



# Medical Office Building Project

## Draft Environmental Impact Report

*prepared by*

**County of Santa Cruz**

Planning Department

701 Ocean Street, Fourth Floor

Santa Cruz, California 95060

Contact: Stephanie Hansen, Principal Planner

*prepared with the assistance of*

**Rincon Consultants, Inc.**

200 Washington Street, Suite 207

Santa Cruz, California 95060

**June 2021**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)

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# Executive Summary

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This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed Medical Office Building Project (proposed project). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

## Project Synopsis

### Project Applicant

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### Lead Agency Contact Person

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### Project Description

This EIR has been prepared to examine the potential environmental effects of the Medical Office Building Project. The following is a summary of the full project description, which can be found in Section 2.0, *Project Description*.

The project site is contained on a single five-acre parcel identified as Assessor's Parcel Number (APN) 029-021-47. It is located on the southern frontage of Soquel Avenue, just south of the State Route (Highway) 1 Freeway in Santa Cruz County. The street address is 5940 Soquel Avenue, Santa Cruz, California 95062. The intersection of Soquel Avenue and Chanticleer Avenue is approximately 730 feet west of the project site. The project would also involve the development of infrastructure within off-site areas, mostly within existing road right-of-way near the project site.

The project site is in RM-2-R (Multi-Family Residential) zoning district, with a General Plan land use designation of R-UH (Urban High-Density Residential). The proposed project would require a General Plan Amendment to change the land use designation of the project site to Professional and Administrative Office Designation (C-O). The proposed project would also require rezoning to change the zoning district of the site to Professional-Administrative Office (PA) District.

The project site is relatively flat with frontage on a segment of Soquel Avenue that parallels Highway 1 in central Santa Cruz County. There is a single driveway for ingress/egress, with an open graded drainage swale between the paved Soquel Avenue and the private property. The project site is used primarily for storage, salvage, and salvage yard purposes, but a concrete contractor is also on-site. Several vehicle towing business and storage companies list the site as their address. Temporary storage containers are dispersed across much of the site, as are vehicles, boats, and



campers which appear either no longer operational or rarely operated. In addition to temporary storage containers, the site contains an office trailer and attached workshop measuring approximately 2,300 square feet and three sheds that range from 215 square feet to 1,300 square feet on the project site. A coarsely paved road leads to various internal roads providing access to smaller areas within the site. Part of the northwestern portion of the site is also paved with concrete pads. All existing uses on-site would be demolished and removed as a component of the proposed project.

### *Project Characteristics*

Implementation of the proposed project would begin with demolition and removal of existing structures and uses on the project site. As described above, the project site is used primarily for miscellaneous storage and salvage yard purposes, as well as a concrete contractor. These vehicles, structures, and pavement would be removed from the site. Existing debris and waste, as well as demolition debris would be transported offsite and disposed of in accordance with local and state regulatory requirements.

Following cleanup of the project site, including removal of all vehicles, trash, debris, asphalt, and structures, the proposed project would include development of the project site with a medical office building, associated parking garage structure, utilities, stormwater management, landscaping, and a pedestrian pathway. Street frontage improvements along Soquel Avenue would also be constructed, as would off-site utility and roadway intersection improvements.

The proposed medical office building would provide approximately 160,000 gross square feet of medical office use for specialty outpatient services. The facility would be open to the public from 8:00 a.m. to 8:00 p.m., but urgent care and ancillary functions would operate 24-hours per day. The expected number of on-site staff at peak function would be approximately 300 persons.

The medical office building would be a four-story structure measuring approximately 60 feet in height to finished roof and approximately 74 feet to top of mechanical screens on the rooftop. The northern portion of the building, closest to Soquel Avenue, would measure three stories and would transition to four stories for the southern portion. The exterior of the medical office building would consist of a mix of a corrugated metal panels, metal cladding panels, punched windows, storefront windows, and curtain wall systems. The corrugated metal panels would be used for the roof screen on the building and coated in a custom-color paint. A mix of three-tone color and single-tone color metal cladding panels would be used on all facades of the building. Punched windows would be used on all facades as well, generally for office windows. Storefront windows would be used in the entry area and lobby on the ground floor of the west (front) façade of the building.

### *Parking and Site Access*

Parking for the medical office building would be provided within a four-story parking garage located on the western half of the project site. The parking garage would provide five levels of parking as vehicles would also have access to rooftop parking. The maximum height of the garage would be approximately 57 feet. A total of 730 parking spaces would be provided in the garage, including 47 spaces dedicated to electric vehicles. Sixty-six spaces would be compliant with the American with Disabilities Act (ADA). Artistic screening elements would be provided on the north and the northern portion of the east façades of the parking garage, visible from Soquel Avenue. Solar panels would be provided on the rooftop level of the garage. There would also be six parking spaces on the site driveway, adjacent to the parking garage. The proposed project would also include 160 bicycle parking stalls, including for both short-term and long-term bicycle parking.

A new driveway would be constructed from Soquel Avenue that facilitates vehicle circulation between the medical office building and parking garage. The driveway would also include a patient drop-off/pick-up zone outside of the medical office building. The driveway would also provide two points of entry to the parking garage. A separate driveway for ambulances and service vehicles would be constructed providing access to the rear (east side) of the medical office building.

### *Roadway and Road Frontage Improvements*

The proposed project would include a range of improvements within and along the Soquel Avenue right-of-way. The road frontage improvements would extend from approximately 270 feet west of the project site, and eastward to the intersection of Soquel Avenue and Mattison Lane. Frontage improvements would include new curb and gutter, sidewalk, and Class II bicycle lane striping. A new traffic signal would be installed at the intersection of Soquel Avenue and the main driveway for the medical office building and parking garage.

In order to maintain acceptable intersection operations in the vicinity of the site, the proposed project includes offsite improvements and modifications at select intersections, including the intersection of Soquel Avenue/40<sup>th</sup> Avenue and Gross Road, and the intersection of 41<sup>st</sup> Avenue and Gross Road.

### *Signage*

The proposed project would include a monument sign at the new driveway entry to the site along Soquel Avenue, as well as directional signage internal to the site, such as signage directing traffic either into the parking garage or to the patient drop-off areas at the entrance to the medical office building. The monument sign would be approximately 20 feet tall, made of aluminum with acrylic lettering, and internally illuminated. Directional signage on-site would be between approximately 6 feet and 15 feet tall, depending on the specific signage. A large illuminated sign would be mounted at the top of the north side of the medical office building, facing Soquel Avenue. Lettering on the sign would be approximately 3 feet in height and include a logo that may be as large as up to approximately 4.25 feet tall.

### *Landscaping and Lighting*

Landscaping would include a mix of deciduous trees, evergreen trees, ornamental trees, shrubs and grasses, and perennial plants. The primary driveway would be lined with deciduous trees on either side, and the driveway median would be planted with native grasses. Deciduous trees would also be planted as street trees along the site frontage on Soquel Avenue. A mix of ornamental trees, shrubs, grasses, and perennial plants would be planted between the medical office building and Soquel Avenue. Evergreen trees would be planted along the north and west sides of the parking garage.

The proposed project would include a landscaped open space area at the rear of the site, between the southern property boundary and the proposed medical office building and parking garage. Plantings in this area would be a mix of deciduous, evergreen, and ornamental trees. Smaller shrubs and perennial plants would be dispersed throughout the area. A pedestrian pathway would be provided in the area for use by the medical office building staff and patients, as well as the general public. Additionally, a patio area with benches and tables would be provided on the south end of the medical office building and connected to the open space area via the pathway.

To provide for directional cues, safety, and security of staff and the public, the proposed project would be equipped with a range of lighting features. These would include overhead driveway and

sidewalk pole-mounted luminaires, low-level bollard-mounted lighting to illuminate landscaped areas and sidewalks, and building-mounted lighting at entrances and within the parking garage. Decorative lighting would also be used to illuminate key architectural features.

### *Utilities*

Water to the project site would be provided by the City of Santa Cruz Water Department. Wastewater generated by the proposed project would be conveyed through existing mains and treated at the wastewater treatment facility located in the City of Santa Cruz. Sanitary sewer service conveyance pipe system servicing the project site would be provided by the Santa Cruz County Sanitation District (SCCSD). The project would require construction of new wastewater conveyance infrastructure, including installing pipelines to connect to the existing sanitary sewer pipeline beneath 17th Avenue, approximately 1,300 feet west of the project site. Approximately 2,600 linear feet of the new 8-inch sanitary sewer pipe would be located within and beneath Soquel Avenue, Chanticleer Avenue, and Rodriguez Street.

The project site would be divided into two separate stormwater drainage management areas. One area would be developed with pervious surfaces consisting of graded slopes around the parking garage, the landscaped open space area at the south of the site, and areas east of the medical office building. Stormwater runoff in this management area would drain offsite following existing drainage patterns.

The second stormwater drainage management area would consist of the medical office building, parking structure, driveways and access road, pedestrian sidewalks, and landscaping area to the north of the medical office building. This drainage management area would be approximately 89 percent impervious due to structures and asphalt pavement. Stormwater generated from the second stormwater drainage management area would be directed to and treated through a Media Filtration System (MFS) unit. Runoff would be collected on-site in swales and inlets and directed to the MFS unit. After passing through the MFS Unit, water would continue into 19 detention vaults. These vaults would be located beneath the outbound drive aisle. An outlet control structure located in the landscape area between the medical office building and Soquel Avenue would release water through an orifice at the pre-development rate for a 10-year storm. Water released from the vault system would then flow offsite through a catch basin located within the Soquel Avenue right-of-way.

Storm drain improvements would be installed within Soquel Avenue, including curb and gutter along the frontage with inlets to be installed at the curb returns near the driveways of the project site and existing adjacent properties. These would also connect to an existing curb inlet near the northeastern corner of the Live Oak Business Park, as well as a catch basin from the northeast corner of the neighboring landscape supply company property, both of which currently daylight<sup>1</sup> to an existing drainage ditch. Finally, the project outlet control structure would discharge through the back of one of the proposed inlets. Eventually, all stormwater conveyed in the new storm drain would discharge into Rodeo Creek Gulch, at a new outfall constructed adjacent to the creek.

Electricity service would be provided by Monterey Bay Community Power via transmission lines owned by Pacific Gas and Electric (PG&E). Gas service would be provided by PG&E. PG&E owns existing gas and electric facilities in proximity to the project site. AT&T, Comcast, and other telecommunications companies provide telephone and internet service to the project site and surrounding areas.

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<sup>1</sup> Daylighting refers to the exiting of a fluid from a piping system, which in this case, is exiting of stormwater runoff from pipes.

### *Construction and Grading*

Construction of the proposed project is expected to occur over approximately 18 to 24 months, depending on factors such as weather. Construction would occur in two primary phases. The first phase would consist of initial site preparation, including demolition of existing buildings and removal of items, vehicles, and all other miscellaneous material from the project site. The second phase of construction would involve grading and soil preparation, excavation for utilities, foundation construction, and construction of the medical office building and parking garage. It would also include other project components such as road frontage improvements.

The project site is currently nearly flat, but the rear of the site is lower than the north end near Soquel Avenue. Therefore, grading would involve constructing an approximately 4-foot-tall embankment at the rear of the lot to make the site nearly level from the front of the lot to the rear. Grading and excavation would result in approximately 900 cubic yards of material. The excavated material would be used to construct the embankment. However, an additional approximately 7,000 cubic yards of fill material would be imported to the site to fully construct the embankment. The maximum depth of excavation would be approximately 4 to 6 feet below existing ground surface.

Construction equipment for the proposed project would include typical heavy machinery, such as a grader, dozers, dump trucks, and backhoes. Concrete trucks, pavers, and a construction crane or cranes would also be required. Flatbed trucks and tractor trailers would be used to remove existing materials on the site and to deliver construction equipment and materials. Other equipment and miscellaneous power tools and hand tools would also be required.

### *Green Building Features*

The proposed project's overall design would meet Leadership in Energy and Environmental Design (LEED) Gold or equivalent standards, which would be achieved by using less water and energy and reducing greenhouse gas emissions compared to a non-certified LEED office building.<sup>2</sup> Solar panels and water conservation elements would be incorporated into the proposed project design to reduce the building's energy utilization and achieve LEED certification. The roof level of the parking garage would contain solar panels to capture solar energy. The proposed project would also include on-site bicycle parking and bicycle improvements on Soquel Avenue to encourage active transportation in place of vehicle travel. Additionally, the parking garage would include preferred parking for electric vehicles.

## Project Objectives

The objectives for the proposed project are to:

- Develop a medical office building containing no less than approximately 160,000 square feet of medical office space that is capable of providing a diverse range of consolidated outpatient services—such as primary care, specialty care, ancillary healthcare, retail services, and educational programs.
- Locate the medical office building in a centralized location within the County on a key transportation corridor thereby reducing out of County health trips, encouraging virtual care where appropriate.

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<sup>2</sup> A building can earn credits toward LEED certification through performance in five key areas, including sustainable sites, water savings, energy and atmosphere, materials and resources, and indoor environmental quality. The sixth category, innovation and design process, awards points for exceeding the minimum criteria in the first five categories.

- Implement a voluntary transportation demand management plan that furthers County 511 programs, such as Ride Amigos, Emergency Ride Home, and bike-share programs.
- Provide an enclosed parking structure of approximately 730 parking spaces with convenient and safe pedestrian access to the medical office building to ensure that there is adequate, accessible on-site parking to serve both employees and members.
- Develop a medical office building with adequate square footage and a minimum of 46,000 gross square feet per floor to accommodate current and future technological advances, thereby allowing the building to be relevant today and into the future by providing the infrastructure for healthcare planning modules, adjacent complimentary programs, and the appropriate scale to allow for future adaptability while at the same time remaining operational.
- Redevelop a highly visible, underutilized site used for storage, salvage, and a concrete contractor with a modern, attractive, LEED Gold certified, energy efficient, community-serving healthcare use.

## Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following four alternatives. Based on the alternatives analysis, Alternative 3 was determined to be the environmentally superior alternative.

- Alternative 1: No Project
- Alternative 2: Approved Land Use
- Alternative 3: Reduced Project
- Alternative 4: Alternate Location - Thurber

**Alternative 1 (No Project)** assumes that the proposed project would not be constructed, and the existing site would remain operational for storage, vehicle towing, and salvage yard purposes. In addition, the on-site office trailer and attached workshop measuring approximately 2,300 square feet and three sheds ranging from 215 to 1,300 square feet would remain operational. No roadway, landscaping, utility, vehicle parking, or bicycle parking improvements would occur. Alternative 1 would have no impacts on all resources or issue areas evaluated in this EIR except for population and housing. This alternative would have no impacts on all but one resource because there would be no change or effects to existing conditions. In order for an impact to occur, there must be an effect or change to existing conditions. Impacts on population and housing would be less than significant and slightly less than the proposed project because the project site would remain undeveloped and not used for residential development. Although this alternative would have no impacts on most resources, which would be lesser impacts compared to the proposed project, beneficial effects of the project would not occur under Alternative 1. For example, the proposed project would reduce existing VMT in the County, which in turn would reduce mobile-source GHG emissions and air pollutant emissions. Alternative 1 would not reduce existing VMT because it would have no impact on existing conditions.

