SANTA CRUZ SENIOR LIVING

CIVIL ENGINEERING CONCEPT DESIGN

IFLAND ENGINEERS

Civil Engineering | Structural Design | Development Planning

PROJECT SUMMARY

SENIOR RESIDENTIAL SITE

ADDRESS: 544 West Cliff Drive/ 100 Pelton Avenue

APN: 004-571-02

ASSESSORS ACREAGE: 6.588 Acres

PROPOSED PROJECT AREA: +/- 3.0 Acres

PROJECT TYPE: Senior Housing/ Assisted living facility

JURISDICTION: City of Santa Cruz

DESCRIPTION: The proposed development will demolish the existing Gateway School and other associated structures, and will construct a senior community in its place. The proposed community will be approximately 3 acres, located at the rear of St. Joseph's Church, and will include site improvements including parking for employees and visitors, courtyards and gardens, and approximately 100 housing units. A preliminary site plan is shown at right, bordering Pelton Avenue to the south, and Eucalyptus Avenue to the west. Residential parcels and a vacant lot near the intersection of these two streets are not a part of the project

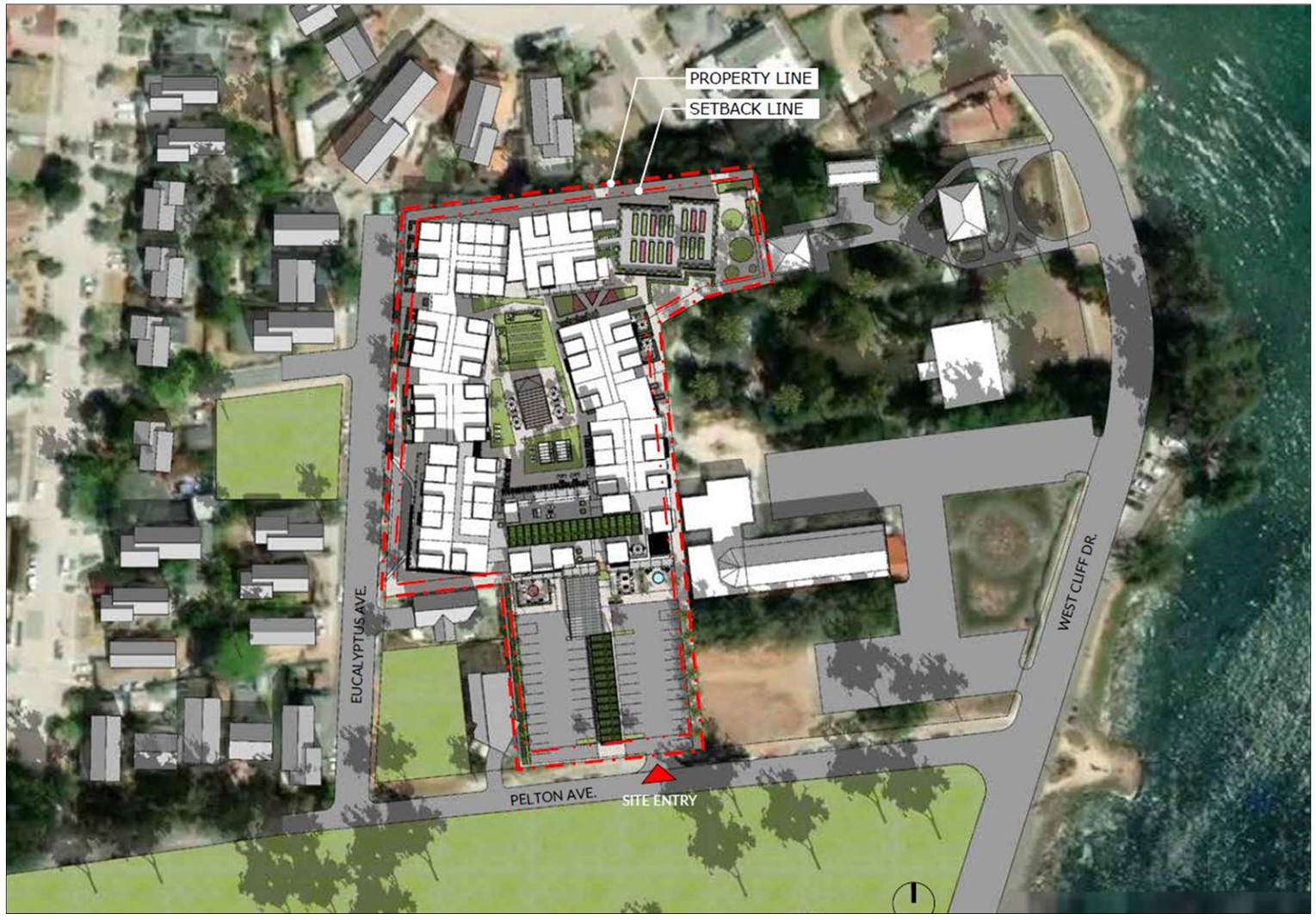

Figure 1– Schematic Site Plan

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WATER SYSTEM

EXISTING WATER SYSTEM

The project site is served by the Santa Cruz Water Department (SCWD). Records obtained from SCWD show an existing 6” water main in West Cliff Drive, as well as a 6” water main along Eucalyptus Avenue that necks down to a 4” line at the north end of the street. There is also an 8” main along Pelton Avenue. There is an existing fire hydrant located at the intersection of West Cliff Drive and Pelton Avenue, and two additional fire hydrants located along Eucalyptus Avenue.

The rear portion of the project site where Gateway School was operated appears to have two fire services and one domestic service along the east side of Eucalyptus Avenue.

An excerpt from the service maps is provided for reference.

PROPOSED WATER SYSTEM

The project will derive its fire, domestic, and irrigation water from the mains in Pelton Avenue and/or Eucalyptus Avenue. It is anticipated that additional on-site fire hydrants will be required to meet the occupancy requirements for this project. The required number and location of these new hydrants will be subject to the review of the City of Santa Cruz Fire Department.

