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FINAL

SHADOW ANALYSIS REPORT FOR THE PROPOSED 875 CALIFORNIA STREET PER SF PLANNING SECTION 295 STANDARDS



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I. INTRODUCTION AND OVERVIEW

This report describes the results of an analysis conducted by PreVision Design to identify the shadow effects that would be caused by the proposed construction of a four-story residential project at 875 California Street (“the proposed project” or “875 California Street”) on St. Mary's Square, Willie “Woo Woo” Wong Playground, and Portsmouth Square Plaza, public parks protected under Section 295 of the San Francisco Planning Code as well as publicly accessible open spaces at 555, 600 & 650 California Street. The project sponsor is Reuben Junius & Rose, and the project architect is Robert A.M. Stern Architects (RAMSA).

The analysis was conducted according to criteria described in (1) the February 3, 1989 memorandum titled “Proposition K – The Sunlight Ordinance” prepared by the San Francisco Recreation and Park Department (RPD) and the San Francisco Planning Department (“the 1989 Proposition K memorandum”), and (2) the July 2014 memorandum titled “Shadow Analysis Procedures and Scope Requirements” prepared by the Planning Department.

PreVision Design has concluded that the project as proposed will not result in any new shadows falling on St. Mary's Square, Willie “Woo Woo” Wong Playground, Portsmouth Square Plaza, protected under Section 295 of the Planning Code, nor the nearby public open spaces at 555, 600, and 650 California Street. Accordingly, this report consists of a description of the proposed project, the parks or open spaces in question, and a graphical analysis showing the extents of new shadow relative to St. Mary's Square, Willie “Woo Woo” Wong Playground, Portsmouth Square Plaza and other publicly accessible open spaces. ■



- Proposed Project at 875 California Street
- RPD parks
 - ① St. Mary's Square
 - ② Willie "Woo Woo" Wong Playground
 - ③ Portsmouth Square Plaza
- Privately-Owned Public Open Spaces (POPOS)
 - ④ 555 California Street
 - ⑤ 600 California Street
 - ⑥ 650 California Street



FIGURE 1: Area Map



FIGURE 2: Project Rendering

II. PROPOSED PROJECT

The proposed project would be located on two lots totaling 15,548-square-foot (sf) in the Chinatown neighborhood of San Francisco on Assessor's Block 0256/ Lots 016-017. Figure 1 shows the location of the proposed project. The project site is located at the southeast corner of California and Powell Streets and currently has a 2-story parking structure at 875 California Street and a 20 space parking lot at 770 Powell Street. The project is within Nob Hill Special Use District, Residential-Mixed, High Density (RM-4) Zoning District and 65-A Height and Bulk District.

The project proposes to construct an 8-story, 65-foot-tall residential building containing 2 studios, 7 one-bedroom, 30 2-bedroom and 5 3-bedroom units, and below-grade parking including 48 vehicle and 46 bicycle spaces accessible from Powell Street and extending to California Street on the northwest corner. In total, the proposed project would provide approximately 63,673 gsf of residential uses. Figure 2 shows a rendering of the proposed project, Figure 3 shows the proposed project site plan, and Figures 4-8 show proposed building elevations. ■