**Alternative 2 (Approved Land Use)** assumes the proposed project would not be constructed. Since the project site is approximately 5 acres and currently zoned Multi-Family Residential with R Combining District (RM-2-R), which allows for 20 units per acre of housing, the site would instead be redeveloped with 100 multi-family residential units. Although the potential alternative residential development has not been designed, it is assumed the buildings would be up to 35 feet in height, which is the maximum allowable height in the RM-2-R zoning district. Additionally, it is

assumed residential development would include driveways for ingress and egress from Soquel Avenue, as well as internal roadways for circulation within in the development. It is also assumed that the development would include active open space area for on-site residents. Alternative 2 would include connection to existing utility infrastructure (water, sanitary sewer, electricity, natural gas, and telecommunications), replacement of the sanitary sewer main beneath Chanticleer Avenue and Rodriguez Street, and construction of a new stormwater outfall at Rodeo Creek Gulch. Compared to the proposed project, Alternative 2 would have slightly greater to greater impacts on energy, geology and soils, greenhouse gas emissions, public services, transportation, and utilities and service systems. However, Alternative 2 would have lesser impacts on aesthetics, land use and planning, and population and housing. Impacts on air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources would be similar under both Alternative 2 and the proposed project.

**Alternative 3 (Reduced Project)** assumes a 25-percent-reduction in size of the proposed project that would be constructed and operated. Under Alternative 3 (Reduced Project), the existing site would be redeveloped with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size (i.e., 118,208 gsf) compared to the proposed project. As such, the top floor of both the medical office building and parking garage included under the proposed project would be eliminated. In addition, the occupant load would be reduced by 25 percent, for a total occupant load of 1,334 persons. Roadway, landscaping, and utility improvements similar in scope and location to the proposed project would occur. Vehicle parking and bicycle parking improvements would occur but reduced by approximately 25 percent in provision amount compared to the proposed project. Compared to the proposed project, Alternative 3 would result in slightly greater impacts on transportation due to increased VMT associated with patients continuing to travel over the hill for services. Other than transportation, Alternative 3 would have similar or lesser impacts on all resources and issue areas than the proposed project. Impacts that would be lesser include aesthetics impacts, noise impacts, public services impacts, and utilities and service systems impacts.

**Alternative 4 (Alternate Location - Thurber)** would involve constructing the same size (157,611 gsf) proposed medical office building and parking garage on an alternate property within the County known locally as the "Thurber" site. The Thurber property is located on the northeast corner of Thurber Lane and Soquel Drive, which is approximately 0.32 mile to the northwest of the project site. Additionally, this alternative assumes that the existing storage/salvage uses and trailer offices/workshop at the project site would persist into the reasonably foreseeable future. The Thurber site currently has a stream running from the north end to the south end of the site, and that stream is piped to the north and south of this property. Therefore, this Alternative 4 is analyzed under two potential scenarios: "Scenario 4-A" assumes that the stream remains daylighted as it currently exists and the riparian corridor remains, and that the medical office building and parking structure would be the same total square footages, but taller as required to ensure that the footprint of the office building and/or parking structure stay out of the riparian corridor. Under the other scenario, "4-B," the stream would be placed in a pipe and undergrounded, joining the current pipes that exist off-site at the north and south ends of the Thurber property, and the footprints and heights of the medical office building and parking structure would be the same as for the proposed project.

Regardless of the potential implementation of Scenario 4-A or Scenario 4-B, Alternative 4 would result in similar impacts of the proposed project on cultural resources, energy, geology and soils, noise, public services, tribal cultural resources, and utilities and service systems. Compared to the

proposed project, Scenario 4-A would result in greater impacts on aesthetics, due to the increased heights of the building(s). Scenario 4-A would result in slightly lesser to lesser impacts on air quality, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, population and housing, and transportation. Scenario 4-A would result in similar impacts to biological resources and land use and planning. Compared to the proposed project, Scenario 4-B would result in greater impacts on biological resources, hydrology and water quality, and land use and planning. Scenario 4-B would result in slightly lesser to lesser impacts on air quality, greenhouse gas emissions, hazards and hazardous materials, population and housing, and transportation.

Refer to Section 6.0, *Alternatives*, for the complete alternatives analysis.

## Areas of Known Controversy

The EIR scoping process did not identify any areas of known controversy for the proposed project. Responses to the Notice of Preparation of a Draft EIR and input received at the EIR scoping meeting held by the County are summarized in Section 1.0, *Introduction*.

## Issues to be Resolved

Issues to be resolved include identifying mitigation measures to reduce or avoid potentially significant impacts and determining a choice among the proposed project and alternatives evaluated.

## Issues Not Studied in Detail in the EIR

This EIR addresses each issue area and environmental factor contained in Appendix G of the *State CEQA Guidelines*, except for those which are clearly not present in the project site or clearly unaffected by the proposed project. The issue areas and environmental factors that are addressed in this EIR include the following: aesthetics; air quality; biological resources; cultural resources; energy; geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; public services; transportation; tribal cultural resources; and utilities and service systems. The issue areas and environmental factors contained in Appendix G of the *State CEQA Guidelines* that are clearly not present or unaffected by the proposed project are discussed in Section 5, *Other CEQA Required Discussions*. The issue areas and environmental factors addressed in Section 5 include the following: agriculture and forestry resources; mineral resources; recreation; and wildfire.

## Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.

- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

**Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts**

Impact	Mitigation Measure (s)	Residual Impact
<b>Aesthetics</b>		
<p><b>Impact AES-1.</b> As the tallest buildings in the area, the proposed medical office building and parking garage would be visible from Highway 1, including vistas from Highway 1. However, the project would remove unsightly debris from the site and continue modern urbanization of the area, such as the Sheriff’s office to the west of the site. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact AES-2.</b> The project has been designed to achieve aesthetic requirements of the county, including zoning regulations pertaining to scenic quality. The medical office building and parking garage would be an incremental increase in the urbanized appearance that typifies adjacent public views in the area and would also include removal of miscellaneous and unsightly debris and items currently stored on-site. However, illuminated signage visible from Highway 1 would conflict with applicable General Plan policies governing scenic quality of Highway 1. Impacts would be reduced to less than significant with implementation of mitigation.</p>	<p><b>AES-2 Channel Letter Signage.</b> Any skyline sign shall not be internally illuminated. All skyline signage shall consist of channel lettering signage and shall be backlit for illumination. For purposes of this mitigation measure, a channel letter sign is defined a three-dimensional graphic element with an individual structure and separate illumination.</p>	<p>Less than significant</p>
<p><b>Impact AES-3.</b> New on-site lighting would not result in substantial light at adjacent residential uses but would incrementally increase illumination of the night sky. Windows on the proposed medical office building could result in glare, but the orientation of the buildings and landscaping would shield most glare.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>



Impact	Mitigation Measure (s)	Residual Impact
Impacts would be less than significant.		
<b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to aesthetics.	No mitigation is required.	Less than significant
<b>Air Quality</b>		
<b>Impact AQ-1.</b> The project would not conflict with or obstruct implementation of the adopted MBARD AQMP. Impact would be less than significant.	No mitigation is required.	Less than significant
<b>Impact AQ-2.</b> The project would not result in a cumulatively considerable net increase of a criteria pollutant. Impacts of the proposed project would be less than significant.	No mitigation is required.	Less than significant
<b>Impact AQ-3.</b> The project would not expose sensitive receptors to substantial pollutant concentrations. Project impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.	No mitigation is required.	Less than significant
<b>Impact AQ-4.</b> The project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant.	No mitigation is required.	Less than significant
<b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to air quality.	No mitigation is required.	Less than significant
<b>Biological Resources</b>		
<b>Impact BIO-1.</b> The proposed project would have a substantial adverse effect on species identified as a candidate, sensitive, or special-status. Impacts would be less than significant with mitigation incorporated.	<b>BIO-1a Construction Worker Environmental Awareness Training.</b> A qualified biologist shall conduct an education program for all persons employed on the project prior to performing construction activities. The presentation given by the qualified biologist shall include a discussion of the biology and general behavior of all special-status species that may be in the construction area, how they may be encountered within the work area, and procedures to follow when they are encountered. The training shall also include information about BMPs to be implemented, identification of the limits of work, project-specific avoidance measures, and permit conditions that must be followed. The qualified biologist shall prepare and distribute handouts containing this information for workers to carry on site. Interpretation shall be provided for non-English-speaking workers. All personnel working on the site shall receive this training and shall sign a sign-in sheet showing they received the training. Any personnel joining the work crew later shall receive the	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
	<p>same training before beginning work on construction of the project.</p> <p><b>BIO- 1b Limits of Work.</b> Prior to commencement of construction activities within the riparian corridor of Rodeo Creek Gulch, the limits of construction shall be identified with the assistance of a biologist to maximize native vegetation retention. High visibility construction fencing or flagging shall be installed around the limits of work to prevent inadvertent grading or other disturbance within the surrounding habitats. No work-related activity, including equipment staging, vehicular access, grading, and/or vegetation removal shall be allowed outside of the limits of work.</p> <p><b>BIO-1c Preconstruction Survey.</b> Within 48 hours prior to commencement of project activities within the riparian corridor of Rodeo Creek Gulch, a qualified biologist shall conduct a pre-construction survey for special-status species including western pond turtle and California giant salamander, and other special-status amphibians. The survey area shall include all suitable habitat within a 50-foot buffer of the stormwater outfall site. Suitable habitat for these species occurs within Rodeo Creek and associated coast live oak riparian woodlands where the stormwater outfall is proposed for construction. If any individual special-status species are observed during the pre-construction survey, their location(s) shall be recorded and identified for avoidance. If avoidance is not feasible, the biologist shall relocate individuals to a location that contains suitable habitat not likely to be affected by proposed project activities</p> <p>To ensure that adverse impacts to special-status species or their habitat do not occur, a biologist shall be present during initial clearing, grubbing, and ground-disturbing activities in the riparian corridor of Rodeo Creek Gulch.</p> <p>If a special-status species is identified within the project impact area at any time during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm’s way on its own or a qualified biologist shall move the animal out of harm’s way to a safe relocation site. The biologist shall have the authority to stop work that may harm or result in the “take” of special-status species, and shall be given enough time to move the animal out of harm’s way.</p> <p>If a western pond turtle egg clutch is discovered during pre-construction surveys, or during construction, work in the vicinity of the egg clutch shall be halted immediately. Unless otherwise advised by CDFW, the nest location shall be surrounded with high visibility fencing under the guidance of a qualified biologist and shall be avoided until the biologist determines that the clutch has hatched and individuals are no longer likely to be injured by work activities.</p> <p>At the end of each workday, all excavations within the riparian corridor shall be secured with a cover to prevent</p>	

Impact	Mitigation Measure (s)	Residual Impact
	<p>wildlife entrapment. No trenches or holes shall be left uncovered overnight.</p> <p><b>BIO-1d San Francisco Dusky-Footed Woodrat.</b> Within two weeks prior to commencement of construction activities within the riparian corridor of Rodeo Creek Gulch (including clearing and grubbing) a qualified biologist shall survey the project disturbance area to identify any woodrat nest locations that may be affected by the proposed development. All woodrat houses within the construction impact area and immediate surroundings shall be clearly flagged.</p> <p>If no woodrat nests are found during the survey, no further avoidance and minimization measures for this species are necessary.</p> <p>If woodrat houses are found, the construction contractor shall avoid the houses to the extent feasible by installing a 25-foot buffer with protective fencing or other material that shall prohibit encroachment. A reduction in the size of this buffer, or encroachment into this buffer, may be allowed if the biologist determines that microhabitat conditions such as shade, cover, and adjacent food sources can be retained.</p> <p>If avoidance of woodrat houses is not possible, a qualified biologist shall develop and implement a Woodrat Relocation Plan to be implemented prior to the commencement of construction. The plan shall be developed in consultation with CDFW and shall include the following:</p> <ul style="list-style-type: none"> <li>• Trapping and relocation activities shall be conducted during the months of August – September when the species is active, and young are able to disperse on their own. Trapping efforts shall not take place during low night temperatures (below 40 degrees Fahrenheit) or inclement or extreme weather conditions.</li> <li>• If no San Francisco ducky-footed woodrats are captured at a given house, it shall be dismantled by hand to ground level, and the woody debris spread to reduce the potential for rebuilding.</li> <li>• For occupied houses, the existing woodrat house shall be dismantled and the woody debris, including cached food and nesting material, carried to the nearest suitable relocation site outside the Project footprint and used to build an artificial shelter.</li> <li>• Sites for artificial shelters shall be located as near as possible to the original house location and no closer than 20 feet from existing woodrat houses and other artificial shelters. Choose the best available microhabitat, ideally in a location with sun and shade and, if possible, under the same species of tree or shrub as was present at the original house location. Relocation sites shall contain biologically suitable habitat features (e.g. stands of poison oak, coast live oaks, and dense native brush).</li> <li>• When releasing woodrats, the occupied live-trap shall be placed against the entrance to the artificial shelter, opened, and the woodrat allowed to enter, ideally on</li> </ul>	

Impact	Mitigation Measure (s)	Residual Impact
	<p>its own accord. After the individual enters, the entrance shall be loosely but completely plugged with dirt and leaf duff to encourage it to stay, at least for the short-term.</p> <ul style="list-style-type: none"> <li>• If occupied houses were relocated, monitoring shall be conducted for 30 days after relocation is completed and include infrared and motion activated cameras and an occupancy assessment. A report on San Francisco dusky-footed woodrat nest monitoring shall be provided to CDFW and County Environmental Planning within 30 days following the end of the monitoring period and shall include the methods and results of trapping and relocation, occupancy determinations, and discussion of any remedies that may be needed.</li> </ul> <p><b>BIO-1e Bat Surveys and Avoidance.</b> To the extent practicable, tree removal and demolition shall occur outside peak bat activity timeframes when young or overwintering bats may be present, which generally occurs from March through April and August through October, to ensure protection of bats and their roosts. Additionally, the timing of construction activities shall be limited to daylight hours to reduce disturbance to roosting and foraging bat species.</p> <p>A preconstruction bat survey shall be conducted within 14 days of the removal of any trees or demolition of buildings within the medical office building project site and stormwater outfall site and a 50-foot buffer around both sites. The biologist shall have access to all structures and interior attics, as needed. The survey shall consist of a visual emergence survey for bats, completed by a qualified biologist with experience identifying bat roosts and behavior. If a colony of bats is found roosting in a structure or vegetation, sufficient acoustic surveys shall be conducted to determine the species present and the type of roost, such as day, night, or maternity roost.</p> <p>If a non-breeding and non-wintering bat colony is found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations to ensure their protection and to avoid unnecessary harm. If a maternity colony or overwintering colony is found on the project site or within 50 feet of the site, then the qualified biologist shall establish a suitable non-disturbance buffer around the location in coordination with CDFW. The non-disturbance buffer shall remain in place until the qualified biologist determines that the maternal colony or wintering roost is no longer active.</p> <p><b>BIO-1f Nesting Bird Surveys and Avoidance.</b> Construction and tree removal activities shall be conducted outside of the migratory bird nesting season (February 1 through August 31) if feasible, to reduce any potentially significant impact to birds that may be nesting in the medical office building project site or stormwater outfall site. If construction and tree removal activities must occur during the migratory bird nesting season, an avian nesting</p>	

