



SAN FRANCISCO PLANNING DEPARTMENT

Initial Study - Community Plan Evaluation

Case No.: 2015-008058ENV
Project Address: 555 Howard Street
Zoning: C-3-O(SD) – Downtown Office (Special Development)
350-S Height and Bulk District
Transbay C-3 Special Use District
Transit Center C-3-0(SD) Commercial District
Block/Lot: 3736/086, 3736/107, 3736/110
Lot Size: 14,505 square feet
Plan Area: Transit Center District Plan (TCDP)
Project Sponsor: Hans Galland, Pacific Howard Corporation (Pacific Eagle Holdings Corporation), (415) 780-7300
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PROJECT DESCRIPTION

The project entails the removal of three buildings and construction of a 385-foot-tall (405 feet including screening enclosure for rooftop open space and mechanical and 420 feet including elevator overrun), 36-story, residential and hotel high-rise tower approximately 437,250 gross square feet in size (which entails approximately 358,600 square feet of Floor Area, Gross (“GFA”) as defined in Planning Code Section 102). The proposed building would include approximately 80 dwelling units, 255 hotel rooms, 6,100 square feet of retail, and four below-grade levels would accommodate up to 70 vehicle parking spaces. The project would provide 95 Class 1 bicycle parking spaces and 25 Class 2 bicycle parking spaces.

Project Location and Site Characteristics

The project site encompasses three lots on the block bounded by Howard Street to the north, Folsom Street to the south, First Street to the east, and Second Street to the west within the Transit Center District Plan (TCDP) subarea of the San Francisco General Plan’s Downtown Plan (See Figure 1). Both Howard Street and Tehama Street front the project site, which is currently developed with three buildings. The project site fronts on Howard and Tehama streets, and the western edge of the project site abuts the future Transbay Transit Center bus ramps (connecting the Transbay Transit Center with the Bay Bridge) and the associated Under Ramp Park (formerly Oscar Park). The project site is developed with the following buildings:

- 547 Howard Street (Lot 110): an approximately 20-foot-tall, two-story, commercial building that is approximately 6,380 square feet in size. The building was constructed in 1907 and is currently occupied by office use.
- 555 Howard Street (Lot 086): an approximately 30-foot-tall, three-story, commercial building that is approximately 24,900 square feet in size. The building was constructed in 1911 and is currently occupied by office uses and a leisure/entertainment use (“Eagle Club Indoor Golf”).
- 557 Howard Street (Lot 107): an approximately 20-foot-tall, two-story commercial building that is approximately 12,375 square feet in size. The building was constructed in 1922 and is occupied by a ground-floor restaurant (“The Melt”) with office use above.

There are no mechanical penthouses on these buildings. Access to these buildings is primarily pedestrian in nature, with all three buildings having primary access via street-level entrances facing Howard Street, although Lots 086 and 107 have frontage and secondary access along Tehama Street. Only one of the buildings (Lot 086) has direct vehicular access, provided by a single curb cut measuring approximately 12 feet in width along the building's Tehama Street frontage. With the exception of this curb cut, all curb fronting the project site is designated for use as on-street parking.

Project Characteristics

The project sponsor proposes the demolition of the three existing buildings at the project site and construction of a new 36-story, mixed-use high-rise tower with approximately 157,000 gross square feet of residential uses (approximately 80 units) and approximately 213,000 gross square feet of hotel uses (approximately 255 guest rooms). The proposed project would be approximately 385 feet in height to the roofline, 405 feet to the top of the screening enclosure, and 420 feet tall to the top of the elevator machine room. As noted above, the project site is located within the 350-S Height and Bulk District and would request an upper tower extension of 10 percent of the base permitted 350-foot height limit, as permitted by Planning Code Section 263.9.¹

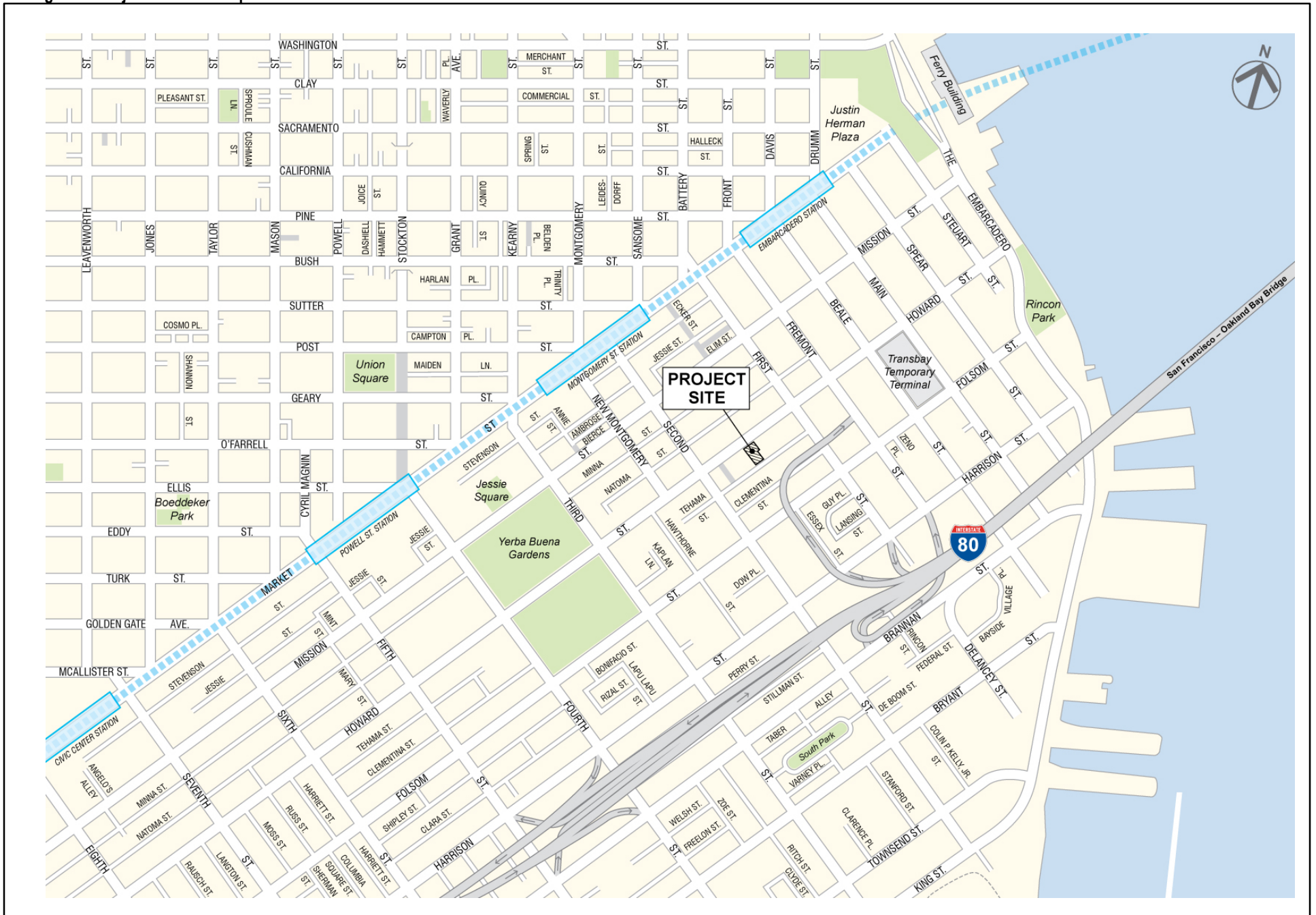
The hotel portion of the building would occupy Levels 1 to 19 and Basement Levels 1 to 3. The hotel would include several ancillary uses that would be open to the public or available for public use, including a full-service restaurant and bar (approximately 4,000 gross square feet) on the ground floor and a sky bar (approximately 2,100 gross square feet) on Level 36. The hotel would include function and conference spaces on Levels 2 to 4, including a ballroom with pre-function space (approximately 3,500 gross square feet) and meeting rooms (approximately 12,000 gross square feet). Fitness facilities for use by hotel guests and residents, including a pool, spa, and exercise room (up to approximately 4,500 gross square feet total), would be located on Basement Level 1. Typical event types that could be held by hotel facilities include the following: large events could take place approximately 10 times per year with a maximum attendance of approximately 350 persons; medium events, such as small conferences or galas, could take place approximately 50 times per year with a maximum attendance of approximately 230 persons; and smaller meetings could take place approximately 90 times per year with a maximum of 125 attendees.

The residential portion of the building, which includes approximately 80 units, would occupy Floors 20 to 36. The proposed unit mix includes one-bedroom, two-bedroom, and three-bedroom units. The residential lobby would be located on Tehama Street, and Floor 21 includes an outdoor terrace that would provide open space to the residents.

The proposed four below-grade levels would accommodate up to 70 vehicle parking spaces in an automated "puzzler" system. The project would also provide a total of 95 Class 1 bicycle parking spaces on Basement Level 1 accessible from the ground floor of the building by use of service corridors and elevators. Employee facilities, including four showers and 24 lockers, would be located on Basement Level 3, accessible from the bike room by service corridors and elevators. Off-street freight loading would

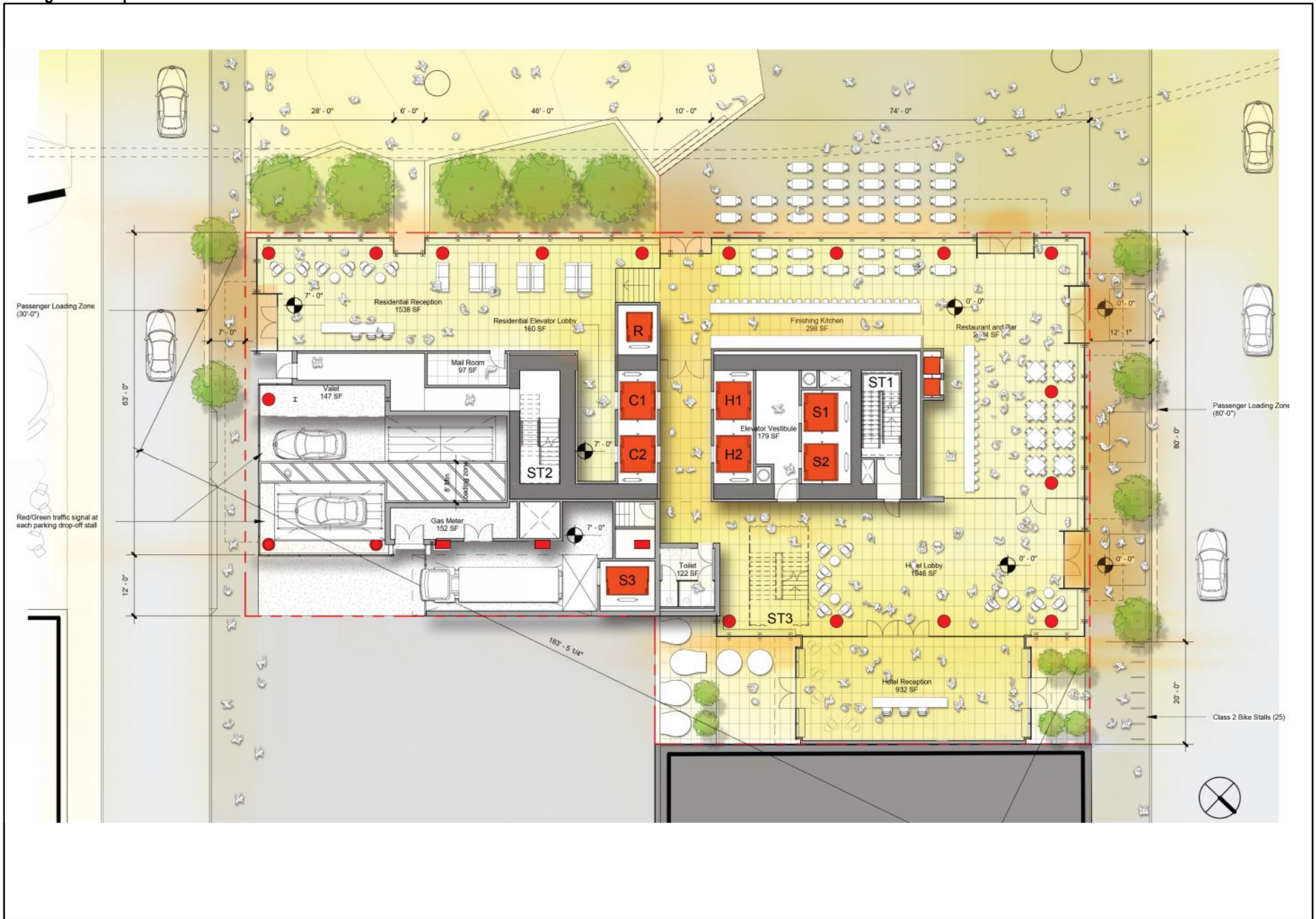
¹ Section 263.9 allows an additional 10 percent of the heights shown on the Zoning Map in S Districts as an extension of the upper tower subject to the volume reduction requirements of the Code. The additional height may be allowed if determined that the upper tower volume is distributed in a way that will add to the sense of slenderness of the building and to the visual interest of the termination of the building, and that the added height will improve the appearance of the skyline when viewed from a distance, and will not adversely affect light and air to adjacent properties, and will not add significant shadows to public open spaces.

Figure 1. Project Location Map



Comments: Not to Scale

Figure 2. Proposed Site Plan



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

Figure 3. Proposed Basement Level 1



Comments: Not to Scale
 Source: Renzo Piano Building Workshop, February 14, 2017

Figure 4. Proposed Basement Level 2



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

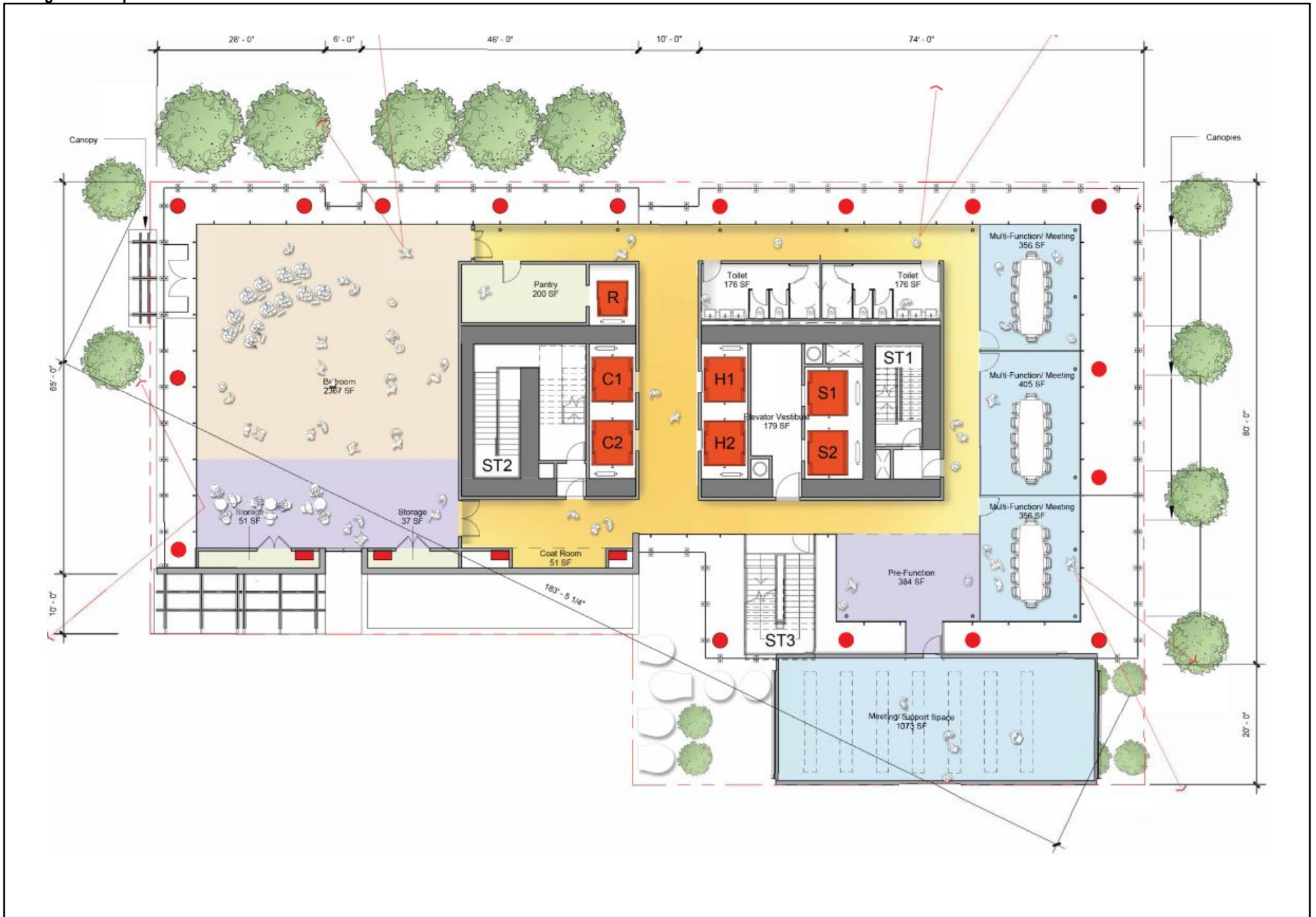
Figure 5. Proposed Basement Level 3



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

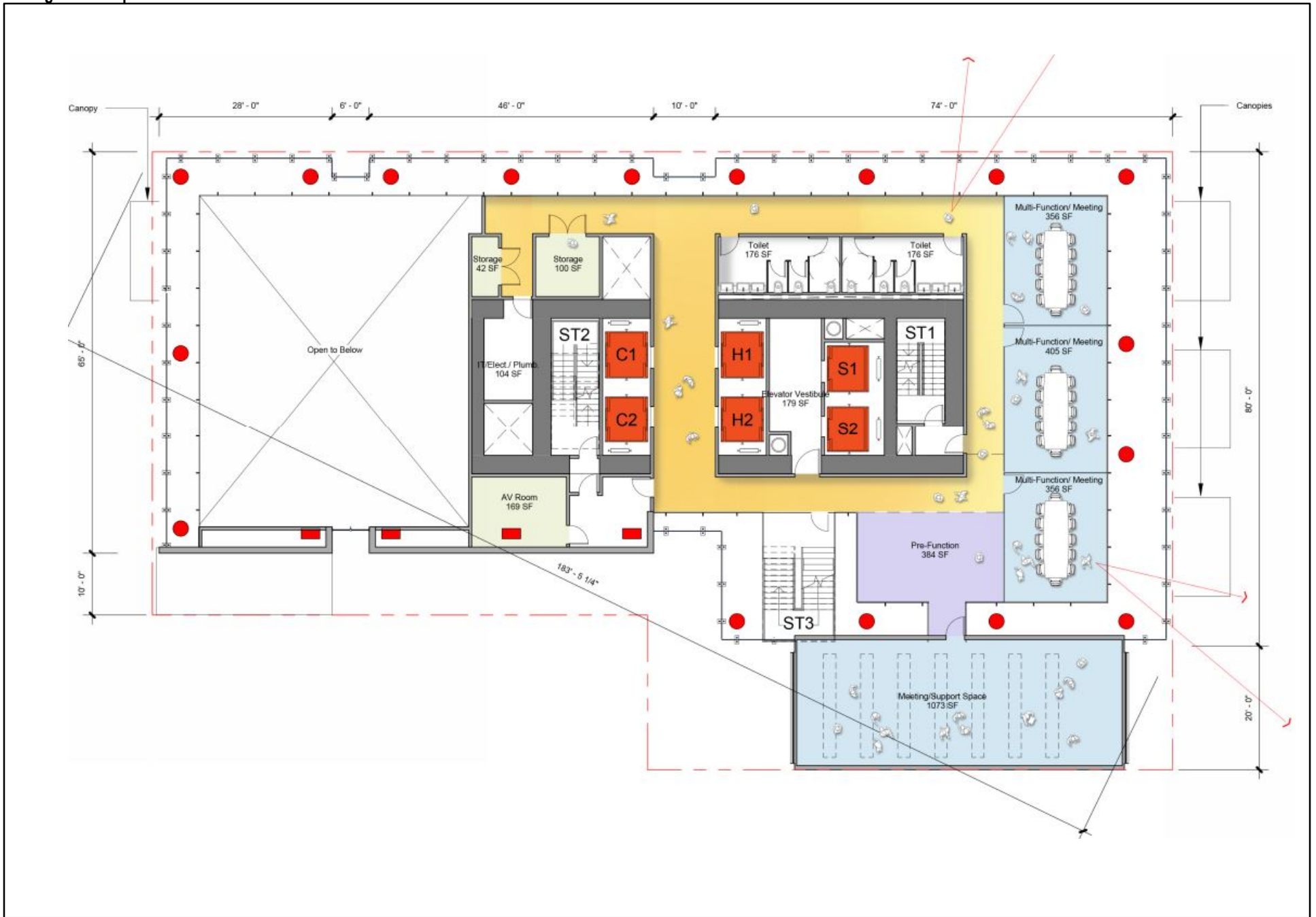
Figure 6. Proposed Level 2



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

Figure 7. Proposed Level 3



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

Figure 8. Proposed Level 4



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

Figure 9. Proposed Hotel Floor Plan



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

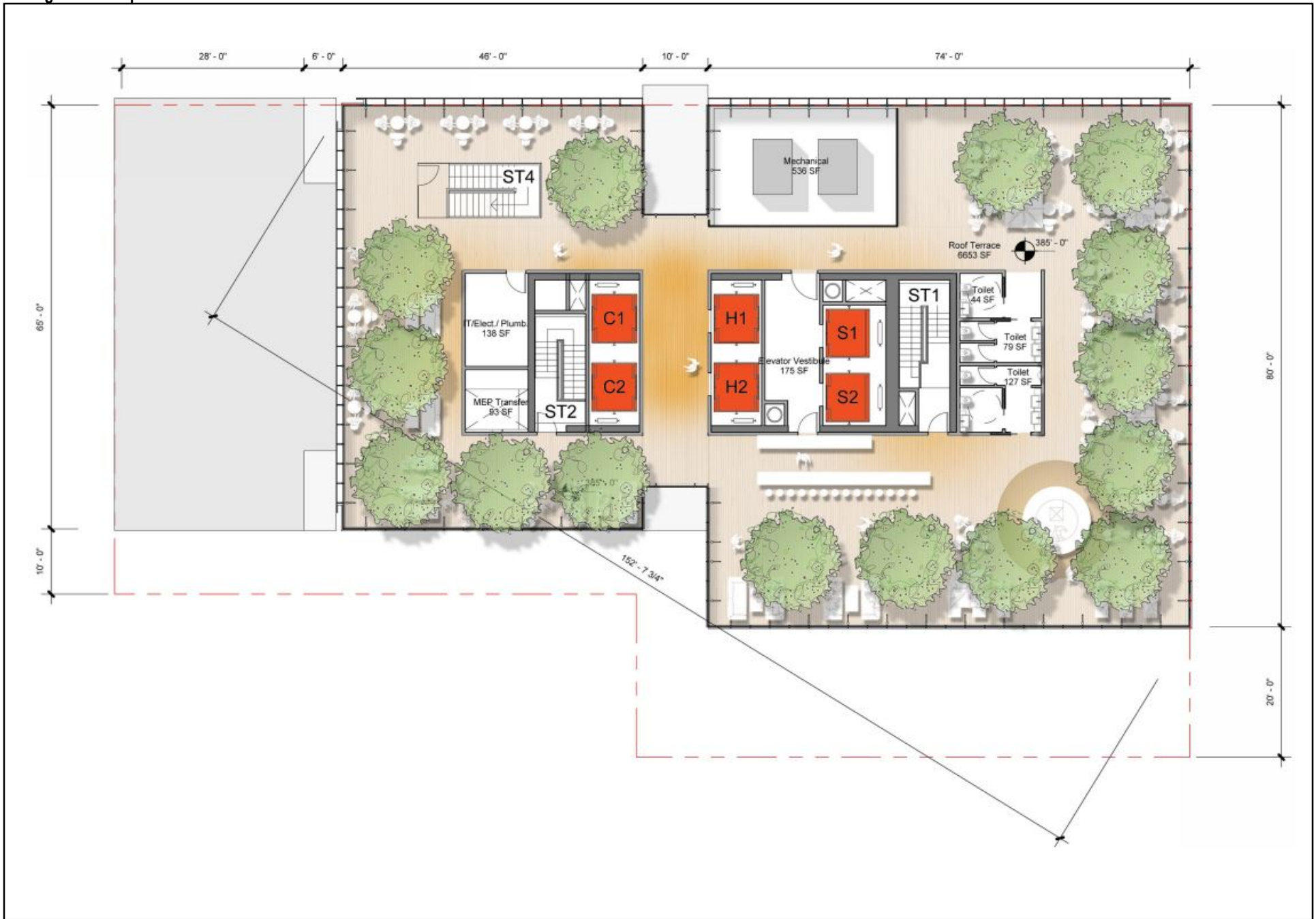
Figure 10. Proposed Residential Floor Plan (Level 21)



