preservation alternative while taking into account the potential feasibility of the proposed alternatives and their ability to achieve the project objectives. The resolution also requests that EIRs provide text discussion of these alternatives.

Table 1 presents the strategies used to identify the alternatives to be analyzed in the EIR to address significant impacts on historic architectural resources. The table includes full preservation alternatives and partial preservation alternatives that could meet the HPC recommendations. The alternative strategies identified reflect recent discussions with EP staff, who have guided the discussion regarding appropriate full and partial preservation alternatives for analysis in the EIR, including alternatives that should be considered but rejected; in addition, the alternatives description and feasibility issues reflect discussions with SFPUC staff, who have provided technical analysis of project requirements and site constraints. The table summarizes the ability of each potential alternative to reduce or avoid impacts, its technical feasibility, and its ability to meet project objectives. The table presents a total of 10 potential alternatives that could fully or partially avoid all impacts on the resources, as follows:

- Full Preservation Alternatives are labeled as FP1 to FP6
- Partial Preservation Alternatives are labeled as PP1 to PP4

The table indicates whether an alternative will be carried forward for detailed analysis in the EIR alternatives chapter or identified in the EIR as an alternative considered but rejected. Alternatives to be carried forward for detailed analysis in the EIR alternatives chapter must meet one of the following two criteria: (1) the alternative would meet most of the basic objectives of the project while avoiding or reducing identified impacts on historic

architectural resources and be considered feasible, or (2) the alternative is required under CEQA (i.e., the no-project alternative). For those alternatives considered but rejected, the EIR will provide a detailed explanation as to why they did not meet these criteria.

In summary, it is proposed that the BDFP EIR provide detailed analysis of the following three full preservation alternatives: (FP1) No Project Alternative, (FP3) Pier 94 Backlands Alternative, and (FP5) Project plus Relocation of Historic Resource. The remaining seven full/partial preservation alternatives will be addressed in the EIR under “Alternatives Considered but Rejected.”

TABLE 1
BDFP ALTERNATIVE STRATEGIES TO AVOID OR REDUCE IMPACTS ON HISTORIC ARCHITECTURAL RESOURCES

Potential Alternatives	Preservation Alternative Type	Issues	
		Ability to Reduce Impacts on Historic Resources	Feasibility, Ability to Meet Project Objectives, and EIR Status
Full Preservation Alternatives			
FP1. No-Project Alternative. This alternative would not implement the BDFP and would continue the existing SEP solids treatment operations. No demolition would occur.	Full (full avoidance)	Avoids impacts by retaining the Central Shops; does not affect other historic resources.	<ul style="list-style-type: none">• Feasibility: This alternative is feasible.• Ability to Meet Project Objectives: This alternative would fail to meet most of the project objectives.• EIR Status: This alternative will be carried forward to the EIR for detailed analysis as required by CEQA, even though it would not meet most of the project objectives
FP2. Full Preservation in Place. Under this alternative, the project would be designed to reuse and repurpose the Central Shops Buildings A and B as part of the project, while meeting Secretary of the Interior Standards.	Full (full avoidance)	Avoids impacts on individual historic resources by retaining the Central Shops buildings; new construction would have a less-than-significant impact on the potential historic district.	<ul style="list-style-type: none">• Feasibility: The reuse in place of the two buildings that comprise the Central Shops historic resource would not be feasible for the numerous reasons, including the following: (1) the location of Buildings A and B in the middle of the BDFP site constrains the overall space available for required aboveground facilities as well as access to required underground facilities; (2) the total area of 65,800 square feet is not large enough to contain a multi-level pre-treatment facility, which requires about 136,800 square feet; (3) the configuration would constrict operations, making them inefficient and potentially dangerous; and (4) space constraints would require use of other existing SEP areas and would interfere with ongoing SEP operations. Even if feasible, this alternative would require a complete redesign of the project layout that would result in substantial project delay. Furthermore, it would require disassembling and temporarily relocating Buildings A and B to construct underground project components, and it is assumed that the resource could be reconstructed in place consistent with SOI standards.• Ability to Meet Project Objectives: Based on the infeasibility described above, this alternative would not meet most of the project objectives.• EIR Status: This alternative will be described in the EIR under “Alternatives Considered but Rejected” due primarily to its infeasibility.
FP3. Pier 94 Backlands Alternative. This alternative would build the Biosolids Digester Facilities at Pier 94 and construct a pipeline/tunnel from the SEP to Pier 94, with no demolition, alterations, or additions to the SEP or Central Shops.	Full (full avoidance)	Avoids impacts by retaining the Central Shops buildings; does not affect other historic resources.	<ul style="list-style-type: none">• Feasibility: This alternative is considered potentially feasible and capable of meeting most of the project's basic objectives. However, this alternative would bifurcate SEP wastewater treatment processes such that the solids handling facilities would be located at a satellite location away from the liquid processing facilities. It would require the construction of pipelines to carry dilute sludge and waste streams approximately one mile from and to the SEP. This alternative would require additional redundant and operational features and create higher energy demands.• Other Issues: The site is located on Port property within State Lands Commission jurisdiction and Public Trust land, and use of the site would require special approvals. The alternative would require acquisition or a land swap. A portion of the site is designated a port priority use area (protected for use as marine terminals and other directly related port activities), within which uses that would impair