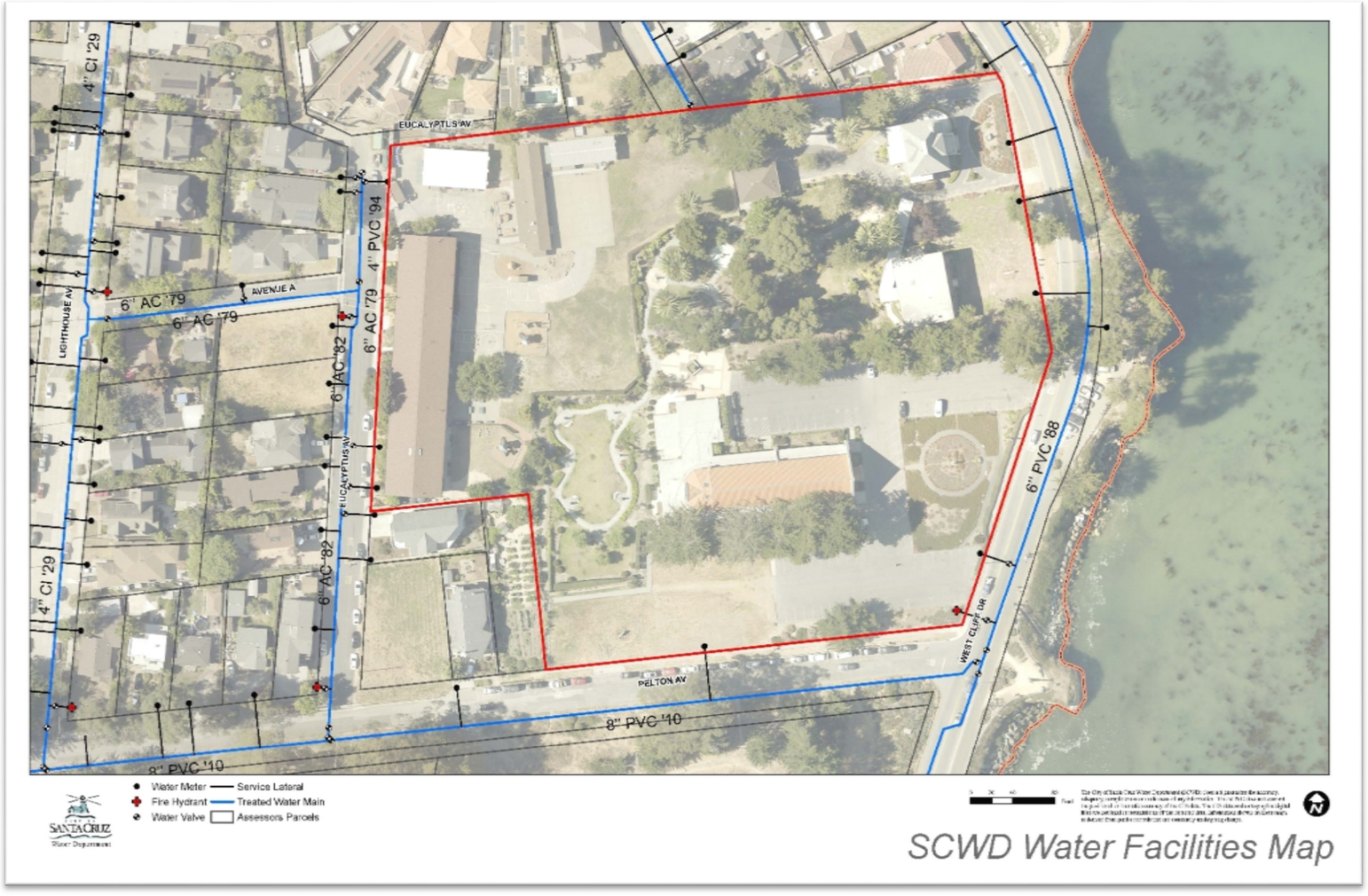

Figure 2-SCWD Facilities Map

SANITARY SEWER SYSTEM

EXISTING SANITARY SEWER SYSTEM

There is an existing 6” sanitary sewer main that runs along West Cliff Drive, and ties into the 8” sanitary sewer main that runs along Pelton Avenue. There is also an existing 6” sanitary sewer main that runs along Eucalyptus Avenue and ties into the main along Pelton Avenue. An excerpt from the City of Santa Cruz GIS has been included below to show the existing sewer infrastructure.

PROPOSED SANITARY SEWER SYSTEM

The proposed sanitary sewer connections for the site will tie into the existing 8” sewer main located along Pelton Avenue and the existing 6” main that runs along Eucalyptus Avenue. As this project will include a kitchen/ dining area, it is estimated that at least 1 grease trap will be required as part of the sanitary sewer system.

Figure 3-City GIS Sewer Map

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EXISTING STORM DRAIN SYSTEM

Figure 4 City GIS Storm Drain Map

STORM DRAIN SYSTEM

EXISTING STORM DRAIN SYSTEM

The existing property (including the front portion consisting of St. Joseph's Church, related buildings and parking areas) is served by a drainage collection system that routes site runoff to an existing curb inlet located at the northwest corner of the West Cliff Drive/Pelton Avenue intersection. From this curb inlet, a public storm drain pipeline extends southerly along the westerly side of West Cliff Drive approximately 250 feet, then crosses West Cliff Drive to an outfall into Monterey Bay.

There is an existing 10" storm drain pipe that is located along the northern portion of the project parcel, in Manor Avenue South. From there, a pipeline extends easterly to West Cliff Drive and ultimately discharges to the ocean. However, reaching the existing inlet in Manor Avenue South may be problematic due to a large tree, block wall, and utility pole in the vicinity.