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

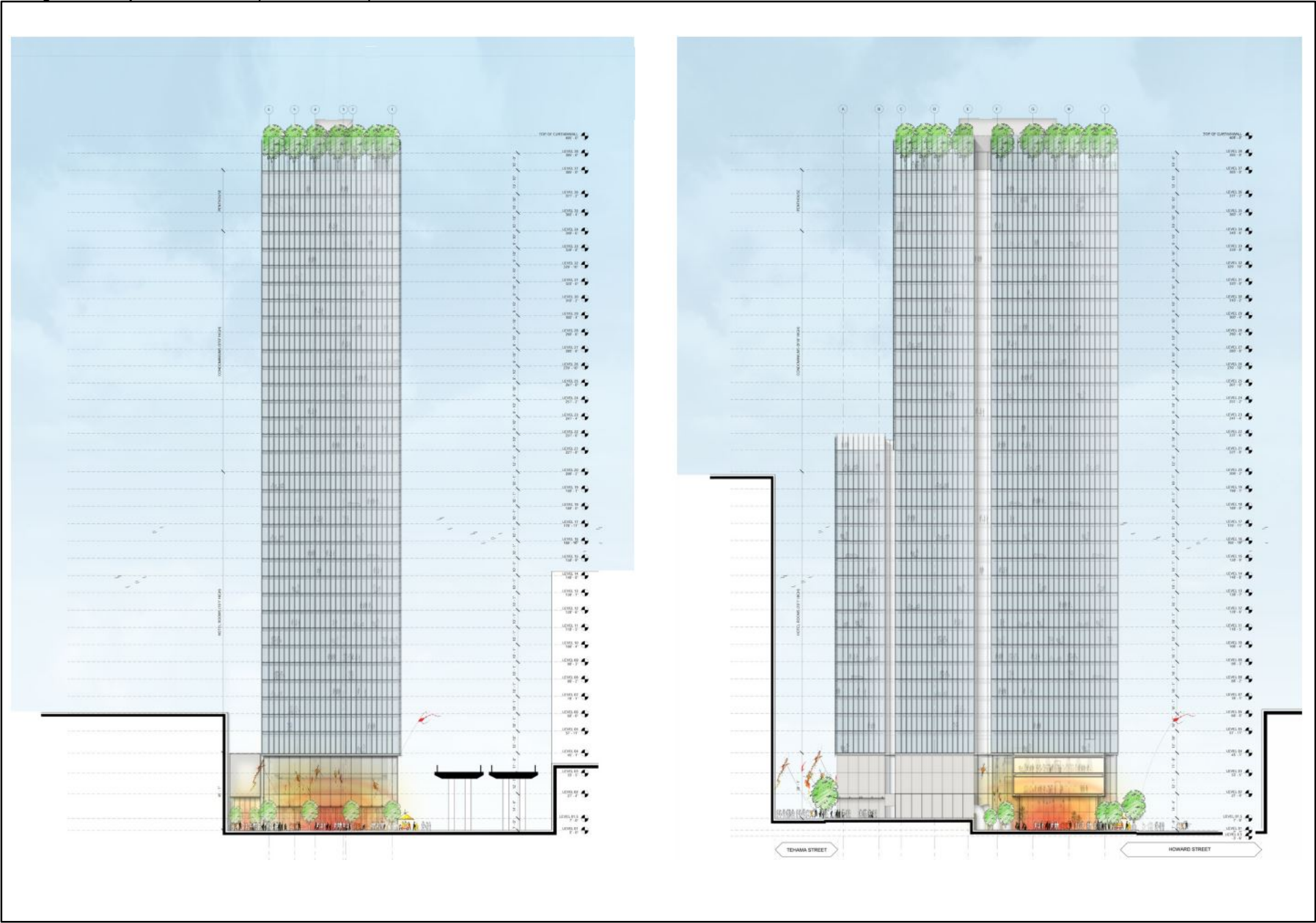
Figure 11. Proposed Roof Level



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

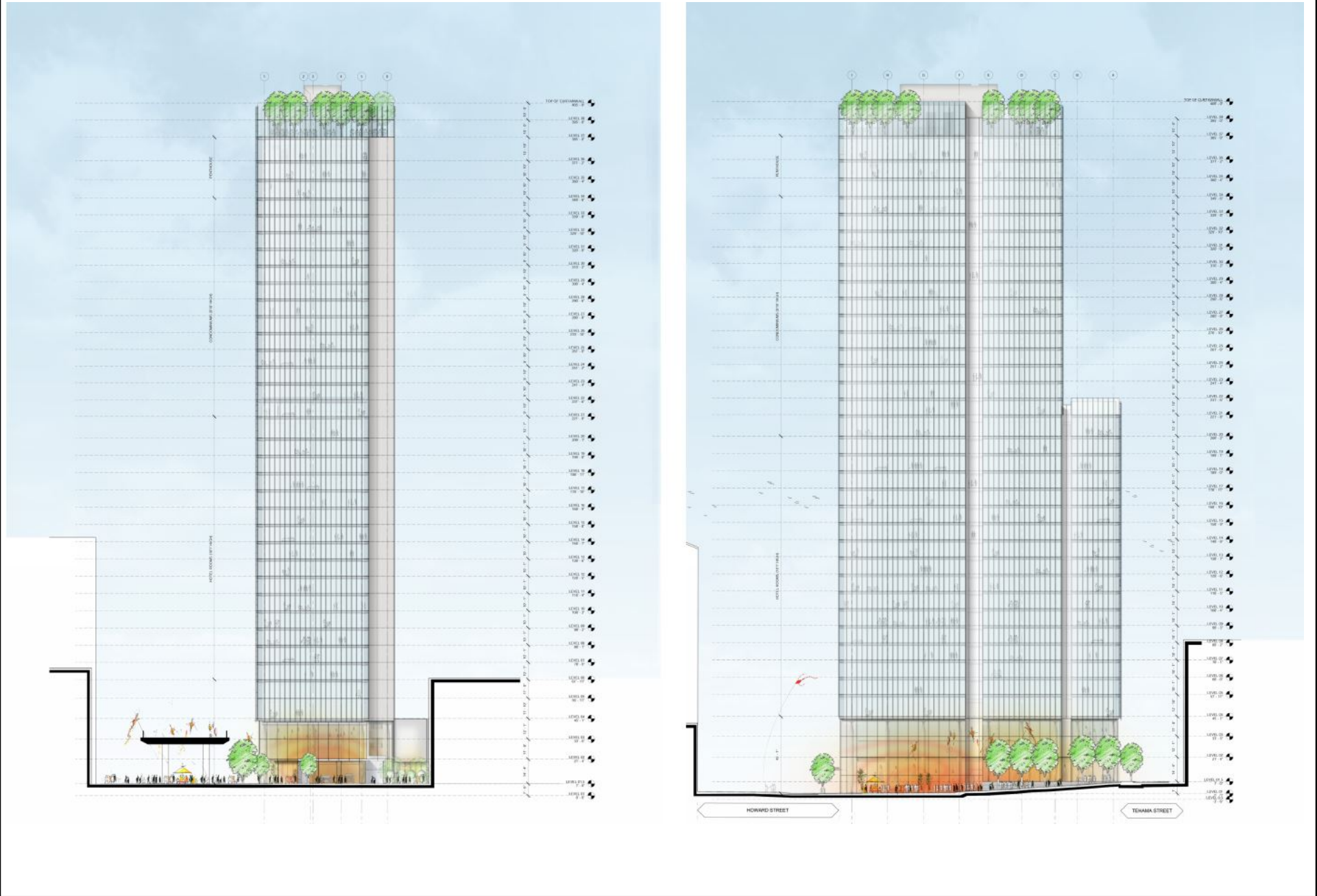
Figure 12. Proposed Elevations (North and East)



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

Figure 13. Proposed Elevations (South and West)



Comments: Not to Scale
 Source: Renzo Piano Building Workshop, February 14, 2017

be provided along Tehama Street at the southeast corner of the building. Mechanical equipment would be located on a portion of the roof and in below-grade levels. Two cooling towers would be installed on the west side of the roof, air handling units and exhaust fans would be located at Basement Level 4 in the main mechanical room, and a diesel-powered emergency backup generator would be located at Basement Level 2. A detailed description of project features is provided in the below subsections.

Circulation, Parking and Loading

Pedestrian access into the building would be provided at multiple locations along the perimeter of the building. Up to four building entrances would be provided along Howard Street—one serving the restaurant (dining area), one serving the bar, one serving the hotel reception area, and one serving the hotel lounge. A fifth building entrance serving the building’s residential lobby would open onto Tehama Street, while a “gateway” entrance for the building along the west façade of the building would open onto the Under Ramp Park.² Additional building service entries would be located at the southeast corner of the project site, serving the valet station, the freight loading dock, emergency stairwells, and other building functions.

The proposed project would provide up to 70 off-street vehicle parking spaces arranged in automatic stackers on the building’s four below-grade levels, including 35 spaces for the proposed residential use, 33 spaces for the proposed non-residential uses (16 spaces for the hotel rooms and 17 spaces for the meeting rooms and retail uses), and two car-share spaces. These spaces would be accessible via two parking elevators along the building’s Tehama Street frontage. The outer (eastern) parking elevator would be accessible from a 27-foot-wide curb cut shared with the building’s freight loading dock, while the inner (western) parking elevator would be accessible from a separate 13-foot-wide curb cut. Vehicles would enter the elevators by backing in from Tehama Street, and would exit the elevators head-first onto Tehama Street.

All off-street vehicle parking within the building would be managed through a valet program. Hotel guests (including retail customers) would drop-off and pick-up their vehicle at a valet station located at the Howard Street passenger loading zone, while residents would drop-off and pick-up their vehicle at a valet station located near the building’s parking elevators along Tehama Street. The two parking elevators would be independent of each other, with each controlling approximately half of the spaces in the garage.

The project would replace the existing 12-foot-wide curb cut on Tehama Street with two curb cuts (measuring 27 feet and 13 feet in width, respectively) on Tehama Street. The 27-foot-wide curb cut would be shared between the outer (eastern) parking elevator and the building’s freight loading dock, while the 13-foot-wide curb cut would exclusively serve the inner (western) parking elevator. The larger, shared curb cut would be located approximately 425 feet west of the First Street/Tehama Street intersection. While the outer (eastern) parking elevator and the building’s freight loading dock would share a curb cut, the two spaces would be physically separate, with structural support columns and a wall in between.

The project also proposes to provide new passenger loading zones (white curb) along both the Howard Street and Tehama Street frontages of the project site. Specifically, the project would convert up to four

² Formerly known as Oscar Park, Under Ramp Park is an under construction park that will be located underneath the future elevated Transbay Transit Center bus ramp, which is immediately west of the project site. Oscar Park was one of the future parks analyzed in the TCDP PEIR.

on-street parking spaces along Howard Street to provide an 80-foot passenger loading zone and up to two on-street parking spaces along Tehama Street to provide a 30-foot passenger loading zone, which was tentatively agreed to by SFMTA.³ The passenger loading zones would help accommodate general passenger loading/unloading activity (including activity generated by uses at the project site, as well as other activity in the surrounding area) and valet operations for the building. All vehicle parking in the building would be operated by valet, and valet attendants would be responsible for operating the automated parking system to store and retrieve vehicles.

Hotel guests would drop-off and pick-up their vehicles at a valet station located at the Howard Street passenger loading zone, with valet attendants taking the vehicle to and from the parking elevators along Tehama Street. Residents would drop-off and pick-up their vehicle at a valet station located near the building's parking elevators along Tehama Street, with valet attendants taking it directly to and from storage. During periods of higher demand for valet service, the proposed passenger loading zones along Howard and Tehama streets would provide space to stage vehicles waiting to be taken to storage or to be picked up.

Freight Loading

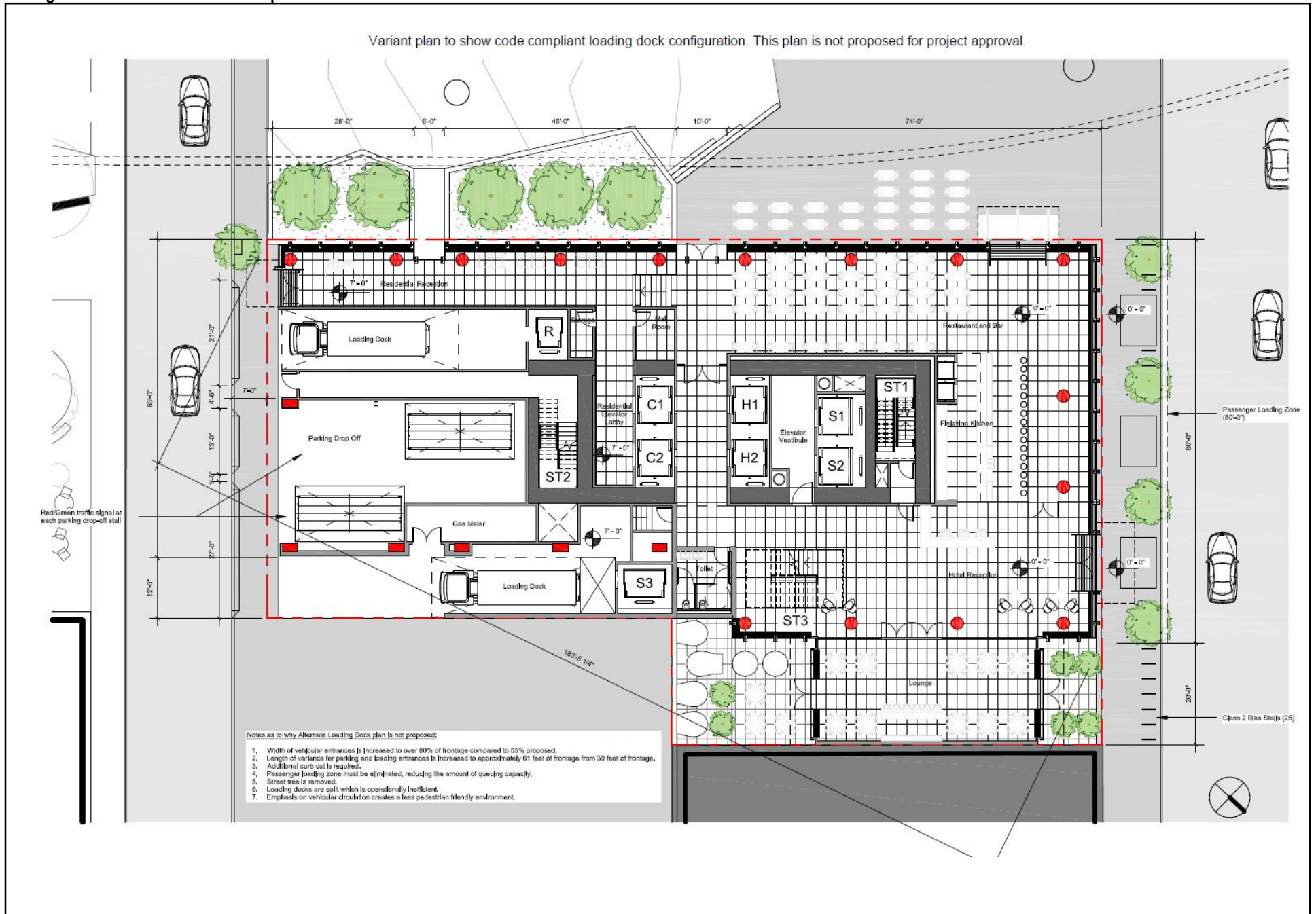
The building would feature an off-street loading dock with one off-street freight loading space (measuring 12 feet wide by 35 feet long by 14 feet tall), accessible from the 27-foot curb cut along Tehama Street. Planning Code Section 161 requires that the proposed project provide two off-street freight loading spaces. The building's freight loading dock would have sufficient depth to accommodate two large trucks in a tandem configuration. While the inner space would not be independently accessible in this configuration, the building's dock could feasibly accommodate up to two large trucks (or, alternatively, a large truck and two small service vehicles, or three small service vehicles) under conditions where independent access is not required.

Code-compliant Variant

The project would be required to provide a total of two off-street freight loading spaces to comply with Planning Code Section 161. As the proposed project would only provide one space, the project sponsor plans to seek an exception for one of the required off-street freight loading spaces pursuant to Planning Code Section 309. Since the proposed configuration is not compliant with Planning Code requirements, a hypothetical variant with two off-street freight loading spaces ("Code-compliant variant") has been developed for consideration. In order to accommodate two off-street freight loading spaces, the Code-compliant variant would feature two separate freight loading docks, each with one loading space, along the Tehama Street side of the building. One of the docks would be located as proposed under the project, at the eastern end of the project site's frontage along Tehama Street. The second dock would be located near the western end of the building, just east of the residential lobby. As the two docks would be located on either side of the landing area for the proposed parking elevators, the Code-compliant variant would not provide a passenger loading zone along Tehama Street. The residential lobby would also be reduced in size in order to accommodate the second dock, although a lobby entrance along Tehama Street would still be maintained as under the proposed project. The second dock would be served by a curb cut measuring approximately 21 feet in width, separate from the two curb cuts (27 feet and 13 feet in width) to serve the parking elevators and east loading dock as proposed under the proposed project. The development program would remain unchanged from the proposed project.

³ Email from Paul Kniha, SFMTA Color Curb Program Manager, December 1, 2016.

Figure 14. Site Plan for Code-compliant Variant



Comments: Not to Scale

Source: Renzo Piano Building Workshop, February 14, 2017

Open Spaces and Landscaping

The proposed project would include a total of approximately 8,751 square feet of open space, including 5,047 square feet of publicly and commonly accessible open space at Level 37, and 2,034 square feet of commonly accessible open space at Level 21. In addition, the project would provide a total of 1,670 square feet of non-compliant publicly and commonly accessible open space, including 1,440 square feet at Level 37 and 230 square feet at the ground-floor level along Howard Street.

The project would include sidewalk improvements, such as the installation of street trees, pervious paving, and furniture, and other public realm upgrades consistent with the public realm improvements called for in the TCDP. New street trees would be planted in accordance with Planning Code Section 138.1(c)(1).

Construction

Construction of the proposed project would take approximately 36 to 40 months. Excavation would be conducted to a maximum depth of approximately 70 feet below the ground surface for construction of the below-grade parking levels, which would result in the removal of approximately 29,000 cubic yards of soil. The proposed tower would be supported by a reinforced mat foundation that is eight feet thick at the northwest and southeast sides of the tower and 12 feet thick at the tower core. Impact piling driving is not proposed or required.

Project Vicinity

As noted above, the project site is within the TCDP area, which is centered on the new Transbay Transit Center site. The TCDP is a comprehensive plan for a portion of the southern downtown financial district and contains the overarching premise that to accommodate projected office-related job growth in the City, additional office development capacity must be provided in proximity to the City's greatest concentration of public transit service. The TCDP, which was adopted and became effective in September 2012, includes a comprehensive program of zoning changes, including elimination of the floor area ratio (FAR) maximums and increased height limits on certain parcels, including the project site. The TCDP's policies and land use controls allow for increased development and improved public amenities in the project area, with the intention of creating a dense transit-oriented district.

The project site is within Zone 2 of the adopted Transbay Redevelopment Area. At the time of redevelopment plan adoption, the San Francisco Redevelopment Agency implemented a Delegation Agreement with the Planning Department to generally assign responsibility and jurisdiction for planning, zoning, and project entitlements in Zone 2 of the redevelopment area to the Planning Department and Planning Commission. As such, the Planning Department retains land use authority within Zone 2 and this zone is governed by the Planning Code, as administered by the Planning Department and Planning Commission. Although California dissolved all California Redevelopment Agencies, effective February 1, 2012, this act did not result in changes to land use controls or project approval processes for projects proposed within Zone 2.

As noted above, the project site is within the C-3-O (SD) Downtown Office Special Development Use District, and is also within the Transit Center Commercial Special Use District (SUD), identified in the TCDP, in which the limits on non-commercial space apply (Planning Code Section 248). The project site is also located within the Transbay C-3 SUD, which is coterminous with Zone 2 of the Redevelopment Area and which contains additional land use controls to implement the Transbay Redevelopment Plan and its companion documents (Planning Code Section 249.28). In general, these controls require proposed

development within the SUD to undertake streetscape improvements, deposit fees into the Downtown Open Space Fund, pay other fees into the Citywide Affordable Housing Fund to construct affordable housing on-site, and (for any parcels adjacent or facing the new Transit Center and its ramp structures) provide active ground floor uses and direct pedestrian access from these areas to the ramps around the future Transit Center. Of note and as described in the Transbay Redevelopment Plan Section 4.9.3, the City's standard Inclusionary Housing Ordinance (Planning Code Section 415) does not apply to the project site. Instead, a minimum of 15 percent of all units constructed on-site must be "affordable" (as defined by the Transbay Redevelopment Plan), with no permitted off-site or "in lieu" fee payment. On-site rental units must be provided at a price affordable to households earning 60 percent of the area median income, while on-site ownership units must be provided at a price affordable to households earning 100 percent of the area median income. The proposed project would comply with these requirements.

In addition, the TCDP establishes new development impact fees to be collected from almost all development projects within the C-3-O (SD) District. These include the Transit Center District Open Space Impact Fee and Fund, Transit Center District Transportation and Street Improvement Impact Fee and Fund, and the Transit Center District Mello Roos Community Facilities District Program. The Transbay Transit Center building site is located north of the project site and extends from Beale Street westward almost to Second Street. Anticipated for completion in 2019, the five-story (three above ground) Transbay Transit Center will provide a one-million-square-foot regional bus and rail station with a five-acre public park atop the building.

Project Approvals

The proposed project would require the following approvals:

San Francisco Planning Commission

- Downtown Project Authorization, pursuant to Planning Code Section 309, with exceptions to the requirements for "Streetwall Base" and "Tower Separation" pursuant to Section 132; "Rear Yard" pursuant to Section 134; "Reduction of Ground-Level Wind Currents" in C-3 Districts pursuant to Section 148; "Off-Street Freight Loading" per Section 161; "Off-street Tour Bus Loading" per Section 162; "Upper Tower Extensions" per Section 263.9 and "Bulk" Controls per Section 270.
- Conditional Use Authorization to establish Hotel Use per Sections 210.2 and 303.
- Zoning Administrator consideration of Variance from Dwelling Unit Exposure, Street Frontage requirements, and Height Exemption for elevator mechanical equipment.

San Francisco Municipal Transportation Agency

- Approval of any necessary construction permits for work within roadways, if required.

San Francisco Department of Building Inspection

- Review and approval of building and demolition permits.

San Francisco Public Utilities Commission

- Review and approval of the stormwater management system to meet the Stormwater Design Guidelines.
- Review and approval of an Erosion and Sediment Control Plan in accordance with Article 4.1 of the San Francisco Public Works Code for construction activities.

San Francisco Department of Public Works

- Approval of any necessary construction permits for work within roadways.

Bay Area Air Quality Management District

- Approval of a permit to operate the proposed backup emergency generator.

The proposed project is subject to Downtown Project Authorization from the Planning Commission, which is the Approval Action for the project. The Approval Action date establishes the start of the 30-day appeal period for this CEQA exemption determination pursuant to Section 31.04(h) of the San Francisco Administrative Code.