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			<p>the future use of the area may be allowed only on a finite, interim basis.</p> <ul style="list-style-type: none"> • Ability to Meet Project Objectives: This alternative could meet most of the project objectives but would not allow for timely construction of the BDFP. • EIR Status: This alternative will be carried forward for detailed analysis in the EIR.
FP4. Project plus Relocation of Buildings A and B within the SEP. This alternative would consist of the BDFP plus relocation of Central Shops Buildings A and B to a site within the SEP boundaries, consistent with Secretary of the Interior Standards. It assumes rehabilitation/reuse consistent with Secretary of the Interior Standards.	Full (full avoidance)	Reduces impacts to a less-than-significant level by avoiding the impacts of demolishing historic resources but instead relocating them elsewhere in the SEP and rehabilitating them according to Secretary of the Interior Standards. Building 870 would still be demolished, but this would not significantly affect the potential historic district.	<ul style="list-style-type: none"> • Feasibility: There is insufficient space to accommodate both buildings within the remaining SEP property in whole. The largest open space (parking lot) within the SEP is about 57,700 square feet, which is less than the 65,800-square-foot area of the Central Shops buildings if they were put side by side without any setbacks. • Ability to Meet Project Objectives: If this alternative were feasible, it would meet most of the project objectives. • EIR Status: This alternative will be described in the EIR under "Alternatives Considered but Rejected" due to its infeasibility.
FP5. Project plus Relocation of Historic Resource. This alternative would consist of the BDFP plus relocation of Central Shops Buildings A and B to a similar industrial setting in San Francisco consistent with Secretary of the Interior Standards. It assumes rehabilitation/reuse consistent with Secretary of the Interior Standards.	Full (full avoidance)	Reduces impacts to a less-than-significant level by avoiding the impacts of demolishing historic resources, but instead relocating them to a new industrial setting in San Francisco and rehabilitating them according to Secretary of the Interior Standards. Building 870 would still be	<ul style="list-style-type: none"> • Feasibility: The SFPUC would need to identify appropriate new location(s) where placement of these buildings would not result in significant environmental impacts. The SFPUC has not identified any SFPUC-owned property that would be available for relocation of the Central Shops Buildings A and B.³ • Ability to Meet Project Objectives: This alternative would meet most of the project objectives. • EIR Status: This alternative will be carried forward to EIR for

³ The SFPUC has investigated a number of potential sites, including the following:

Southeast Greenhouses: The site is not available because it currently serves as a community mitigation. The greenhouse structures recently underwent a comprehensive study that found seismic, life safety, and fire safety deficiencies that require the structures to be demolished or rehabilitated. There is a public process underway to determine the best future use. Options include new greenhouses at the site (or at other sites), or other to-be determined uses.