No public storm drain exists in Eucalyptus Avenue or Pelton Avenue fronting the project site.

PROPOSED STORM DRAIN SYSTEM

The proposed stormwater management system for this development will be designed and constructed according to the requirements set forth in the City of Santa Cruz Stormwater Best Management Practices Manual, chapter 6B. Given that the proposed development will create more than 22,500 SF of impervious areas, the project will be considered a Tier 4 project and subject to runoff reduction measures, water quality treatment, onsite retention of small storms, and peak flow management (detention).

The project will implement LID techniques and BMP design by incorporating areas for landscaping, a vineyard, butterfly garden, activity lawn, memory care garden, permeable pavements, constructing raingardens or flow-through planters, and directing roof runoff onto vegetated areas and/or areas for infiltration of small storms.

The size, type, and location of these systems will be subject to further soils investigation and percolation rate testing. The proposed development intends to utilize the existing on-site drainage system to the extent that increased flows from select areas of the proposed development will not overburden the system. In addition, it is intended that the public storm drain system be extended from the existing curb inlet at West Cliff Drive/Pelton Avenue, westerly along Pelton Avenue to the project site, thereby allowing for connection from an on-site drainage system serving the majority of the proposed development. It is anticipated that the site will have raingardens, area drains, trench drains and related improvements to collect and convey storm runoff through the site to the parking lot proposed to be located along Pelton Avenue. Any retention and/or detention that may ultimately be required could be provided under the parking lot, subsequently connecting to the extended storm drain in Pelton Avenue.

The extension of the public storm drain system would provide a continuous underground drainage system from the site to marine waters. As such, per Section 4.4 of the City's Stormwater Management Manual, the project would be exempt from any peak flow management requirements, subject to determination by the City's Public Works Department. An Operations & Maintenance Manual and Maintenance Agreement will be required that outlines the necessary procedures for all on-site stormwater mitigation facilities, and will identify the responsible party according