EVALUATION OF ENVIRONMENTAL EFFECTS

This initial study evaluates whether the environmental impacts of the proposed project are addressed in the programmatic environmental impact report for the Transit Center District Plan (TCDP PEIR).⁴ The initial study considers whether the proposed project would result in significant impacts that: (1) are peculiar to the proposed project or project site; (2) were not identified as significant project-level, cumulative, or off-site effects in the PEIR; or (3) are previously identified significant effects, which as a result of substantial new information that was not known at the time that the TCDP PEIR was certified, are determined to have a more severe adverse impact than discussed in the PEIR.⁵ Such impacts, if any, will be evaluated in a project-specific, focused mitigated negative declaration or environmental impact report. If no such impacts are identified, no additional environmental review shall be required for the project beyond that provided in the TCDP PEIR and this project-specific initial study in accordance with CEQA section 21083.3 and CEQA Guidelines section 15183.

Mitigation measures identified in the PEIR are discussed under each topic area, and measures that are applicable to the proposed project are provided under the Mitigation Measures section at the end of this checklist.

The TCDP PEIR identified significant impacts related to aesthetics, cultural and paleontological resources, transportation, noise, air quality, shadow, wind, biological resources, and hazardous materials. Additionally, the PEIR identified significant cumulative impacts related to aesthetics, cultural and paleontological resources, noise, air quality, shadow, and wind. Mitigation measures were identified for the above impacts and reduced all impacts however, certain impacts related to aesthetics, cultural resources, transportation, noise, air quality, and shadow were determined to be significant and unavoidable.

The proposed project would involve the construction of a residential and hotel high-rise tower with approximately 80 dwelling units, 255 hotel rooms, and 6,100 square feet of retail use. As discussed below in this initial study, the proposed project would not result in new, significant environmental effects or effects of greater severity, otherwise acknowledged as “peculiar effects,” than were already analyzed and disclosed in the TCDP PEIR.

⁴ San Francisco Planning Department, Transit Center District Plan and Transit Tower Final Environmental Impact Report, Planning Department Case Nos. 2007.0558E and 2008.0789E, State Clearinghouse No. 2008072073, certified May 24, 2012. Available online at: <http://sf-planning.org/area-plan-eirs>, accessed May 3, 2016.

⁵ Significant refers to “significant effect on the environment,” defined as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance,” by the California Environmental Quality Act Section 15382.

Changes in the Regulatory Environment

Since the certification of the TCDP PEIR in 2012, several new policies, regulations, statutes, and funding measures have been adopted, passed, or are underway that affect the physical environment and/or environmental review methodology for projects in the TCDP plan area. As discussed in each topic area referenced below, these policies, regulations, statutes, and funding measures have or will implement mitigation measures or further reduce less-than-significant impacts identified in the PEIR. These include:

- State statute regulating Aesthetics and Parking Impacts for Transit Priority Infill,⁶ effective January 2014 (see associated heading below);
- San Francisco ordinance establishing Noise Regulations Related to Residential Uses Near Places of Entertainment effective June 2015 (see Checklist section “Noise”);
- San Francisco ordinance establishing Enhanced Ventilation Required for Urban Infill Sensitive Use Developments, effective December 2014 (see Checklist section “Air Quality”);
- San Francisco Resolution 19579, effected March 2016, which requires use of a vehicle miles traveled (VMT) metric instead of automobile delay to evaluate the transportation impacts of projects;
- Article 22A of the Health Code amendments effective August 2013 (see Checklist section “Hazardous Materials”).

Aesthetics and Parking

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

- a) The project is in a transit priority area;
- b) The project is on an infill site; and
- c) The project is residential, mixed-use residential, or an employment center.

The proposed project meets each of the above three criteria and thus, this checklist does not consider aesthetics or parking in determining the significance of project impacts under CEQA.⁷ Project elevations are included in the project description.

Automobile Delay and Vehicle Miles Traveled Analysis

In addition, CEQA Section 21099(b)(1) requires that the State Office of Planning and Research (OPR) develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects that “promote the reduction of greenhouse gas [GHG] emissions, the development of multimodal transportation networks, and a diversity of land uses.” CEQA Section 21099(b)(2) states that upon certification of the revised guidelines for determining transportation impacts pursuant to Section 21099(b)(1), automobile delay, as described solely by level of service or similar

⁶ Infill development refers to the construction of new housing, commercial, retail, industrial, or other land uses within an existing urban area with the intent of maximizing the potential of underutilized land.

⁷ San Francisco Planning Department. *Transit-Oriented Infill Project Eligibility Checklist for 555 Howard Street*, December 30, 2016.

measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment under CEQA.

In January 2016, OPR published for public review and comment a Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA recommending that transportation impacts for projects be measured using a VMT metric.⁸ On March 3, 2016, in anticipation of the future certification of the revised CEQA Guidelines, the San Francisco Planning Commission adopted OPR’s recommendation to use the VMT metric instead of automobile delay to evaluate the transportation impacts of projects (Resolution 19579). (Note: the VMT metric does not apply to the analysis of impacts on non-automobile modes of travel such as transit, walking and bicycling.) Therefore, impacts and mitigation measures from the TCDP PEIR associated with automobile delay are not discussed in this initial study, including **PEIR Mitigation Measures M-TR-1a** through **M-TR-1m**. Instead, a VMT and induced automobile travel impact analysis is provided in the Transportation section.

<i>Topics:</i>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
1. LAND USE AND LAND USE PLANNING—Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial impact upon the existing character of the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR analyzed the land use changes anticipated under the TCDP and determined that significant adverse impacts related to the division of an established community would not occur; the TCDP would not conflict with an applicable land use plan (including the General Plan); and the TCDP would not have a substantial impact on the existing character of the vicinity.

The project would add residential, hotel, and retail uses to the project site, all of which are uses that are anticipated under the TCDP for the project site and surrounding area. Because the potential future land uses at the project site would be the same as those evaluated for the area in the PEIR, there would be no significant land use impacts related to the proposed project.

The Citywide Planning and Current Planning divisions of the planning department have determined that the proposed project is permitted in the C-3-O(SD) Use District and the 350-S Height and Bulk District. Buildings in the C-3-O(SD) Zoning Districts do not have Floor Area Ratio (FAR) limits. However, to

⁸ This document is available online at: https://www.opr.ca.gov/s_sb743.php. Accessed December 19, 2016.

exceed a base FAR of 6.0 to 1 to 9.0 to 1, Transfer of Development Rights (TDR) must be transferred to the project site. To exceed a floor area ratio of 9.0 to 1, all projects must participate in the Transit Center Mello-Roos Community Facilities District as described in Planning Code Section 424.8. Since the project proposes an FAR exceeding 9.0 to 1 (approximately 30.0 to 1), TDR and participation in the Transit Center Mello-Roos District are required. Additionally, properties in S Bulk Districts may seek an upper-tower height extension of up to 10 percent pursuant to Planning Code Section 309, excluding exempted features listed in Planning Code Section 260(b). Since a 385-foot-tall tower is proposed, the project will be seeking an upper-tower height exception. Uses within the proposed building include residential, hotel, and commercial, which are all permitted within the C-3-O(SD) Use District. The proposed project is consistent with the uses and development density established by the Planning Code and the TCDP and therefore qualifies for a CPE pursuant to Section 15183 of the CEQA Guidelines.^{9,10}

Because the proposed project is consistent with the development density established in the TCDP, implementation of the proposed project would not result in significant impacts that were not identified in the TCDP PEIR related to land use and land use planning, and no mitigation measures are necessary.

Topics:	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
2. POPULATION AND HOUSING—				
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The key goal of the TCDP was to concentrate future employment growth where it is best served by public transit, through rezoning to allow increased density in the plan area. The TCDP PEIR found that with implementation of the TCDP there would be more than 9,470 new residents (in about 6,100 households) and more than 29,300 new employees in the plan area by 2030. As stated in the PEIR, the Planning Department forecasts that San Francisco’s total household population¹¹ would reach approximately

⁹ San Francisco Planning Department, *Community Plan Exemption Eligibility Determination, Citywide Planning and Policy Analysis, 555 Howard Street*, February 2, 2017.

¹⁰ San Francisco Planning Department, *Community Plan Exemption Eligibility Determination, Current Planning Analysis, 555 Howard Street*, February 8, 2017.

¹¹ Household population excludes about 2.5 percent of the City’s total population that lives in what the U.S. Census calls “group quarters,” including institutions (jails, nursing homes, etc.), college dormitories, group homes, religious quarters, and the like.

912,000 by 2030, an increase of some 132,500 residents from the 2005 total of 779,500.^{12,13} Employment in 2005 totaled approximately 552,000. The Department forecasts employment growth of 241,300 additional jobs by 2030, for a total of 793,300. The TCDP PEIR found that the increased employment and household population generated by the TCDP would be in line with regionally forecasted growth for the City, and that the TCDP would not create substantial new demand for housing or reduce the existing supply to the extent that would result in a significant impact.

The proposed project would involve the development of approximately 80 housing units, the majority of which would be market-rate. Assuming 1.55 persons per household, as estimated in the TCDP PEIR, the proposed project would accommodate approximately 124 people. By 2030, this population increase would amount to approximately 0.01 percent of the anticipated citywide population growth and 2.0 percent of the growth anticipated under the TCDP. The proposed project would also develop approximately 6,100 square feet of retail space and a 255-room hotel, which would generate approximately 242 total employees at full occupancy.¹⁴ Project related employment would be equivalent to 0.3 percent of the anticipated citywide growth by the year 2030, assuming that the proposed project attracted entirely new employees to San Francisco; in reality, some of these workers would likely have relocated from other jobs in San Francisco. Project-related employment growth would amount to approximately 0.83 percent of the growth anticipated in the TCDP. This employment increase would result in a demand for 104 new housing units.¹⁵ These direct effects of the project on population and housing are within the scope of the population growth anticipated under the TCDP and evaluated in the TCDP PEIR.

As discussed above, the project would include approximately 80 residential units. Of the total number of units, the project sponsor would provide up to 12 “affordable” housing units on-site (15 percent of the total number of residential units), as defined and required by the Transbay Redevelopment Plan. In addition, the project sponsor would pay the housing fees that are required of all commercial development citywide under Section 413.1 et seq., of the Planning Code, the Jobs-Housing Linkage Program. This would satisfy the City’s regulatory requirements to mitigate the impact of market-rate housing and retail development on the demand for affordable housing in San Francisco. Impacts would be less than significant.

There are no housing units on the site; therefore, the proposed project would not displace any existing housing units, and thus would not necessitate the construction of replacement housing elsewhere. The proposed project would not result in significant impacts on population and housing that were not identified in the PEIR, nor would the proposed project have more severe impacts than those identified in the PEIR. Furthermore, the proposed project would not contribute to any cumulative impacts on population and housing, business activity, and employment. The proposed project would have a less than significant impact, and no other mitigation measures would be required.

¹² Consistent with recent trends, this incremental growth is anticipated to occur in relatively smaller households; that is, growth would occur in households that would be smaller than the average household size in 2010 of 2.3 persons per household.

¹³ Because of the economic effects of the Great Recession, the Transit Center District Plan’s employment growth forecast is conservative, when compared to more recent projections. The projections for household growth remain generally accurate.

¹⁴ Employment calculations in this section are based on the City of San Francisco *Transportation Impact Analysis Guidelines*, which estimate an average density of 350 square feet per employee assigned to retail space (6,100 square feet), and 0.9 employees per hotel room (255 rooms).

¹⁵ Based on 57 percent of City workers who live in San Francisco, from 2010 Census data, 1.22 workers per household, and an assumed 8.3 percent vacancy factor.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
3. CULTURAL AND PALEONTOLOGICAL RESOURCES—Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Historic Architectural Resources

Direct Impacts

Pursuant to CEQA Guidelines Sections 15064.5(a)(1) and 15064.5(a)(2), historical resources are buildings, structures, or sites that are listed, or are eligible for listing, in the California Register of Historical Resources, are identified in a local register of historical resources, such as Articles 10 and 11 of the San Francisco Planning Code, or are otherwise determined by a lead agency to be “historically significant.” The TCDP PEIR determined that future development facilitated through the changes in use districts and height limits under the TCDP could have substantial adverse changes on the significance of historic architectural resources and on historical districts within the plan area. Although the precise nature of this impact could not be determined at the time, the PEIR determined that such an impact would be significant and unavoidable. To partially mitigate the impact, the PEIR identified **PEIR Mitigation Measures M-CP-3a: Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) Documentation, M-CP-3b: Public Interpretative Displays, M-CP-3c: Relocation of Historical Resources, and M-CP-3d: Salvage of Historical Resources.** These measures would reduce impacts to historic resources, but not to a level of less than significant.

The proposed project involves the demolition of three buildings. The 547 Howard Street building (“Greeley Building”) is a two-story brick commercial building that was constructed in 1907. The Greeley Building is one of many small-scale commercial or light industrial buildings constructed on the block between 1906 and 1913. Although the two-story commercial building exhibits common characteristics of commercial loft buildings constructed in the area, including its brick construction, stucco cladding, and Renaissance Revival detailing, it does not appear to be a particularly significant example of this style or building typology. The Greeley Building appears to retain a good level of integrity, including its integrity of design, materials, workmanship, location, and association. Its storefront has had minor alterations, such as the replacement of the doors. However, the structure’s setting and feeling has been impacted by the construction of the Transbay Terminal Building, which was completed in 1936 and about a block to the north, and the associated aboveground concrete viaduct that cuts through the block to its west.

The 555 Howard Street building (“Kahn Building”) is a three-story, reinforced concrete warehouse that was constructed in 1911. The Kahn Building first housed the warehouse and offices of the United Cigar Company, which occupied the building until the mid-1920s. Although the United Cigar Company was a major corporation that became a major player in San Francisco’s wholesale cigar market, the building did not house their first warehouse for their initial expansion from New York City to the West Coast, nor did it play a singular role in their expansion plans following the 1906 earthquake and fires. It was one of over twenty buildings the cigar company occupied following the disaster. The Kahn Building does not retain a sufficient level of integrity as the original steel-sash windows, a key character-defining feature of the building, have been replaced with metal-sash fixed and operable windows. However, the structure’s setting and feeling has been impacted by the construction of the nearby Transbay Terminal Building and the associated aboveground concrete viaduct.

The 557 Howard Street is a two-story brick commercial building designed in the Renaissance Revival style and was constructed in 1922. Although the building exhibits common characteristics of commercial loft buildings constructed in the area, it does not appear to be a particularly significant example of this style or building typology. The building appears to retain a high level of integrity, including its integrity of design, materials, workmanship, location, and feeling. The structure's setting has been impacted by the construction of the nearby Transbay Terminal Building and the associated aboveground concrete viaduct.

These three buildings were included in the Transbay Center Survey and were given a rating of ‘6Z’ (“Found ineligible for National Register, California Register, or Local designation through survey evaluation”).¹⁶ Therefore, the existing buildings on the project site are not considered historical resources pursuant to CEQA. The project site is not located within the boundaries of any identified historic district, including the eligible New Montgomery, Mission, and Second Historic District, which is approximately 120 feet to the west of the project site and physically separated by a viaduct that lies between the district and project site. Because the existing buildings are not within the boundaries of the historic district, they are not considered contributors to the district. Therefore, the project would not result in significant direct impacts on historic architectural resources. As such, the project site does not contain historical resources pursuant to CEQA, and **PEIR Mitigation Measures M-CP-3a, M-CP-3b, M-CP-3c, and M-CP-3d** are not applicable.

Indirect Impacts

The PEIR found that changes in height and bulk controls in the plan area could result in indirect impacts to historic architectural resources. Larger buildings of such a different scale from existing historic buildings could result in an adverse effect on the setting of those resources, particularly in or adjacent to historic districts. The PEIR determined that the impacts would be less than significant when considered in conjunction with other policies, including recognition and protection of historic resources, retention, and rehabilitation of significant resources, and the design review program and other processes implemented through Article 11 of the Planning Code.

The proposed project would include demolition of three buildings, which were determined to not be historical resources, and immediately adjacent to the east of the project site is the 543 Howard Street building, which is considered a historical resource. The 543 Howard Street building is a four-story,

¹⁶ Carey & Co, Inc., *Transbay Center Survey, Summary Report and DPR 523B forms*, March 23, 2010.

concrete commercial building designed in the Renaissance Revival style and constructed in 1925.¹⁷ Neither the project site nor the 543 Howard Street building is located within an historic district. The project would not cause material damage to the physical characteristics of 543 Howard Street and other nearby historic resources such that their historical significance and/or potential consideration for inclusion in the California Register of Historic Resources would be affected. In addition, the proposed project would not affect the integrity of a historic district. Therefore, the project would result in less-than-significant indirect impacts.

Construction Impacts

Construction activity can generate vibration that can cause structural damage to nearby buildings. As described in the TCDP PEIR, construction activity would result in a potentially significant impact on historic and potentially historic buildings, such as the 543 Howard Street building. **PEIR Mitigation Measures M-CP-5a: Construction Best Practices for Historical Resources** and **M-CP-5b: Construction Monitoring Program for Historical Resources** were identified to reduce impacts to a less-than-significant level by requiring contractors to implement best-management practices during construction, as well as perform pre-construction surveys of historical resources within 125 feet of a project site.

The proposed project would require demolition of three buildings and on-site excavation of approximately 70 feet below grade. The use of heavy construction equipment would result in a temporary increase in localized vibration, which could result in structural damage to nearby structures. If structural damage were to occur, these activities would result in a potentially significant impact on historic buildings near the project site, including the 543 Howard Street building which is immediately adjacent to the project site.¹⁸ Therefore, the proposed project would be subject to **PEIR Mitigation Measure M-CP-5a (Project Mitigation 1)** and **M-CP-5b (Project Mitigation Measure 2)** to reduce the potential for adverse impacts to nearby historic structures by requiring preconstruction surveys, monitoring of on-site vibration levels, other best management practices, and restoration of any changes to historic structures as a result of project construction identified during monitoring.¹⁹

In conclusion, the proposed project would not result in significant impacts on historic architectural resources that were not identified in the TCDP PEIR, nor would it result in substantially more severe impacts than previously identified in the PEIR.

Archeological Resources

The TCDP PEIR found that development under the TCDP could cause a substantial adverse change to the significance of archeological resources because the entire plan area could be considered generally sensitive for both prehistoric and historic-era archeological resources. The TCDP Archeological Resource Design and Treatment Plan (ARDTP) presented sensitivity assessments of five sites in the plan area, including the project site.²⁰ No prehistoric archaeological sites have been documented within the 555

¹⁷ The survey evaluation for 543 Howard Street building is available online at: <http://sfplanninggis.org/docs/DPRForms/3736111.pdf>. Accessed January 30, 2017.

¹⁸ Immediately east of the 543 Howard Street building are two additional historical resources located at 531 Howard Street and 527 Howard Street. Both of these buildings are located within 125 feet of the project site. Survey evaluations for these buildings are located at <http://sfplanninggis.org/docs/DPRForms/3736111.pdf> and <http://sfplanninggis.org/docs/DPRForms/3736111.pdf>. Accessed January 30, 2017.

¹⁹ Full text of all applicable mitigation measures is provided in the "Mitigation Measures" section below.

²⁰ San Francisco Planning Department, *Archaeological Research Design and Treatment Plan for the Transit Center District Plan Area, San Francisco, California*, prepared by Far Western Anthropological Research Group, Inc.; Past Forward, Inc.; and JRP Historical Consulting, LLC; February 2010.

Howard Street site, although two prehistoric sites (SFR-112 and SFR-135) and one historic-era site (SFR-119H) are located within the general vicinity. Due to development that has occurred at the project site, historic archeological potential is considered to be low.

PEIR Mitigation Measure M-CP-1: Subsequent Archeological Testing Program was identified to ensure that projects developed within the TCDP area are subject to preliminary archeological review by Planning Department archaeologists. Based on the ARDTP, the in-house review would identify any data gaps and require additional investigations to make an archeological sensitivity assessment. Planning Department archeologists completed an in-house review on April 4, 2016, and determined, in agreement with the ARDTP, that the project site is archeologically sensitive. Consistent with **PEIR Mitigation Measure M-CP-1**, projects found to have archeological sensitivity are required to prepare and implement an Archeological Testing Program (ATP), and projects found to require data recovery necessitate preparation of an Archeological Data Recovery Plan (ADRP). An Archeological Monitoring Plan (AMP) may also be required based on the outcome of the ATP and/or ADRP. The mitigation measure also states that any accidental discovery of human remains or potential associated funerary objects during soils-disturbing activity shall comply with all applicable laws.

As noted above, no prehistoric archeological sites have been documented within the project site. Given the project site's proximity to two prehistoric sites and one historic-era site, **PEIR Mitigation Measure M-CP-1 (Project Mitigation Measure 3)** is applicable.

Paleontological Resources

As stated in the PEIR, there are no known paleontological resources in the TCDP area. As discussed in the Geology and Soils section of this initial study, a preliminary geotechnical analysis specific to the project site was completed.²¹ The project site is blanketed by six to ten feet of fill consisting of loose to medium dense sand with varying amounts of clay, silt, gravel, brick fragments, shells, concrete, and wood. A layer of medium dense Dune Sand, between 12 and 14 feet thick, underlies the fill. Beneath the Dune Sand, five to 10 feet of generally medium stiff sandy clay (Marine Deposit) was encountered. The Colma Formation, which generally consists of medium dense to very dense sand, was encountered at about 24 to 30 feet bgs across the project site. The soil grades to dense at depths of 34 to 40 feet, then becomes very dense at depths of about 40 to 45 feet. The very dense Colma Formation sand has varying silt and clay content and extends to depths of 73 to 80 feet bgs. Sand does not typically contain paleontological resources, and the marine deposits are considered relatively young in age, and therefore unlikely to contain rare or important fossils. As a result, development of the project site would not affect paleontological resources.

²¹ Langan Treadwell Rollo, *Preliminary Geotechnical Evaluation for 555 Howard Street*, San Francisco, California, March 18, 2016.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
4. TRANSPORTATION AND CIRCULATION—Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR anticipated that growth associated with the zoning changes could result in significant impacts on transportation and circulation. The PEIR identified 23 transportation mitigation measures, including implementation of traffic management strategies, and traffic and transit improvements. Even with mitigation, however, the PEIR concluded that the significant adverse impacts on certain local intersections and transit, pedestrian, loading, and construction impacts would not be fully mitigated, and these impacts were identified as significant and unavoidable. Effects on emergency access were determined to be less than significant.

A transportation impact study (TIS) was prepared for the proposed project to evaluate potential project-specific effects and is summarized herein.²²

The TCDP area, including the project site, is not located within an airport land use plan area, or in the vicinity of a private airstrip. Therefore, topic 4c is not applicable.

Vehicle Miles Traveled Analysis

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at

²² AECOM, 555 Howard Street Transportation Impact Study, San Francisco, CA. February, 2017.

great distance from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, San Francisco has a lower VMT ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the City have lower VMT ratios than other areas of the City. These areas of the City can be expressed geographically through transportation analysis zones. Transportation analysis zones are used in transportation planning models for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

The San Francisco County Transportation Authority (Transportation Authority) uses the San Francisco Chained Activity Model Process (SF-CHAMP) to estimate VMT by private automobiles and taxis for different land use types. Travel behavior in SF-CHAMP is calibrated based on observed behavior from the California Household Travel Survey 2010–2012, Census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. SF-CHAMP uses a synthetic population, which is a set of individual actors that represents the Bay Area’s actual population, who make simulated travel decisions for a complete day. The Transportation Authority uses tour-based analysis for office and residential uses, which examines the entire chain of trips over the course of a day, not just trips to and from the project. For retail uses, the Transportation Authority uses trip-based analysis, which counts VMT from individual trips to and from the project (as opposed to entire chain of trips). A trip-based approach, as opposed to a tour-based approach, is necessary for retail projects because a tour is likely to consist of trips stopping in multiple locations, and the summarizing of tour VMT to each location would over-estimate VMT.^{23,24}

A project would have a significant effect on the environment if it would cause substantial additional VMT. The State Office of Planning and Research’s (OPR) Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA (“Proposed Transportation Impact Guidelines”) recommends screening criteria to identify types, characteristics, or locations of projects that would not result in significant impacts to VMT. If a project meets screening criteria, then it is presumed that VMT impacts would be less than significant for the project and a detailed VMT analysis is not required.