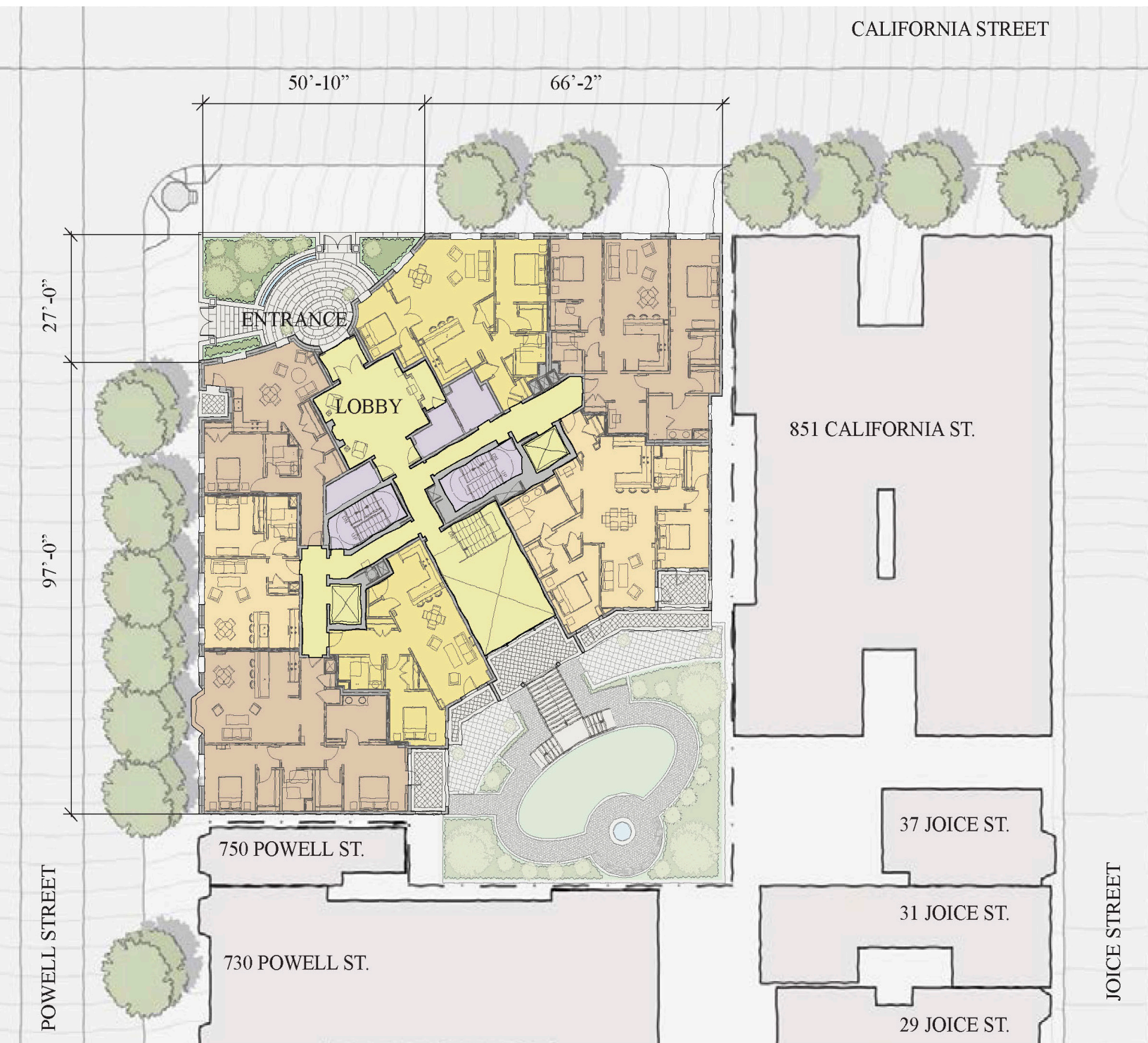


FIGURE 3: Site Plan

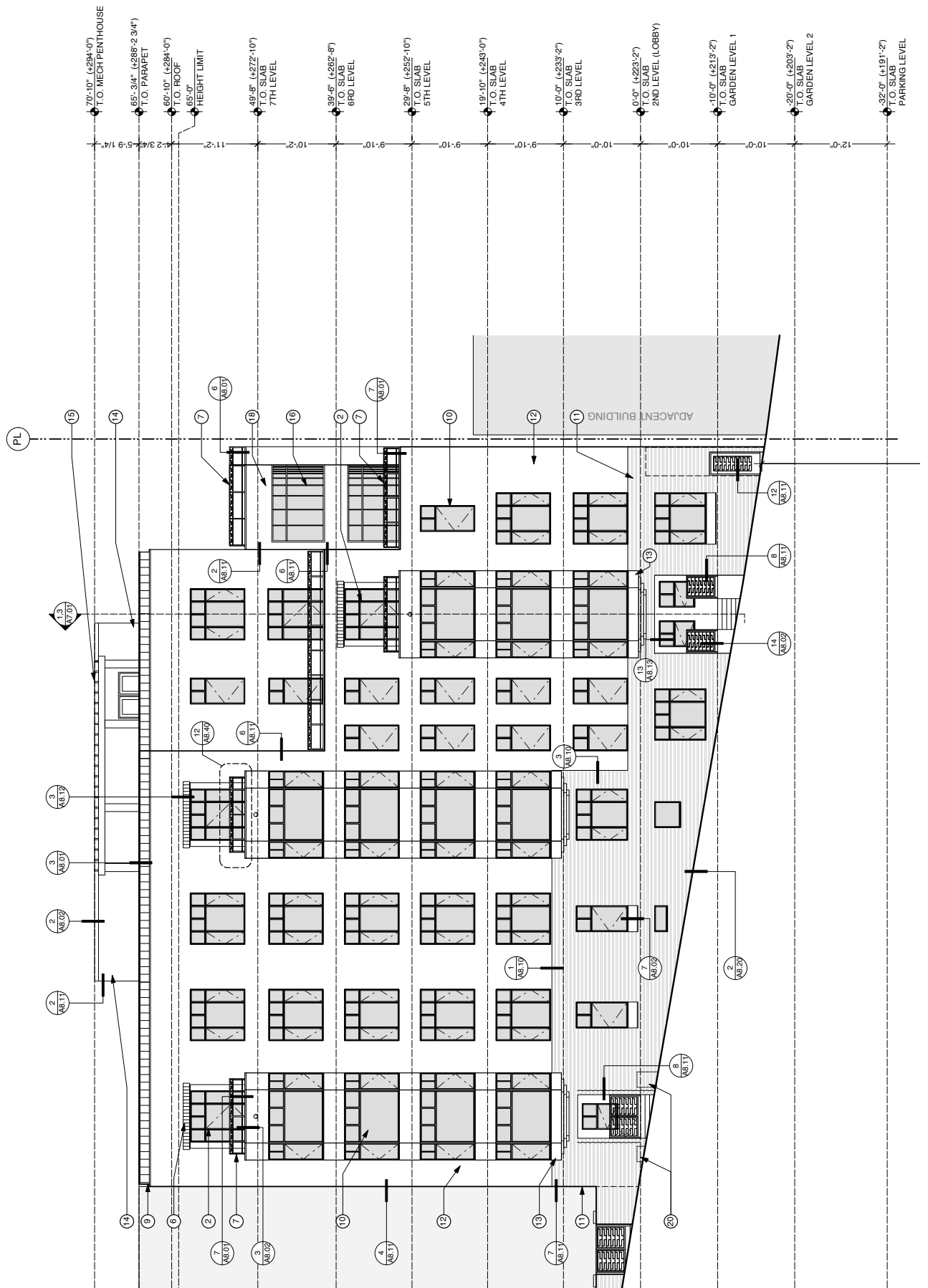