WATERSHED MANAGEMENT ZONE 4

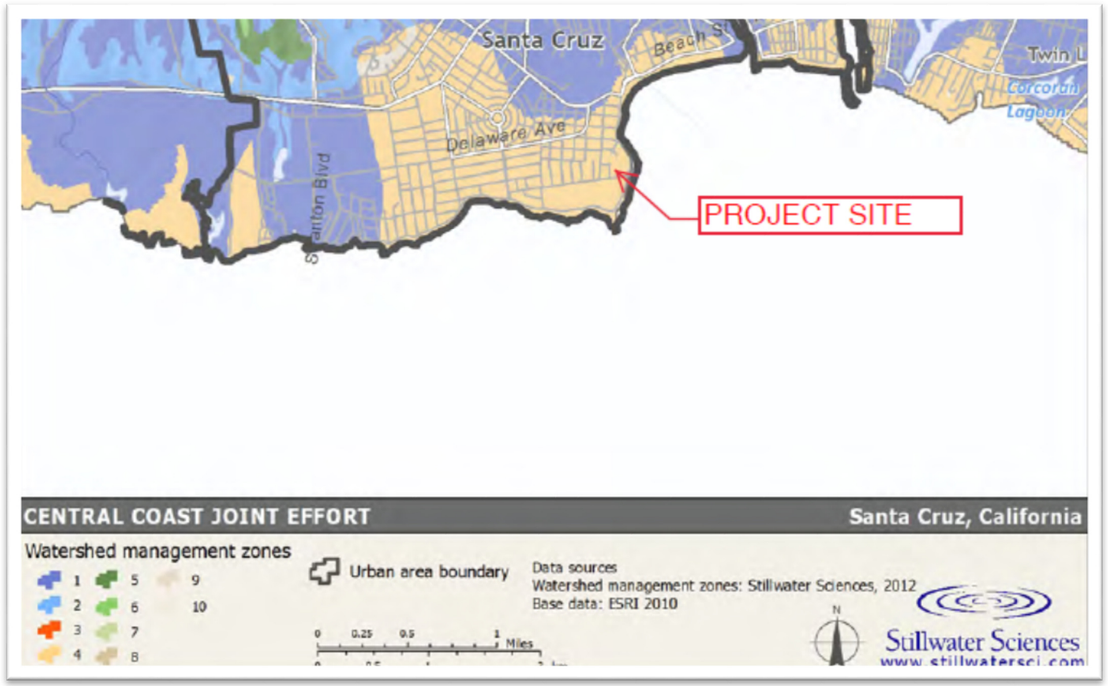

Figure 5 – Watershed Management Zone

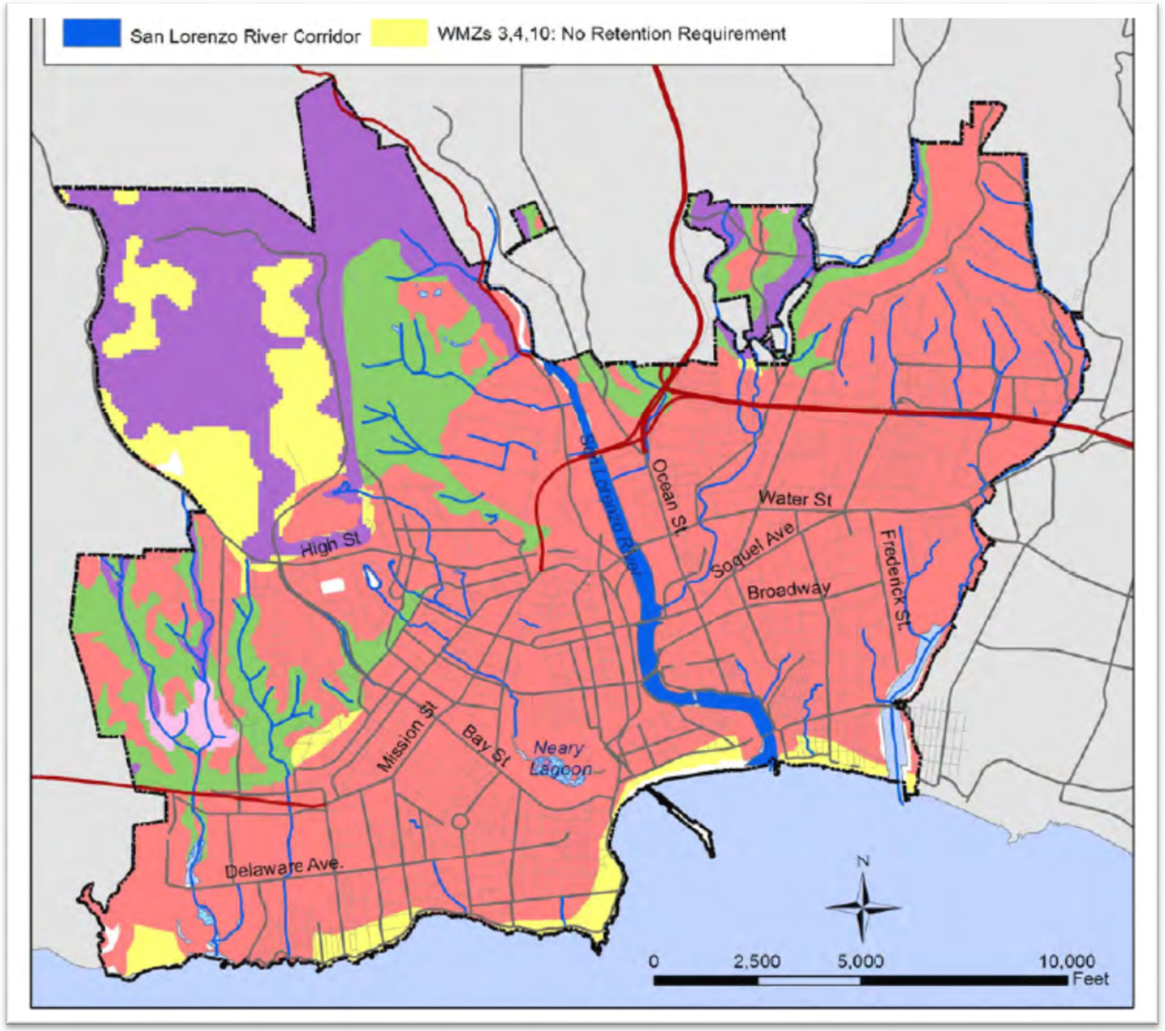

Figure 6 – City of Santa Cruz Runoff Retention Requirements

This portion of Water Management Zone 4 falls within the "yellow" boundary in Figure 4.6 of the City of Santa Cruz's Chapter 6B Stormwater Management Manual which states that "there is no retention requirement" for this area.

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FRONTAGE IMPROVEMENTS

An existing driveway approach on Pelton Avenue will be removed and replaced with new curb and gutter. A new approach will be constructed to provide vehicular access to a new parking lot serving the project. The north side of Pelton Avenue has an existing separated sidewalk that would remain except for replacing any sections due to poor condition or lack of code compliance for an accessible path of travel. Existing parallel parking spaces along Pelton Avenue will be adjusted so as not to interfere with the proposed driveway entrances.