The proposed project includes residential, hotel, and retail use, and special events would be held in the hotel facilities. As trips for tourist hotels typically function similarly to residential, tourist hotels are generally treated as a “residential” use for the purpose of this VMT analysis. However, the maximum potential VMT effect generated by the hotel’s function and conference spaces would be reflective of a regional-draw event that would attract some attendees driving to and from the conference directly. In contrast, a national-scope or larger event would attract a majority of attendees from out-of-region areas, most of whom would be expected to stay in or near the venue and travel to and from the conference by

²³ To state another way: a tour-based assessment of VMT at a retail site would consider the VMT for all trips in the tour, for any tour with a stop at the retail site. If a single tour stops at two retail locations, for example, a coffee shop on the way to work and a restaurant on the way back home, then both retail locations would be allotted the total tour VMT. A trip-based approach allows us to apportion all retail-related VMT to retail sites without double-counting.

²⁴ San Francisco Planning Department. *Executive Summary: Resolution Modifying Transportation Impact Analysis*, Appendix F, Attachment A (March 3, 2016).

transit, on foot, or by taxi/rideshare, generally resulting in a lower daily average VMT per attendee. While the latter type of event would generate trips exhibiting behavior similar to a retail use, the former type of event can be expected to generate trips exhibiting behavior similar to an office use. As a result, the VMT analysis considers average daily VMT per capita or per employee for residential, retail, and office uses. These values for the Bay Area and for the transportation analysis zone (TAZ) containing the project site are summarized in Table 1, below.

Table 1: Daily Vehicle Miles Traveled

<u>Land Use</u>	<u>Existing</u>			<u>Cumulative 2040</u>		
	<u>Bay Area Regional Average</u>	<u>Bay Area Regional Average minus 15%</u>	<u>TAZ 730</u>	<u>Bay Area Regional Average</u>	<u>Bay Area Regional Average minus 15%</u>	<u>TAZ 730</u>
Households (Residential)	17.2	14.6	3.1	16.1	13.7	2.3
Employment (Office)	19.1	16.2	8.1	17.0	14.5	6.3
Employment (Retail)	14.9	12.6	9.6	14.6	12.4	8.7

As shown in Table 1, the existing average daily household VMT per capita is 3.1 for the transportation analysis zone the project site is located in, TAZ 730. This is 82 percent below the existing regional average daily household VMT per capita of 17.2. Future 2040 average daily household VMT per capita is 2.3 for TAZ 730. This is 86 percent below the future 2040 regional average daily household VMT per capita of 16.1. The existing average daily work-related VMT per office employee is 8.1 for TAZ 730. This is 58 percent below the existing average daily work-related VMT per office employee of 19.1. Future 2040 average daily work-related VMT per office employee is 6.3 for TAZ 730. This is 63 percent below the future 2040 regional average daily work-related VMT per office employee of 17.1.²⁵ The existing average daily work-related VMT per retail employee is 9.6 for TAZ 730. This is 36 percent below the existing average daily work-related VMT per retail employee of 14.9. Future 2040 average daily work-related VMT per retail employee is 8.7 for TAZ 730. This is 40 percent below the future 2040 regional average daily work-related VMT per retail employee of 14.6. Therefore, the project would not cause substantial additional VMT.

Induced Automobile Travel Analysis

A project would have a significant effect on the environment if it would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network. OPR's Proposed Transportation Impact Guidelines includes a list of transportation project types that would not likely lead to a substantial or measureable increase in VMT. If a project fits within the general types of projects (including combinations

²⁵ As stated above, although the project does not specifically propose office uses, average VMT per employee for office uses is being considered here because a regional-draw event in the hotel's function and conference spaces would generate trips exhibiting behavior similar to an office use in terms of mode share and trip distribution.

of types), then it is presumed that VMT impacts would be less than significant and a detailed VMT analysis is not required.

The proposed project is not a transportation project. However, the proposed project would include changes within the public right-of-way, such as replacement of existing curb cuts, conversion of on-street parking spaces to commercial and/or passenger loading zones, and installation of Class II bicycle parking and pedestrian amenities such as privately-owned public open space. These features fit within the general types of projects that would not substantially induce automobile travel, and the impacts would be less than significant.²⁶ Therefore, the project would not substantially induce automobile travel.

Trip Generation

The proposed project involves the construction of a new residential and hotel tower with approximately 80 residential units, 255 hotel rooms, and 6,720 square feet of retail space.²⁷ The localized person-trip generation for the proposed project was based on the weekday daily and p.m. peak hour rates documented in the *2002 Transportation Impacts Analysis Guidelines for Environmental Review* (SF Guidelines). The proposed project would generate an estimated 3,876 daily person trips (inbound and outbound), of which 1,608 would be transit trips, 1,108 would be auto trips, 1,003 would be pedestrian trips, and the remaining 157 trips would be by other modes of transportation, which includes bicycle trips. During the p.m. peak hour, the proposed project would generate an estimated 707 person trips, of which 320 would be transit trips, 208 would be auto trips, 152 would be pedestrian trips, and 27 would be by other trips. The project would generate an estimated 949 daily vehicle trips and 176 p.m. peak hour vehicle trips.

Transit

The TCDP PEIR found that growth associated with implementation of the TCDP would generate a substantial increase in transit demand that would result in significant and unavoidable impacts to the transit system due to lack of capacity to accommodate the increased demand, resulting in unacceptable levels of transit service and a substantial increase in delays or operating costs. The TCDP PEIR identified five mitigation measures (**M-TR-3a** through **M-TR-3e**) to reduce these impacts, including installation and operation of transit-only and queue-jump lanes, exclusive San Francisco Municipal Railway (Muni) use of Mission Street boarding islands, transit improvements on streets within the plan area, and two measures to provide increased transit funding. However, **PEIR Mitigation Measures M-TR-3a** through **M-TR-3e** were identified as being of uncertain feasibility and/or effectiveness or would not fully mitigate impacts; accordingly, effects on transit were determined to be significant and unavoidable. These measures are not applicable to the proposed project, as they are Plan-level mitigations to be implemented by City and County agencies. The San Francisco Municipal Transportation Authority (SFMTA) is implementing the Transit Effectiveness Project (TEP), which was approved by the SFMTA Board of Directors in March 2014. The TEP (now called Muni Forward) includes system-wide review, evaluation, and recommendations to improve service and increase transportation efficiency.

The project site is well-served by both local and regional transit service. Local public transit service to and from the project site is provided by Muni bus and rail lines, while regional public transit service is

²⁶ San Francisco Planning Department, *Eligibility Checklist for CEQA Section 21099: Modernization of Transportation Analysis*, 555 Howard Street, December 30, 2016.

²⁷ Trip generation for the proposed project includes the number of trips that a large conference event with 350 attendees could generate.

provided by a variety of transit operators including the San Francisco Bay Area Rapid Transit District (BART), the Alameda–Contra Costa Transit District (AC Transit), Golden Gate Transit, and the San Mateo County Transit District (SamTrans). The project site is located approximately two blocks from Market Street, which is Muni’s busiest transit corridor. Market Street is served by surface buses on high-frequency trunk lines radiating out to most of the City, as well as Muni Metro, operating six light rail lines underground through the Market Street Subway. Muni Metro’s closest station is Montgomery Station, which is approximately 850 feet to the north of the project site.

The proposed project would generate an estimated 320 new transit trips (44 inbound and 276 outbound) during the weekday p.m. peak hour. Transit trips to and from the project site would likely use the nearby Muni bus and light rail lines for local trips, and BART, AC Transit, Golden Gate Transit, Caltrain, and SamTrans for trips outside San Francisco. The project would increase ridership on the Muni screenlines, but would not directly cause any of the screenlines or corridors to exceed the 85 percent capacity utilization threshold. However, several corridors currently exceed the 85 percent capacity utilization threshold under existing conditions and would continue to do so under existing plus project conditions, including the Fulton/Hayes corridor (Northwest screenline) and Third Street corridor (Southeast screenline). The project would contribute 0.6 percent and 0.8 percent, respectively, of overall ridership on the Fulton/Hayes and Third Street corridors. The increase in transit ridership generated by the project represents less than five percent of the overall ridership on corridors that currently operate over the 85 percent capacity utilization threshold under existing conditions and would continue to do so under existing plus project conditions. As a result, the project would result in less-than-significant impacts to capacity utilization on Muni’s Downtown screenlines during the weekday p.m. peak hour. With respect to regional transit, project ridership would not result in exceedance of any operator’s standard.

Under cumulative conditions, a number of Muni corridors and screenlines would have ridership in excess of Muni’s standard and, as was identified in the PEIR, this would be a significant impact. However, in no case would project ridership exceed one percent on a particular corridor, and thus the project would not contribute considerably to the impact identified in the PEIR. With respect to regional transit, the transit riders generated by the project would account for a relatively small portion of the overall cumulative ridership totals. The project would not be cumulatively considerable with respect to cumulative impacts on regional transit ridership and capacity utilization during the weekday p.m. peak hour.

The project would not result in relocation or removal of any existing bus stops or other changes that would alter transit service. Additionally, while the project would add traffic to surrounding roadways, project-generated vehicle, bicycle, and pedestrian trips would not substantially affect transit operations on nearby routes.²⁸

Bicycles

The project site is served by multiple bikeway facilities, including the bike lane on Howard Street.²⁹ The project would result in approximately 27 “other” person-trips during the weekday p.m. peak hour, which all would be assumed to be bicycle trips. The project would provide a total of 95 Class 1 bicycle parking spaces in a below-grade garage and 25 Class 2 bicycle parking spaces would be located on the Howard Street sidewalk in front of the project site. While the project would increase the amount of bicycle traffic

²⁸ The Code-compliant variant would also result in less-than-significant impacts to transit operations as the development program would remain unchanged from the proposed project.

²⁹ The bike lane is located on the lane farthest away from the project site.

along streets in the vicinity of the project site, the addition of 27 p.m. peak hour bicycle trips would not be substantial enough to affect overall bicycle circulation or the operations of bikeway facilities. There would be sufficient capacity on existing bikeways to handle the incremental increase in bicyclists generated by the proposed development. As a result, the project would result in less-than-significant impacts to general bicycle conditions as a result of increased bicycle traffic.

The project would not create new sources of major conflict between vehicles and bicyclists. However, queuing at or near the building's parking elevators could result in temporary and minor disruptions to bicycle circulation along Tehama Street, primarily concentrated during periods of high vehicular traffic activity into and out of the garage. While these effects would be less-than-significant, improvement measures have been identified to further minimize any less-than-significant effects on bicycle conditions as a result of queuing at the proposed parking elevator along Tehama Street. **Improvement Measure 1: Queue Abatement** addresses compliance with the Planning Department's standard Condition of Approval regarding vehicle queue abatement at driveways and curb cuts and would ensure that vehicle queues do not block any portion of the roadway along Tehama Street. Additionally, improvement measures have also been identified to further minimize any less-than-significant effects on bicycle conditions as a result of the proposed passenger loading zones. **Improvement Measure 2: Passenger Loading Zone Management** monitors passenger loading activities at the proposed passenger loading zones to minimize any potential disruptions to bicycle circulation in the adjacent travel lane, and **Improvement Measure 3: Event-Related Transportation Demand Management** would address secondary effects on bicycle circulation along Howard Street or Tehama Street as a result of event-related activities.³⁰

Pedestrians

The PEIR concluded that the increased pedestrian activity that would result from TCDP implementation would degrade the level of service at sidewalks, street corners, and crosswalks within the Plan area and would result in a significant and unavoidable impact. **PEIR Mitigation Measure M-TR-4** was identified, whereby SFMTA would widen crosswalks in the Plan area; however, the impact remained significant and unavoidable. In addition, the TCDP PEIR concluded that the development of the large projects proposed in the Plan area, as well as lack of capacity to accommodate loading demands, would create potentially hazardous conditions for pedestrians, bicycles, traffic, and transit, resulting in significant and unavoidable impacts. **PEIR Mitigation Measures M-TR-5, M-TR-7a, and M-TR-7b** were identified to reduce impacts by requiring some projects to employ a parking garage and/or loading dock attendant, requiring some projects to develop a loading dock management plan, and encouraging SFMTA to increase the supply of on-street loading spaces; however, these impacts remained significant and unavoidable.³¹

The project would generate approximately 472 daily pedestrian trips, which includes 152 walk-only person-trips and 320 transit person-trips. The project does not propose any sidewalk widening, which would continue to feature sidewalk widths measuring approximately 12 feet on Howard Street and 7 feet on Tehama Street. While the project would generate pedestrian activity along the approximately seven-

³⁰ The Code-compliant variant would also result in less-than-significant impacts to bicycle conditions and the same improvement measures identified above would apply to minimize any less-than-significant effects on bicycle circulation.

³¹ PEIR Mitigation Measures M-TR-4 and TR-7b are not applicable to the proposed project since they are Plan-level mitigation that could be implemented by SFMTA.

foot-wide Tehama Street sidewalk, the majority of project-generated foot traffic would be expected to access the project site via Howard Street or Under Ramp Park. New pedestrian trips could be accommodated on the adjacent facilities and would not substantially affect pedestrian operations on nearby sidewalks or crosswalks.

Vehicle movements at the vehicle parking elevators and truck movements at the building's freight loading dock would involve vehicles crossing the sidewalk on the north side of Tehama Street. While not a high-volume pedestrian corridor in and of itself, Tehama Street provides important local access for adjacent properties and would provide direct access to Under Ramp Park.

The project would generate up to approximately 176 vehicle-trips during the weekday p.m. peak hour. The project would also generate a freight loading/service vehicle demand of approximately two spaces during the average hour and between two and three spaces during the peak hour. Vehicles entering or exiting the garage and trucks entering or exiting the freight loading dock on Tehama Street would disrupt pedestrian flow and would obstruct pedestrian circulation. Without proper management of valet operations at the parking elevators and adjacent areas along Tehama Street, residents and valet attendants may also intrude into or obstruct circulation in the sidewalk as they drop-off, stage, or pick-up vehicles. Given these considerations, the project would result in a significant impact to pedestrian conditions as a result of project-generated vehicle traffic and freight loading/service vehicle activities. Therefore, **PEIR Mitigation Measure Measures M-TR-5: Garage/Loading Dock Attendant (Project Mitigation Measure 4)** and **M-TR-7a: Loading Dock Management (Project Mitigation Measure 5)** would be applicable. These measures would ensure that the operation of the building's parking garage and freight loading dock would not introduce hazards for or substantially interfere with pedestrians traveling along Tehama Street. These mitigation measures would deploy building personnel, such as a garage/loading dock attendant, to direct vehicles entering and exiting the building to avoid any safety-related conflicts with pedestrians and develop a plan to manage garage and loading dock activity, which could include time-based restrictions, coordination of move-in/move-out activities and Recology waste collection, or other strategies. With implementation of **Project Mitigation Measures 4 and 5**, the impact would be reduced to a less-than-significant level.

The project would also provide an 80-foot-long passenger loading zone on Howard Street and a 30-foot-long passenger loading zone on Tehama Street, as tentatively agreed by SFMTA.³² There is some potential that passenger loading activities in the proposed zones could disrupt pedestrian circulation in the sidewalk, particularly during periods of high pedestrian activity or during events held in the hotel's function and conference spaces. Given the nature of passenger loading activities, any such effects would likely be only minor and temporary in duration.

While there may be some concentrated passenger pick-up taking place at the Howard Street passenger loading zone at the conclusion of events hosted at the hotel, these activities would be spread over the course of the post-event period and would be unlikely to result in substantial disruptions to pedestrian circulation, given the expected attendance for typical events. Valet and hotel staff would also be regularly stationed at the Howard Street passenger loading zone and would be able to ensure that any event-related passenger loading takes place without adverse effects on pedestrian circulation or other modes, similar to operations at other hotels in the Downtown area. Even assuming that the zone is occasionally used for tour bus loading activities generated by the hotel, valet and hotel staff would be present at the

³² Email from Paul Kniha, SFMTA Color Curb Program Manager, December 1, 2016.

Howard Street zone during these activities to help minimize adverse effects on other modes, such that the potential effects of loading activities to pedestrian circulation and safety and effects on other modes would constitute a less-than-significant impact.

To further minimize any less-than-significant effects on pedestrian conditions as a result of the proposed parking elevators, freight loading dock, and passenger loading zones, the following improvement measures have been identified: **Improvement Measures 1: Queue Abatement** addresses compliance with the Planning Department's standard Condition of Approval regarding vehicle queue abatement at driveways and curb cuts and would ensure that vehicle queues do not block any portion of the sidewalk along Tehama Street; **Improvement Measure 2: Passenger Loading Zone Management** monitors passenger loading activities at the proposed passenger loading zones to minimize any potential disruptions to pedestrian circulation; and **Improvement Measure 3: Event-Related Transportation Demand Management** addresses secondary effects on pedestrian circulation along Howard or Tehama streets as a result of event-related activities.

The Code-compliant variant would replace the passenger loading zone along Tehama Street with a 21-foot-wide curb cut to serve a second off-street freight loading space (the first off-street loading space would be located in the same location as under the proposed project). This change would increase the total width of frontage along Tehama Street devoted to curb cuts for automobile parking or freight loading/service vehicle access from approximately 40 feet to approximately 61 feet. As a result, the majority of the building's Tehama Street frontage under the Code-compliant variant would be occupied by curb cuts, increasing the potential for vehicle-pedestrian conflicts in the sidewalk along Tehama Street. In addition, a second, independently accessible off-street freight loading space would also increase potential conflicts between pedestrians in the sidewalk and trucks or service vehicles attempting to enter or exit the building. If some or all of the residential passenger loading and valet operations are shifted off of Tehama Street, any increased passenger loading activity at the Howard Street passenger loading zone would also increase the potential for disruptions to pedestrian circulation in the adjacent sidewalk. Events held in the hotel's function and conference spaces could exacerbate these effects. Similar to the proposed project, **PEIR Mitigation Measure Measures M-TR-5: Garage/Loading Dock Attendant (Project Mitigation Measure 4)** and **M-TR-7a: Loading Dock Management (Project Mitigation Measure 5)** would apply to the Code-compliant variant. **Improvement Measure 1: Queue Abatement, Improvement Measure 2: Passenger Loading Zone Management** and **Improvement Measure 3: Event-Related Transportation Demand Management** were also identified for the Code-compliance variant.

Freight Loading / Service Vehicles

The project would be required to provide a total of two off-street freight loading spaces per Planning Code Section 161. As the project would only provide one space, the project sponsor plans to seek an exception for one of the required off-street freight loading spaces pursuant to Planning Code Section 309.

The project would generate a freight loading/service vehicle demand of approximately two spaces during the average hour and between two and three spaces during the peak hour. The project would provide an off-street loading dock along Tehama Street housing one freight loading space measuring 12 feet wide, 35 feet long, and 14 feet tall. The project's proposed supply of one freight loading space would fall short of the average-hour and peak-hour freight loading/service vehicle demand. However, approximately two-thirds (67 percent) of daily service vehicle activity typically consists of vehicle types similar to personal (household) automobiles, including 25 percent consisting of cars and pickups and 42 percent consisting of vans. These vehicles would have the option of using on- or off-street parking spaces (including off-street spaces in the building's garage), and would not be required to use the building's

freight loading dock. These vehicle types are also substantially more maneuverable than larger vehicles, and would not have difficulty entering or exiting the building's dock. The remaining 33 percent of daily service vehicle activity, corresponding to up to one truck during the average hour and peak hour of freight loading/service vehicle activity, would consist of larger vehicles needing to use the building's freight loading dock or nearby on-street commercial loading zones.

While the project would only formally provide a single off-street freight loading space, the loading dock would have sufficient depth to accommodate an additional large truck in a tandem configuration. While the inner space would not be independently accessible in this configuration, the building's dock could feasibly accommodate up to two large trucks (or, alternatively, a large truck and two small service vehicles, or three small service vehicles) under conditions where independent access is not required. Because the inner space would not be independently accessible, however, this tandem configuration would not be considered compliant with the Planning Code. Therefore, the building would be considered to have only one space for the purposes of evaluating Planning Code compliance.

Trucks attempting to enter the building's loading dock would stop west of the curb cut and reverse into the dock. Truck maneuvers into and out of the building's loading dock would disrupt pedestrian flow and obstruct pedestrian circulation in the sidewalks along Tehama Street. Truck drivers may also have difficulty seeing pedestrians adjacent to or immediately in front of the path of a truck reversing into the dock due to blind spots, and trucks exiting the dock may intrude into the sidewalk and curb cut as they attempt to check for oncoming vehicular traffic. Because of the limited sidewalk width along Tehama Street, pedestrians in these situations may be forced to enter the roadway or cross into the freight loading dock or parking elevator area to bypass stopped service vehicles or trucks blocking the north sidewalk. The overhang on trucks entering or exiting the dock may also temporarily intrude into portions of the opposite (south) sidewalk, which would result in similar disruptions to pedestrian circulation along the south side of Tehama Street.

As a result, the project would result in a significant impact related to loading dock operations. Therefore, **PEIR Mitigation Measures M-TR-5: Garage/Loading Dock Attendant (Project Mitigation Measure 4)** and **Mitigation Measure M-TR-7a: Loading Dock Management (Project Mitigation Measure 5)** are applicable. **Project Mitigation Measures 4** and **5** would reduce potential for conflicts generated by delivery/service vehicles with vehicles entering/exiting the garage—as well as with vehicles, bicyclists, and pedestrians traveling along Tehama Street—and would facilitate safe and efficient dock ingress and egress for trucks. These mitigation measures would deploy building personnel, such as a garage/loading dock attendant, to assist in the truck maneuvers and would develop a plan to manage garage and loading dock activity, which could include time-based restrictions, coordination of move-in/move-out activities, and Recology waste collection. With implementation of **Project Mitigation Measures 4** and **5**, the impact would be reduced to less-than-significant levels.

The Code-compliant variant would provide a total of two independently accessible off-street freight loading spaces, and would be fully compliant with the Planning Code requirements regarding off-street freight loading spaces. The two spaces under the Code-compliant variant would also be sufficient to meet the estimated freight loading/service vehicle demand of approximately two spaces during the average hour and would largely meet the estimated demand of between two and three spaces during the peak hour.

The second loading space and dock would help reduce potential disruptions to traffic, bicycle, and pedestrian circulation as a result of trucks and service vehicles double-parking, parking in the sidewalk,

or otherwise parking illegally along Tehama Street and/or Howard Street. Trash, recycling, and compost collection and residential move-in/move-out activities would take place as under the proposed project, although the Code-compliant variant would have a second off-street freight loading space to help accommodate additional move-in/move-out activities.

However, due to the presence of two separate loading docks along Tehama Street, the Code-compliant variant would result in an increased potential for conflicts between truck movements into and out of the building's docks and other activities taking place along Tehama Street. In particular, the Code-compliant variant would likely exacerbate the various effects of the proposed project, including disruptions to traffic, bicycle, and pedestrian circulation along Tehama Street and conflicts with valet operations and vehicle ingress/egress at the building's parking elevators. Therefore, **Project Mitigation Measures 4 and 5** would also be applicable to the Code-compliance variant to reduce freight loading and service vehicle impacts to a less-than-significant level.

Emergency Vehicles

Emergency vehicle access to the project site is from Howard and Tehama streets. The four nearest SFFD fire stations are located approximately 0.7 miles or less from the project site, and include Station 35 (Pier 22½, The Embarcadero at Harrison Street), Station 13 (530 Sansome Street at Washington Street), Station 1 (935 Folsom Street at Fifth Street), and Station 8 (36 Bluxome Street at 4th Street). Some emergency vehicles such as ladder trucks may experience some difficulties negotiating turns into and out of Tehama Street, but would not be precluded from access. During the weekday a.m. and p.m. peak periods, general traffic congestion in the vicinity of the Project site can also result in some delay to emergency vehicle response. The project would meet the requirements of the San Francisco Fire Code with respect to fire apparatus access. The project does not propose any modifications to the roadway network, and emergency vehicles would continue to be able to access the site and surroundings as they currently do. While the project would result in a slight increase in traffic levels on the surrounding roadway network, this increase would not be substantial enough to produce a material effect on overall emergency vehicle access to the area. The project would have less-than-significant impacts related to emergency vehicle access.³³

Construction

The PEIR determined that construction of individual projects within the Plan area, with ongoing construction of the Transbay Transit Center, could disrupt nearby streets, transit services, and pedestrian and bicycle circulation. **PEIR Mitigation Measure M-TR-9** was identified to reduce impacts by requiring individual development projects within the TCDP area to develop a construction management plan. Even with implementation of **PEIR Mitigation Measure M-TR-9**, the impact was considered significant and unavoidable.