FIGURE 4: Powell Street Elevation

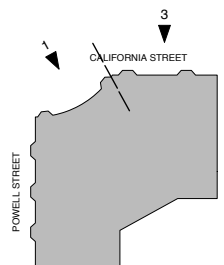
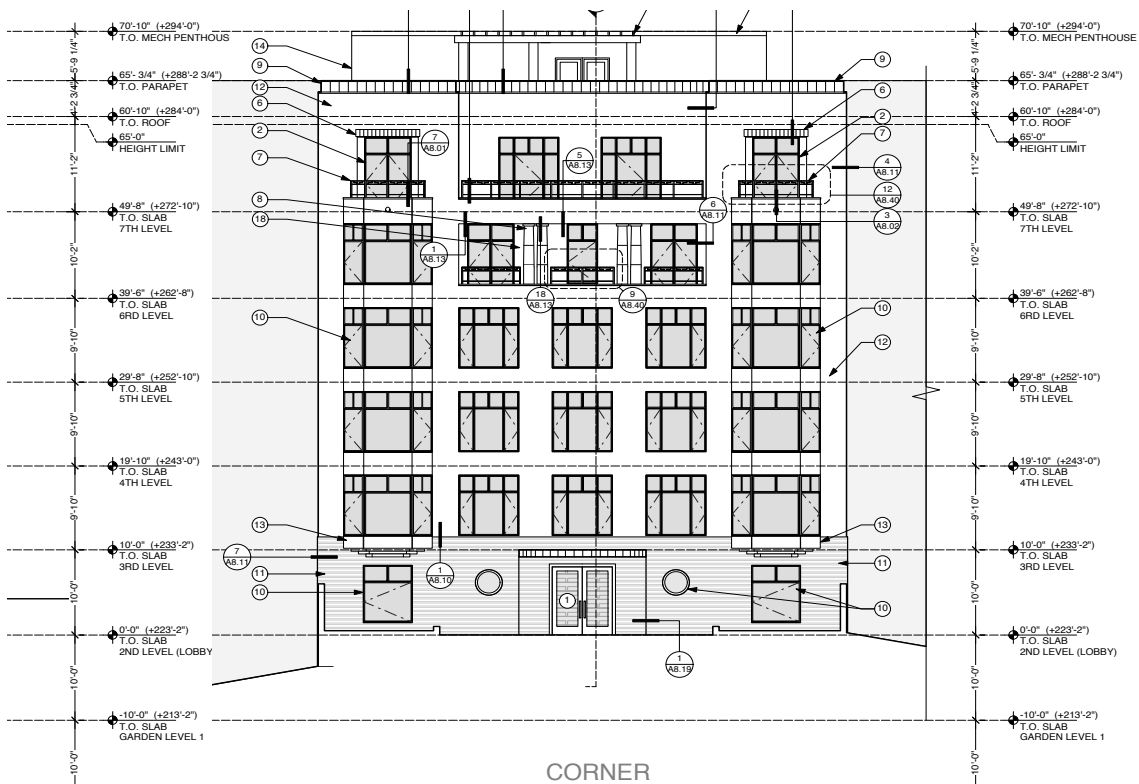
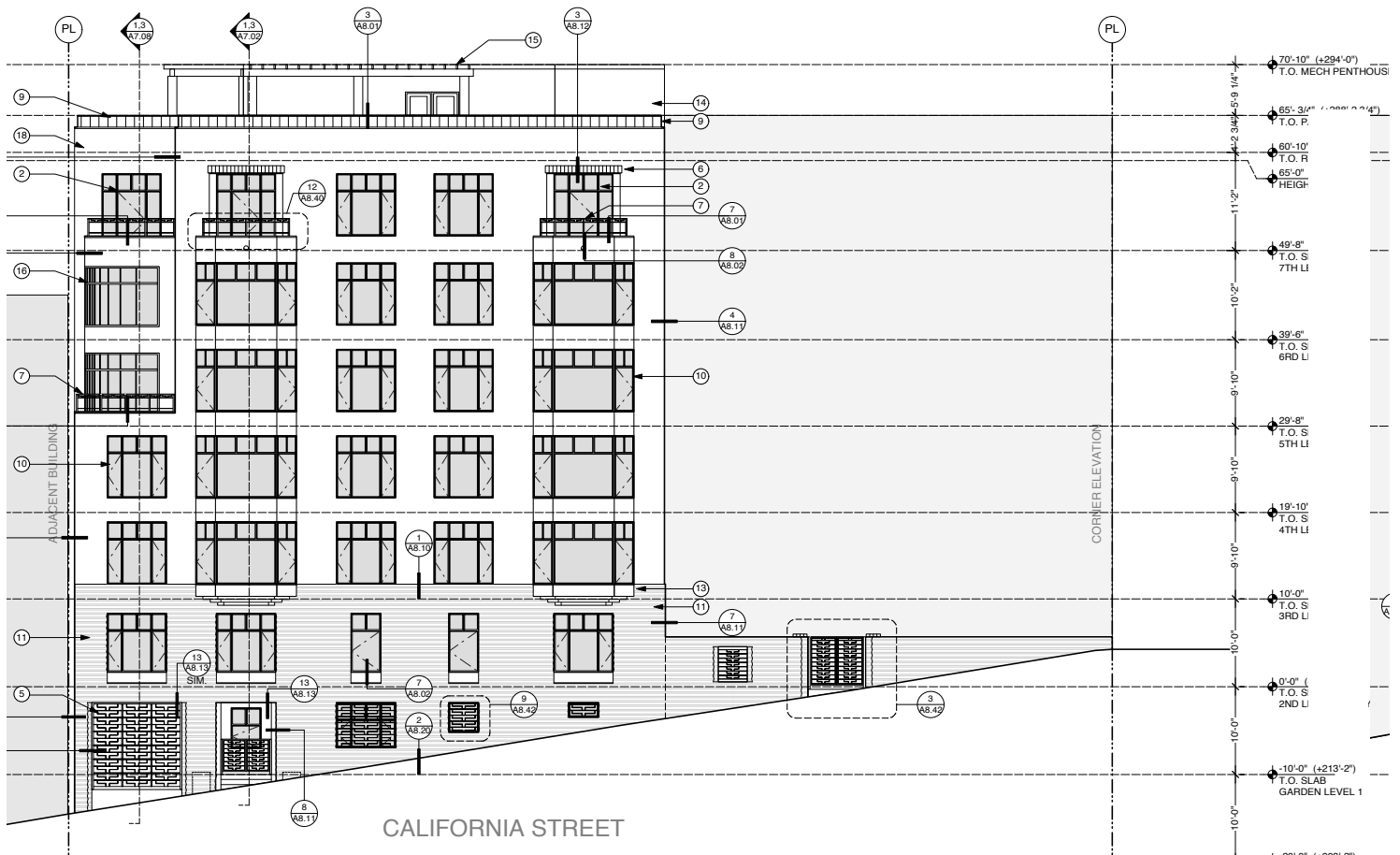