Impact	Mitigation Measure (s)	Residual Impact
	<p>survey of the medical office building project site, stormwater outfall site, and contiguous habitat within 300 feet of all impact areas shall be conducted for active nests of protected migratory birds. The avian nesting survey shall be performed by a qualified wildlife biologist within 7 days prior to the start of ground or vegetation disturbance or building demolition activities. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate no disturbance buffer, which shall be determined by the biologist based on the species sensitivity to disturbance (50-250 feet for passerines and 250-500 feet for raptors and special-status species). The nest buffer shall be demarcated in the field with flagging and stakes or construction fencing. Work within the nest avoidance buffer shall be prohibited until the juveniles have fledged.</p>	
<p><b>Impact BIO-2.</b> The proposed project would have a substantial adverse effect on riparian habitat. Impacts would be less than significant with mitigation incorporated.</p>	<p><b>BIO-2a Erosion and Sediment Control.</b> Erosion and sediment control measures must be in place, and BMPs adhered to during construction. All disturbed soils shall be stabilized to prevent siltation and reduce sediment and chemical-laden runoff into any drainages or water courses within the project vicinity. No refueling, maintenance, or staging of equipment or vehicles shall occur within 60 feet of aquatic or riparian habitat and not in a location from where a spill would drain directly toward aquatic habitat.</p> <p><b>BIO-2b Oak Woodland Riparian Revegetation.</b> Direct impacts to sensitive habitats and jurisdictional non-wetland waters of the state, which consist of the riparian oak woodland habitat adjacent Rodeo Creek Gulch shall be mitigated through on-site rehabilitation to conditions similar to those that existed prior to grading and/or ground-disturbing activities. This shall consist of re-contouring temporarily impacted areas to match pre-project grade and revegetating these areas to match surrounding conditions.</p> <p>A site-specific Habitat Mitigation and Monitoring Plan (HMMP) shall be developed for compensation of unavoidable temporary and permanent impacts to riparian habitat. The HMMP shall be prepared by a qualified biologist or restoration professional and shall include the following minimum elements:</p> <ol style="list-style-type: none"> <li>a. Identification of areas on site where temporary disturbance and re-establishment of native habitat shall occur. All sensitive habitat areas temporarily disturbed as a result of the project shall be restored to pre-project contours to the maximum extent possible and re-vegetated with native plant species appropriate to the surrounding habitat.</li> <li>b. Identification of restoration areas to compensate for permanently impacted riparian habitat. All riparian habitat permanently impacted as a result of the project shall be compensated for at a minimum 1:1 ratio through restoration or establishment of in-kind habitat at designated restoration areas within the stormwater outfall site, or in the nearby riparian corridor.</li> </ol>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
	<ul style="list-style-type: none"> <li>c. Riparian restoration areas intended for compensation may be identified along previously disturbed portions of Rodeo Creek Gulch where riparian woodland is degraded and/or not currently present. Enhancement activities may include non-native species removal and revegetation followed by monitoring for all disturbed areas.</li> <li>d. The plan shall specify the criteria and standards by which the enhancement actions compensate for impacts of the proposed project on the oak woodland vegetation community.</li> <li>e. Discussion of the following shall be included: (1) the enhancement objectives, including the type and amount of revegetation to be implemented, taking into account enhanced areas where non-native invasive vegetation is removed, and replanting specifications that take into account natural regeneration of species; (2) the specific methods to be employed for revegetation; (3) success criteria and monitoring requirements to ensure vegetation community restoration success; and, (4) remedial measures to be implemented in the event that performance standards are not achieved.</li> <li>f. Site-specific planting plan intended to inform the re-vegetation efforts. Local plant stock shall be used whenever possible. The plant pallet should include native species common to the surrounding native habitats that are being restored and species, size, and locations of all restoration plantings that will occur.</li> <li>g. Five-year management plan for maintenance and monitoring of restored areas to maintain 100 percent survival of installed container stock in year 1, 90 percent survival in years 2-3, and at least 80 percent survival in years 4-5. Replacement plants shall be installed as needed during the monitoring period to meet survival rates. Annual habitat monitoring reports shall be submitted to the County Planning Department by December 31 of each monitoring year.</li> <li>h. The project proponent shall be responsible for execution of the 5-year management plan for maintenance and monitoring of restored areas. If responsibility is transferred legally to another entity, County Environmental Planning Staff shall be informed of any such transfer of responsibility.</li> </ul>	
<p><b>Impact BIO-3.</b> The proposed project would have a substantial adverse effect on jurisdictional waters of the state. Impacts would be less than significant with mitigation incorporated.</p>	<p>Implementation of mitigation measures BIO-2a and BIO-2b, above, is required.</p>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact BIO-4.</b> The proposed project would not substantially interfere with the movement of fish or wildlife or with migratory corridors and nursery sites. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact BIO-5.</b> The proposed project would have no conflicts with policies and ordinances protecting biological resources, including tree preservation ordinances. The proposed project would have impacts that are less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Cumulative Impacts.</b> Mitigation measures BIO-1a through BIO-1f and BIO-2a and BIO-2b would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative biological resources impacts would not be cumulatively considerable.</p>	<p>Implementation of mitigation measures BIO-1a through BIO-1f and BIO-2a and BIO-2b, above, is required.</p>	<p>Less than significant</p>
<p><b>Cultural Resources</b></p>		
<p><b>Impact CUL-1.</b> Grading and excavation required for the proposed project would have the potential to unearth and adversely change or damage previously unidentified historical and archaeological resources. Impacts would be less than significant with implementation of mitigation.</p>	<p><b>CUL-1a Cultural Resources Construction Monitoring.</b> All project-related ground disturbing activities in native soils within the Area of Potential Effect (APE), which includes the project site and off-site disturbance areas, shall be monitored by a qualified archaeologist. Archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for archaeology (National Park Service 1983). Should the project site or off-site disturbance be determined to have little if any potential to yield subsurface cultural resources deposits, the qualified archaeologist may recommend that monitoring be reduced or eliminated after consulting with the County and Native American representatives.</p> <p><b>CUL-1b Unanticipated Discovery of Cultural Resources.</b> In the event that cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt, and the qualified archaeologist shall evaluate the find. Evaluation of significance for the find may include the determination of whether or not the find qualifies as a cultural resource. The qualified archaeologist shall evaluate the find and determine if it is material that may be of importance to Native Americans and, in consultation with the County, whether further Native American consultation is required. If necessary, the evaluation shall require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical, archaeological, and/or tribal cultural resources. Mitigation of significant impacts</p>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
	to the find may include a damage assessment of the find, archival research, and/or data recovery to remove any identified archaeological deposits, as determined by the qualified archaeologist. After effects to the find have been appropriately mitigated, work in the area may resume.	
<b>Impact CUL-2.</b> Grading and excavation required for the proposed project would have the potential to unearth and disturb previously unidentified or unknown human remains. Impacts would be less than significant with mandatory adherence with existing regulations pertaining to discovery of human remains.	No mitigation is required.	Less than significant
<b>Cumulative Impacts.</b> Mitigation measures CUL-1a and CUL-1b would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative cultural resources impacts would not be cumulatively considerable.	Implementation of mitigation measures CUL-1a and CUL-1b, above, is required.	Less than significant
<b>Energy</b>		
<b>Impact E-1.</b> Neither construction nor operation of the project would result in a significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Impact E-2.</b> The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to energy.	No mitigation is required.	Less than significant
<b>Geology and Soils</b>		
<b>Impact GEO-1.</b> No known faults occur on or near the project site; therefore, the proposed project would not expose people to risks from the rupture of known faults. Impacts would be less than significant.	No mitigation is required.	Less than significant



Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact GEO-2.</b> The proposed project would be in a seismically active area, and ground shaking could cause structural failure if the project is not properly designed and constructed. Impacts would be reduced to less than significant with implementation of mitigation.</p>	<p><b>GEO-2 Geotechnical Investigation Update.</b> Prior to issuance of the grading permit for the proposed project, the project applicant shall have an updated Geotechnical Investigation prepared for the proposed project that references and utilizes standards meeting the most recent version of the California Building Code adopted by Santa Cruz County. All measures recommended in the Geotechnical Investigation shall be incorporated into the final plans for the proposed project and made conditions of approval.</p>	<p>Less than significant</p>
<p><b>Impact GEO-3.</b> The potential for liquefaction, landslides, lateral spreading, and subsidence on the project site is low. The project site is also at low risk from unstable geologic units or soils. However, improper project design, grading, or construction could expose people or structures to damage from unstable soils. Impacts would be reduced to less than significant with implementation of mitigation.</p>	<p>Implementation of mitigation measure GEO-2, above, would be required.</p>	<p>Less than significant</p>
<p><b>Impact GEO-4.</b> Project construction could result in soil erosion. Adherence to NPDES permit requirements and County ordinances would ensure that construction and operation of the project do not result in substantial soil erosion or the loss of topsoil. This impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact GEO-5.</b> The project site includes highly expansive soils, but the applicant would be required to implement recommendations in the Geotechnical Investigation to minimize this risk and improve soil stability. Therefore, the impact from expansive soils would be significant but mitigable.</p>	<p>Implementation of mitigation measure GEO-2, above, would be required.</p>	<p>Less than significant</p>
<p><b>Impact GEO-6.</b> The project would not involve the use of septic tanks or other alternative wastewater disposal systems. No impact related to such systems would occur.</p>	<p>No mitigation is required.</p>	<p>No impact</p>
<p><b>Impact GEO-7.</b> The project site overlies Pleistocene-era marine terrace deposits, a geologic unit with high paleontological sensitivity. Ground disturbance has the potential to disturb intact fossils. This impact would be less than significant with implementation of mitigation to</p>	<p><b>GEO-7 Protection of Paleontological Resources.</b> The following measures shall be required for all grading and excavation at depths of 3 feet or greater below the existing grade:</p> <ul style="list-style-type: none"> <li>▪ <b>Paleontological Mitigation and Monitoring Program.</b> A qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground disturbance activity below existing grade for the project, in areas where</li> </ul>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
identify and preserve potential fossil resources.	<p>native soils would be encountered. A qualified paleontologist is defined as an individual who meets the education and professional experience standards as set forth by the Society of Vertebrate Paleontology (2010), which includes a BS or BA degree in geology or paleontology, one year of monitoring experience, and knowledge of the local paleontology and collection/salvation paleontological procedures and techniques. This program shall outline the procedures for construction staff Worker Environmental Awareness Program (WEAP) training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.</p> <ul style="list-style-type: none"> <li>▪ <b>Paleontological Worker Environmental Awareness Program (WEAP).</b> Prior to the start of ground disturbance activity below existing grade, in areas where native soils would be encountered, construction personnel shall be informed on the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.</li> <li>▪ <b>Paleontological Monitoring.</b> All grading and excavation that would involve disturbance below the existing grade, in areas where native soils would be encountered, shall be monitored on a full-time basis by a qualified paleontological monitor. Should no fossils be observed during the first 50 percent of such excavations, paleontological monitoring could be reduced to weekly spot-checking under the discretion of the qualified paleontologist. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources.</li> <li>▪ <b>Salvage of Fossils.</b> If fossils are discovered, the County shall be notified immediately, and the qualified paleontologist (or paleontological monitor) shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the paleontologist should have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.</li> <li>▪ <b>Preparation and Curation of Recovered Fossils.</b> Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection, along with all pertinent field notes, photos, data, and maps.</li> <li>▪ <b>Final Paleontological Mitigation and Monitoring Report.</b> Upon completion of ground disturbing activity (and curation of fossils if necessary) the qualified</li> </ul>	

Impact	Mitigation Measure (s)	Residual Impact
	paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.	
<b>Cumulative Impacts.</b> Mitigation measures GEO-2 and GEO-7 would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative geology and soils impacts would not be cumulatively considerable.	Implementation of mitigation measures GEO-2 and GEO-7, above, is required.	Less than significant
<b>Greenhouse Gas Emissions</b>		
<b>Impact GHG-1.</b> The project would not generate new, ongoing sources of GHG emissions that would have a direct or indirect significant impact on the environment. This impact would be less than significant.	No mitigation is required.	Less than significant
<b>Impact GHG-2.</b> The proposed project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to greenhouse gas emissions.	No mitigation is required.	Less than significant
<b>Hazards and Hazardous Materials</b>		
<b>Impact HAZ-1.</b> Operation of the proposed project would include the routine use, storage, or transport of hazardous materials and medical wastes that could potentially create a safety hazard to the public or the environment. Pursuant to compliance with applicable state and federal laws pertaining to hazardous materials and medical wastes, impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Impact HAZ-2.</b> Construction and operations on the project site could cause exposure to existing contamination on site. Impacts would be less than significant with mitigation incorporated.	<b>HAZ-2a Asbestos and Lead.</b> Pursuant to Cal/OSHA regulations, each structure constructed before 1978 within the project site shall inspected by a qualified environmental specialist for the presence of ACMs and LBPs prior to obtaining a demolition permit from the County of Santa Cruz Planning Department. If ACMs and LBPs are found during the investigations, the project applicant shall develop a remediation program to ensure that these materials are removed and disposed of by a	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
	<p>licensed contractor in accordance with all federal, state, and local laws and regulation, subject to approval by the Monterey Bay Air Resources District, and Santa Cruz County Environmental Health, as applicable. Any hazardous materials that are removed from the structures shall be disposed of at an approved landfill facility in accordance with federal, state, and local laws and regulations.</p>	
	<p><b>HAZ-2b Soil Management Plan.</b> Before the issuance of a grading permit, impacted soil on the project site shall be mitigated in accordance with a Soil Management Plan prepared for the entire project area. The laboratory data for the impacted soil shall be used to profile the soil for transport, treatment, and recycling at a licensed treatment facility. The Soil Management Plan shall also include health and safety information for workers and the general public, and shall inform the various contractors and workers of the presence of impacted soil and the appropriate measures to safely deal with the soil. The Soil Management Plan shall be submitted to and approved by the CSCEHD prior commencement of ground disturbance within the project site.</p>	
	<p><b>HAZ-2c Site Remediation.</b> Prior to construction of the project, additional hazardous material site evaluations shall be implemented, per the recommendations included in the Phase II ESA dated October 25, 2018, by Terracon, following removal of existing barriers to full site access:</p> <ol style="list-style-type: none"> <li>1. Conduct further evaluation of the location and conditions of the suspected drain and sump.</li> <li>2. Access the interior portions of the site with hand-sampling / limited access equipment to facilitate soil sampling of TPH, VOC, and lead within the site tenant operation areas.</li> <li>3. Conduct additional surface soil sampling in the vicinity of boring SV10 and inaccessible portions of the site, including tenants who perform landscaping operations, to evaluate the presence or absence of organochlorine pesticides.</li> <li>4. Evaluate groundwater for the presence of petroleum hydrocarbons and solvents. Advance a minimum of two deep soil borings using hollow-stem auger drilling equipment to a depth of 75 feet below ground surface.</li> <li>5. Investigate soil vapor in the interior of the tenant operation areas.</li> </ol> <p>Additionally, additional hazardous material site evaluations shall be implemented, per the recommendations of the CSCEHD, including:</p> <ol style="list-style-type: none"> <li>1. Historical use of the project site includes the possibility of agricultural land use from the early 1910s through the late 1950s. Based on historical site use, further organochlorine pesticides sampling and characterization shall be conducted. Organochlorine pesticides sampling and characterization shall be conducted at locations throughout the project site, in</li> </ol>	