Construction activities are anticipated to take place over a period of approximately 36 to 40 months. Construction staging would occur primarily within the confines of the project site, although the sidewalk fronting the site along Howard Street and/or Tehama Street may need to be closed temporarily. Any closures along Howard Street would likely require the temporary closure of the adjacent parking lane to maintain pedestrian access but would likely otherwise have little effect on roadway capacity. It is anticipated that no roadways or travel lanes would need to be closed and no transit service or bus stops

³³ The Code-compliant variant would also have less-than-significant impacts related to emergency vehicle access.

would need to be rerouted or relocated during the construction period. However, any temporary traffic and transportation changes must be coordinated through SFMTA’s Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT).

Construction truck traffic could result in minor congestion and conflicts with vehicles, transit, pedestrians, and bicyclists. Potential impacts would be considered less-than-significant due to their temporary and limited duration and due to the fact that the majority of construction activity would occur during off-peak hours, when traffic volumes are minimal and potential for conflicts is low.

Project construction activities would need to be coordinated with any construction activities taking place simultaneously in the surrounding area, potentially including (but not limited to) development proposals at 41 Tehama Street, 524 Howard Street, Transbay Parcel F, and work related to the Transbay Transit Center. Project construction activities could potentially result in a significant impact to traffic, transit, pedestrian, and bicycle circulation if they take place concurrently with nearby projects. Therefore, **PEIR Mitigation Measure M-TR-9: Construction Coordination (Project Mitigation Measure 6)** is applicable to the proposed project. Specifically, the mitigation measure would require development of a Construction Management Plan that could include time-based restrictions on construction truck movements, identification of optimal truck routes to and from the project site, encouragement of transit use among construction workers, coordination with City agencies and construction contractors in the surrounding area, and other strategies to minimize disruptions to traffic, transit, bicycle, and pedestrian circulation. Implementation of **Project Mitigation Measure 6** would reduce the potential transportation impacts from project construction activities to less-than-significant levels.³⁴

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
5. NOISE—Would the project:				
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

³⁴ Project Mitigation Measure 6 would also be applicable to the Code-compliant variant to reduce construction impacts to a less-than-significant level.

<u>Topics:</u>	<u>Significant Impact Peculiar to Project or Project Site</u>	<u>Significant Impact not Identified in PEIR</u>	<u>Significant Impact due to Substantial New Information</u>	<u>No Significant Impact not Previously Identified in PEIR</u>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Be substantially affected by existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR noted that noise levels adjacent to all major streets in the TCDP plan area from Main Street to the west exceed the level, 70 decibels (dBA) L_{dn} , at which the General Plan noise compatibility guidelines recommend that new residential construction should be undertaken only following completion of a detailed analysis of noise reduction requirements.^{35,36} The PEIR identified significant impacts related to the introduction of new sensitive uses that would be affected by existing noise levels and to the exposure of persons to noise levels in excess of standards in the General Plan. The PEIR also noted that TCDP implementation may also result in temporary significant and unavoidable construction noise and vibration impacts from pile driving and other construction activities.

The TCDP PEIR included several mitigation measures (some of which are intended to guide the analysis of individual projects within the TCDP plan area and others that are intended to be implemented during the design and construction of a respective project). These mitigation measures include the following: noise surveys for residential uses (**PEIR Mitigation Measure M-NO-1a**), implementation of certain noise minimization measures to meet residential and non-residential noise standards (**PEIR Mitigation Measure M-NO-1b** and **M-NO-1c**), and noise minimization measures to meet mechanical equipment noise standards (**PEIR Mitigation Measure M-NO-1d** and **M-NO-1e**).³⁷ The proposed project would not include non-residential sensitive receptors, such as child care centers, school, or libraries; as a result, **PEIR Mitigation Measure M-NO-1c** would not be applicable.

With respect to construction noise, the PEIR determined that construction activities in the Plan area could expose persons to temporary increases in noise levels substantially in excess of ambient levels, but that these impacts could be mitigated to less-than-significant levels with implementation of certain noise control measures during pile driving (**PEIR Mitigation Measure M-NO-2a**) and other general

³⁵ The dBA, or A-weighted decibel, refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies. On this scale, the normal range of human hearing extends from about 0 dBA to about 140 dBA. A 10-dBA increase in the level of a continuous noise represents a perceived doubling of loudness.

³⁶ Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dBA increment be added to “quiet time” noise levels to form a 24-hour noise descriptor, such as the day-night noise level (L_{dn}), which is used by the San Francisco Noise Ordinance. L_{dn} adds a 10-dBA nighttime penalty during the night hours (10:00 p.m. to 7:00 a.m.).

³⁷ TCDP PEIR Mitigation Measure M-NO-1b addresses the siting of residential open space in noisy environments. Based on a recent California Supreme Court decision, the effect of existing environmental noise on the proposed project would not be considered significant under CEQA *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369; 17 December 2015. Available at: <http://www.courts.ca.gov/opinions/documents/S213478.PDF>. Therefore, TCDP Mitigation Measure M-NO-1b is not applicable.

construction noise control measures (**PEIR Mitigation Measure M-NO-2b**). The PEIR determined that construction activities could expose people to temporary increases in vibration levels that would be substantially in excess of ambient levels, which would result in significant and unavoidable vibration impacts. The PEIR acknowledged that specific projects may reduce vibration impacts to less than significant through adoption of **PEIR Mitigation Measures M-NO-2a, M-CP-5a, and M-CP-5b**; however, as noted above, the PEIR determined that program-level impacts would remain significant and unavoidable.

New Sensitive Uses

Implementation of the proposed project would add new residential uses on-site. The proposed project would be subject to the following interior noise standards, which are described for informational purposes. The California Building Standards Code (Title 24) establishes uniform noise insulation standards. The Title 24 acoustical requirement for residential structures (including hotels) is incorporated into Section 1207 of the San Francisco Building Code and requires these structures be designed to prevent the intrusion of exterior noise so that the noise level with windows closed, attributable to exterior sources, shall not exceed 45 dBA in any habitable room. In compliance with Title 24, the Department of Building Inspection (DBI) would review the final building plans to ensure that the building wall, floor/ceiling, and window assemblies meet Title 24 acoustical requirements. If determined necessary by DBI, a detailed acoustical analysis of the exterior wall and window assemblies may be required. The regulations and procedures set forth by Title 24 would ensure that existing ambient noise levels would not adversely affect the proposed residential uses on the project site. Therefore, **PEIR Mitigation Measures M-NO-1a and M-NO-1d** are not applicable.

Additionally, the proposed project would be subject to the Noise Regulations Relating to Residential Uses Near Places of Entertainment (Ordinance 70-15, effective June 19, 2015). The intent of these regulations is to address noise conflicts between residential uses in noise critical areas, such as in proximity to highways and other high-volume roadways, railroads, rapid transit lines, airports, nighttime entertainment venues or industrial areas. In accordance with the adopted regulations, residential structures to be located where the day-night average sound level (Ldn) or community noise equivalent level (CNEL) exceeds 60 decibels shall require an acoustical analysis with the application of a building permit showing that the proposed design would limit exterior noise to 45 decibels in any habitable room. Furthermore, the regulations require the Planning Department and Planning Commission to consider the compatibility of uses when approving residential uses adjacent to or near existing permitted places of entertainment and take all reasonably available means through the City's design review and approval processes to ensure that the design of new residential development projects take into account the needs and interests of both the places of entertainment and the future residents of the new development. The project site is located within 300 feet of two Places of Entertainment: Kate O'Brien's Irish Bar and Restaurant at 577 Howard Street and Temple Nightclub at 560 Howard Street.

Building Operation and Traffic Noise

The proposed project includes the installation of two cooling towers on the west side of the proposed 37th floor, approximately 385 feet above grade.³⁸ The cooling towers would be surrounded by an absorptive equipment screen to reduce noise impact to the proposed roof terrace. In compliance with **TCDP FEIR Mitigation Measure M-NO-1e**, a noise technical memorandum was prepared to assess the potential for project-generated noise sources to affect nearby sensitive receptors.³⁹ The memorandum determined that

³⁸ The rest of the mechanical equipment, including the back-up generator, would be located in basement levels.

³⁹ Charles M. Salter Associations, Inc., *555 Howard Street, Noise Mitigation Compliance Letter*, December 6, 2016.

the existing ambient noise level in the area of the proposed roof-top equipment would be 52.5 dBA and that the project's operational stationary sources could result in a combined noise level of 55 dBA. The nearest noise sensitive land use would be the proposed 45-story residential tower at 524 Howard Street, which is approximately 150 feet to the northeast of the project site.⁴⁰ The predicted noise level of the cooling towers at the façade of the proposed residential tower at 524 Howard Street would be 53 dBA. The location of the proposed mechanical equipment would not adversely affect existing sensitive uses or future sensitive uses at 524 Howard Street.

The proposed rooftop equipment would be subject to Section 2909 of the City's Noise Control Ordinance, which limits noise levels from stationary-source equipment at the respective property line to no more than 5 dBA above ambient noise levels. The noise memorandum demonstrates that the proposed project would not exceed the 5 dBA threshold. The ambient noise level is 52.5 dBA and the noise level of the rooftop equipment would be 55 dBA, which is under the 57.5 dBA threshold. The predicted noise level at the proposed 524 Howard Street tower would be 52.5 dBA, which is 4.5 dBA below the threshold. The Noise Control Ordinance would require the project sponsor to retain an acoustical consultant to measure the sound levels of operating exterior equipment within 30 days after installation. If exterior equipment meets sound-level standards identified in the Noise Control Ordinance, no further action is required. If sound-level standards are not met, the project sponsor would be required to replace and/or redesign the exterior equipment to meet those standards. Therefore, noise levels generated by the project's stationary equipment would be reduced to the extent feasible through building design and compliance with the City's Noise Control Ordinance.

The proposed project would generate 949 daily vehicle trips within the plan area, including 176 during the p.m. peak hour. As such, the proposed project would contribute to the significant impact, identified in the PEIR, related to the exposure of persons to noise levels in excess of standards in the General Plan. Because traffic generated by the proposed project would result in less than 1 dB increase in traffic noise, which would not be noticeable, the proposed project's contribution to this impact would not be considerable and no new or more severe impacts would occur.

Construction Noise and Vibration

Construction activities under the proposed project would last for approximately 36 to 40 months and would include several noise and vibration-creating phases, including demolition of the existing buildings, excavation, and building construction. Since the proposed project would not involve pile-driving, **PEIR Mitigation Measure M-NO-2a** is not applicable. Since heavy equipment would be used during excavation and construction of the proposed tower, **PEIR Mitigation Measure M-NO-2b (Project Mitigation Measure 7)** is applicable. **Project Mitigation Measure 7** would require general construction noise control measures. The PEIR concluded that cumulative construction noise impacts could occur if multiple projects, located adjacent to the Transbay Transit Center, were under construction at the same time. To address these impacts, PEIR identified **Mitigation Measure M-C-NO: Cumulative Construction Noise Control Measures**. At this time there is no existing City-sponsored construction noise control program for the TCDP area or other area-wide program developed to reduce the potential effects of construction noise in the project vicinity. Therefore, the **Mitigation Measure M-C-NO** is not applicable.

With implementation of **Project Mitigation Measure 7**, cumulative construction noise impacts would be reduced, but depending on the timing and location of the construction of various projects, the impact

⁴⁰ There are no existing sensitive receptors within 300 feet of the project site.

could still be significant. Therefore, the mitigated project may still contribute to a significant and unavoidable cumulative impact given the amount of construction occurring in the surrounding area. As noted above, this impact was identified as significant and unavoidable in the TCDP PEIR and thus the proposed project would not result in new or more severe impacts than the significant and unavoidable cumulative impacts identified in the PEIR.

The operation of heavy equipment during construction could result in excessive levels of vibration that could contribute to structural damage of potentially historic structures nearby, including the 543 Howard Street building which is immediately adjacent to the project site. As stated in the TCDP PEIR, this impact would be temporary but could be considered substantial should nearby structures be damaged. However, **PEIR Mitigation Measures M-CP-5a: Construction Best Practices for Historical Resources (Project Mitigation Measure 1)** and **M-CP-5b: Construction Monitoring Program for Historical Resources (Project Mitigation Measure 2)** would be implemented to reduce the potential for damage and ensure that any damage that may occur is repaired. Implementation of these measures would reduce the impacts of construction-related groundborne vibration on historic structures to a less-than-significant level.

All construction activities for the proposed project would be subject to the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code) (Noise Ordinance). Construction noise is regulated by the Noise Ordinance. The Noise Ordinance requires that construction work be conducted in the following manner: (1) noise levels of construction equipment, other than impact tools, must not exceed 80 dBA at a distance of 100 feet from the source (the equipment generating the noise); (2) impact tools must have intake and exhaust mufflers that are approved by the Director of the Department of Public Works (DPW) or the Director of the Department of Building Inspection (DBI) to best accomplish maximum noise reduction; and (3) if the noise from the construction work would exceed the ambient noise levels at the site property line by 5 dBA, the work must not be conducted between 8:00 p.m. and 7:00 a.m. unless the Director of DPW authorizes a special permit for conducting the work during that period.

DBI is responsible for enforcing the Noise Ordinance for private construction projects during normal business hours (8:00 a.m. to 5:00 p.m.). The Police Department is responsible for enforcing the Noise Ordinance during all other hours. Nonetheless, during the approximately 36- to 40-month construction period for the proposed project, occupants of the nearby properties could be disturbed by construction noise. Times may occur when noise could interfere with indoor activities in nearby residences and other businesses near the project site. The increase in noise in the project area during project construction would not be considered a significant impact of the proposed project, because the construction noise would be temporary, intermittent, and restricted in occurrence and level, as the contractor would be required to comply with the Noise Ordinance and **PEIR M-NO-2b (Project Mitigation Measure 8)**, which would reduce construction noise impacts to a less-than-significant level.

The project site is not located within an airport land use plan area, within two miles of a public airport, or in the vicinity of a private airstrip. Therefore, topics 12e and 12f are not applicable.

<i>Topics:</i>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
6. AIR QUALITY—Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR identified significant and unavoidable air quality impacts related to exposure of existing and future sensitive receptors, such as residences and child care centers, to emissions of fine particulate matter (PM_{2.5}) and toxic air contaminants (TACs) as a result of existing and future mobile (vehicular travel) and stationary (generators, boilers, and cogeneration facilities) sources within and adjacent to the TCDP. **PEIR Mitigation Measure M-AQ-2** was identified to reduce impacts to sensitive receptors through the implementation of a risk and hazard overlay zone, within which certain health risk reduction policies would apply. **PEIR Mitigation Measure M-AQ-3** was identified to require site-specific analyses of on-site stationary sources and implement measures to reduce health risks where necessary; however, the PEIR determined that impacts at the program level would remain significant and unavoidable.

The TCDP PEIR also determined that future construction activity would result in significant and unavoidable impacts related to the generation of criteria air pollutants and exposure of sensitive receptors to TACs. **PEIR Mitigation Measures M-AQ-4a** and **M-AQ-5** were identified to reduce project-specific impacts associated with the operation of construction vehicles. The PEIR determined that impacts at the program level would remain significant and unavoidable. In general, with respect to air quality, the PEIR found that project-specific impacts may be reduced to less than significant with mitigation incorporated.

Construction Dust Control

The TCDP PEIR determined that emissions from fugitive dust would be less than significant with implementation of the San Francisco Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) and **PEIR Mitigation Measure M-AQ-4b: Dust Control Plan**. **PEIR Mitigation Measure M-AQ-4b** applies to sites that are too small (one-half acres or less) to be subject to the Dust Control Ordinance and requires such projects to develop and implement a dust control plan as set forth in Article 22B of the San Francisco Health Code. Since the project site is approximately 0.33 acres in size and would remove more than 5,000 cubic yards of soil, **PEIR Mitigation Measure M-AQ-4b (Project Mitigation 8)** is applicable. Implementation of **Project Mitigation Measure 8** would require the implementation of certain dust control measures to reduce construction-related dust to a less-than-significant level.

Construction Criteria Air Pollutant Emissions

Construction activities from the proposed project would result in the emission of criteria air pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. Construction of the proposed project would occur over approximately 36 to 40 months. Since the project involves more than 10,000 cubic yards of soil removal, the proposed project would exceed the BAAQMD screening levels and would contribute to the significant construction criteria air pollutant impact identified in the PEIR. Therefore, the proposed project would be subject to **PEIR Mitigation Measures M-AQ-4a (Project Mitigation 9) and M-AQ-5 (Project Mitigation Measure 10)**, which would address construction criteria air pollutant impacts.

Operational Criteria Air Pollutant Emissions

While the PEIR determined that at a program-level the TCDP would result in less-than-significant regional air quality impacts, the PEIR states that, "It is possible that individual development projects, if large enough, could result in significant effects related to emissions of criteria air pollutants, even if the [TCDP] is determined to have a less than significant impact."⁴¹ The BAAQMD's CEQA Air Quality Guidelines (Air Quality Guidelines) provide screening criteria⁴² for determining whether a project's criteria air pollutant emissions would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. Pursuant to the Air Quality Guidelines, projects that meet the screening criteria would not have a significant impact related to criteria air pollutants. Criteria air pollutant emissions during operation of the proposed project would not exceed the Air Quality Guidelines screening criteria (511 high-rise residential dwelling units or a 489-room hotel). Because the project includes a residential and hotel component, the combined percentage of the two uses was considered when evaluating the screening criteria. For the purposes of this analysis and to take into consideration different pollutant emission levels by use type, a combined percentage of 90 percent or higher would be considered an indication of a potential violation of an air quality standard. Therefore, the project represents 52 percent (i.e. 255 of 489) of the hotel screening criterion and 16 percent (i.e. 80 of 511) of the high-rise residential screening criterion, for a combined total of 68 percent. Therefore, the project would not have a significant impact related to criteria air pollutants, and a detailed air quality assessment is not required.

Health Risk

The PEIR evaluated the health risk impacts of the Plan upon new sensitive receptors and from new sources of fine particulate matter and toxic air contaminants. The PEIR identified a significant and unavoidable impact in regards to health risks from locating sensitive receptors in areas with high levels of fine particulate matter and toxic air contaminants and exposing existing and future sensitive receptors to significant levels of fine particulate matter and toxic air contaminants from vehicle and equipment emissions. The proposed project includes sensitive land uses (e.g., residential) and would include an emergency back-up generator, which would emit diesel particulate matter, a known toxic air contaminant.

⁴¹ San Francisco Planning Department, Transit Center District Plan and Transit Tower Final Environmental Impact Report. See page 395. Available online at: <http://sf-planning.org/area-plan-eirs>. Accessed February 1, 2017.

⁴² Bay Area Air Quality Management District, CEQA Air Quality Guidelines, updated May 2010. See pp. 3-2 to 3-3. Available at: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/draft_baaqmd_ceqa_guidelines_may_2010_final.pdf?la=en. Accessed February 1, 2017.

Siting Sensitive Land Uses

Subsequent to publication of the PEIR, the San Francisco Board of Supervisors approved a series of amendments to the *San Francisco Building and Health Codes*, generally referred to as Enhanced Ventilation Required for Urban Infill Sensitive Use Developments, or *Health Code Article 38* (Ordinance 224-14, effective December 8, 2014). The purpose of Article 38 is to protect the public health and welfare by establishing an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill sensitive use development within the Air Pollutant Exposure Zone. The Air Pollutant Exposure Zone as defined in Article 38 includes areas that, based on modeling of all known air pollutant sources undertaken by the City in partnership with BAAQMD, exceed health protective standards for cumulative PM_{2.5} concentration and/or cumulative excess cancer risk, and incorporates health vulnerability factors and proximity to freeways. Projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would expose sensitive receptors to substantial air pollutant concentrations or add emissions to areas already adversely affected by poor air quality. The Ordinance requires that the project sponsor submit an Enhanced Ventilation Proposal for approval by the Department of Public Health (DPH) that achieves protection from PM_{2.5} (fine particulate matter) equivalent to that associated with a Minimum Efficiency Reporting Value 13 filtration. DBI will not issue a building permit without written notification from the Director of Public Health that the applicant has an approved Enhanced Ventilation Proposal.

Thus, **PEIR Mitigation Measure M-AQ-2: Implementation of Risk and Hazard Overlay Zone and Identification of Health Risk Reduction Policies** has been implemented by the City through establishment of an Air Pollutant Exposure Zone and enhanced ventilation requirements under Article 38. The project site is located within the Air Pollutant Exposure Zone and the proposed project's residential uses would be subject to the enhanced ventilation requirements under Health Code Article 38. Compliance with Article 38 would satisfy **PEIR Mitigation Measure M-AQ-2**.

In compliance with Article 38, the project sponsor submitted an initial application to DPH on September 9, 2015.⁴³ The regulations and procedures set forth by Article 38 would ensure that exposure of sensitive receptors to air pollutant emissions would not be significant. These requirements supersede the provisions of **PEIR Mitigation Measure M-AQ-2**; therefore, **Mitigation Measure M-AQ-2** is no longer applicable, and impacts related to siting new sensitive land uses would be less than significant through compliance with Article 38.

Construction

The PEIR determined that implementation of **PEIR Mitigation Measure M-AQ-5** would not reduce significant health risk impacts from the construction of subsequent projects to below a significant level, and the impact would be significant and unavoidable. As discussed above, the project site is located within an identified Air Pollutant Exposure Zone; therefore the ambient health risk to sensitive receptors from air pollutants is considered substantial. The proposed project would require heavy-duty off-road diesel vehicles and equipment during most of the anticipated 36- to 40-month construction period. Thus, the proposed project's construction emissions would contribute to this significant impact and **Project Mitigation Measure 10**, implementing **PEIR Mitigation Measure M-AQ-5**, would reduce DPM exhaust

⁴³ Steve Shanks, Project Sponsor, *Application for Article 38 Compliance Assessment*, August 19, 2015.

from construction equipment by 89 to 94 percent compared to uncontrolled construction equipment⁴⁴; however, the impact would remain significant and unavoidable.

Siting New Sources

In regards to siting new sources of air pollutant emissions, particularly the project’s proposed emergency back-up generator, **PEIR Mitigation Measure M-AQ-3** was identified to reduce the health risk impact from new sources of diesel particulate matter. As noted above, subsequent to publication of the PEIR, the City partnered with BAAQMD to model all stationary and mobile emissions sources in San Francisco, resulting in identification of the Air Pollutant Exposure Zone. This modeling obviates the need for project-specific modeling previously required by **Mitigation Measure M-AQ-3**. In combination with **Project Mitigation Measure 11**, which would implement **PEIR Mitigation Measure M-AQ-3**, potential effects of new sources of emissions (the proposed emergency generator) would be reduced to a less than significant level.

For the above reasons, the mitigated project would not result in any significant air quality impacts that were not previously identified in the TCDP PEIR, nor would it result in substantially more severe impacts than those identified in the PEIR.

Topics:	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
7. GREENHOUSE GAS EMISSIONS— Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The PEIR concluded that adoption of the Transit Center District Plan would not directly result in greenhouse gas (GHG) emissions; however, implementation of development projects in the Plan area, including the proposed project, would result in GHG emissions. The Plan includes goals and policies that would apply to the proposed project, and these policies are generally consistent with the City’s *Strategies to Address Greenhouse Gas Emissions*. The PEIR concluded that emissions resulting from development

⁴⁴ PM emissions benefits are estimated by comparing off-road PM emission standards for Tier 2 with Tier 1 and 0. Tier 0 off-road engines do not have PM emission standards, but the United States Environmental Protection Agency’s *Exhaust and Crankcase Emissions Factors for Nonroad Engine Modeling – Compression Ignition* has estimated Tier 0 engines between 50 hp and 100 hp to have a PM emission factor of 0.72 g/hp-hr and greater than 100 hp to have a PM emission factor of 0.40 g/hp-hr. Therefore, requiring off-road equipment to have at least a Tier 2 engine would result in between a 25 percent and 63 percent reduction in PM emissions, as compared to off-road equipment with Tier 0 or Tier 1 engines. The 25 percent reduction comes from comparing the PM emission standards for off-road engines between 25 hp and 50 hp for Tier 2 (0.45 g/bhp-hr) and Tier 1 (0.60 g/bhp-hr). The 63 percent reduction comes from comparing the PM emission standards for off-road engines above 175 hp for Tier 2 (0.15 g/bhp-hr) and Tier 0 (0.40 g/bhp-hr). In addition to the Tier 2 requirement, ARB Level 3 VDECs are required and would reduce PM by an additional 85 percent. Therefore, the mitigation measure would result in between an 89 percent (0.0675 g/bhp-hr) and 94 percent (0.0225 g/bhp-hr) reduction in PM emissions, as compared to equipment with Tier 1 (0.60 g/bhp-hr) or Tier 0 engines (0.40 g/bhp-hr).

under the Plan, including the proposed project, would be less than significant and no mitigation measures were required.