FIGURE 5: California Street Elevations

III. PARKS AND OPEN SPACES IN THE VICINITY

St. Mary's Square



St. Mary's Square from the corner of California and Quincy Street facing southeast

St. Mary's Square is a public park under the jurisdiction of the RPD. It is a 1.11 acre (48,352 sf) park on top of a parking garage located in the Chinatown neighborhood of San Francisco on Assessor's Block 0258 / Lot 003. The park spans north-south and is located on the southeast corner of California and Quincy Streets. Two main entrances are located at the corners of Quincy Street with stairs on the California Street side and a ramp on the Pine Street side, and three additional entrances along Quincy Street. The park has two-toned checkered paved walkways and includes two children's play areas on the northern and southeastern ends, curved planting beds, low seat walls, benches and restrooms.

St. Mary's Square is open from 6am to 10pm daily.

Willie "Woo Woo" Wong Playground

Willie "Woo Woo" Wong Playground is a public park under the jurisdiction of the RPD. It is a 0.61 acre (26,572 sf) urban park in the Chinatown neighborhood of San Francisco on Assessor's Block 0225 / Lot 018. The multi-level park, built into the hillside, slopes down from west to east along Sacramento Street to the south, Pagoda Place / Hang Ah Street to the west and Waverly Place to the east. It is fenced with an entrance on the southeast end, which leads to the recreation center, two below-grade, sand play areas in the center of the park and stairs that lead up to the basketball court, which is located on the eastern section. The volleyball and tennis courts are located on the western portion of the park and are accessible from Pagoda Place. Other amenities include an indoor



Willie “Woo Woo” Wong Playground from Sacramento Street

gym, ping pong tables and restrooms.