Impact	Mitigation Measure (s)	Residual Impact
	<p>such a way, that soils across the entire site are characterized, such as placing samples on a grid.</p> <ol style="list-style-type: none"> <li>2. Because arsenic is known to naturally occur in areas of Santa Cruz County, a site-specific arsenic background concentration for soil should be developed for the subject site. Based on prior detected arsenic concentrations in the County of Santa Cruz, the detections of arsenic that are most likely to exceed background concentrations would be the soil samples collected from B3, B5, and B6 at depths of 0.5 feet below ground surface, where arsenic was detected at 13.9 milligrams per kilogram (mg/kg), 12.0 mg/kg, and 8.84 mg/kg, respectively, according to the Phase II ESA.</li> <li>3. A Site Mitigation Program Well Permit must be approved by CSCEHD prior to the destruction of or addition of new gas monitoring wells.</li> <li>4. Laboratory results for all media shall be compared at a minimum to the current version of each of the following guidance screening concentrations: (1) ESLs published by the San Francisco Bay Regional Water Quality Control Board; (2) screening levels from the DTSC Office of Human and Ecological Risk (HERO) Human Health Risk Assessment Note Number 3 or, for chemicals without a Note 3 value, the USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites (RSLs); (3) for soil only, the RSLs for protection of groundwater; (4) for metals in soil only, the background concentrations, if established; and (5) for groundwater only, the groundwater cleanup goals based on the Water Quality Control Plan (Basin Plan) established by the Central Coast Regional Water Quality Control Board.</li> </ol> <p>Upon completion of the above items, and pending testing and analysis results, construction of the project shall include on-site remediation and engineering controls such as capping, vapor barrier, and proper air exchanges. This shall be required in areas that indicate contamination above the residential ESLs. A work plan for remediation shall be prepared in accordance with all applicable federal, state and local regulations prior to issuance of a grading permit. The work plan shall be submitted to and approved by the CSCEHD prior to commencement of remediation fieldwork or ground-disturbing activities.</p>	
<p><b>Impact HAZ-3.</b> The project site is located within one-quarter mile of an existing school, and demolition of existing uses could emit airborne asbestos or lead. Impacts would be less than significant with incorporation of mitigation.</p>	<p>Implementation of mitigation measure HAZ-2a, above, is required.</p>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact HAZ-4.</b> No active listed hazardous materials sites, as listed pursuant to Government Code Section 65962.5, are located on the project site or within one-quarter mile of the site. There would be no impact.</p>	<p>No mitigation is required.</p>	<p>No impact</p>
<p><b>Impact HAZ-5.</b> The proposed project is not within an airport land use plan or within two miles of a public airport or public use airport. There would be no impact.</p>	<p>No mitigation is required.</p>	<p>No impact</p>
<p><b>Impact HAZ-6.</b> The proposed project would not interfere with any adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Cumulative Impacts.</b> Mitigation measures HAZ-2a through HAZ-2c would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative hazards and hazardous materials impacts would not be cumulatively considerable.</p>	<p>Implementation of mitigation measures HAZ-2a through HAZ-2c, above, is required.</p>	<p>Less than significant</p>
<p><b>Hydrology and Water Quality</b></p>		
<p><b>Impact HWQ-1.</b> Project operation could result in polluted runoff and contamination of downstream waterbodies and thus violate water quality standards or waste discharge requirements. Impacts would be less than significant with mitigation.</p>	<p><b>HWQ-1 Operations and Maintenance Agreement.</b> Prior to completion and issuance of the certificate of occupancy for the proposed project, an Operational and Maintenance Agreement with the County of Santa Cruz shall be prepared. This agreement shall be recorded against the property with the County Recorder’s Office and shall be binding on all subsequent owners of the property. This Maintenance Agreement shall remain in place for the life of the project.</p> <p>The maintenance agreement shall set forth a schedule of maintenance tasks, to be performed by the medical building maintenance staff, which are required for safe and efficient function of the on-site stormwater treatment and detention facilities. It shall also specify procedures for yearly inspections and record keeping of inspections, maintenance and repairs performed. Operation and Maintenance Agreement shall conform to all the requirements outlined in the County of Santa Cruz Design Criteria.</p>	<p>Less than significant</p>
<p><b>Impact HWQ-2.</b> The Proposed Project would not interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>

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Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact HWQ-3.</b> Development of the Proposed Project would alter drainage patterns and increase runoff in the project vicinity. Impacts would be less than significant with mitigation.</p>	<p>Implementation of mitigation measure HWQ-1, above, would be required.</p>	<p>Less than significant</p>
<p><b>Impact HWQ-4.</b> Development under the Proposed Project would alter drainage patterns and increase runoff in the project area but would not impede or redirect flood flows. The project is not within an area at risk from inundation by flood hazard, seiche, tsunami, or mudflow. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact HWQ-5.</b> The proposed project would affect water quality but would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Cumulative Impacts.</b> Mitigation measure HWQ-1 would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative hydrology and water quality impacts would not be cumulatively considerable.</p>	<p>Implementation of mitigation measure HWQ-1, above, is required.</p>	<p>Less than significant</p>
<p><b>Land Use and Planning</b></p>		
<p><b>Impact LU-1.</b> The project would not physically divide an established community. The proposed project would have no impact.</p>	<p>No mitigation is required.</p>	<p>No impact</p>
<p><b>Impact LU-2.</b> Based on the current project, if approved by the County the proposed project would be substantially consistent with applicable land use policies of the County of Santa Cruz 1994 General Plan, and would not conflict with land use policies that are in effect to avoid or mitigate environmental effects on environment and natural resources. Therefore, impacts would be less than significant.</p>	<p>No mitigation is required other than mitigation listed in this table for other resources or issues areas.</p>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Cumulative Impacts.</b> Mitigation measure identified throughout this EIR would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative land use and planning impacts would not be cumulatively considerable.</p>	<p>No mitigation is required other than mitigation listed in this table for other resources or issues areas.</p>	<p>Less than significant</p>
<p><b>Noise</b></p>		
<p><b>Impact N-1.</b> Project construction would expose nearby receptors to a temporary increase in noise. However, construction noise reduction techniques would be implemented during construction as part of a Standard Condition of Approval for the project and would not exceed noise standards established in the Santa Cruz County Code. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact N-2.</b> Project operation would expose nearby receptors to a permanent increase in noise. However, noise levels during operation would be similar to those in the existing urban setting, and parking garage and mechanical equipment noise would be shielded. Impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact N-3.</b> Project operation would alter traffic patterns in the area, but the project would not result in a 3 dBA increase in traffic noise. Traffic-related noise impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact N-4.</b> Project construction would expose nearby sensitive receptors to a temporary increase in vibration. Vibration levels would not exceed applicable standards at nearby residences or structures and would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact N-5.</b> There are no public use airports in the project vicinity, therefore, there would be no impact from airport noise exposure.</p>	<p>No mitigation is required.</p>	<p>No impact</p>
<p><b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to noise.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>



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Impact	Mitigation Measure (s)	Residual Impact
<b>Population and Housing</b>		
<b>Impact PH-1.</b> Employment growth caused by the project would not exceed forecasts for Santa Cruz County, and the project would not extend infrastructure to new areas. The impact from inducement of unplanned population growth would be less than significant.	No mitigation is required.	Less than significant
<b>Impact PH-2.</b> The project would not displace existing people or housing because the project site is not currently developed with residential uses. This impact would be less than significant.	No mitigation is required.	Less than significant
<b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to population and housing.	No mitigation is required.	Less than significant
<b>Public Services</b>		
<b>Impact PUB-1.</b> The proposed project would incrementally increase demand for fire protection services. However, this demand would not necessitate the construction of new fire department or facilities or alter the existing fire station or facilities. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Impact PUB-2.</b> Implementation of the proposed project would increase demand for police protection services. However, this demand would not significantly increase the need for law enforcement services such that new facilities or physically altered facilities would be required to maintain acceptable service ratios and response times. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Impact PUB-3.</b> Employment generated by the proposed project could result in relocation to Santa Cruz County. Some relocation could be households with school-aged children, resulting in an incremental increase in school enrollment. The project applicant must pay development impact fees, which pursuant to SB 50, are considered complete and full mitigation of impacts on school capacity. Impacts would be less than significant.	No mitigation is required.	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact PUB-4.</b> The proposed project would not directly lead to a population increase or introduce a substantial number of new residents to Santa Cruz County. Therefore, the proposed project would not create a need for new or expanded park facilities and there would be no impact.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact PUB-5.</b> The proposed project would not directly lead to a population increase or introduce a substantial number of new residents to Santa Cruz County. Therefore, the proposed project would not create a need for new or expanded public facilities. There would be no environmental impacts.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to public services.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Transportation</b></p>		
<p><b>Impact T-1.</b> The project would improve existing multi-modal conditions by improving vehicle travel lanes and intersections, improving Class II bike lanes and adding sidewalks on Soquel Avenue, as well as on-site bicycle parking and pedestrian pathways. New employees and patients on the project site would not substantially increase transit demand. Therefore, the project would have a less-than-significant impact related to consistency with a program, plan, ordinance, or policy addressing the circulation system.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact T-2.</b> Implementation of the proposed project would reduce VMT in the County. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Impact T-3.</b> The proposed project would reduce existing traffic safety hazards and would not introduce incompatible uses to the circulation system. Therefore, the proposed project would have a less-than-significant impact related to such hazards.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>

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Impact	Mitigation Measure (s)	Residual Impact
<p><b>Impact T-4.</b> The proposed medical office building would improve existing access to medical care in the County. The project also would not have a substantial adverse effect on travel times for emergency vehicles with the required implementation of measures to improve traffic flow. Therefore, the project would have a less-than-significant impact related to emergency access.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Cumulative Impacts.</b> The proposed project would have no significant cumulative impacts related to transportation.</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>
<p><b>Tribal Cultural Resources</b></p>		
<p><b>Impact TCR-1.</b> Grading and excavation required for project construction would have the potential to unearth and adversely change or damage previously unidentified tribal cultural resources. Impacts would be potentially significant but mitigable.</p>	<p>Mitigation measures CUL-1a and CUL-1b, above, are required.</p>	<p>Less than significant</p>
<p><b>Cumulative Impacts.</b> Mitigation measures CUL-1a and CUL-1b would reduce project-level impacts to a less than significant level and would ensure that the project’s contribution to cumulative tribal cultural resources impacts would not be cumulatively considerable.</p>	<p>Implementation of mitigation measures CUL-1a and CUL-1b, above, is required.</p>	<p>Less than significant</p>
<p><b>Utilities and Service Systems</b></p>		
<p><b>Impact UTIL-1.</b> The project would require new connections to electric power, natural gas, and telecommunication infrastructure, as well as water supply lines. Additionally, new wastewater infrastructure and stormwater treatment facilities would be constructed as part of the project. Impacts from utility construction and relocation would be less than significant with implementation of the mitigation measures identified throughout this EIR.</p>	<p>No mitigation is required other than mitigation listed in this table for other resources or issues areas.</p>	<p>Less than significant</p>
<p><b>Impact UTIL-2.</b> The proposed project would generate demand for water. Water supplies are inadequate during a single dry year and multiple dry years for existing conditions, as well as with demand from the project. The demand of the project would be an</p>	<p>No mitigation is required.</p>	<p>Less than significant</p>

Impact	Mitigation Measure (s)	Residual Impact
incremental increase and not necessitate construction of a new water supply. Impacts would be less than significant.		
<b>Impact UTIL 3.</b> The existing wastewater treatment provider would have adequate capacity to treat wastewater generated by the proposed project as well as by existing land uses. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Impact UTIL-4.</b> The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, including the Buena Vista Landfill. The proposed project would not impair the attainment of solid waste reduction goals and would comply with Federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant.	No mitigation is required.	Less than significant
<b>Cumulative Impacts.</b> Collectively, reasonably foreseeable future development and growth in the water service area would generate demand that exceeds supply such that the City would need to develop new or additional water supplies. The development and timing of new or additional water supplies are unknown at this time. Development of water supplies could result in significant environmental impacts. Accordingly, the cumulative impact would be potentially significant and unavoidable. The proposed project would contribute to total water demand, and thus potential water shortages in the future alongside other development and growth in the service area. Therefore, the proposed project would contribute to the significant and unavoidable cumulative impact.	No mitigation is available or feasible to implement.	Significant and unavoidable

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# 1 Introduction

This document is an Environmental Impact Report (EIR) that analyzes a proposed medical office building development at a site located at 5940 Soquel Avenue, Santa Cruz, California. The proposed Medical Office Building Project (hereafter referred to as the “proposed project” or “project”) would be constructed on a site currently used for miscellaneous junkyard/storage purposes, as well as an office trailer and workshop. The project would involve removal or demolition of the existing on-site uses and construction of a four-story medical office building and four-story parking garage. Other components of the project include a landscaped outdoor area with pedestrian pathway, site driveway with patient drop-off/pick-up zone, road frontage improvements, new pedestrian and bicycle facilities, and new utility connections.

This section discusses (1) the project and EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) the lead, responsible, and trustee agencies; and (5) the environmental review process required under the California Environmental Quality Act (CEQA). The proposed project is described in detail in Section 2.0, *Project Description*.

## 1.1 Environmental Impact Report Background

The County of Santa Cruz distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on March 24, 2020 and ending on April 22, 2020. On March 30, 2020, the County announced that due to ongoing shelter-in-place orders issued by the State of California in association with the Covid-19 pandemic, the public review period would be extended to May 1, 2020. In addition, the City held an EIR Scoping Meeting on April 2, 2020. The meeting, held from 6:00 PM to 7:30 PM, was aimed at providing information about the proposed project to members of public agencies, interested stakeholders and community members. The meeting was held virtually with ability to participate either through an internet connection or by telephone. The meeting was held virtually due to public health concerns associated with the Covid-19 pandemic. The County received letters from six agencies and 22 organizations or persons in response to the NOP during the public review period, as well as various oral comments presented during the scoping meeting. The NOP is presented in Appendix A of this EIR, along with the NOP responses received. Table 1-1 summarizes the content of the comments and where the issues raised are addressed in the EIR.

**Table 1-1 NOP Comments and EIR Response**

Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
<b>Agency Comments</b>		
California Department of Fish and Wildlife	The EIR should evaluate cumulative impacts to biological resources, particularly as they relate to Rodeo Gulch; Impacts on biological resources from increased runoff should be evaluated; Impacts of artificial lighting on fish and wildlife should be evaluated; Impacts on migratory nesting birds should be evaluated	Impacts to biological resources, including cumulative impacts, are evaluated in Section 4.3, <i>Biological Resources</i> .