The BAAQMD has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines Sections 15064.4 and 15183.5 which address the analysis and determination of significant impacts from a proposed project's GHG emissions and allow for projects that are consistent with an adopted GHG reduction strategy to conclude that the project's GHG impact is less than significant. San Francisco's *Strategies to Address Greenhouse Gas Emissions*⁴⁵ presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's GHG reduction strategy in compliance with the BAAQMD and CEQA guidelines. These GHG reduction actions have resulted in a 23.3 percent reduction in GHG emissions in 2012 compared to 1990 levels,⁴⁶ exceeding the year 2020 reduction goals outlined in the BAAQMD's *2010 Clean Air Plan*,⁴⁷ Executive Order S-3-05⁴⁸, and Assembly Bill 32 (also known as the Global Warming Solutions Act).^{49,50} In addition, San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under Executive Orders S-3-05⁵¹, B-30-15^{52,53}, and Senate Bill (SB) 32.^{54,55} Therefore, projects that are consistent with San Francisco's GHG Reduction Strategy would not result in GHG emissions that would have a significant effect on the environment and would not conflict with state, regional, and local GHG reduction plans and regulations.

The proposed project would increase the intensity of use of the site with construction of a residential and hotel high-rise tower with approximately 80 dwelling units, 255 hotel rooms, 6,100 square feet of retail uses, and 70 vehicular parking spaces. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential and

⁴⁵ San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, November 2010. Available at http://sfmea.sfplanning.org/GHG_Reduction_Strategy.pdf, accessed March 3, 2016.

⁴⁶ ICF International, *Technical Review of the 2012 Community-wide Inventory for the City and County of San Francisco*, January 21, 2015.

⁴⁷ Bay Area Air Quality Management District, *Clean Air Plan*, September 2010. Available at <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>, accessed March 3, 2016.

⁴⁸ Office of the Governor, *Executive Order S-3-05*, June 1, 2005. Available at <https://www.gov.ca.gov/news.php?id=1861>, accessed March 3, 2016.

⁴⁹ California Legislative Information, *Assembly Bill 32*, September 27, 2006. Available at http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf, accessed March 3, 2016.

⁵⁰ Executive Order S-3-05, Assembly Bill 32, and the Bay Area 2010 Clean Air Plan set a target of reducing GHG emissions to below 1990 levels by year 2020.

⁵¹ Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million MTCO₂E); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO₂E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO₂E).

⁵² Office of the Governor, *Executive Order B-30-15*, April 29, 2015. Available at <https://www.gov.ca.gov/news.php?id=18938>, accessed March 3, 2016. Executive Order B-30-15 sets a state GHG emissions reduction goal of 40 percent below 1990 levels by the year 2030.

⁵³ San Francisco's GHG reduction goals are codified in Section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

⁵⁴ Senate Bill 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding Section 38566, which directs that statewide greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

⁵⁵ Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

commercial operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

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

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

The proposed project would be required to comply with the energy and water efficiency requirements of the City's Green Building Code, Stormwater Management Ordinance, Water Efficient Irrigation Ordinance, and Energy Conservation Ordinance, which would promote energy and water efficiency, thereby reducing the proposed project's energy-related GHG emissions.⁵⁶ Additionally, the project would be required to meet the renewable energy criteria of the Green Building Code, further reducing the project's energy-related GHG emissions.

The proposed project's waste-related emissions would be reduced through compliance with the City's Recycling and Composting Ordinance, Construction and Demolition Debris Recovery Ordinance, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote reuse of materials, conserving their embodied energy⁵⁷ and reducing the energy required to produce new materials.

Compliance with the City's Street Tree Planting requirements would serve to increase carbon sequestration. Other regulations, including those limiting refrigerant emissions and the Wood Burning Fireplace Ordinance would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds (VOCs).⁵⁸ Thus, the proposed project was determined to be consistent with San Francisco's GHG reduction strategy.⁵⁹

Therefore, the proposed project's GHG emissions would not conflict with state, regional, and local GHG reduction plans and regulations. Furthermore, the proposed project is within the scope of the development evaluated in the PEIR and would not result in impacts associated with GHG emissions beyond those disclosed in the PEIR. For the above reasons, the proposed project would not result in significant GHG emissions that were not identified in the Transit Center District Plan PEIR and no mitigation measures are necessary.

⁵⁶ Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump and treat water required for the project.

⁵⁷ Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

⁵⁸ While not a GHG, VOCs are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing VOC emissions would reduce the anticipated local effects of global warming.

⁵⁹ San Francisco Planning Department, *Greenhouse Gas Compliance Checklist, 555 Howard Street*, January 3, 2017.

<u>Topics:</u>	<u>Significant Impact Peculiar to Project or Project Site</u>	<u>Significant Impact not Identified in PEIR</u>	<u>Significant Impact due to Substantial New Information</u>	<u>No Significant Impact not Previously Identified in PEIR</u>
8. WIND AND SHADOW—Would the project:				
a) Alter wind in a manner that substantially affects public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Wind

Within the C-3-0(SD) district, the Planning Code establishes wind comfort and wind hazard criteria to evaluate new development. In terms of wind comfort criteria, wind speeds should not exceed, more than 10 percent of the time between 7 a.m. and 6 p.m., and 11 miles per hour (mph) in substantial pedestrian use areas. Similarly, the hazard criterion is established within the Planning Code requires that buildings not cause equivalent wind speeds to reach or exceed the hazard level of 26 mph as averaged from a single full hour of the year.

A wind tunnel test was conducted for the TCDP PEIR. The test included massing models of other potential future development in the vicinity of the Transit Tower and were modeled as boxy, rectangular massings, extending up to the maximum height limit. The TCDP PEIR identified significant but mitigable impacts related to the substantial increases in wind speeds in publicly accessible open spaces, including City Park, and new exceedances of the Section 148 Planning Code wind hazard criterion. The TCDP PEIR identified **PEIR Mitigation Measure M-WI-2: Tower Design to Minimize Pedestrian Wind Speeds** to mitigate impacts to a less-than-significant level.

Pursuant to **PEIR Mitigation Measure M-WI-2**, and based on the height and location of the project, a pedestrian wind assessment was prepared by a qualified wind consultant for the proposed project.⁶⁰ The wind study measured wind speeds for the existing, existing plus project, and cumulative scenario. As with the TCDP PEIR wind analysis, the cumulative scenario included a model for the Transit Tower (now known as the Salesforce Tower or Transbay Tower) and massing models of other potential future development in the vicinity of the Transit Tower project site. Wind speed measurements were taken at 68 locations for the existing scenario and 78 locations for the project and cumulative scenarios. The number of test points along Howard, Tehama, and Second streets were greater in the 555 Howard Street wind assessment than the number of locations addressed in the TCDP PEIR wind study. Therefore, the wind assessment provides a more fine-grained analysis than the PEIR of the project’s potential wind impacts

Hazardous Wind Conditions and Potential Effects

The wind assessment found that the existing wind conditions on the adjacent streets do not exceed the 26-mile-per-hour wind hazard criterion and the project is not anticipated to cause adverse wind impacts or

⁶⁰ RWDI, 555 Howard Street, San Francisco, CA. Pedestrian Wind Study, February 6, 2017.

result in hazardous wind conditions. The wind assessment found that the proposed project would not cause winds to reach or exceed the 26-mile-per-hour wind hazard criterion at any pedestrian areas on and around the proposed development that were tested, and that wind speeds at building entrances and public sidewalks would be suitable for the intended pedestrian usage, under both existing plus project and project plus cumulative scenarios. As a result, the project is not anticipated to cause adverse wind impacts or result in hazardous wind conditions in or around the project site.

Pedestrian Comfort Conditions and Project Effects

Effects related to pedestrian comfort are provided for informational purposes; there are no applicable thresholds of significance under CEQA that have been adopted by the City with respect to pedestrian comfort relative to wind. Regarding pedestrian comfort, existing wind conditions near the project site are moderate to high with wind speeds averaging 12 mph for the 68 test locations under existing conditions. Wind speeds at 35 of the 68 locations exceed the Planning Code's 11 mph pedestrian-comfort criterion. These areas are along Tehama Street west of First Street, along Second Street, along Howard Street west of First Street, and at localized areas to the north and south of the project site. Under the existing scenario, winds currently exceed the 11 mph pedestrian-comfort criterion 13 percent of the time on average with an average wind speed of 12 mph.

Under the existing plus project scenario, seven additional test locations (for a total of 75 locations) were added to determine wind speed immediately around the proposed building. These seven locations were not included under the existing scenario due to the presence of the existing buildings on the project site. Under the existing plus project scenario, wind speeds at 42 of the 75 test locations are expected to exceed the Planning Code's 11 mph pedestrian-comfort criterion. These exceedances are generally in the same locations as under the existing scenario. Specifically, the existing plus project scenario would remove four exceedances and would add eleven new exceedances, resulting in a difference of seven exceedances.⁶¹ However, wind speeds are generally expected to remain similar to existing conditions, since wind conditions under the existing plus project scenario would exceed the 11 mph pedestrian-comfort criterion 13 percent of the time on average with an average wind speed of 12 mph, which is the same as under the existing scenario. Additionally, when compared to the existing scenario, wind speeds would be slightly lower to the east and south of the project site under the existing plus project scenario. The addition of new pedestrian-comfort exceedances would require the project sponsor to seek exception under Planning Code Section 309.

Under the project plus cumulative scenario⁶², wind speeds at 40 of the 75 test locations are expected to exceed the Planning Code's 11 mph pedestrian-comfort criterion. Wind speeds would exceed the 11 mph pedestrian-comfort criterion 14 percent of the time on average with an average wind speed of 12 mph. When compared to the existing plus project scenario, the project plus cumulative scenario would result in two fewer exceedances, would increase the percent of time wind speed exceeds the pedestrian-comfort criterion by one percent, and would not change the average wind speed. Therefore, wind conditions for the project plus cumulative and existing plus project scenarios are generally expected to be similar. Wind conditions around the project site are not expected to be affected substantially by construction of reasonably foreseeable development under project plus cumulative.

⁶¹ Of these seven locations that exceed the pedestrian-comfort criterion, two of which were not tested under the existing scenario due to the presence of the existing buildings on the project site.

⁶² The cumulative scenario includes eight in-construction projects and 21 reasonably foreseeable projects near the project site, including the 524 Howard Street, Parcel F (562, 564, and 568 Howard Street), and Transbay Tower developments.

The wind assessment also evaluated potential wind speed increases within public seating areas, including at the intersection of Howard and First Streets, and determined that the project would result in an insubstantial (one to three mph) increase in wind speeds within public seating areas under existing plus project and cumulative plus project scenarios. As a result, the proposed project would not result in new or peculiar impacts, or adverse effects of greater severity than were already analyzed and disclosed in the TCDP PEIR with respect to the wind comfort criteria.

Shadow

Planning Code Section 295 generally prohibits new structures above 40 feet in height that would cast additional shadows on open space that is under the jurisdiction of the San Francisco Recreation and Park Commission between one hour after sunrise and one hour before sunset, at any time of the year, unless that shadow would not result in a significant adverse effect on the use of the open space.

The TCDP PEIR considered reasonable foreseeable future projects on 13 specific sites in the TCDP, based on generalized massing models of buildings at the heights that would be allowed under the TCDP. The PEIR found that new shadows from development within the Plan area would affect nine parks, eight of which have established Absolute Cumulative Limits⁶³ for net new shadow under Section 295. Considered together, development under the TCDP would require that the Absolute Cumulative Limit be increased on eight downtown parks. No mitigation is available for shadow impacts on existing parks, because it not possible to lessen the intensity or otherwise reduce the shadow cast by a building at a given height and bulk. Therefore, the TCDP PEIR found a significant and unavoidable shadow impact.

To evaluate the design of the proposed project, a project-specific shadow study for the 555 Howard Street project was performed using a detailed 3-D model of the proposed project. The results of this project-specific shadow study were discussed in the 555 Howard Street shadow analysis technical memorandum and are summarized here.⁶⁴ At no time throughout the year does the proposed project impact any Recreation and Park open space subject to Section 295 of the Planning Code, or Jessie Square and Yerba Buena Gardens. Therefore, the potential impacts described below are for open spaces not subject to Section 295.

Rincon Park

Rincon Park is an approximately 2.7-acre (119,138 square feet) park along the east side of The Embarcadero between Howard Street and Harrison Street. Most of the northern half of the park is landscaped with grass and small shrubs. The central portion of the park is occupied by an approximately 65-foot-tall sculpture of a bow and arrow known as “Cupid’s Span,” and there is a paved pedestrian path to the west of the sculpture that generally runs parallel to the Embarcadero Promenade. The southern half of the park includes a small amount of landscaping and a pair of two-story restaurant buildings. There

⁶³ The Absolute Cumulative Limit represents the maximum percentage of new shadow, expressed as a percentage of theoretical annual available sunlight. The theoretical annual available sunlight is the amount of sunlight, measured in square-foot-hours that would fall on a given park during the hours covered by Section 295. It is computed by multiplying the area of the park by 3,721.4, which is the number of hours in the year subject to Section 295. Thus, this quantity is not affected by shadow cast by existing buildings, but instead represents the amount of sunlight that would be available with no buildings in place. Theoretical annual available sunlight calculations for each downtown park were used by the Planning and Recreation and Park Commissions in establishing the allowable Absolute Cumulative Limit for downtown parks in 1989.

⁶⁴ CADP, *555 Howard Street Shadow Analysis*, October 26, 2016.

are seating areas along the pedestrian promenade (the Embarcadero Promenade) and seating areas to the east and south of the sculpture. Rincon Park is used for active and passive recreation.⁶⁵ Throughout the year, Rincon Park is sunny from the morning until the early afternoon. In general, the existing afternoon shadows begin later during the summer (after approximately 4:30 p.m.) and earlier during the winter (after approximately 12:30 p.m.). The TCDP PEIR acknowledged that Rincon Park would be the most greatly affected non-Section 295 public open space by Plan area development.

Rincon Park has approximately 471,602,456 square foot hours (sfh) of theoretical annual available sunlight (TAAS). This existing shadow load on the park is approximately 8,166,757 sfh annually. The project would add approximately 11,662 sfh of shadow on Rincon Park. The existing shadow load for Rincon Park is approximately 1.7317 percent of the total TAAS, and the project would incrementally increase the total percentage of TAAS by 0.003 percent. New shadow cast by the project would occur from October 25th to December 13th and again from December 27th to February 15th, lasting for an average duration of approximately seven minutes in the late afternoon. The project would cast a 6,584-square-foot shadow, that is the largest shadow, at 4:03 p.m. on November 8th/February 1st. New project shadow would be cast on a small area of the middle section of Rincon Park, which includes paved pedestrian pathways and the landscaped areas immediately adjacent to the northern restaurant located in Rincon Park. The project would not cast new shadow on the grassy lawn area and would not fall on the seating areas in the park where many park users prefer to sit. The incremental increase in shadow duration, location, and amount of shadow cast on Rincon Park by the proposed project would not substantially affect use of the park because the shadow would be on areas that are used when users are walking or in transition, and impacts would be less than significant.

Privately Owned, Publicly Accessible Open Spaces (POPOS)

Most of the open spaces in the project vicinity are privately owned, publicly accessible open spaces ("POPOS"). These open spaces are not subject to Section 295 and they are not operated or managed by public agencies. However, these areas are subject to Planning Code Section 147, which is intended to minimize shading of public plazas or other publicly accessible open spaces.

There are four POPOS: the 101 Second Street POPOS is an entirely indoor space; the 555 Mission Street POPOS is a recently constructed sitting area with landscaping and public art; the 100 First Street Plaza is an elevated outdoor space with tables and chairs for lunch use; and Foundry Square consists of several street-level plazas at the corners of Howard and First Street with sitting areas for lunchtime use. The project would not cast shadow on 101 Second Street, 555 Mission Street, and 100 First Street Plaza.

The proposed project would cast shadow on the portion of Foundry Square on the northeast and northwest corner of Howard and First streets, but mostly in the vicinity of the sidewalk and the edge of the plaza. The project shadow would reach a portion of Foundry Square at 2:00 p.m. around the winter solstice and also a small portion of the southern section of the plaza between 4:00 and 5:00 p.m. during the spring and fall equinox. Foundry Square, which is frequented by nearby office workers, has mostly mid-day use with sunny sitting areas. Since new shading would not occur during times of typical high use, and since the incremental increase in shadow duration, location, and amount of shadow cast on Foundry Square would not substantially affect use of the plaza. Therefore, the potential impacts on nearby POPOS are considered less than significant.

⁶⁵ Active recreation includes walking, running, cycling, rollerblading, and skateboarding, which occur primarily along the eastern perimeter of the park within the pedestrian promenade, while passive recreation includes sitting or lying down.

Future Parks

There are five proposed or under construction parks in the vicinity of the proposed project, including City Park, Transbay Park, Under Ramp Park (formerly Oscar Park), Second & Howard Plaza and Mission Square. The project would not cast shadow on City Park, Transbay Park, or Mission Square. The proposed project has the potential to cast new shadow on Under Ramp Park in the first hour of the day during the summer months from April to September; however, the shadow would be localized in the northern corner of the park in the terrace near Howard Street with short duration. The proposed project has the potential to add new shadow on the Second & Howard Plaza during the early morning hours of the spring, summer and fall months. New shadow from the project would be localized to the eastern half of the plaza and would not occur after 10:30 a.m. The eastern half of the Second & Howard Plaza would include an entry pathway into a hardscape tree lined casual pedestrian space. Therefore, the potential impacts on nearby future parks are considered less than significant.

Topics:	Significant Impact Peculiar to Project or Project Site	Significant Impact not Identified in PEIR	Significant Impact due to Substantial New Information	No Significant Impact not Previously Identified in PEIR
9. RECREATION—Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR found that implementation of the TCDP would have a less-than-significant impact related to recreational resources, including increased use of existing neighborhood parks and recreational facilities, and no mitigation measures were identified.

The project site is located in the TCDP area, which is served primarily by privately-owned, publicly-accessible open spaces (POPOS) associated with nearby developments. In the project vicinity, there are four existing POPOS (101 Second Street, 555 Mission Street, 100 First Street and Foundry Square) and five future parks that are either proposed or under construction (City Park, Transbay Park, Under Ramp Park, 2nd & Howard Plaza, and Mission Square). Notably, the 5.4-acre City Park would be located atop the new Transit Center directly north of the project site and Under Ramp Park is located immediately adjacent to the west of the project site.

The proposed project would include a total of approximately 8,751 square feet of open space, including 5,047 square feet of publicly and commonly accessible open space at Level 37 and 2,034 square feet of commonly accessible open space at Level 21.. In addition, the project would provide a total of 1,670 square feet of non-compliant publicly and commonly accessible open space, including 1,440 square feet at Level 37 and 230 square feet at the ground-floor level along Howard Street.

Although new residents and employees at the project site would increase the use of nearby public and private open spaces, the provision of new open space at the project site would provide adequate open space for on-site residents. In addition, the use of City Park and other planned POPOS by local residents, such as those who would be located at the project site, was anticipated during its design and evaluation as part of the TCDP PEIR. As the proposed project would not degrade recreational facilities and is consistent with the development density established under the TCDP, there would be no additional impacts on recreation beyond those analyzed in the TCDP PEIR.

<i>Topics:</i>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
10. UTILITIES AND SERVICE SYSTEMS—Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR describes the general environmental conditions in the plan area with respect to utilities and service systems and found that implementation of the TCDP would result in less-than-significant impacts to utilities and service systems, including wastewater, water supply, and solid waste. No mitigation measures were identified.

Since certification of the PEIR, the San Francisco Public Utilities Commission (SFPUC) adopted the 2010 Urban Water Management Plan (UWMP) in June 2011. The UWMP update includes City-wide demand projections to the year 2035, compares available water supplies to meet demand and presents water demand management measures to reduce long-term water demand. Additionally, the UWMP update includes a discussion of the conservation requirement set forth in Senate Bill 7 passed in November 2009

mandating a statewide 20 percent reduction in per capita water use by 2020. The UWMP includes a quantification of the SFPUC’s water use reduction targets and plan for meeting these objectives. The UWMP projects sufficient water supply in normal years and a supply shortfall during prolonged droughts. Plans are in place to institute varying degrees of water conservation and rationing as needed in response to severe droughts.

In addition, the SFPUC is in the process of implementing the Sewer System Improvement Program, which is a 20-year, multi-billion dollar citywide upgrade to the City’s sewer and stormwater infrastructure to ensure a reliable and seismically safe system. The program includes planned improvements that will serve development in the TCDP area including at the Southeast Treatment Plant, which is located in the Bayview District and treats the majority of flows in the plan area, as well as the North Point plant which is located on the northeast waterfront and provides additional wet-weather treatment capacity.

The SFPUC has concluded that under its Water Shortage Allocation Plan with additional local Water System Improvement Program supplies, sufficient water would be available to meet the existing and planned future water retail demand within San Francisco, inclusive of the growth in the plan area. Similarly, the TCDP PEIR found that sufficient dry weather capacity exists at the Southeast Water Pollution Control plant, and that development under the TCDP would only result in new wet weather flow from sanitary sewage generation. Regarding solid waste, the TCDP PEIR found that impacts would be less than significant because solid waste generated by development pursuant to the TCDP would be accommodated within existing projections. The TCDP PEIR concluded that development under the TCDP would not exceed wastewater treatment requirements of the Regional Water Quality Control Board and would not require the construction of new water or wastewater treatment facilities. Similarly, sufficient water supply is expected to be available from existing entitlements in accordance with water supply demands evaluated in the TCDP PEIR.

As the proposed project is consistent with the development density established under the TCDP, there would be no additional impacts on utilities and service systems beyond those analyzed in the TCDP PEIR.

<i>Topics:</i>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
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11. PUBLIC SERVICES—Would the project:

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as fire protection, police protection, schools, parks, or other services? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

The PEIR found that implementation of the Plan would result in less-than-significant impacts to police, fire, and park services. The increased residential and worker population in the area would result in

increased demand for police and fire protection services, as well as park use, but this demand could be accommodated within existing infrastructure and planned improvements in the TCDP area, such as new parks and open spaces, or through re-deployment of resources from other areas of the city, if needed. The proposed project would account for a small fraction of the increased demand analyzed in the PEIR and the proposed project falls within the development density assumptions for the site that are in the PEIR. Therefore, the proposed project would not result in a substantial increase in the demand for police or fire protection services. As described above, the proposed project would also not result in new or more severe impacts to parks or recreational facilities.

With the construction of 80 housing units, and assuming a 0.05 student yield rate for units, the proposed project would generate approximately four elementary or high school students. These additional students would not exceed the capacity of schools such that new facilities would be required, and thus the proposed project would not result in new or more severe impacts on school facilities than what was already analyzed and disclosed in the PEIR. Furthermore, as noted above, the residential growth of the proposed project was anticipated as part of the TCDP PEIR. Since the proposed project would be consistent with the TCDP PEIR, school impacts associated with development of the project site would also be less than significant. As stated in the TCDP PEIR, the Leroy F. Greene School Facilities Act of 1998 restricts the ability of local agencies such as the City and County of San Francisco to deny land use approvals on the basis that public school facilities are inadequate. The Act establishes the base amount of allowable developer fees per square foot of commercial and residential construction, and SFUSD has approved its own school facilities impact fees specific to local considerations. These fees are intended to address local school facility needs resulting from new development.