Willie “Woo Woo” Wong Playground is open from 6am to 10pm daily.

Portsmouth Square Plaza

Portsmouth Square Plaza is a public park under the jurisdiction of the RPD. The park is located in the Chinatown neighborhood on a full block (Block 0209 / Lot 017) and has a total parcel area of 1.29 acres (56,192 sf). Built on top of a four-level parking garage, the multi-level park is bounded by Washington Street to the north, Clay Street to the south, Kearny Street to the east, and Walter U. Lum Place to the west. Pedestrian entries are located at the northwest and southwest corners of the park with additional entrances along Clay and Washington Streets. Kearny Street has a pedestrian bridge that links the upper level of the park with Hilton Hotel as well as vehicular access to



Portsmouth Square from Clay Street facing north

the garage. The upper, or plaza, level, located on the western edge, has a children's play area, a pavilion, event space / seating, restrooms and elevator access to the parking garage. The lower, or mezzanine, level, has a smaller children's play area, clubhouse, trellis and chess boards. An indoor portion under the plaza level is used for valet parking and is not accessible to the public. The ground level has the parking entrances located off of Kearny Street.

Portsmouth Square is open from 6am to 10pm daily.

555 California Street Plaza (POPOS)



555 California Street Plaza

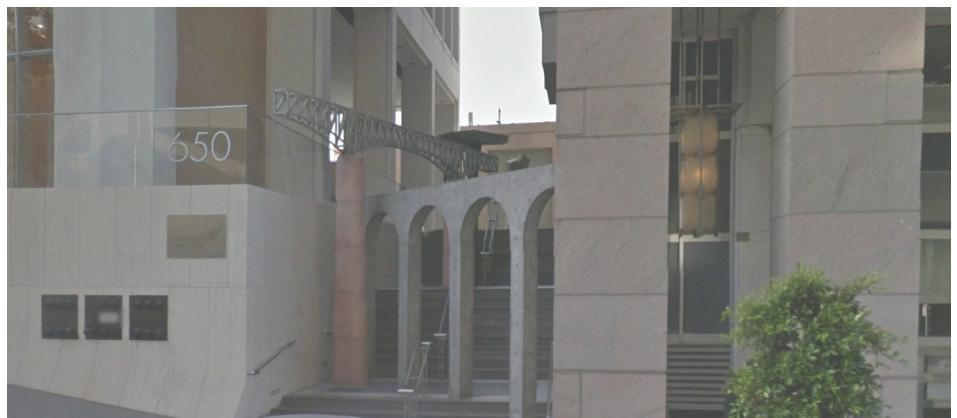
555 California Street Plaza is a privately-owned, public open space on the mezzanine level of the 555 California Street building, which is located in the Financial District neighborhood on Assessor's Block 0259 / Lots 026-029. The building is bounded by California Street to the north, Pine Street to the south, Montgomery Street to the east, and Kearny Street to the west. The park is accessible from stairs along California Street and at street level on the corner of Kearny Street. There is also an escalator within the building, which can take users to the mezzanine level. Red granite from the exterior of the building is used as pavement, the railing and stairs of within the park. Three sculptures are located on the southwestern corner upon entering from the street level, which leads to two square pruned-landscaped areas, located centrally and centrally-south within the park. Diagonal walkways run through these landscaped areas. On the northeast section are six large wooden planters containing bamboo and olive trees and teak benches. 555 California Street Plaza is not fenced and has no posted hours of operation.