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Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
California Department of Transportation (Caltrans)	As of July 2020, Caltrans will use vehicle miles traveled (VMT) rather than LOS to evaluate transportation impacts	Transportation impacts of the project, including VMT impacts, are evaluated in Section 4.14, <i>Transportation</i> .
City of Capitola	Traffic analysis should evaluate traffic and circulation impacts of opening 40 <sup>th</sup> Avenue to through traffic.	The proposed project includes installing a diverter at the intersection of 40 <sup>th</sup> Avenue and Gross Road. The diverter would direct traffic to 41 <sup>st</sup> Avenue. Therefore, the traffic analysis concluded project-generated trips would not continue south on 40 <sup>th</sup> Avenue but instead would be redirected to 41 <sup>st</sup> Street. Therefore, opening 40 <sup>th</sup> Avenue to through traffic is not a component of the proposed project, and this EIR does not evaluate the impacts of opening 40 <sup>th</sup> Avenue to through traffic. Additionally, pursuant with CEQA Guidelines Section 15064.3, this EIR does not evaluate potential traffic congestion impacts of the project.
City of Capitola	Cumulative impacts analysis should include redevelopment of a portion of the Capitola Mall.	Table 3-1 in Section 3.0, <i>Environmental Setting</i> , lists the projects included in the cumulative impacts analysis in this EIR. Redevelopment of a portion of the Capitola Mall is included.
Native American Heritage Commission	Please complete all legal tribal consultation requirements, as applicable.	Please refer to Section 4.15, <i>Tribal Cultural Resources</i> , for a summary of tribal consultation completed.
Santa Cruz County Regional Transportation Commission (SCCRTC)	<p>Applicant should work with SCCRTC staff to ensure project would not conflict with the 41st Avenue to Soquel Avenue/Drive Auxiliary Lane Project design;</p> <p>Traffic impacts, including mode conflicts, should be evaluated;</p> <p>Project applicant should work with SCCRTC to identify regional and local multi-modal traffic circulation improvements;</p> <p>Project applicant should discourage the provision of unlimited, free parking for employees in favor of effective, long-term employer-based Transportation Demand Management (TDM) programs;</p> <p>Project should include direct, designated pedestrian access from sidewalks on adjacent roadways to the front entry of the building and nearby transit stops.</p>	<p>Coordination of proposed project design with the auxiliary lane project is not a CEQA impact. Therefore, this comment is not addressed in this EIR.</p> <p>Potential conflicts with plans, programs, and policies addressing the circulation system, including various modes of transportation, are evaluated in Section 4.14, <i>Transportation</i>.</p> <p>Comments pertaining to multi-modal improvements, TDM programs, and pedestrian access pertain to the project design. These comments do not address specific potential impacts of the project. Therefore, these comments are not addressed in this EIR. However, as described in Section 2, <i>Project Description</i>, the proposed project includes pedestrian improvements on Soquel Avenue. The proposed project also includes bicycle facilities and a bicycle lane on Soquel Avenue.</p>
Santa Cruz METRO	<p>If an alternate site is unavailable, applicant should explore ways to provide transit connections;</p> <p>EIR should analyze transit delays due to increased traffic generated by the project;</p> <p>EIR should consider mitigation including shuttle service between project site and Capitola Mall Transit Center, and fixed-</p>	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips. Additionally, potential conflicts with programs, policies, and plans pertaining to transportation, including transit, are also discussed in Section 4.14, <i>Transportation</i> . Mitigation measures to reduce potentially significant impacts

Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
	route transit service from Watsonville, Capitola, and Santa Cruz to the project site combined with METRO passes for project employees; EIR should consider mitigation to reduce traffic.	of the project are identified throughout the EIR, as applicable.
<b>Organization Comments</b>		
Campaign for Sustainable Transportation	Site location is not ideal due to lack of transit service. Potential mitigation for traffic impacts could be a new bus route on 17th Avenue that allows transfers from routes along Portola, Brommer and Capitola Road.	CEQA requires that transportation impacts be evaluated in terms of VMT. Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips. Additionally, potential conflicts with programs, policies, and plans pertaining to transportation, including transit, are also discussed in Section 4.14, <i>Transportation</i> .
Campaign for Sustainable Transportation	Vacant parcels on Soquel Avenue should be considered as alternative project sites.	Alternatives to the proposed project are discussed in Section 6, Alternatives.
Campaign for Sustainable Transportation	EIR should consider incentives for alternative commute modes, including paying employees to commute by bike, bus, and vanpool, in order to minimize the size of parking facilities.	As discussed in Section 2, <i>Project Description</i> , the proposed project includes a new bicycle lane on Soquel Avenue, as well as a new pedestrian sidewalk. Additionally, as described in Section 4.14, <i>Transportation</i> , ParaCruz, a para-transit service, would provide service to the project site for persons having certain disabilities or other conditions.  Potential aesthetics impacts associate with building massing and size of the parking garage and medical office building are evaluated in Section 4.1, <i>Aesthetics</i> . Mitigation measures to reduce potentially significant impacts of the project are provided, as applicable, within impact discussions in this EIR.
Sierra Club	EIR should evaluate potential changes in runoff flow patterns, including impacts of routing stormwater runoff to the proposed new outfall rather than allowing it to flow overland following historic drainage routes.	Potential impacts associated with alterations to drainage patterns are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
Sierra Club	EIR should evaluate impacts to potential wetland on adjacent property to the east as a result of proposed changes to stormwater runoff and reduced surface hydrology.	Potential impacts to wetlands are evaluated in Section 4.3, <i>Biological Resources</i> . Potential impacts associated with alterations to drainage patterns are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
Sierra Club	EIR should evaluate potential water quality and treatment impacts of stormwater runoff from the project.	Potential impacts related to water quality, stormwater runoff, and stormwater treatment are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .



Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
Sierra Club	Potential VMT impacts of the project should be evaluated in the EIR given the lack of transit nearby and the number of parking spaces proposed on-site.	Potential impacts related to VMT of the project are evaluated in Section 4.14, <i>Transportation</i> .
Sierra Club	EIR should evaluate an alternative to the project that includes locating the medical office building on the north side of Highway 1 where existing development is more urban and transit is available to reduce VMT.	Potential impacts related to VMT of the project are evaluated in Section 4.14, <i>Transportation</i> . The suggestion for an alternative site is noted. Alternatives to the proposed project, including an alternative site, are discussed in Section 6, <i>Alternatives</i> .
Sierra Club	<p>EIR should consider the following mitigation measures to reduce VMT impacts of the project:</p> <ul style="list-style-type: none"> <li>• Completion of the proposed pedestrian bridge over the freeway at Chanticleer Avenue. The new bridge should include rental bicycles and scooters on both sides of the bridge. Medical office building staff should be available to help the disabled and elderly get across.</li> <li>• A new bus line on 17th Avenue that connects Portola Avenue, Brommer Street, Capitola Road, and Soquel Avenue.</li> <li>• Protected bike lanes and complete sidewalks with wheelchair ‘bumps’ on Soquel Avenue between the facility and the planned bicycle and pedestrian bridge at Chanticleer Avenue.</li> </ul>	Potential impacts related to VMT of the project are evaluated in Section 4.14, <i>Transportation</i> . Mitigation measures to reduce potentially significant impacts of the project are provided throughout the EIR, as applicable.
<b>Individuals</b>		
Jean Brocklebank	The EIR scoping meeting should be postponed until internet demand is decreased or the meeting can be in-person.	The <i>State CEQA Guidelines</i> do not specifically require scoping meetings be held in-person. Given ongoing health concerns and statewide shelter-in-place orders, the County proceeded with a now-common practice of holding community planning meetings via a video conferencing platform that includes the capability for joining by telephone. Additionally, the meeting materials were posted on the County’s website. The NOP circulated for this EIR provided instructions for participating in the scoping meeting and a link to where meeting materials can be accessed on the website, as well as how the public could participate and respond in writing with input.
Marcella Cantalupo	County should host a meeting at the Beachcomber Mobile Home Park.	The <i>State CEQA Guidelines</i> do not specifically require scoping meetings be held in-person. Given statewide shelter-in-place orders and ongoing health concerns pertaining to the Covid-19 pandemic, the County held a virtual scoping meeting.
Marcella Cantalupo	Noise impacts should be evaluated.	Noise impacts are evaluated in Section 4.11, <i>Noise</i> .

<b>Commenter</b>	<b>Comment/Request</b>	<b>How and Where Comment Is Addressed in the EIR</b>
<b>Marcella Cantalupo</b>	The vacant Toys-R-Us site should be considered as an alternative site.	The suggestion for an alternative site is noted. Alternatives to the proposed project are discussed in Section 6, <i>Alternatives</i> .
<b>Marcella Cantalupo</b>	Traffic impacts should be evaluated.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>John Hall</b>	Project site is unacceptable given traffic impacts that would be generated and lack of transit service	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips. Impacts resulting from conflicts with transportation circulation, including transit, are evaluated in Section 4.14. Alternatives to the proposed project are discussed in Section 6, <i>Alternatives</i> .
<b>Sharon Hall</b>	Air quality impacts should be evaluated in the EIR.	Potential air quality impacts resulting from construction and operation of the proposed project are evaluated in Section 4.2, <i>Air Quality</i> .
<b>Sharon Hall</b>	Greenhouse gas (GHG) emissions impacts should be evaluated in the EIR.	Potential GHG emissions and impacts are evaluated in Section 4.7, <i>Greenhouse Gas Emissions</i> .
<b>Sharon Hall</b>	Traffic impacts should be evaluated in the EIR.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Sharon Hall</b>	Stormwater runoff and drainage patterns impacts should be evaluated in the EIR.	Stormwater runoff and drainage pattern impacts of the proposed project are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
<b>Sharon Hall</b>	Noise, light pollution, and glare impacts should be evaluated in the EIR. A tall wall at the south site boundary should be considered as mitigation for noise and light pollution impacts.	Light and glare impacts are evaluated in Section 4.1, <i>Aesthetics</i> , and noise impacts are evaluated in Section 4.11, <i>Noise</i> . Mitigation measures to reduce potentially significant impacts of the project are provided, as applicable, within impact discussions in this EIR.
<b>Bob Hambleton</b>	The proposed medical office building would be a better land use along the Highway 1 corridor than the residential development approved for the project site.	This comment is noted but does not pertain to the scope of the EIR analysis.
<b>Nita Hertel</b>	Lack of transit would result in increased GHG emissions, which should be evaluated.	Potential GHG emissions and impacts are evaluated in Section 4.7, <i>Greenhouse Gas Emissions</i> .
<b>George Hurley</b>	This project should be expedited because medical facilities are needed.	This comment does not pertain to the EIR and is not addressed further in this EIR.
<b>Heather Hutchison</b>	Project would have traffic impacts, notably on Mattison Lane.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.

Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
<b>Heather Hutchison</b>	Parking structure is too close to mobile home park and moving it north on the site would allow for more open space near the mobile home park.	Potential impacts on adjacent property, such as lighting and noise impacts, are evaluated in this EIR. Light and glare impacts are evaluated in Section 4.1, <i>Aesthetics</i> , and noise impacts are evaluated in Section 4.11, <i>Noise</i> .
<b>Michael Lewis</b>	EIR Scoping meeting should be postponed until it can be held in-person and meeting materials should be made available.	The <i>State CEQA Guidelines</i> do not specifically require scoping meetings be held in-person. Given ongoing health concerns and statewide shelter-in-place orders, the proceeded with a now-common practice of holding community planning meetings via a video conferencing platform which includes the capability for joining by telephone. Additionally, the meeting materials were posted on the County’s website. The NOP circulated for this EIR provided instructions for participating in the scoping meeting and a link to where meeting materials can be accessed on the website, as well as how the public could participate and respond in writing with input.
<b>Paula Mack</b>	Traffic impacts should be evaluated, including lack of transit service to the project site.	Impacts resulting from conflicts with transportation circulation, including transit services, are evaluated in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Bob Morgan, as representative of the Campaign for Sustainable Transportation</b>	All vacant properties along the Soquel Drive transportation corridor between the Highway 1 intersection and 41st Ave. intersection should be examined as alternative sites for the medical facility to increase transit accessibility.	These suggestions are noted and considered. Alternatives to the proposed project are evaluated in Section 6, <i>Alternatives</i> .
<b>Bob Morgan, as representative of the Campaign for Sustainable Transportation</b>	All transit options to service the site should be considered.	Potential conflicts related to circulation, including transit, are evaluated in Section 4.14, <i>Transportation</i> .
<b>Bob Morgan, as representative of the Campaign for Sustainable Transportation</b>	Considering Covid-19 crisis, the comment period should be extended 45 days.	Per <i>State CEQA Guidelines</i> Section 15082, the NOP comment period shall be no less than 30 days. The NOP for this EIR was circulated for comment for an extended period of 39 days, beginning March 24, 2020 and ending May 1, 2020.
<b>Jerry and Merrily Rosenthal</b>	Traffic congestion and circulation should be evaluated.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Mike &amp; Elizabeth Saint</b>	Transportation impacts should be evaluated, accounting for lack of transit service to the site.	Potential transportation impacts resulting from the proposed project are evaluated in Section 4.14, <i>Transportation</i> .

<b>Commenter</b>	<b>Comment/Request</b>	<b>How and Where Comment Is Addressed in the EIR</b>
<b>Wendy Schadle</b>	Would the stormwater outfall affect future development of my family's private property?	As shown on Figure 2-15 in Section 2, <i>Project Description</i> , the proposed off-site stormwater outfall would be located within the public right-of-way for Soquel Avenue. The outfall, as well as storm drainpipes to the outfall would not be located on private property.
<b>Andy Schiffrin</b>	Draft EIR should consider reconstruction of the Soquel Avenue/Highway 1 interchange as a potentially feasible mitigation measure for the traffic impacts resulting from the proposed project.  The contribution of traffic impact fees from the proposed project could increase the financial feasibility of the interchange project.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips as well as off-site improvements. Mitigation measures to reduce potentially significant project impacts are identified throughout the EIR, as applicable.
<b>Robert Singleton</b>	The EIR should evaluate project trip impacts.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Robert Singleton</b>	The EIR should evaluate stormwater runoff impacts.	Stormwater runoff impacts of the proposed project are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .
<b>Robert Singleton</b>	The EIR should evaluate aesthetics impacts.	Aesthetics impacts are evaluated in Section 4.1, <i>Aesthetics</i> .
<b>Becky Steinbruner</b>	The NOP comment period should be extended 30 days due to ongoing shelter-at-place orders;	Per <i>State CEQA Guidelines</i> Section 15082, the NOP comment period shall be no less than 30 days. The NOP for this EIR was circulated for comment for an extended period of 39 days, beginning March 24, 2020 and ending May 1, 2020.
<b>Becky Steinbruner</b>	The project would have traffic impacts that must meaningfully be evaluated and mitigated.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Becky Steinbruner</b>	METRO service should be added.	This comment pertains to desired project features but does not pertain to the scope of the evaluation to be included in the EIR. Conflicts with transportation circulation, including transit services, are evaluated in Section 4.14, <i>Transportation</i> .
<b>Becky Steinbruner</b>	Project should improve bicycle transportation on Soquel Avenue.	As described in Section 2, <i>Project Description</i> , the proposed project would provide a bicycle lane on a segment of Soquel Avenue. The provision of cycling infrastructure as a mode of transport is evaluated in Section 4.14, <i>Transportation</i> .
<b>Becky Steinbruner</b>	EIR should evaluate stormwater runoff impacts from increased impervious surface resulting from the project.	Stormwater runoff impacts of the proposed project are evaluated in Section 4.9, <i>Hydrology and Water Quality</i> .

Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
<b>Becky Steinbruner</b>	Applicant should hold a public informational meeting, with Spanish translation, at the Beach Comber Mobile Home Park.	Due to shelter-in-place orders and ongoing health concerns associated with the Covid-19 pandemic, the County held a public scoping meeting virtually, with participation available through the internet or by telephone. Meeting materials, in both Spanish and English, were also made available on the County website. In addition, translation services for all public meetings are available upon request.
<b>Becky Steinbruner</b>	The project would conflict with the existing sewer system that is currently over capacity.	Project impacts on utilities, including sanitary sewer and wastewater treatment are evaluated in Section 4.16, <i>Utilities and Service Systems</i> .
<b>Becky Steinbruner</b>	Aesthetic impacts of the project must be evaluated and mitigated. Winter shadowing impacts on the growing grounds of the adjacent nursery should be evaluated.	Aesthetics impacts are evaluated in Section 4.1, <i>Aesthetics</i> . Shadow impacts are also evaluated in Section 4.1, <i>Aesthetics</i> .
<b>Becky Steinbruner</b>	Noise impacts should be evaluated.	Noise impacts of the project are evaluated in Section 4.11, <i>Noise</i> .
<b>Becky Steinbruner</b>	Housing displacement should be evaluated, as people reside on the project site currently. The project would displace planned housing for the site, and this should be evaluated in the EIR.	Potential displacement of people and housing is evaluated in Section 4.12, <i>Population and Housing</i> .
<b>Becky Steinbruner</b>	Financial impacts of displacing businesses on-site currently should be evaluated.	Financial or fiscal impacts are not addressed within CEQA analysis documents. Therefore, this EIR does not evaluate financial impacts.
<b>Becky Steinbruner</b>	Please stake floor dimensions of buildings on-site so that public can see dimensions.	This comment is suggestion to the County regarding a method of evaluating the massing of the proposed project. The EIR evaluates massing and other aesthetic impacts in Section 4.1, <i>Aesthetics</i> .
<b>Amethyst Ware</b>	The project will result in unacceptable traffic operations due to increased vehicle trips and lack of transit options.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Margaret Ware</b>	Traffic impacts should be evaluated.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips.
<b>Margaret Ware</b>	The vacant Toys-R-Us site should be considered as an alternative site because transit is available there to reduce traffic impacts	The suggestion is noted. An analysis of alternatives to the proposed project are discussed in Section 6, <i>Alternatives</i> .