As the proposed project is consistent with the development density established under the TCDP, the project would not result in new or substantially more severe impacts on the physical environment associated with the provision of public services beyond those analyzed in the TCDP PEIR.

<i>Topics:</i>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
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12. BIOLOGICAL RESOURCES—Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP area is a dense, developed urban area with no natural vegetation communities remaining; therefore, development under the TCDP, as addressed as part of the TCDP PEIR, would not affect any special-status plants. There are no riparian corridors, estuaries, marshes, or wetlands in the plan area that could be affected by the development anticipated under the TCDP. In addition, development envisioned under the TCDP would not substantially interfere with the movement of any resident or migratory wildlife species through compliance with Planning Code Section 139, which requires specific window and façade treatments for structures over 300 feet in height. However, the PEIR determined that construction in the plan area could have a significant effect on special-status birds and bats through tree removal or building demolition. The PEIR concluded that implementation of the TCDP would not result in significant impacts on biological resources with implementation of **PEIR Mitigation Measures M-BI-1a: Pre-Construction Bird Surveys** and **M-BI-1b: Pre-Construction Bat Surveys**. **PEIR Improvement Measure I-BI-2** was identified to reduce potential effects on birds from night lighting at project sites.

The proposed project would involve demolition of three buildings that currently contain active uses. Since the existing buildings to be demolished could provide for marginal nesting opportunities, the proposed project is subject to **PEIR Mitigation Measures M-BI-1a (Project Mitigation Measure 12)**. Since the project does not involve removal of large trees and the buildings proposed for demolition are not vacant or underutilized, **PEIR M-BI-1b** is not applicable. Implementation of **Project Mitigation Measure 12** would require pre-construction surveys to identify nesting birds and if applicable would provide protection measures to limit effects to biological resources onsite. Additionally, the project sponsor has agreed to implement **PEIR Improvement Measure I-BI-2 (Project Improvement Measure 5)** to reduce potential effects on birds from night lighting. The mitigated project would not result in any new or more severe significant impacts to biological resources not identified in the PEIR.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
13. GEOLOGY AND SOILS—Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Change substantially the topography or any unique geologic or physical features of the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR found that all impacts related to Geology and Soils would be less than significant, including impacts related to earthquake fault, seismic groundshaking, seismically induced ground failure, or landslides. Much of the TCDP area, including the project site, is located within a potential liquefaction hazard zone identified by the California Geological Survey (CGS). Compliance with applicable codes and recommendations made in project-specific geotechnical analyses would not eliminate earthquake risks, but would reduce them to an acceptable level, given the seismically active characteristics of the Bay Area. Thus, the PEIR concluded that implementation of the plan would not result in significant impacts with regard to geology, and no mitigation measures were identified in the PEIR.

A geotechnical investigation was prepared for the proposed project.⁶⁶ The investigation found that the project site is underlain by six to ten feet of fill material comprising of loose to medium dense sand with varying amounts of clay, silt, gravel, brick fragments, shells, concrete, and wood. The fill was likely placed during the post-1906 earthquake leveling process and generally termed “earthquake fill.” Since the existing buildings on the project site were all constructed post-1906, it is likely that the majority, if not all, of the earthquake fill was removed during construction of the existing buildings. A layer of medium dense Dune Sand, between 12 and 14 feet thick, underlies the fill and likely the existing buildings.

⁶⁶ Langan Treadwell Rollo, *Preliminary Geotechnical Report, 555 Howard Street, San Francisco, California*, February 3, 2017.

Beneath the Dune Sand, five to 10 feet of generally medium stiff sandy clay (Marine Deposit) was encountered. The Colma Formation, which generally consists of medium dense to very dense sand, was encountered at about 24 to 30 feet bgs across the project site. The soil grades to dense at depths of 33.5 to 40 feet and then becomes very dense at depths of about 40 to 45 feet. The very dense Colma Formation sand has varying silt and clay content and extends to depths of 73 to 80 feet bgs. Old Bay Clay underlies the Colma Formation and is about 22 to 31 feet thick. Beneath the Old Bay Clay is bedrock consisting of sheared shale with sandstone, siltstone, and claystone fragments and was encountered at depths of 96 to 110 feet bgs. At the time of investigation, groundwater was encountered at depths of approximately 26 feet bgs.

The investigation recommended that the proposed tower be supported by a reinforced mat foundation that is eight feet thick at the northwest and southeast sides of the tower and 12 feet thick at the tower core. Since the bottom of excavation would be below the groundwater level, the soil at subgrade would be near saturation even after dewatering. The investigation deemed that over-excavation of the site and construction of a three-foot-thick concrete working pad, on which to construct the mat foundation, may be required.

The project is required to conform to the San Francisco Building Code, which ensures the safety of all new construction in the City. DBI will review the project-specific geotechnical report during its review of the building permit for the project. In addition, DBI may require additional site specific soils report(s) through the building permit application process, as needed. The DBI requirement for a geotechnical report and review of the building permit application pursuant to DBI's implementation of the Building Code would ensure that the proposed project would have no significant impacts related to soils, seismic or other geological hazards.

In light of the above, the proposed project would not result in a significant effect related to seismic and geologic hazards. Therefore, the proposed project would not result in significant impacts related to geology and soils that were not identified in the TCDP PEIR, and no mitigation measures are necessary.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
14. HYDROLOGY AND WATER QUALITY—Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Topics:</i>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR determined that implementation of the plan could affect water quality due to grading and earthmoving operations, the use of fuels and other chemicals, and groundwater dewatering activities during construction and demolition of various projects. In addition, operation of projects in the plan area would result in changes to sanitary sewer flows and stormwater runoff patterns that could have an impact on water quality. The PEIR determined that compliance with all applicable regulations, including the federal Clean Water Act, the National Pollutant Discharge Elimination System (NPDES), Article 4.1 of the San Francisco Public Works Code, the San Francisco Green Building Ordinance, and San Francisco's Stormwater Design Guidelines would ensure impacts to water quality are less than significant. The PEIR determined that impacts due to the depletion of groundwater would be less than significant, as projects in the Plan area would rely on surface water and recycled water to meet their demand, and while groundwater dewatering would occur, groundwater from the Downtown San Francisco Groundwater Basin is not used for drinking water. In addition, because the plan area is almost entirely paved or covered by existing buildings, implementation of the plan would not alter groundwater infiltration rates. Impacts from erosion and flooding, as well as impacts to the existing stormwater drainage system, were considered less than significant, as projects in the plan area would comply with San Francisco's Stormwater Design Guidelines, which would minimize stormwater runoff. The PEIR determined that projects in the plan area would not expose people, housing or structures to a substantial risk of flooding or death involving inundation by seiche, tsunami, or mudflow.

The proposed project would involve excavation to approximately 70 feet below ground surface; excavation to this depth would require dewatering, given that groundwater is approximately 26 feet below ground surface.⁶⁷ Construction stormwater discharges to the City’s combined sewer system would be subject to the requirements of Article 4.1 of the San Francisco Public Works Code (supplemented by Department of Public Works Order No. 158170), which incorporates and implements the City’s NPDES permit, and the federal Combined Sewer Overflow Control Policy. Stormwater drainage during construction would flow to the City’s combined sewer system, where it would receive treatment at the Southeast plant or other wet weather facilities and would be discharged through an existing outfall or overflow structure in compliance with the existing NPDES permit.

Regarding groundwater supplies, the project would use potable water from the SFPUC. Groundwater from the Downtown San Francisco Groundwater Basin is not used as drinking water, and development of the project site would not result in additional impervious surfaces to the extent that it would affect groundwater recharge because the project site is entirely covered by three existing buildings. Development of the project site would not affect the course of a stream or river. Given that the project site is already comprised of impervious surfaces, development would not result in an increase in impervious surfaces and would not contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems. Stormwater flows and draining would be controlled by San Francisco’s Stormwater Design Guidelines. The project sponsor would be required to submit and have approved by the SFPUC a Stormwater Control Plan (SCP) that complies with the Stormwater Design Guidelines using a variety of Best Management Practices, thereby ensuring that development of the project site meets performance measures set by the SFPUC related to stormwater runoff rate and volume. Compliance with the Stormwater Design Guidelines would reduce the quantity and rate of stormwater runoff to the City’s combined sewer system and improve the water quality of those discharges.

Therefore, the proposed project would not result in any significant impacts related to hydrology and water quality that were not identified in the TCDP PEIR.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
15. HAZARDS AND HAZARDOUS MATERIALS—Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁶⁷ Langan Treadwell Rollo, *Preliminary Geotechnical Report, 555 Howard Street, San Francisco, California*, March 18, 2016.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TCDP PEIR describes the general environmental conditions in the Plan area with respect to the presence of hazardous materials and wastes, a description of hazardous building materials likely to be present, and an overview of the relevant hazardous materials regulations that are applicable. The project site is not within two miles of an airport or private air strip, and there are no schools within 0.25-mile of the TCDP plan area. Therefore, topics c, e, and f are not applicable. The TCDP PEIR identified significant impacts related to potentially exposing workers and the public to hazardous materials as a result of contaminated soils and groundwater or demolition or renovation of buildings.

Since certification of the TCDP PEIR, Article 22A of the Health Code, also known as the Maher Ordinance, was expanded to include properties throughout the City where there is potential to encounter hazardous materials, primarily industrial zoning districts, sites with industrial uses or underground storage tanks, sites with historic bay fill, and sites in proximity to freeways or underground storage tanks. The over-arching goal of the Maher Ordinance is to protect public health and safety by requiring appropriate handling, treatment, disposal and when necessary, mitigation of contaminated soils that are encountered in the building construction process. Projects that disturb 50 cubic yards or more of soil that are located on sites with potentially hazardous soil or groundwater within TCDP area are subject to this ordinance.

The TCDP PEIR included several mitigation measures (some of which are site dependent and some that are applicable to all projects within the plan area). These mitigation measures include requirements for preparing site assessments and corrective actions for sites located bayward of the historic tide line (**PEIR Mitigation Measure M-HZ-2a**), preparing site assessments and corrective actions for sites located landward of the historic tide line (**PEIR Mitigation Measure M-HZ-2b**), preparing site assessments and corrective actions for all sites (**PEIR Mitigation Measure M-HZ-2c**), and hazardous building materials abatement (**PEIR Mitigation Measure M-HZ-3**). With implementation of these mitigation measures,

potential impacts related to hazards and hazardous materials as a result of development within the TCDP area would be reduced to less than significant.⁶⁸ The proposed project would not be located bayward of the historic tide line, and therefore, **PEIR Mitigation Measures M-HZ-2a** is not applicable to the proposed project.

Routine Transport, Use, and Disposal of Hazardous Materials

The TCDP PEIR noted that for all development under the TCDP, including development of the project site, compliance with the San Francisco Health Code, which incorporates state and federal requirements, as well as California Highway Patrol and California Department of Transportation regulations, would minimize potential exposure of site personnel and the public to any accidental releases of hazardous materials or waste and would also protect against potential environmental contamination. Therefore, consistent with the TCDP, the potential impacts related to the routine use, transport, and disposal of hazardous materials associated with development of the project site would not be new or of greater severity than what was already analyzed and disclosed in the TCDP PEIR.

Hazardous Building Materials

As discussed in the PEIR, many buildings built earlier than the 1930s may contain hazardous building materials including asbestos-containing materials, lead-based paint, and electrical equipment containing polychlorinated biphenyls (PCBs). Most of the buildings could also include fluorescent light ballasts containing PCBs or di (2 ethylhexyl) phthalate (DEHP), and fluorescent light tubes containing mercury vapors. Workers and the public could be exposed to these hazardous building materials if they were not abated prior to demolition. Impacts related to exposure to asbestos-containing materials and lead-based paint would be less than significant with compliance with the well-established regulatory framework for abatement of these hazardous building materials.

However, the presence of electrical transformers that could contain PCBs, fluorescent light ballasts that could contain PCBs or DEHP, or fluorescent light tubes that could contain mercury vapors, could result in significant impacts related to exposure of hazardous building materials. Since the proposed project involves demolition of three buildings that were constructed earlier than 1930, **PEIR Mitigation Measure M-HZ-3 (Project Mitigation Measure 13)** is applicable. **Project Mitigation Measure 13** would ensure that the existing buildings are surveyed, removed, and properly disposed of prior to the start of demolition. Implementation of **Project Mitigation Measure 13** would reduce impacts related to hazardous building materials to a less than significant level.

Soil and Groundwater Contamination

The project site is located in a Maher area, and development of the proposed project would require excavation to a maximum depth approximately 70 feet below the ground surface (bgs) for construction of four underground levels with building foundation, which would result in the removal of approximately 29,000 cubic yards of soil. Therefore, the project is subject to the Maher Ordinance, which is administered and overseen by the Department of Public Health (DPH). The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare a Phase I Environmental Site Assessment (ESA) that meets the requirements of Health Code Section 22.A.6.

The Phase I ESA would determine the potential for site contamination and level of exposure risk associated with the project. Based on that information, the project sponsor may be required to conduct soil and/or groundwater sampling and analysis. Where such analysis reveals the presence of hazardous

⁶⁸ In general, the actions identified in these mitigation measures are now required by the Maher Ordinance, except for M-HZ-3.

substances in excess of state or federal standards, the project sponsor is required to submit a site mitigation plan (SMP) to the DPH or other appropriate state or federal agency(ies), and to remediate any site contamination in accordance with an approved SMP prior to the issuance of any building permit.

In compliance with the Maher Ordinance, the project sponsor has submitted a Maher Application to DPH and a Phase I ESA has been prepared to assess the potential for site contamination.^{69,70} Based on the Phase I ESA, the project site consisted of dwellings and stores in at least 1887 and dwellings, stores, saloons, and a sawdust yard in at least 1899. The existing building at 547 Howard Street was constructed in 1907, the existing building at 555 Howard Street was constructed in 1911, and the existing building at 557 Howard Street was constructed in 1922. From at least 1944 to 1950, the project site was used for storage of railway supplies. In at least 1950, the project site was developed with two stores and a paper-converting warehouse. From at least 1955 to 1960, the project site was occupied by various offices, a gun club, and various warehouse/storage businesses. From at least 1965 to 1990, the project site was occupied by various printers, lithographers, and graphic artists in all three buildings. Since 1990 the project site has been occupied by offices and small businesses.

The Phase I ESA did not reveal any Recognized Environmental Conditions. However, based on the likely historical use of hazardous materials associated with a former on-site print shop and location within 150 feet of former elevated freeway, the project site is located within a designated area defined by Article 22A of the San Francisco Health Code (Maher Ordinance).

The proposed project would be required to remediate potential soil and groundwater contamination described above in accordance with Article 22A of the Health Code. Additionally, the proposed project is subject to **PEIR Mitigation Measure M-HZ-2b: Site Assessment and Corrective Action for Projects Landward of the Historic Tide Line (Project Mitigation Measure 14)** and **M-HZ-2c: Site Assessment and Corrective Action for All Sites (Project Mitigation Measure 15)**. Therefore, the proposed project would not result in significant impacts related to hazards or hazardous materials that were not identified in the TCDP PEIR.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
16. MINERAL AND ENERGY RESOURCES—Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁶⁹ Hans Galland, Pacific Eagle Holdings Corporation, *Maher Ordinance Application: 555 Howard Street, San Francisco*, August 25, 2015.

⁷⁰ AEI Consultants, *Phase I Environmental Site Assessment, 547, 555, and 557 Howard Street, San Francisco*, February 24, 2015.

As noted in the TCDP PEIR, all land in San Francisco, including the 555 Howard Street project site, is designated as Mineral Resource Zone 4 (MRZ-4) by the California Division of Mines and Geology (CDMG). This designation indicates that there is not adequate information available for assignment to any other MRZ, and thus the site is not a designated area of significant mineral deposits. The project site is not a mineral resource recovery site, and it would not require quarrying, mining, dredging, or extraction of locally important mineral resources on the project site, and it would not deplete non-renewable natural resources. As a result, no impacts to mineral resources would occur, consistent with the findings of the PEIR.

With respect to energy resources, the TCDP PEIR determined that the implementation of the TCDP would facilitate the construction of both new residential units and commercial buildings. Development of these uses would not result in use of large amounts of fuel, water, or energy in a wasteful manner or in the context of energy use throughout the City and region. The energy demand for individual buildings, such as the proposed project or variant, would be typical for such projects and would meet, or exceed, current state and local codes and standards concerning energy consumption, including Title 24 of the California Code of Regulations enforced by DBI.

As the proposed project is consistent with the development density established under the TCDP, there would be no additional impacts on mineral and energy resources beyond those analyzed in the TCDP PEIR.

<u>Topics:</u>	<i>Significant Impact Peculiar to Project or Project Site</i>	<i>Significant Impact not Identified in PEIR</i>	<i>Significant Impact due to Substantial New Information</i>	<i>No Significant Impact not Previously Identified in PEIR</i>
17. AGRICULTURE AND FOREST RESOURCES:—Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The PEIR determined that no agriculture or forest resources exist within the boundaries of the TCDP; therefore, development under the TCDP would have no effect on agriculture or forest resources. No mitigation measures were identified in the PEIR. As the proposed project is consistent with the development density established under the TCDP, there would be no additional impacts on agriculture and forest resources beyond those analyzed in the TCDP PEIR.

MITIGATION MEASURES

The following mitigation measures from the TCDP PEIR apply to the proposed project and would be implemented as part of the project:

Cultural Resources

Project Mitigation Measure 1: Construction Best Practices for Historical Resources. The project sponsor of a development project in the plan area shall incorporate into construction specifications for the proposed project a requirement that the construction contractor(s) use all feasible means to avoid damage to adjacent and nearby historic buildings, including, but not necessarily limited to, staging of equipment and materials as far as possible from historic buildings to avoid direct impact damage; using techniques in demolition (of the parking lot), excavation, shoring, and construction that create the minimum feasible vibration; maintaining a buffer zone when possible between heavy equipment and historical resource(s) within 125 feet, as identified by the Planning Department; appropriately shoring excavation sidewalls to prevent movement of adjacent structures; design and installation of the new foundation to minimize uplift of adjacent soils; ensuring adequate drainage from adjacent sites; covering the roof of adjacent structures to avoid damage from falling objects; and ensuring appropriate security to minimize risks of vandalism and fire.

Project Mitigation Measure 2: Construction Monitoring Program for Historical Resources. The project sponsor shall undertake a monitoring program to minimize damage to adjacent historic buildings and to ensure that any such damage is documented and repaired. The monitoring program would include the following components. Prior to the start of any ground-disturbing activity, the project sponsor shall engage a historic architect or qualified historic preservation professional to undertake a preconstruction survey of historical resource(s) identified by the Planning Department within 125 feet of planned construction to document and photograph the buildings' existing conditions. Based on the construction and condition of the resource(s), the consultant shall also establish a maximum vibration level that shall not be exceeded at each building, based on existing condition, character-defining features, soils conditions, and anticipated construction practices (a common standard is 0.2 inches per second, peak particle velocity). To ensure that vibration levels do not exceed the established standard, the project sponsor shall monitor vibration levels at each structure and shall prohibit vibratory construction activities that generate vibration levels in excess of the standard.

Should vibration levels be observed in excess of the standard, construction shall be halted and alternative techniques put in practice, to the extent feasible. The consultant shall conduct regular periodic inspections of each building during ground-disturbing activity on the project site. Should damage to either building occur, the building(s) shall be remediated to its preconstruction condition at the conclusion of ground-disturbing activity on the site.

Project Mitigation Measure 3: Subsequent Archeological Testing Program. When a project is to be developed within the TCDP plan area, it will be subject to preliminary archeological review by the

Planning Department archeologist. This in-house review will assess whether there are gaps in the necessary background information needed to make an informed archaeological sensitivity assessment. This assessment will be based upon the information presented in the TCDP Archeological Research Design and Treatment Plan (Far Western Anthropological Research Group, Inc., *Archeological Research Design and Treatment Plan for the Transit Center District Plan Area, San Francisco, California*, February 2010), as well as any more recent investigations that may be relevant. If data gaps are identified, then additional investigations, such as historic archival research or geo-archaeological coring, may be required to provide sufficiently detailed information to make an archaeological sensitivity assessment.

If the project site is considered to be archaeologically sensitive and based on a reasonable presumption that archaeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the Planning Department (“Department”) pool of qualified archeological consultants as provided by the Department archeologist. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant’s work shall be conducted in accordance with this measure and with the requirements of the TCDP archeological research design and treatment plan at the direction of the ERO. In instances of inconsistency between the requirement of the project archaeological research design and treatment plan and of this archaeological mitigation measure, the requirements of this archaeological mitigation measure shall prevail. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sections 15064.5 (a) (c).

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

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

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

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological consultant shall prepare an archeological monitoring plan (AMP):

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

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

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor,

and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.
- Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures.
- Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies.
- Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.
- Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report. Description of proposed report format and distribution of results.
- Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

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

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Transportation

Project Mitigation Measure 4: Parking Garage/Loading Attendant: If warranted by project-specific conditions, the project sponsor of a development project in the plan area shall ensure that building management employs attendant(s) for the project's parking garage and/or loading dock, as applicable. The attendant would be stationed as determined by the project-specific analysis, typically at the project's driveway to direct vehicles entering and exiting the building and avoid any safety-related conflicts with pedestrians on the sidewalk during the AM and PM peak periods of traffic and pedestrian activity, with extended hours as dictated by traffic and pedestrian conditions and by activity in the project garage and loading dock. Each project shall also install audible and/or visible warning devices, or comparably effective warning devices as approved by the Planning Department and/or the Sustainable Streets Division of the Municipal Transportation Agency, to alert pedestrians of the outbound vehicles from the parking garage and/or loading dock, as applicable.

Project Mitigation Measure 5: Loading Dock Management: To ensure that off-street loading facilities are efficiently used and that trucks longer than can be safely accommodated are not permitted to use a building's loading dock, and the project sponsor of a development project in the plan area shall develop a plan for management of the building's loading dock and shall ensure that tenants in the building are informed of limitations and conditions on the loading schedules and truck size. Such a management plan could include strategies such as the use of an attendant to direct and guide trucks (see Project Mitigation Measure #4), installing a 'Full' sign at the garage/loading dock driveway, limiting activity during peak hours, installation of audible and/or visual warning devices, and other features. Additionally, as part of the project application process, the project sponsor shall consult with the Municipal Transportation Agency concerning the design of loading and parking facilities. Typically, a building property manager dictates the maximum size of trucks that can be accommodated by a building's loading dock, and when trucks may access the project site.

Project Mitigation Measure 6: Construction Management Plan: To minimize potential disruptions to transit, traffic, and pedestrian and bicyclists, the project sponsor and/or construction contractor for any individual development project in the TCDP plan area shall develop a Construction Management Plan that could include, but not necessarily be limited to, the following:

- Limit construction truck movements to the hours between 9:00 a.m. and 4:00 p.m. (or other times, if approved by the Municipal Transportation Agency) to minimize disruption of traffic, transit, and pedestrian flow on adjacent streets and sidewalks during the weekday AM and PM peak periods;
- Identify optimal truck routes to and from the site to minimize impacts to traffic, transit, pedestrians, and bicyclists; and

- Encourage construction workers to use transit when commuting to and from the site, reducing the need for parking.

The project sponsor shall also coordinate with the Municipal Transportation Agency/Sustainable Streets Division, the Transbay Joint Powers Authority, and construction manager(s)/ contractor(s) for the Transit Center project, and with Muni, AC Transit, Golden Gate Transit, and SamTrans, as applicable, to develop construction phasing and operations plans that would result in the least amount of disruption that is feasible to transit operations, pedestrian and bicycle activity, and vehicular traffic.