1550 Evans: The site is not available because there are other long-term uses envisioned for 1550 Evans, including a potential rebuild of the Southeast Community Facility, currently located at 1800 Oakdale. In addition, this site could house an adjacent academic institution in the future that could be co-located next to the newly built Community Center.

Griffith Yard: The site is not available because SFPUC Collection System Division and Sewer Operations staff and operations need to be relocated to Griffith Yard in early 2017. In order to meet this deadline, construction must start in the summer of 2016. Based on the current design of Griffith Yard, there would be insufficient available space (after construction completion) to accommodate Central Shops Buildings A and B at the site. It would be infeasible to delay the design completion of Griffith Yard to accommodate the Central Shops Buildings A and B, because relocation of the buildings cannot occur until after certification of the BDFP EIR and approval of the project. Construction of the BDFP, if approved, would not occur until 2018.

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		Ability to Reduce Impacts on Historic Resources	Feasibility, Ability to Meet Project Objectives, and EIR Status
		demolished, but this would not significantly affect the potential historic district.	detailed analysis, although at this time, a specific site has yet to be identified.
FP6. Project plus Relocation/Reuse of Historic Resources for New Central Shops. This alternative would consist of the BDFP plus relocation of Central Shops Building A and B for use as part of the new San Francisco Department of Public Works Central Shops site opposite the Caltrans tracks. This alternative assumes rehabilitation/reuse consistent with Secretary of the Interior Standards.	Full (full avoidance)	Reduces impacts to a less-than-significant level by avoiding the impacts of demolition while relocating historic resources close to their original location, retaining their current use, and rehabilitating them according to Secretary of the Interior Standards. This alternative would affect Building 870 but would not significantly affect the historic district.	<ul style="list-style-type: none"> • Feasibility: This alternative assumes that coordination with the San Francisco Department of Public Works regarding the design of its new Central Shops would still be feasible, and that the schedule for operations at the new Central Shops could be delayed until the completion of such a design. However, the San Francisco Department of Public Works needs to maintain an ongoing, operational Central Shops facility, such as under the current plan to complete construction of the new Central Shops facility, before abandoning and relocating the new location. • Ability to Meet Project Objectives: If this alternative were feasible, it would meet most of the project objectives. • EIR Status: This alternative will be described in the EIR under "Alternatives Considered but Rejected" due primarily to its infeasibility.
Partial Preservation Alternatives			
PP1: Retain both Central Shops Buildings A and B in Place with Modifications. This alternative would retain both Buildings A and B in place, but with footprint and height modifications, consistent with Secretary of the Interior Standards. It would redesign the project layout to accommodate retention of historic Buildings A and B. Depending on the design, alterations/additions to the buildings could include some increase in building heights (up to one story), but would need to be consistent with Secretary of the Interior Standards.	Partial (preservation in place with alterations)	May reduce all impacts on the Central Shops to a less-than-significant level, and avoids impacts on their integrity because rehabilitations would be consistent with Secretary of the Interior Standards.	<ul style="list-style-type: none"> • Feasibility: As described for FP2, above, Central Shops Buildings A and B are in the middle of the BDFP site, which has little or no space to spare, making the layout of this alternative inefficient and more costly than the project. The project's diagonal orientation of new facilities, compared with the rectilinear orientation of Central Shops Buildings A and B, makes retaining a portion of Buildings A and B problematic from a design standpoint. See feasibility issues described above for FP2. Even if feasible, this alternative would require a complete redesign of the project layout that would result in substantial project delay, and it would require disassembling and temporarily relocating Buildings A and B to construct underground project components, and it is assumed that the resource could be reconstructed and modified in place consistent with SOI standards. • Ability to Meet Project Objectives: Based on the infeasibility described above, this alternative would not meet most of the project objectives. • EIR Status: This alternative will be described in the EIR under "Alternatives Considered but Rejected" due primarily to its infeasibility.
PP2: Retain a Portion of both Buildings A and B in Place. This alternative would retain a portion of both Buildings A and B in place, such as one or two exterior glass curtain walls, or a portion of both buildings. The BDFP would be redesigned to be constructed above and behind retained portions of Buildings A and B.	Partial (partial preservation in place, retain only façade/s)	Reduces the impact but not to a less-than-significant level. The impact on Buildings A and B would be reduced by preservation of architectural elements, but the impact would remain significant and unavoidable because a large portion of the two	<ul style="list-style-type: none"> • Feasibility: As described for FP2 and PP1, above, Central Shops Buildings A and B are in the middle of the BDFP site, which has little or no space to spare, making the layout of this alternative inefficient and more costly than the project. The project's diagonal orientation of new facilities, compared with the rectilinear orientation of Central Shops Buildings A and B, makes retaining a portion of the Buildings A and B problematic from a design standpoint. Even if feasible, this alternative would require a complete redesign of the project layout