Commenter	Comment/Request	How and Where Comment Is Addressed in the EIR
Linda Wilshusen	The EIR should evaluate both VMT impacts and level of service intersection impacts of the proposed project. Mitigation for these impacts should be realistic and include improvements to pedestrian, bicycle, and transit.	Potential impacts on VMT resulting from vehicle trips generated by the proposed project are discussed in Section 4.14, <i>Transportation</i> . Section 4.14 also discusses traffic delay resulting from project trips. Mitigation measures to reduce potentially significant impacts of the project are provided, as applicable, within impact discussions in this EIR.

## 1.2 Purpose and Legal Authority

The proposed project requires the discretionary approval of the County of Santa Cruz Board of Supervisors; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *State CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

“...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

This EIR has been prepared as a project EIR pursuant to Section 15161 of the *State CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *State CEQA Guidelines*:

“This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.”

This EIR is to serve as an informational document for the public, County of Santa Cruz, and other agency decision makers. The process will include public hearings before the Planning Commission and Board of Supervisors to consider certification of a Final EIR and approval of the proposed project.

## 1.3 Scope and Content

This EIR addresses each issue area and environmental factor contained in Appendix G of the *State CEQA Guidelines*, except for those which are clearly not present in the project site or clearly unaffected by the proposed project. The issue areas and environmental factors that are addressed in this EIR include the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation

- Greenhouse Gas Emissions
- Hazards and Hazardous Emissions
- Tribal Cultural Resources
- Utilities and Service Systems

The issue areas and environmental factors contained in Appendix G of the *State CEQA Guidelines* that are clearly not present or unaffected by the proposed project are discussed in Section 5, *Other CEQA Required Discussions*. The issue areas and environmental factors addressed in Section 5 include the following:

- Agriculture and Forestry Resources
- Mineral Resources
- Recreation
- Wildfire

In preparing the EIR, use was made of pertinent County policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. A full reference list is contained in Section 7, *References*.

The alternatives section of the EIR (Section 6) was prepared in accordance with Section 15126.6 of the *State CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the “environmentally superior” alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required “No Project” alternative, two alternative development scenarios for the project site, and an alternative of developing the project at a different location than the project site.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *State CEQA Guidelines* provides the standard of adequacy on which this document is based. The *State CEQA Guidelines* state:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

## 1.4 Lead, Responsible, and Trustee Agencies

The *State CEQA Guidelines* define lead, responsible and trustee agencies. The County of Santa Cruz is the lead agency for the project because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. State responsible agencies include the Central Coast Regional Water Quality Control Board (CCRWQCB), which regulates water quality in the region, and the California Department of Transportation (Caltrans), which may require an encroachment permit for road improvements and modifications. Local responsible agencies include the City of Santa Cruz Water Department and the Santa Cruz County Sanitation District, which may be required to approve or

deny connections and modifications to the municipal water and wastewater treatment facilities, respectively. The EIR will also be submitted to these agencies for review and comment.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. The California Department of Fish and Wildlife (CDFW) is a trustee agency for the proposed project. There are no other identified trustee agencies for the proposed project.

## 1.5 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

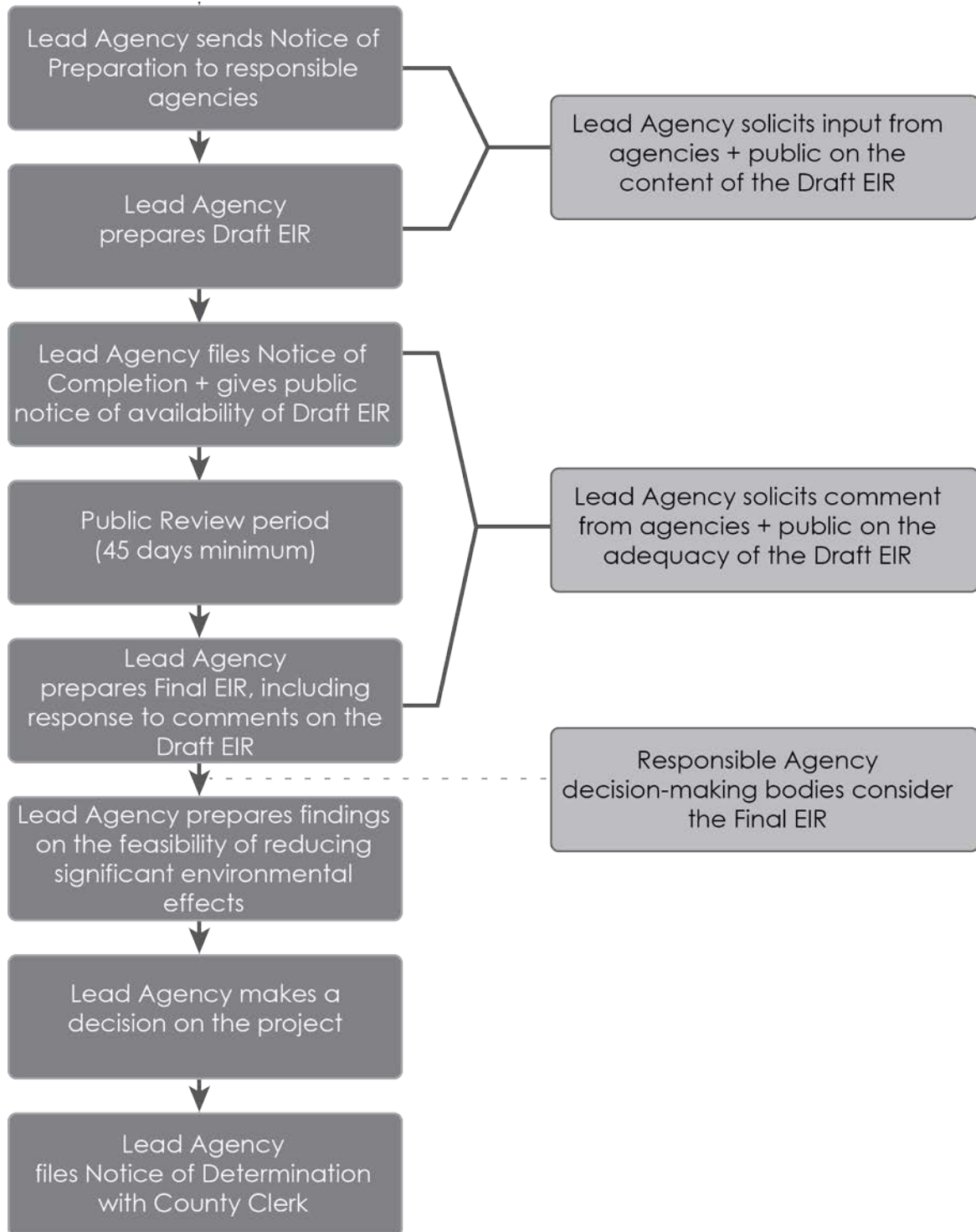
1. **Notice of Preparation (NOP).** After deciding that an EIR is required, the lead agency (County of Santa Cruz) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*State CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts. The NOP for this EIR was circulated from March 24, 2020, through May 1, 2020.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*State CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).
4. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; d) presentation of any edits or corrections made to the Draft EIR, and e) responses to comments.
5. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project (*State CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental



effects, if the proper findings and statement of overriding considerations are adopted (*State CEQA Guidelines* Sections 15042 and 15043).

7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*State CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*State CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



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## 2 Project Description

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This section describes the features of and related information concerning the proposed project, including the project applicant, the project site and surrounding land uses, and important project elements. It also presents the project objectives and presents the discretionary actions needed for approval.

### 2.1 Project Applicant

PMB Santa Cruz LLC  
3394 Carmel Mountain Road, Suite 200  
San Diego, California 92121

### 2.2 Lead Agency Contact Person

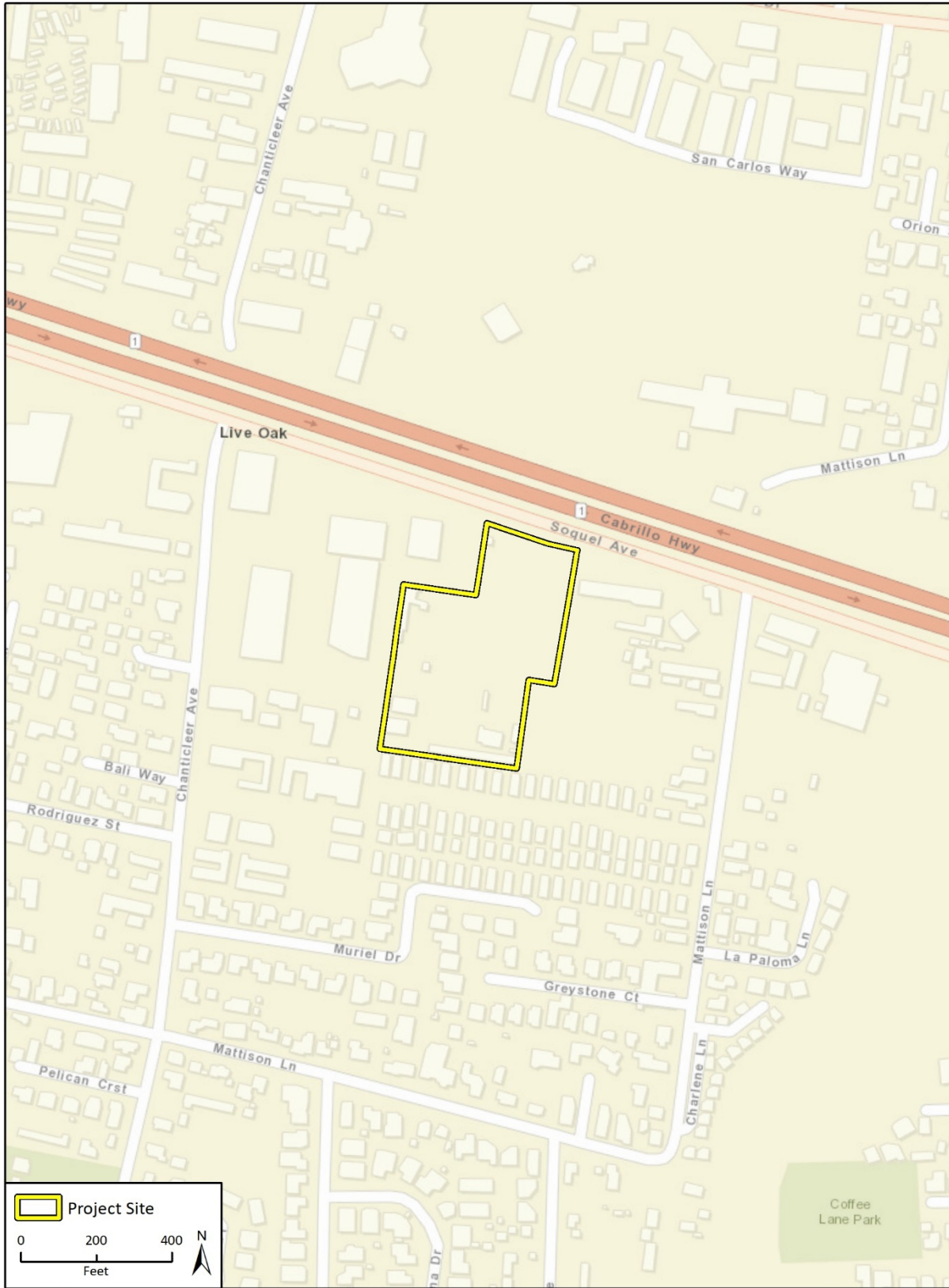
Stephanie Hansen, Principal Planner  
County of Santa Cruz  
Planning Department  
701 Ocean Street, Fourth Floor  
Santa Cruz, California 95060  
(831) 454-3112

### 2.3 Project Location

The project site is contained on a single five-acre parcel identified as Assessor's Parcel Number (APN) 029-021-47. It is located on the southern frontage of Soquel Avenue, just south of the State Route (Highway) 1 Freeway in Santa Cruz County. The street address is 5940 Soquel Avenue, Santa Cruz, California 95062. The intersection of Soquel Avenue and Chanticleer Avenue is approximately 730 feet west of the project site, and the intersection of Soquel Avenue and Mattison Lane is approximately 400 feet east of the site's eastern edge. Figure 2-1 and Figure 2-2 show the proposed project location.

The project would also involve the development of infrastructure within off-site areas, mostly within existing road right-of-way near the project site. The off-site improvements include a stormwater outfall located approximately 1,200 feet east of the project site. Figure 2-3 shows the location of off-site utility improvements in context with the project site.

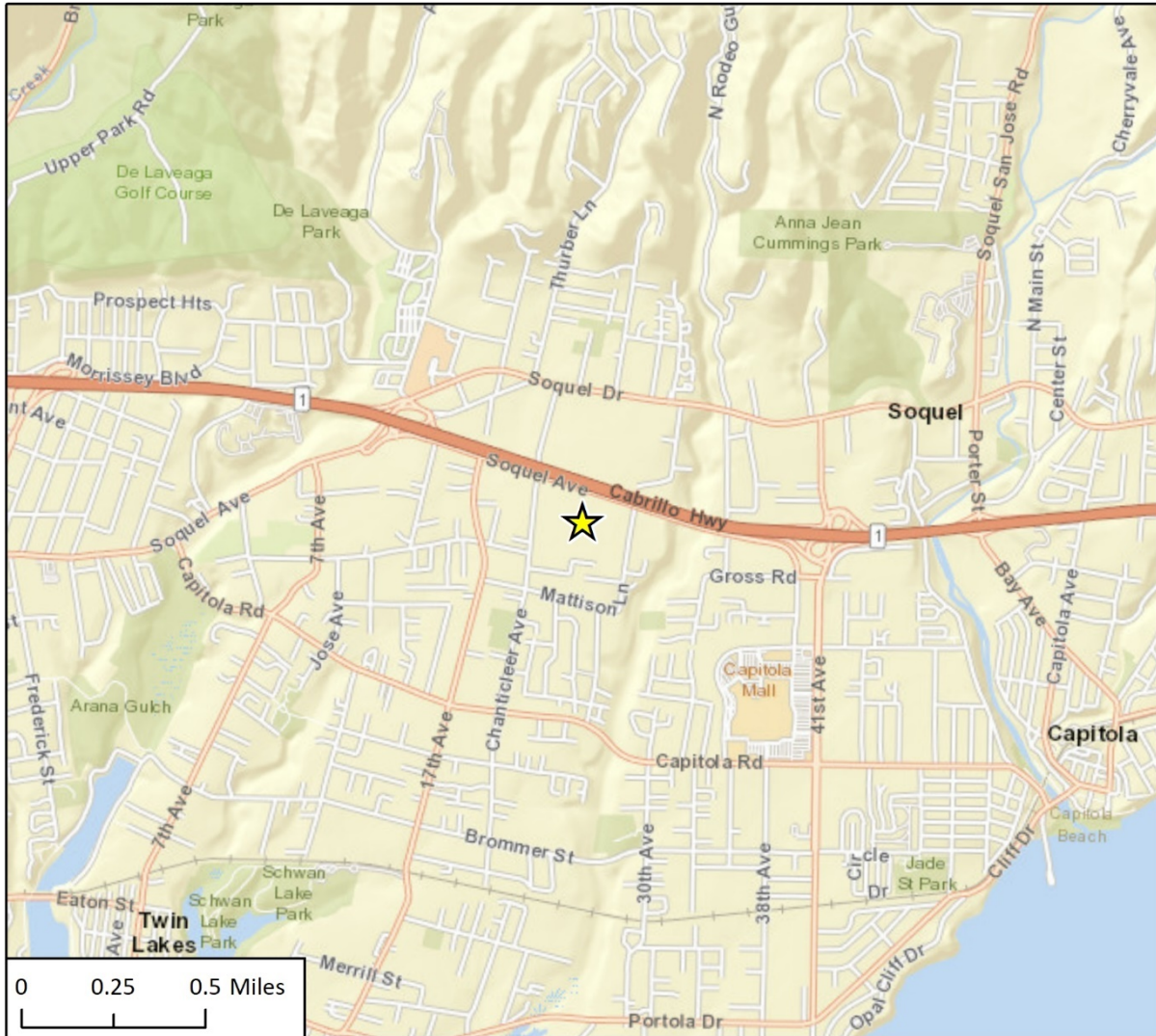
Figure 2-1 Project Site Location



Imagery provided by ESRI and its licensors © 2020.