Noise

Project Mitigation Measure 7: General Construction Noise Control Measures: To ensure that project noise from construction activities is minimized to the maximum extent feasible, the project sponsor of a development project in the plan area shall undertake the following:

- The project sponsor of a development project in the plan area shall require the general contractor to ensure that equipment and trucks used for project construction utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- The project sponsor of a development project in the plan area shall require the general contractor to locate stationary noise sources (such as compressors) as far from adjacent or nearby sensitive receptors as possible, to muffle such noise sources, and to construct barriers around such sources and/or the construction site, which could reduce construction noise by as much as five dBA. To further reduce noise, the contractor shall locate stationary equipment in pit areas or excavated areas, if feasible.
- The project sponsor of a development project in the plan area shall require the general contractor to use impact tools (e.g., jack hammers, pavement breakers, and rock drills) that are hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used, along with external noise jackets on the tools, which could reduce noise levels by as much as 10 dBA.
- The project sponsor of a development project in the plan area shall include noise control requirements in specifications provided to construction contractors. Such requirements could include, but not be limited to, performing all work in a manner that minimizes noise to the extent feasible; use of equipment with effective mufflers; undertaking the noisiest activities during times of least disturbance to surrounding residents and occupants, as feasible; and selecting haul routes that avoid residential buildings inasmuch as such routes are otherwise feasible.
- Prior to the issuance of each building permit, along with the submission of construction documents, the project sponsor of a development project in the plan area shall submit to the Planning Department and Department of Building Inspection (DBI) a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include (1) a procedure and phone numbers for notifying DBI, the Department of Public Health, and the Police Department (during regular construction hours and off-hours); (2) a sign posted on-site describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction; (3) designation of an on-site construction complaint and enforcement manager for the project; and (4) notification of neighboring residents and non-

residential building managers within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities (defined as activities generating noise levels of 90 dBA or greater) about the estimated duration of the activity.

Air Quality

Project Mitigation Measure 8: Dust Control Plan. To reduce construction-related dust emissions, the project sponsor of each development project in the plan area and each public infrastructure project (such as improvements to the public realm) in the plan area on a site of one-half acre or less but that would require more than 5,000 cubic yards of excavation lasting four weeks or longer shall incorporate into construction specifications the requirement for development and implementation of a site-specific Dust Control Plan as set forth in Article 22B of the *San Francisco Health Code*. The Dust Control Plan shall require the project sponsor to: submit a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site; wet down areas of soil at least three times per day; provide an analysis of wind direction and install upwind and downwind particulate dust monitors; record particulate monitoring results; hire an independent, third party to conduct inspections and keep a record of those inspections; establish shut-down conditions based on wind, soil migration, etc.; establish a hotline for surrounding community members who may be potentially affected by project-related dust; limit the area subject to construction activities at any one time; install dust curtains and windbreaks on the property lines, as necessary; limit the amount of soil in hauling trucks to the size of the truck bed and secure soils with a tarpaulin; enforce a 15 mph speed limit for vehicles entering and exiting construction areas; sweep affected streets with water sweepers at the end of the day; install and utilize wheel washers to clean truck tires; terminate construction activities when winds exceed 25 miles per hour; apply soil stabilizers to inactive areas; and sweep adjacent streets to reduce particulate emissions. The project sponsor would be required to designate an individual to monitor compliance with dust control requirements.

Project Mitigation Measure 9: Construction Vehicle Emissions Minimization. To reduce construction vehicle emissions, the project sponsor shall incorporate the following into construction specifications:

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Project Mitigation Measure 10: Construction Vehicle Emissions Evaluation and Minimization. The project sponsor or the project sponsor's contractor shall comply with the following:

1. Engine Requirements.
 - a. All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 hours over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (ARB) Tier 2 off-road emission standards and have been retrofitted with an ARB Level 3 Verified Diesel Emissions Control Strategy. Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emissions standards automatically meet this requirement.
 - b. Where access to alternative sources of power are available, portable diesel engines shall be prohibited.
 - c. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations

regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The Contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas and at the construction site to remind operators of the two minute idling limit.

- d. The Contractor shall instruct construction workers and equipment operators on the maintenance and tuning of construction equipment, and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.

2. Waivers

- a. The Planning Department’s Environmental Review Officer or designee (ERO) may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the Contractor must submit documentation that the equipment used for onsite power generation meets the requirements of Subsection (A)(1).

The ERO may waive the equipment requirements of Subsection (A)(1) if: a particular piece of off-road equipment with an ARB Level 3 VDECS is technically not feasible; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or, there is a compelling emergency need to use off-road equipment that is not retrofitted with an ARB Level 3 VDECS. If the ERO grants the waiver, the Contractor must use the next cleanest piece of off-road equipment, according to the table below.

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	ARB Level 2 VDECS
2	Tier 2	ARB Level 1 VDECS
3	Tier 2	Alternative Fuel*

How to use the table: If the ERO determines that the equipment requirements cannot be met, then the project sponsor would need to meet Compliance Alternative 1. If the ERO determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 1, then the contractor must meet Compliance Alternative 2. If the ERO determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 2, then the contractor must meet Compliance Alternative 3. *Alternative Fuels are not a VDECS.

- 1. Construction Emissions Minimization Plan. Before starting on-site construction activities, the Contractor shall submit a Construction Emissions Minimization Plan to the ERO for review and approval. The plan shall state, in reasonable detail, how the Contractor will meet the requirements of Section 1.
 - a. The plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), hp, engine serial number, and expected fuel usage and hours of operation. For VDECS install, the description may include: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.

- b. The ERO shall ensure that all applicable requirements of the plan have been incorporated into the contract specifications. The plan shall include a certification statement that the contractor agrees to comply fully with the plan.
 - c. The contractor shall make the plan available to the public for review on-site during work hours. The contractor shall post at the construction site, legible and visible sign summarizing the plan. The sign shall also state that the public may ask to inspect the plan for the project at any time during working hours and shall explain how to request to inspect the plan. The Contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.
2. Monitoring. After start of Construction Activities, the Contractor shall submit quarterly reports to the ERO documenting compliance with the plan. After completion of construction activities and prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the plan.

Project Mitigation Measure 11: Best Available Control Technology for Diesel Generators. The project sponsor shall ensure that the backup diesel generator meet or exceed one of the following emission standards for particulate matter: (1) Tier 4 certified engine, or (2) Tier 2 or Tier 3 certified engine that is equipped with a California Air Resources Board (ARB) Level 3 Verified Diesel Emissions Control Strategy (VDECS). A non-verified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical ARB verified model and if the Bay Area Air Quality Management District (BAAQMD) approves of its use. The project sponsor shall submit documentation of compliance with the BAAQMD New Source Review permitting process (Regulation 2, Rule 2, and Regulation 2, Rule 5) and the emission standard requirement of this mitigation measure to the Planning Department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.

Biological Resources

Project Mitigation Measure 12: Pre-Construction Bird Surveys: Conditions of approval for building permits issued for construction within the TCDP plan area shall include a requirement for pre-construction breeding bird surveys when trees or vegetation would be removed or buildings demolished as part of an individual project. Pre-construction nesting bird surveys shall be conducted by a qualified biologist between February 1st and August 15th if vegetation (trees or shrubs) removal or building demolition is scheduled to take place during that period. If special-status bird species are found to be nesting in or near any work area or, for compliance with federal and state law concerning migratory birds, if birds protected under the federal Migratory Bird Treaty Act or the California Fish and Game Code are found to be nesting in or near any work area, an appropriate no-work buffer zone (e.g., 100 feet for songbirds) shall be designated by the biologist. Depending on the species involved, input from the California Department of Fish and Wildlife (CDFW) and/or the U.S. Fish and Wildlife Service (USFWS) Division of Migratory Bird Management may be warranted. As recommended by the biologist, no activities shall be conducted within the no-work buffer zone that could disrupt bird breeding. Outside of the breeding season (August 16 – January 31), or after young birds have fledged, as determined by the biologist, work activities may proceed. Birds that establish nests during the construction period are considered habituated to such activity and no buffer shall be required, except as needed to avoid direct destruction of the nest, which would still be prohibited.

Hazards and Hazardous Materials

Project Mitigation Measure 13: Hazardous Building Materials Abatement. The project sponsor of any development project in the Plan area shall ensure that any building planned for demolition or renovation is surveyed for hazardous building materials including PCB-containing electrical equipment, fluorescent light ballasts containing PCBs or DEHP, and fluorescent light tubes containing mercury vapors. These materials shall be removed and properly disposed of prior to the start of demolition or renovation. Old light ballasts that are proposed to be removed during renovation shall be evaluated for the presence of PCBs and in the case where the presence of PCBs in the light ballast cannot be verified, they shall be assumed to contain PCBs, and handled and disposed of as such, according to applicable laws and regulations. Any other hazardous building materials identified either before or during demolition or renovation shall be abated according to federal, state, and local laws and regulations.

Project Mitigation Measure 14: Site Assessment and Corrective Action for Projects Landward of the Historic High Tide Line. For any project that is not located bayward of the historic high tide line, the project sponsor shall ensure that a site-specific Phase I ESA is prepared prior to development. The site assessment shall include visual inspection of the property; review of historical documents; and review of environmental databases to assess the potential for contamination from sources such as underground storage tanks, current and historical site operations, and migration from off-site sources. The project sponsor shall ensure that the Phase I assessment and any related documentation is provided to the Planning Department's Environmental Planning (EP) division and, if required by EP, to DPH for review and consideration of potential corrective action.

Where the Phase I site assessment indicates evidence of site contamination, additional data shall be gathered during a Phase II investigation, including sampling and laboratory analysis of the soil and groundwater for the suspected chemicals to identify the nature and extent of contamination. If the level(s) of chemical(s) would create an unacceptable risk to human health or the environment, appropriate cleanup levels for each chemical, based on current and planned land use, shall be determined in accordance with accepted procedures adopted by the lead regulatory agency providing oversight (e.g., the DTSC, the RWQCB, or DPH). At sites where there are ecological receptors such as sensitive plant or animal species that could be exposed, cleanup levels shall be determined according to the accepted ecological risk assessment methodology of the lead agency, and shall be protective of ecological receptors known to be present at the site.

If agreed-upon cleanup levels were exceeded, a remedial action plan or similar plan for remediation shall be prepared and submitted review and approval by the appropriate regulatory agency. The plan shall include proposed methods to remove or treat identified chemicals to the approved cleanup levels or containment measures to prevent exposure to chemicals left in place at concentrations greater than cleanup levels.

Upon determination that a site remediation has been successfully completed, the regulatory agency shall issue a closure letter to the responsible party. For sites that are cleaned to levels that do not allow unrestricted land use, or where containment measures were used to prevent exposure to hazardous materials, the DTSC may require a limitation on the future use of the property. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners. A risk management plan, health and safety plan, and possibly a cap maintenance plan could be required. These plans would specify procedures for preventing unsafe exposure to hazardous materials left in place and safe procedures for handling hazardous materials should site disturbance be required.

The requirements of these plans and the land use restriction shall transfer to the new property owners in the event that the property is sold.

Project Mitigation Measure 15: Site Assessment and Corrective Action for All Sites. The project sponsor shall characterize the site, including subsurface features such as utility corridors, and identify whether volatile chemicals are detected at or above risk screening levels in the subsurface. If so, a screening evaluation shall be conducted in accordance with guidance developed by the DTSC⁷¹ to estimate worst case risks to building occupants from vapor intrusion using site-specific data and conservative assumptions specified in the guidance. If an unacceptable risk were indicated by this conservative analysis, then additional site data shall be collected and a site-specific vapor intrusion evaluation, including fate and transport modeling, shall be required to more accurately evaluate site risks. Should the site-specific evaluation identify substantial risks, then additional measures shall be required to reduce risks to acceptable levels. These measures could include remediation of site soil and/or groundwater to remove vapor sources, or, should this be infeasible, use of engineering controls such as a passive or active vent system and a membrane system to control vapor intrusion. Where engineering controls are used, a deed restriction shall be required, and shall include a description of the potential cause of vapors, a prohibition against construction without removal or treatment of contamination to approved risk-based levels, monitoring of the engineering controls to prevent vapor intrusion until risk-based cleanup levels have been met, and notification requirements to utility workers or contractors who may have contact with contaminated soil and groundwater while installing utilities or undertaking construction activities. In addition, if remediation is necessary, the project sponsor shall implement long-term monitoring at the site as needed. The frequency of sampling and the duration of monitoring will depend upon site-specific conditions and the degree of volatile chemical contamination.

The screening level and site-specific evaluations shall be conducted under the oversight of DPH and methods for compliance shall be specified in the site mitigation plan prepared in accordance with this measure, and subject to review and approval by the DPH. The deed restriction, if required, shall be recorded at the San Francisco Office of the Assessor-Recorder after approval by the DPH and DTSC.

IMPROVEMENT MEASURES

The project sponsor has agreed to implement all of the following improvement measures:

Transportation

Project Improvement Measure 1: Queue Abatement. The project sponsor should comply with the Planning Department's standard Condition of Approval regarding vehicle queue abatement (with modifications to reflect the Project's specialized automobile parking arrangement). Specifically, it should be the responsibility of the project sponsor to ensure that vehicle queues do not block any portion of the sidewalk or roadway of Tehama Street, including any portion of any travel lanes. The owner / operator of the parking facility should also ensure that no pedestrian conflict (as defined below) is created at the curb cut serving the project's parking elevator.

A vehicle queue is defined as one or more stopped vehicles destined to the project garage blocking any portion of the Tehama Street sidewalk or roadway for a consecutive period of three minutes or longer on

⁷¹ California Department of Toxic Substances Control, Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air. October 2011.

a daily or weekly basis, or for more than five (5) percent of any 60-minute period. Queues could be caused by unconstrained parking demand exceeding parking space capacity; vehicles waiting for safe gaps in high volumes of pedestrian traffic; car or truck congestion within the parking garage; or a combination of these or other factors.

A pedestrian conflict is defined as a condition where drivers of inbound and / or outbound vehicles, frustrated by the lack of safe gaps in pedestrian traffic, unsafely merge their vehicle across the sidewalk while pedestrians are present and force pedestrians to stop or change direction to avoid contact with the vehicle, and / or contact between pedestrians and the vehicle would occur.

There is one exception to the definition of a pedestrian conflict. Sometimes, outbound vehicles departing from the Project driveway would be able to cross the sidewalk without conflicting with pedestrians, but then would have to stop and wait in order to safely merge into the Tehama Street roadway. While waiting to merge, the rear of the vehicle could protrude into the western half of the sidewalk. This protrusion shall not be considered a pedestrian conflict. This is because the obstruction would be along the western edge of the sidewalk, while the pedestrian path of travel would be along the eastern side of the sidewalk; street trees and other streetscape elements would already impede pedestrian flow along the west side of the sidewalk. Any pedestrians that would be walking along the west side of the sidewalk would be able to divert to the east and maneuver behind the stopped car. This exception only applies to outbound vehicles, and only if pedestrians are observed to walk behind the stopped vehicle. This exception does not apply to any inbound vehicles, and does not apply to outbound vehicles if pedestrians are observed to walk in front of the stopped outbound vehicle.

Because the project would include several unique components (i.e., a valet program and parking elevator), pedestrian conflicts would also include situations where valet attendants use the adjacent sidewalk along Tehama Street (i.e., the public right-of-way portion outside of the property lines of the project), either partially or in whole, as temporary stacking capacity. Stacking capacity is typically required at or near the elevator because attendants may retrieve vehicles before their owners have arrived, because the elevator is storing or retrieving other vehicles and may be unavailable for use at that moment, or because of other reasons. In these situations, valet attendants would not be allowed to use the sidewalk as stacking capacity, and would be required to ensure that vehicles temporarily parked in the formal stacking area do not intrude into the sidewalk.

If vehicle queues or pedestrian conflicts occur, the project sponsor should employ abatement methods as needed to abate the queue and / or conflict. Appropriate abatement methods would vary depending on the characteristics and causes of the queue and conflict. Suggested abatement methods include but are not limited to the following: redesign of facility to improve vehicle circulation and/or on-site queue capacity; use of off-site parking facilities or shared parking with nearby uses; travel demand management strategies such as additional bicycle parking or employee shuttles; parking demand management strategies such as time-of-day parking surcharges; and/or limiting hours of access to the Project driveway during periods of peak pedestrian traffic. Any new abatement measures shall be reviewed and approved by the Planning Department.

If the Planning Director, or his or her designee, suspects that vehicle queues or a pedestrian conflict are present, the Planning Department shall notify the property owner in writing. The facility owner/operator should hire a qualified transportation consultant to evaluate the conditions at the site for no less than seven days. The consultant should submit a report to the Department documenting conditions. Upon

review of the report, the Planning Department shall determine whether or not queues and/or a pedestrian conflict exists, and shall notify the garage owner/operator of the determination in writing.

If the Planning Department determines that queues or a pedestrian conflict do exist, upon notification, the facility owner/operator should have 90 days from the date of the written determination to carry out abatement measures. If after 90 days the Planning Department determines that vehicle queues and/or a pedestrian conflict are still present or that the facility owner/operator has been unsuccessful at abating the identified vehicle queues or pedestrian conflicts, the hours of inbound and/or outbound access of the Project driveway should be limited during peak hours. The hours and directionality of the access limitations shall be determined by the Planning Department and communicated to the facility owner/operator in writing. The facility owner/operator should be responsible for limiting the hours of Project driveway access as specified by the Planning Department.

Project Improvement Measure 2: Passenger Loading Zone Management. It should be the responsibility of the project sponsor to ensure that project-generated passenger loading activities along Howard Street and Tehama Street are accommodated within the confines of the zones. Specifically, the project sponsor should monitor passenger loading activities at the proposed zones to ensure that such activities are in compliance with the following requirements:

- That double parking, queuing, or other Project-generated activities do not result in intrusions into the adjacent travel lane. Any Project-generated vehicle conducting, or attempting to conduct, passenger pick-up or drop-off activities should not occupy, or obstruct free-flow traffic or bicycle circulation in, the adjacent travel lane.
- That vehicles conducting passenger loading activities are not stopped in the passenger loading zone for an extended period of time. In this context, an “extended period of time” shall be defined as more than five (5) consecutive minutes at any time during other time periods.

Should passenger loading activities at the proposed on-street passenger loading zones not be in compliance with the above requirements, the project sponsor should employ abatement methods as needed to ensure compliance. Suggested abatement methods may include, but are not limited to, employment or deployment of additional staff to direct passenger loading activities; use of off-site parking facilities or shared parking with nearby uses; travel demand management strategies such as additional bicycle parking; and/or limiting hours of access to the passenger loading zones. Any new abatement measures should be reviewed and approved by the Planning Department.

In general, hotel management should also work with tour groups and event sponsors booking rooms or space in the building to determine what transportation needs they may have, and should coordinate regularly with the valet operator to ensure that sufficient curb space is available in the passenger loading zone to accommodate any passenger loading needs. If necessary, building management and/or the valet operator should clear space at the zone in advance of the arrival of tour buses or other tour/event traffic (also see **Improvement Measure 3: Event-Related Transportation Demand Management** below). If additional space is necessary, a temporary signage application can also be filed with the SFMTA to convert on-street parking in the immediate vicinity of the Project site into additional space for passenger loading.

Building management should also ensure that passenger loading activities at the Howard Street and Tehama Street zones do not obstruct pedestrian circulation and safety in the adjacent sidewalk. While passenger loading activities would be expected to temporarily occupy portions of the sidewalk as part of regular hotel and valet operations (e.g., valet stand stationed in the sidewalk, porters moving hotel guests' luggage to and from curbside), pedestrian access along the sidewalk fronting the building should be maintained at all times. Major obstructions to pedestrian circulation—such as large tour groups assembling in the sidewalk to board or alight tour buses—should be avoided.

If the Planning Director, or his or her designee, suspects that Project-generated passenger loading activities in the proposed passenger loading zones along Howard Street or Tehama Street are not in compliance with the above requirements, the Planning Department shall notify the property owner in writing. The property owner, or his or her designated agent (such as building management), shall hire a qualified transportation consultant to evaluate conditions at the site for no less than seven total days. The consultant shall submit a report to the Planning Department documenting conditions. Upon review of the report, the Planning Department shall determine whether or not Project-generated passenger loading activities are in compliance with the above requirements, and shall notify the property owner of the determination in writing.

If the Planning Department determines that passenger loading activities are not in compliance with the above requirements, upon notification, the property owner or his or her designated agent should have 90 days from the date of the written determination to carry out abatement measures. If after 90 days the Planning Department determines that the property owner or his or designated agent has been unsuccessful at ensuring compliance with the above requirements, use of the on-street passenger loading zone should be restricted during certain time periods or events to ensure compliance. These restrictions should be determined by the Planning Department in coordination with SFMTA, as deemed appropriate based on the consultant's evaluation of site conditions, and communicated to the property owner in writing. The property owner or his or her designated agent should be responsible for relaying these restrictions to building tenants to ensure compliance.

Project Improvement Measure 3: Event-Related Transportation Demand Management. When booking events in the hotel's function and conference spaces, the Project Sponsor, hotel operator, and/or building management should work with event sponsors to identify the expected transportation needs of the event and implement improvement measures to assist with event activities. Potential measures could include (but are not limited to) the following:

- For events that may generate substantial demand for curbside passenger loading (e.g., tour buses, limousines, etc.) in excess of regular (non-event) conditions (and could result in disruptions to traffic, bicycle, and pedestrian circulation along Howard Street or Tehama Street), manage use of the proposed passenger loading zone to ensure that sufficient space is provided to accommodate the additional vehicles while maintaining regular (non-event) use of the zone. If additional space is necessary apply for temporary signage through the SFMTA to convert on-street parking in the immediate vicinity of the Project site into additional space for event-related passenger loading.
- Provide general transit information (e.g., directions to/from key transit hubs, route schedules, fares) to event sponsors for distribution to event attendees, and encourage attendees to take transit, bike, or walk when traveling to/from the event. If necessary,

provide general information about nearby public parking facilities (e.g., maps, directions, rates, etc.) to event sponsors for distribution to event attendees.

- For events that may generate substantial demand for valet parking in excess of regular (non-event) conditions, the project sponsor should continue to pursue negotiations with the 55 Hawthorne Street facility to secure access to up to 25 parking spaces to accommodate events.

Project Improvement Measure 4: Transportation Demand Management Program. In compliance with the TDM Ordinance (Board of Supervisors File #160925), the project sponsor will establish a transportation demand management (TDM) program for building tenants, in an effort to expand the mix of travel alternatives available for the building tenants. The project sponsor has chosen to implement the following measures as part of the building's TDM program:

- ACTIVE-2: Bicycle Parking (Option A)
- ACTIVE-3: Showers and Clothes Lockers
- CSHARE-1: Car-Share Parking and Membership (Option A)
- LU-2: On-site Affordable Housing (Option A)

In reviewing the project, the SFMTA has also recommended optional additional measures for consideration as part of the project's TDM program:

- Develop bicycle safety strategies along Tehama Street adjacent to the Project site, preventing conflicts with private cars accessing the garage;
- Provide signage indicating the location of nearby bikeways (e.g., Route 30 on Howard Street / Folsom Street, Route 11 on Second Street);
- Provide signage indicating the location of bicycle parking at on-site points of access;
- Provide free or subsidized bikeshare membership to all employees;
- Facilitate access to car-share spaces through on-site signage;
- Provide free or subsidized car-share membership to all employees;
- Offer free or subsidized Muni passes (loaded onto Clipper cards) for tenants; and
- Ensure that building's valet service is provided at all times (24 hours a day, seven days a week) and that carshare members who are not building users (i.e., car-share members who are not building residents, guests, customers, etc.) have easy, convenient access to the car-share vehicles.

Project Improvement Measure 5: Night Lighting Minimization. In compliance with the voluntary San Francisco Lights Out Program, the Planning Department could encourage buildings developed pursuant to the Plan to implement bird-safe building operations to prevent and minimize bird strike impacts, including but not limited to the following measures:

- Reduce building lighting from exterior sources by:
 - Minimizing amount and visual impact of perimeter lighting and façade uplighting and avoid up-lighting of rooftop antennae and other tall equipment, as well as of any decorative features;
 - Installing motion-sensor lighting;
 - Utilizing minimum wattage fixtures to achieve required lighting levels.

- Reduce building lighting from interior sources by:
 - Dimming lights in lobbies, perimeter circulation areas, and atria;
 - Turning off all unnecessary lighting by 11:00 p.m. through sunrise, especially during peak migration periods (mid-March to early June and late August through late October);
 - Utilizing automatic controls (motion sensors, photo-sensors, etc.) to shut off lights in the evening when no one is present;
 - Encouraging the use of localized task lighting to reduce the need for more extensive overhead lighting;
 - Scheduling nightly maintenance to conclude by 11:00 p.m.;
- Educating building users about the dangers of night lighting to birds.