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		buildings would be demolished.	that would result in substantial project delay, and it would require disassembling and temporarily relocating Buildings A and B to construct underground project components. <ul style="list-style-type: none"> • Ability to Meet Project Objectives: This alternative could meet most of the basic objectives of the project but would not allow for timely construction of the BDFP. • EIR Status: This alternative will be described in the EIR under “Alternatives Considered but Rejected” because it is infeasible and it would not substantially reduce the severity of the significant and unavoidable impact on historic resources.
PP3: Demolish Central Shops Building B and Relocate a Portion of Building A. This alternative would demolish Building B; demolish a portion of Building A and relocate a portion of Building A to Jerrold Avenue, where it could fit within the BDFP site plan; and repurpose the relocated portion of Building A.	Partial (relocation of part of the resource to a similar industrial setting)	Reduces the impact but not to a less-than-significant level, because Building B would be demolished and only a portion of Building A would be relocated and repurposed. The impact on the historic resource would remain significant and unavoidable because a large portion of the resource would be demolished.	<ul style="list-style-type: none"> • Feasibility: It is feasible to retain a portion of Building A or portions of one or two walls of Building A as either a wall or a screen wall for proposed facilities along Jerrold Avenue. This alternative would require architectural redesign to integrate the historic buildings. Relocating portions of Building A would not be consistent with Secretary of the Interior Standards and would create additional costs and would extend the construction schedule. • Ability to Meet Project Objectives: This alternative, if feasible, could meet most of the basic objectives of the project but would not allow for timely construction of the BDFP. • EIR Status: This alternative will be described in the EIR under “Alternatives Considered but Rejected” because it would not substantially reduce the severity of the significant and unavoidable impact on historic resources.
PP4: Demolish either Building A or B and Relocate the Other Building. This alternative would demolish either Central Shops Building A or B, relocate the other building to a similar industrial setting in San Francisco consistent with Secretary of the Interior Standards, and then construct the BDFP as currently proposed.	Partial (relocation in proximity to original location)	Reduces the impact but not to a less-than-significant level, because one building would be demolished and the other building would be relocated and repurposed. The impact on the historic resource would remain significant and unavoidable because a large portion of the resource would be demolished.	<ul style="list-style-type: none"> • Feasibility: This alternative, while potentially feasible, would not sufficiently reduce the severity of the impact to provide adequate benefits of a partial preservation alternative because Buildings A and B are considered a single historic resource. Relocation of one building without the other would not meet the needs of a partial preservation alternative. See FP5, above, in which both buildings would be relocated together. • Ability to Meet Project Objectives: This alternative, if feasible, could meet most of the project objectives. • EIR Status: This alternative will be described in the EIR under “Alternatives Considered but Rejected” because it would not substantially reduce the severity of the significant and unavoidable impact on historic resources.