600 California Street Plaza

600 California Street Plaza (POPOS)

600 California Street POPOS (or “the park”) is a privately-owned, public open space at the 600 California Street building, which is located in the Chinatown neighborhood on Assessor’s Block0241 / Lot 027. The building is located on the northwest corner of California and Kearny Streets. The park is accessible from stairs on the northwest side of the building, and adjoins to the open space of the adjacent building. This park has nine linear seats and an array of sculptures and public art pieces on square concrete paving. 600 California Street Plaza is not fenced and has no posted hours of operation.



Entrance to 650 California Street Plaza

650 California Street Plaza (POPOS)

650 California Street POPOS is a privately-owned, public open space at 650 California Street building, which is located in the Chinatown neighborhood on Assessor’s Block 0241 / Lots 025. The building is mid-block between Sacramento Street to the north and

California Street to the south and between properties 600 California to the east and 660 California Street to the west. The park is elevated with the main entrance accessible by stairs along California Street. A four-arched sculpture is diagonally situated between 600 and 650 California Street buildings. There is a secondary entrance from behind the building. The park surrounds the building with concrete benches and large circular planters which create ledges for seating. Boxwood and hydrangea planters are placed throughout. 650 California Street Plaza is not fenced and has no posted hours of operation.

IV. SECTION 295 METHODOLOGY AND FINDINGS

Proposed buildings that would be more than 40 feet tall and that could cause new shadow in parks under the control of the RPD are subject to review under Section 295 of the San Francisco Planning Code. Section 295 requires the Planning Commission to deny building permits for projects that would have adverse shadow impacts on these parks, unless the impacts are found to be insignificant.

Following the direction provided by Section 295, an adverse impact is defined as the addition of new shadow from any development over 40 feet in height at any time throughout the year at times between one hour after sunrise through one hour before sunset, unless the Planning Commission, with input from the general manager of the RPD and the Recreation and Park Commission, determines that the impact would be insignificant. (In this report, the term “Section 295 cutoff times” refers to one hour after sunrise and one hour before sunset, and “Section 295 start time” refers to one hour after sunrise.)

The shadow analysis completed by PreVision Design for 875 California Street used an accurately Geo-located 3D computer model of the proposed project, the park, and the surrounding urban environment to simulate and calculate both existing amounts of shading and levels of new shading (if any) that would be present with the addition of the proposed project starting one hour after sunrise through one hour before sunset. Between these Section 295 cutoff times, the model performed snapshot analyses at 15-minute intervals and repeated this process for every seven days between the Summer Solstice and Winter Solstice. This half-year is referred to as a “solar year” for purposes of this report, and the data taken from these 27 sample dates throughout the course of the solar year are then mirrored with interim times and dates extrapolated to arrive at

the full-year shading calculation. The difference between the current levels of shading and the levels of shading that would be present with the addition of the proposed project yields the total annual increase, measured in square-foot-hours (sfh) of shadow. This increase is taken as a percentage of TAAS of sun in the park (the amount of sun that would fall on the park throughout the year if there were no shading present at any time) to determine whether the new shadows created by the proposed project would fall within or outside the potentially permissible limits of increased shading.

The results of this analysis indicated that at no time throughout the year would 875 California Street cast new shadows on St. Mary's Square, Willie "Woo Woo" Wong Playground or Portsmouth Square, nor the publicly accessible open spaces at 555, 600 & 650 California Street.

To document and substantiate this finding of no shading impact, PreVision Design has prepared a full-year shading diagram to show the full range on locations where new shading would occur, included as Exhibit A. As shown, at no time throughout the year would new shadows be cast on any of the open spaces discussed in this report. ■

EXHIBIT A: 875 CALIFORNIA STREET FULL YEAR SHADING DIAGRAM

Aggregate Full-Year New Shading Diagram



Proposed project

Shadow fan of proposed project

Only areas in blue will receive any new shadow from the proposed project at some point during the year.



RPD parks



St. Mary's Square



Willie "Woo Woo" Wong Playground



Portsmouth Square Plaza



Privately-Owned Public Open Spaces (POPOS)



555 California Street



600 California Street



650 California Street



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