Fig 2-2 Project Site Location

Figure 2-2 Regional Location



Imagery provided by Esri and its licensors © 2020.

★ Project Location



Fig 1 Regional Location



Figure 2-3 Off-Site Utility Improvement Areas



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Fig 2-6 Off-Site Improvement Areas

## 2.4 Existing Site Characteristics

### 2.4.1 Current Land Use Designation and Zoning

The County adopted the current General Plan on May 24, 1994 (County of Santa Cruz 1994), but has revised the plan several times over the years, with the last revision in 2020. The Land Use Element of General Plan establishes land use designations for properties within Santa Cruz County. The General Plan designates the project site R-UH (Urban High-Density Residential).

The Santa Cruz County Zoning Ordinance is codified in Chapter 13.10 of the Santa Cruz County Code. Among other things, the Zoning Ordinance provides specific regulations as to the allowable uses of land by categorizing property into various zoning districts. The project site is in RM-2-R (Multi-Family Residential) zoning district. The “-R” nomenclature of the zoning denotes “Regional Housing Need” and is applied to sites for development of 20 dwelling units per acre to meet the County’s Regional Housing Needs Allocation. The project site is approximately 5 acres, enabling 100 units to be developed at the site.<sup>1</sup>

Figure 2-4 shows existing General Plan land use designations of the site and adjacent parcels. Zoning districts are shown on Figure 2-5.

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<sup>1</sup> Approximately 5 acres X 20 units/acre = 100 units



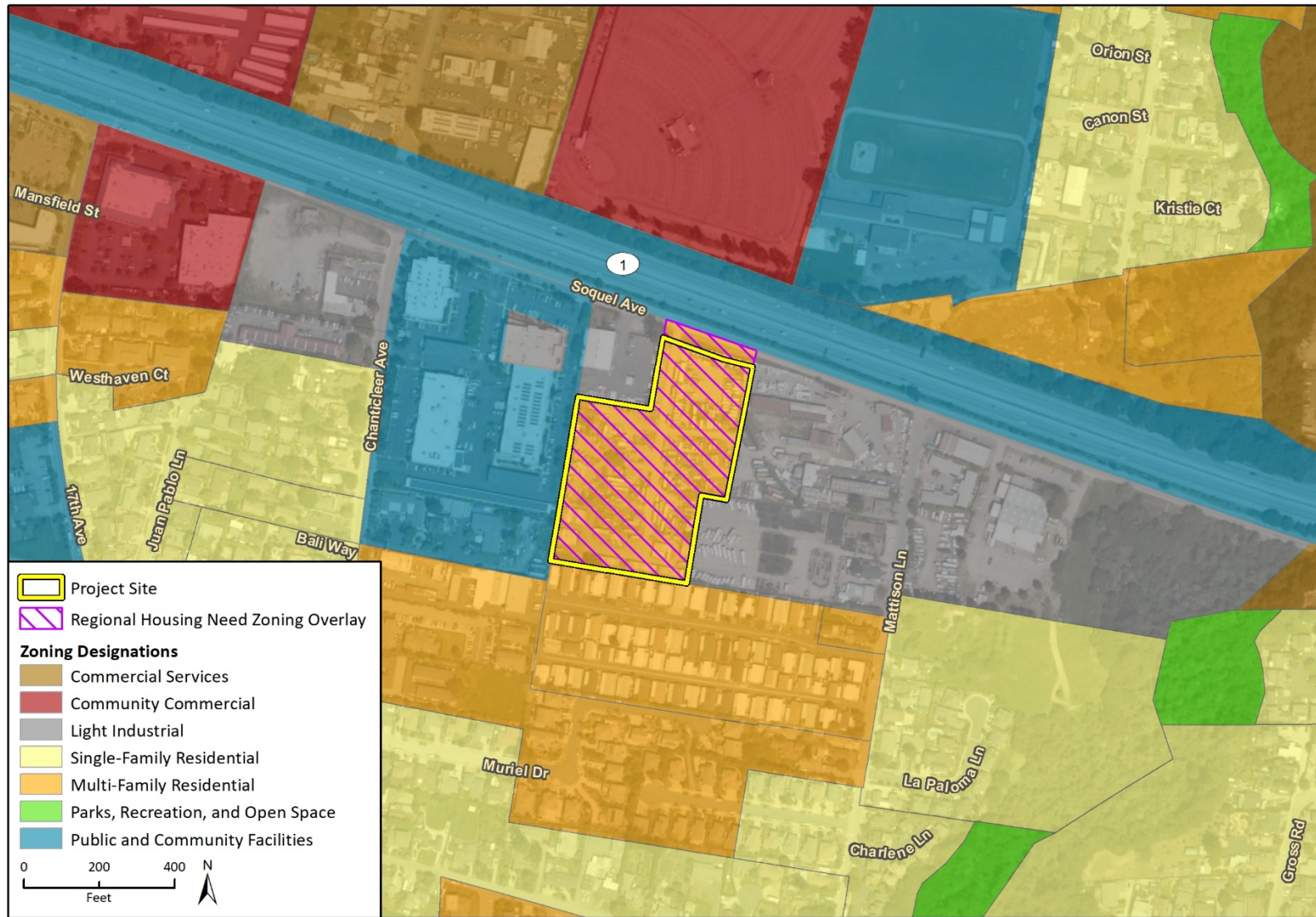
Figure 2-4 General Plan Land Use Designations



Imagery provided by Microsoft Bing and its licensors © 2020.  
Land Use data provided by Santa Cruz County, 2018.

Fig 2-4 General Plan Land Use Designations

Figure 2-5 Zoning Districts



Imagery provided by Microsoft Bing and its licensors © 2020.  
Zoning data provided by Santa Cruz County, 2019.

Fig 2-5. Zoning Districts

## 2.4.2 Current Land Uses

The project site is relatively flat with frontage on a segment of Soquel Avenue that parallels Highway 1 in central Santa Cruz County. There is a single driveway for ingress/egress, with an open graded drainage swale between the paved Soquel Avenue and the private property. The project site is used primarily for storage, salvage, and salvage yard purposes, but a concrete contractor is also on-site. Several vehicle towing business and storage companies list the site as their address. Temporary storage containers are dispersed across much of the site, as are vehicles, boats, and campers which appear either no longer operational or rarely operated. In addition to temporary storage containers, the site contains an office trailer and attached workshop measuring approximately 2,300 square feet and three sheds that range from 215 square feet to 1,300 square feet on the project site. A coarsely paved road leads to various internal roads providing access to smaller areas within the site. Part of the northwestern portion of the site is also paved with concrete pads.

## 2.4.3 Surrounding Land Uses

A separate parcel adjoins a portion of the project site on the north, between the site boundary and Soquel Avenue. This property is developed with a landscape supply business. Light-industrial and commercial development adjoin the site to the east, including a roofing supply operation and a landscape nursery. A single-family manufactured home residential development is adjacent to the south side of the project site. Some residences within this community lay within 10 feet of the property line of the project site. An electrical supply store and an assisted living facility are located to the southwest of the project site. Three buildings of more recent construction and associated surface parking are located to the west of the project site. These buildings include the Santa Cruz County Sheriff's Office, as well as professional offices housing private businesses. The surface parking area and building exteriors are landscaped. Chanticleer Avenue is located to the west of these buildings. Surrounding land uses in the project area are shown on Figure 2-6.



Figure 2-6 Project Area Land Uses and Aerial Photography



Fig 2-3 Proj Area Land Uses Aerial Photography

## 2.5 Proposed Project

### 2.5.1 Site Clean-Up

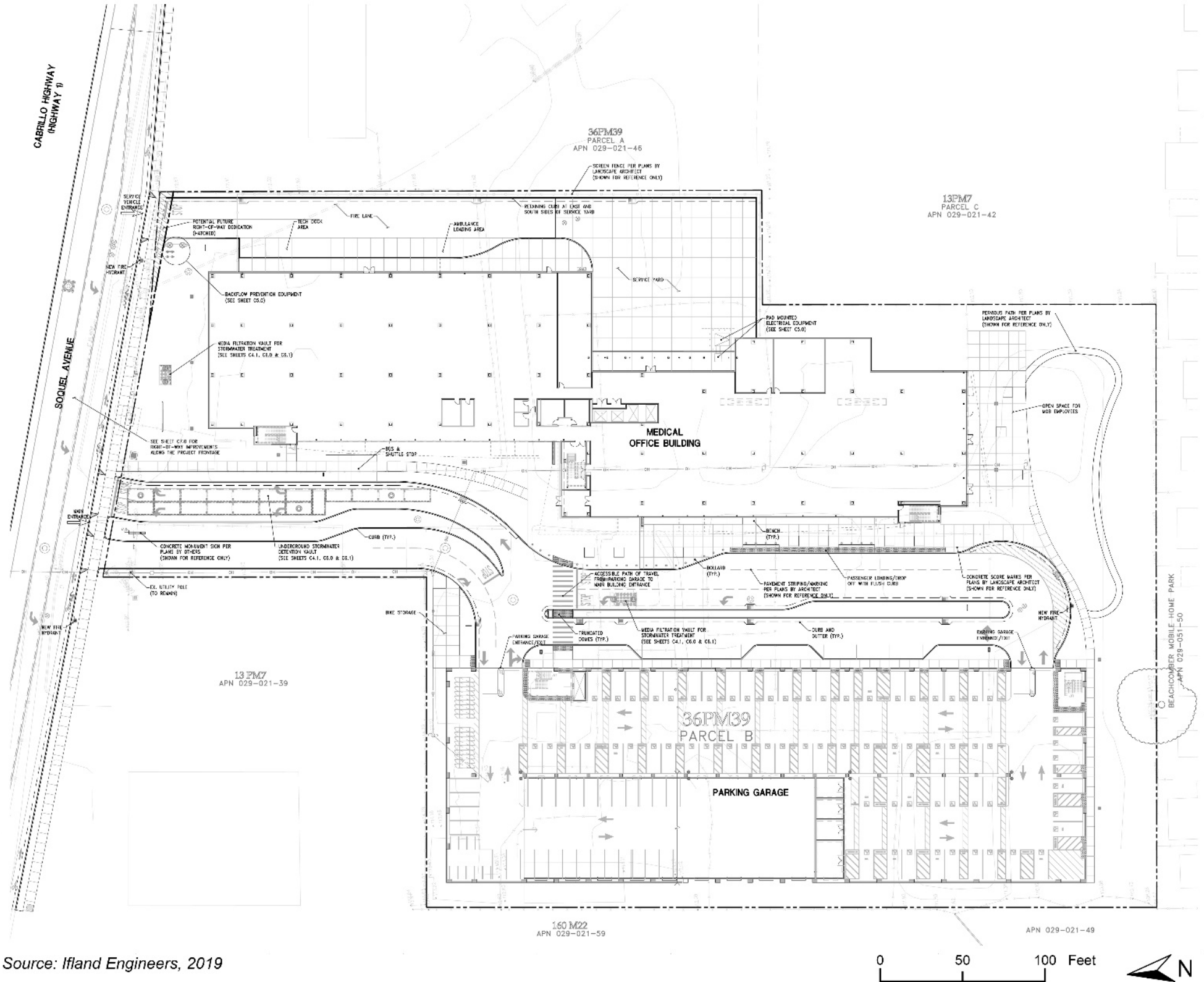
Implementation of the proposed project would begin with demolition and removal of existing structures and uses on the project site. As described above, the project site is used primarily for miscellaneous storage and salvage yard purposes, as well as a concrete contractor. These vehicles, structures, and pavement would be removed from the site. Existing debris and waste, as well as demolition debris would be transported offsite and disposed of in accordance with local and state regulatory requirements.

### 2.5.2 Proposed Development

Following cleanup of the project site, including removal of all vehicles, trash, debris, asphalt, and structures, the proposed project would include development of the project site with a medical office building, associated parking garage structure, utilities, stormwater management, landscaping, and a pedestrian pathway. Street frontage improvements along Soquel Avenue would also be constructed, as would off-site utility and roadway intersection improvements, as described further in Section 2.5.7.

A more detailed description of the precise nature and locations of each component of the proposed project are included below. Figure 2-7 provides the conceptual site plan, which illustrates the layout of project components on the project site.

Figure 2-7 Conceptual Site Plan



Source: Ifland Engineers, 2019

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## Medical Office Building

The project applicant proposes to develop the site with a new medical office building. The proposed facility would provide approximately 160,000 gross square feet of medical office use for specialty outpatient services. Services provided at the medical office building may include advanced medical and urgent care clinics, outpatient surgery facilities, support services for urgent care and outpatient surgery. Specific support functions would include pharmacy, laboratory, imaging facilities, primary care, women’s health, pediatric health, optometry, hearing, vision essentials, neurology, endocrinology, gastroenterology, hematology/oncology, infectious diseases, rheumatology, nephrology, pulmonology, sleep lab, orthopedics, podiatry, pain medicine, physical medicine and rehabilitation dermatology, health education, telehealth, café, and administrative office spaces.

The facility would be open to the public from 8:00 a.m. to 8:00 p.m., but urgent care and ancillary functions would operate 24-hours per day. The expected number of on-site staff at peak function would be approximately 300 persons. Table 2-1 shows the approximate floor area, by function of space, for each building level, as well as maximum occupancy for each level, including customers and patients.