Figure 7-Entry off of Pelton

A new service lane driveway will be constructed along the easterly side of Eucalyptus Avenue which will require two driveway openings for vehicular access with wraparound sidewalks for accessibility compliance. Existing curb, gutter, and sidewalk fronting the site will be extended northerly along Eucalyptus Avenue to the northerly terminus of the proposed development.

An existing crosswalk across Eucalyptus from Avenue A will be removed, as a mid-block crossing of Eucalyptus would no longer be warranted as an accessible route to a school. The existing curb ramp on the east side of Eucalyptus will be removed due to impacts from the new service lane described above.

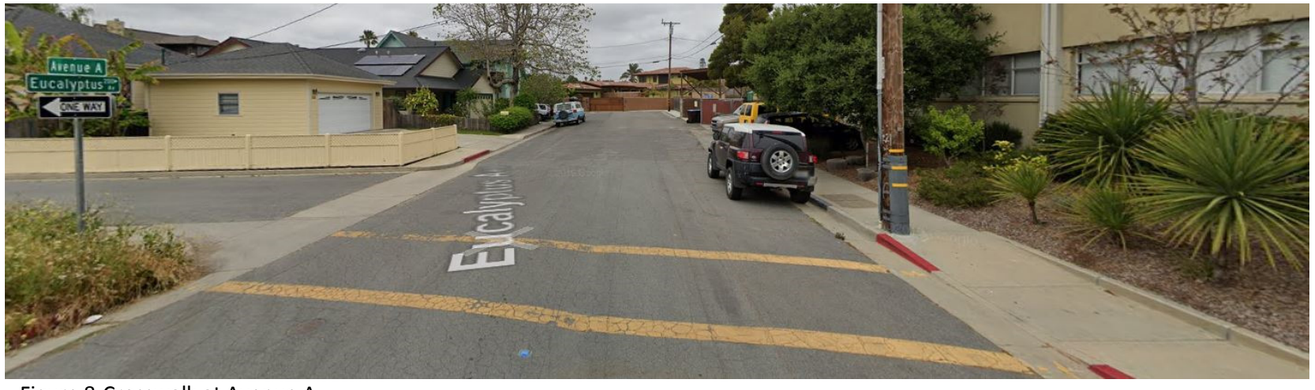

Figure 8-Crosswalk at Avenue A

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