**Table 2-1 Medical Office Building: Functional Space and Occupancy Load by Level**

Function of Space	Area (square feet)	Occupant Load
<b>Level 1</b>		
Business Use – General	41,429	415
Assembly Use – Accessory	2,029	136
Accessory Mechanical and Storage Areas	2,107	8
<b>Total</b>	<b>4,565</b>	<b>559</b>
<b>Level 2</b>		
Business Use – General	31,889	319
Health Care Use – Outpatient/Ambulatory Care	12,310	124
Accessory Mechanical and Storage Areas	529	4
<b>Total</b>	<b>44,728</b>	<b>447</b>
<b>Level 3</b>		
Business Use – General	44,852	449
Accessory Mechanical and Storage Areas	529	4
<b>Total</b>	<b>45,381</b>	<b>453</b>
<b>Level 4</b>		
Business Use – General	19,972	200
Assembly Use – Accessory	1,759	118
Accessory Mechanical and Storage Areas	206	2
<b>Total</b>	<b>21,937</b>	<b>320</b>
<b>Building Total</b>	<b>157,611</b>	<b>1,779</b>

The building would be a four-story structure measuring approximately 60 feet in height to finished roof and approximately 74 feet to top of mechanical screens on the rooftop. The northern portion of the building, closest to Soquel Avenue, would measure three stories and would transition to four

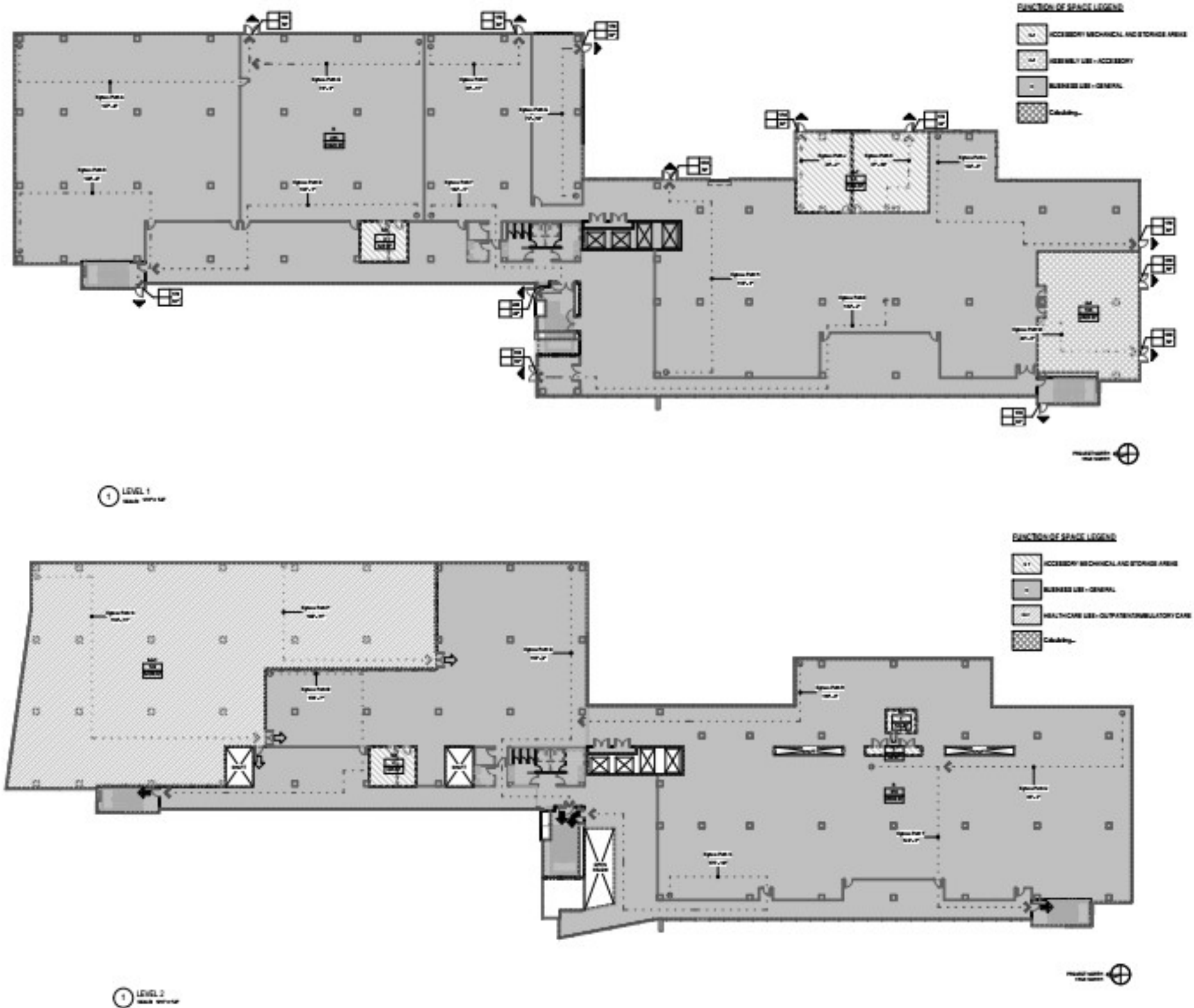


stories for the southern portion. Figure 2-8a through Figure 2-8b show a floor plan of each building level.

### *Building Facade*

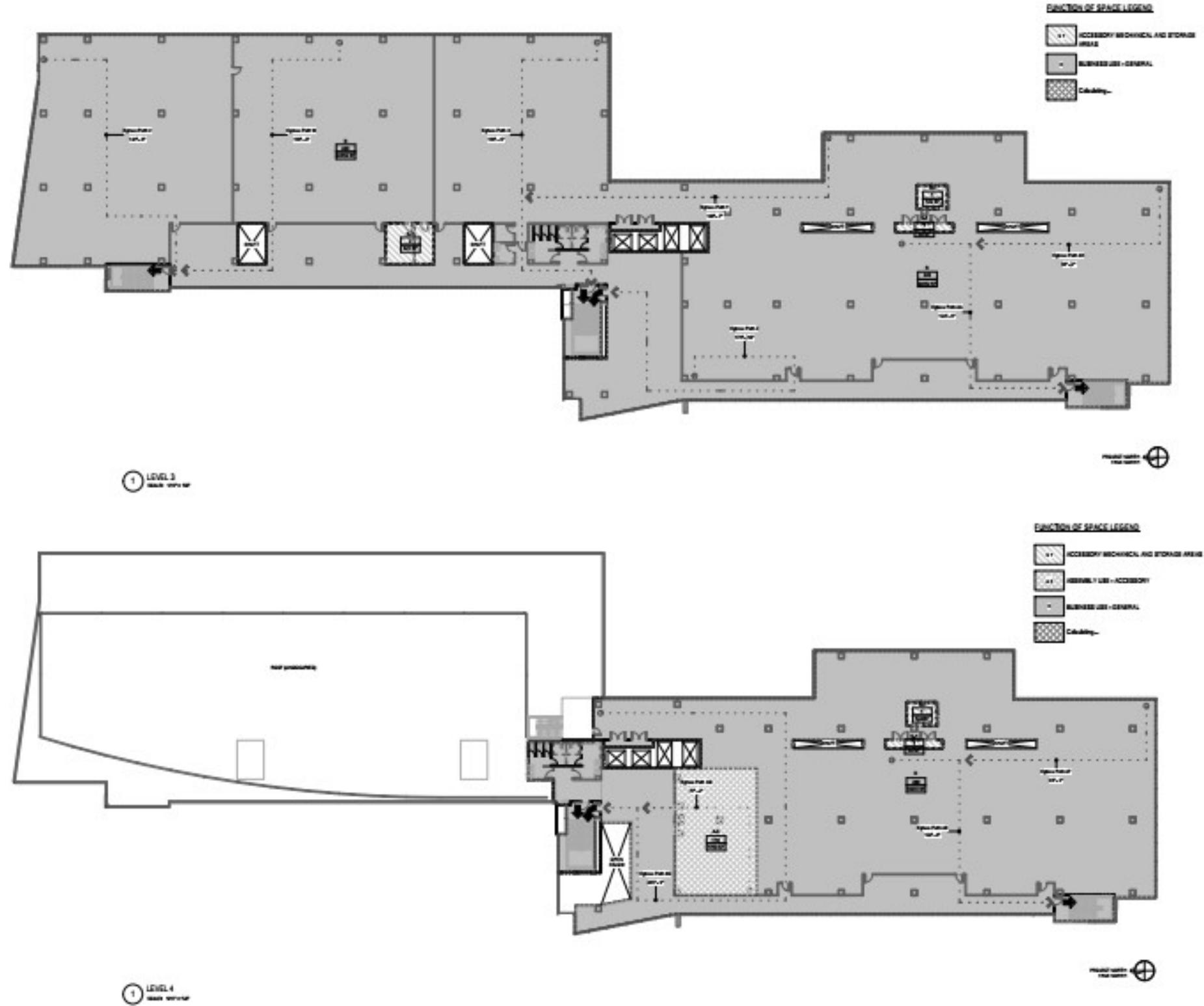
The exterior of the medical office building would consist of a mix of a corrugated metal panels, metal cladding panels, punched windows, storefront windows, and curtain wall systems. The corrugated metal panels would be used for the roof screen on the building and coated in a custom-color paint. A mix of three-tone color and single-tone color metal cladding panels would be used on all facades of the building. Punched windows would be used on all facades as well, generally for office windows. Storefront windows would be used in the entry area and lobby on the ground floor of the west (front) façade of the building. The various curtain wall systems would be used for glass opening on the west façade of the building and the stairwell, which is also on the west side of the building. Figure 2-9 shows the materials and finishes that would be used for the medical office building façade, as wells as examples of where they would be used on the building. As shown on Figure 2-10, exterior building colors would be a mix of sandy beige color, white to off-white, gray, silver, and pale green.

Figure 2-8a Floor Plan: Levels 1 and 2



Source: Smith Group 2019

Figure 2-8b Floor Plan: Levels 3 and 4



Source: Smith Group 2019

Figure 2-9 Medical Office Building Façade Materials



A



B



1. CORRUGATED METAL PANELS  
CUSTOM COLOR PAINT ON SOLID METAL PANELS WITH A POWDER COATING



2. PREFABRICATED EXTERIOR CLADDING METAL PANEL SYSTEM - THREE TONE  
CUSTOM COLOR PAINT ON METAL PANELS



3. PREFABRICATED EXTERIOR CLADDING METAL PANEL SYSTEM - SINGLE TONE  
CUSTOM COLOR PAINT ON METAL PANELS



4. PUNCHED WINDOW  
GLASS  
SYSTEM WITH ANCHORING



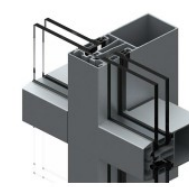
5. STOREFRONT WINDOW  
GLASS  
SYSTEM WITH ANCHORING



6. VISION/VISION CURTAIN WALL SYSTEM  
GLASS  
SYSTEM WITH ANCHORING



7. ALL VISION CURTAIN WALL SYSTEM  
GLASS  
SYSTEM WITH ANCHORING



8. ALUMINUM CURTAIN WALL AND WINDOW FRAME  
GLASS  
SYSTEM WITH ANCHORING

Source: Smith Group 2019



Figure 2-10 Conceptual Rendering



Source: Smith Group 2019

### 2.5.3 Parking and Vehicle Access

Parking for the medical office building would be provided within a four-story parking garage located on the western half of the project site, as shown on Figure 2-7. The parking garage would provide five levels of parking as vehicles would also have access to rooftop parking. The maximum height of the garage would be approximately 57 feet. A total of 730 parking spaces would be provided in the garage, including 47 spaces dedicated to electric vehicles. Sixty-six spaces would be ADA compliant. Artistic screening elements would be provided on the north and the northern portion of the east façades of the parking garage, visible from Soquel Avenue. As shown on Figure 2-10, the screening would be designed with breaking or cresting waves in order to capture the ocean and surfing culture that is commonly associated with the Santa Cruz area. Solar panels would be provided on the rooftop level of the garage. There would also be six parking spaces on the site driveway, adjacent to the parking garage.

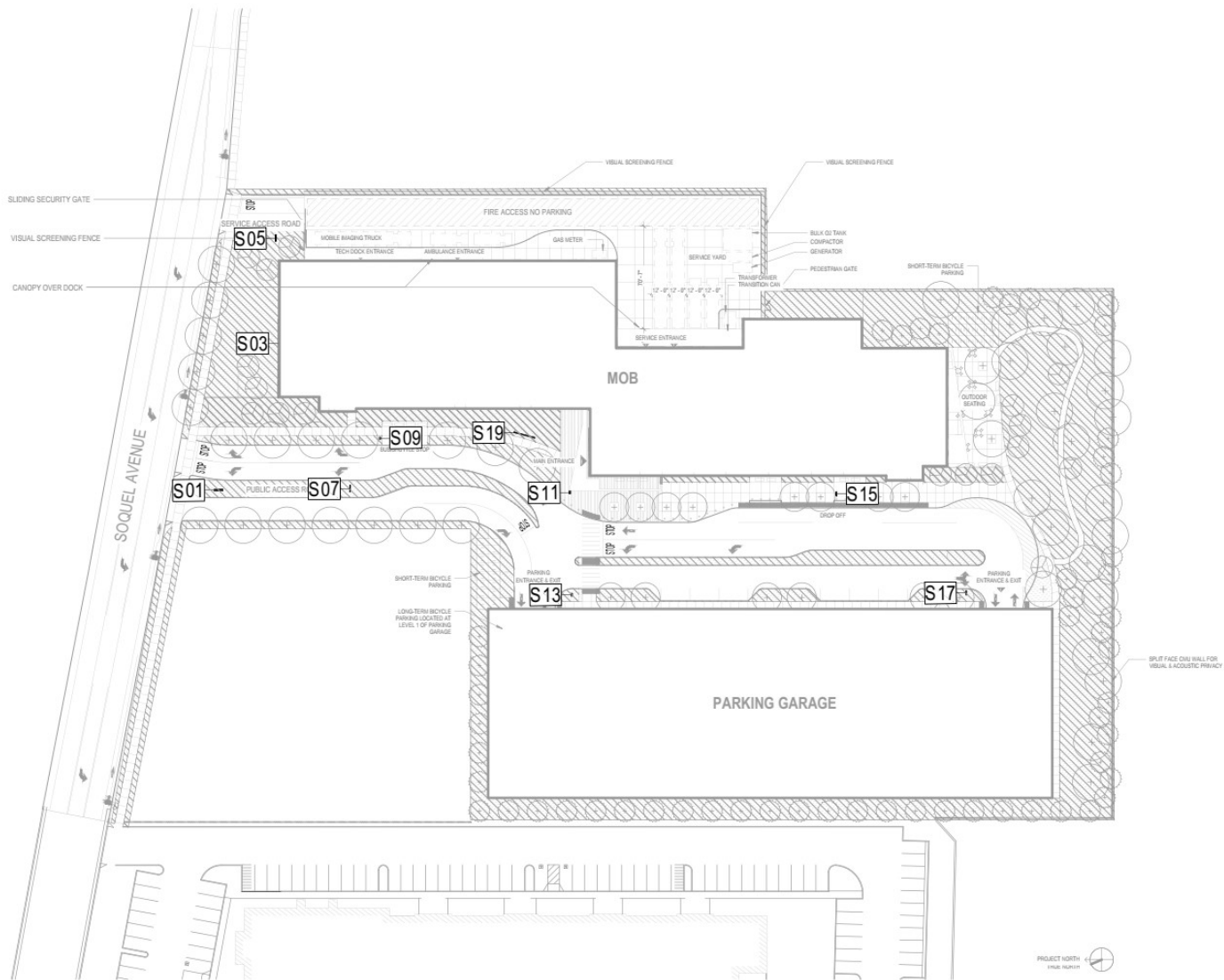
The proposed project would also include 160 bicycle parking stalls, including for both short-term and long-term bicycle parking. Short-term bicycle parking would be located adjacent to the parking garage north entrance and at the rear of the medical office building. Thirty-six long-term covered bicycle parking spaces would be provided on the ground floor of the parking garage. Bicycle parking would be a combination of bicycle storage lockers and bicycle racks.

As shown on Figure 2-7, a new driveway would be constructed from Soquel Avenue that facilitates vehicle circulation between the medical office building and parking garage. The driveway would also include a patient drop-off/pick-up zone outside of the medical office building. The driveway would also provide two points of entry to the parking garage. The driveway would be divided with a landscape median for much of its length. A separate driveway for ambulances and service vehicles would be constructed providing access to the rear (east side) of the medical office building.

### 2.5.4 Signage

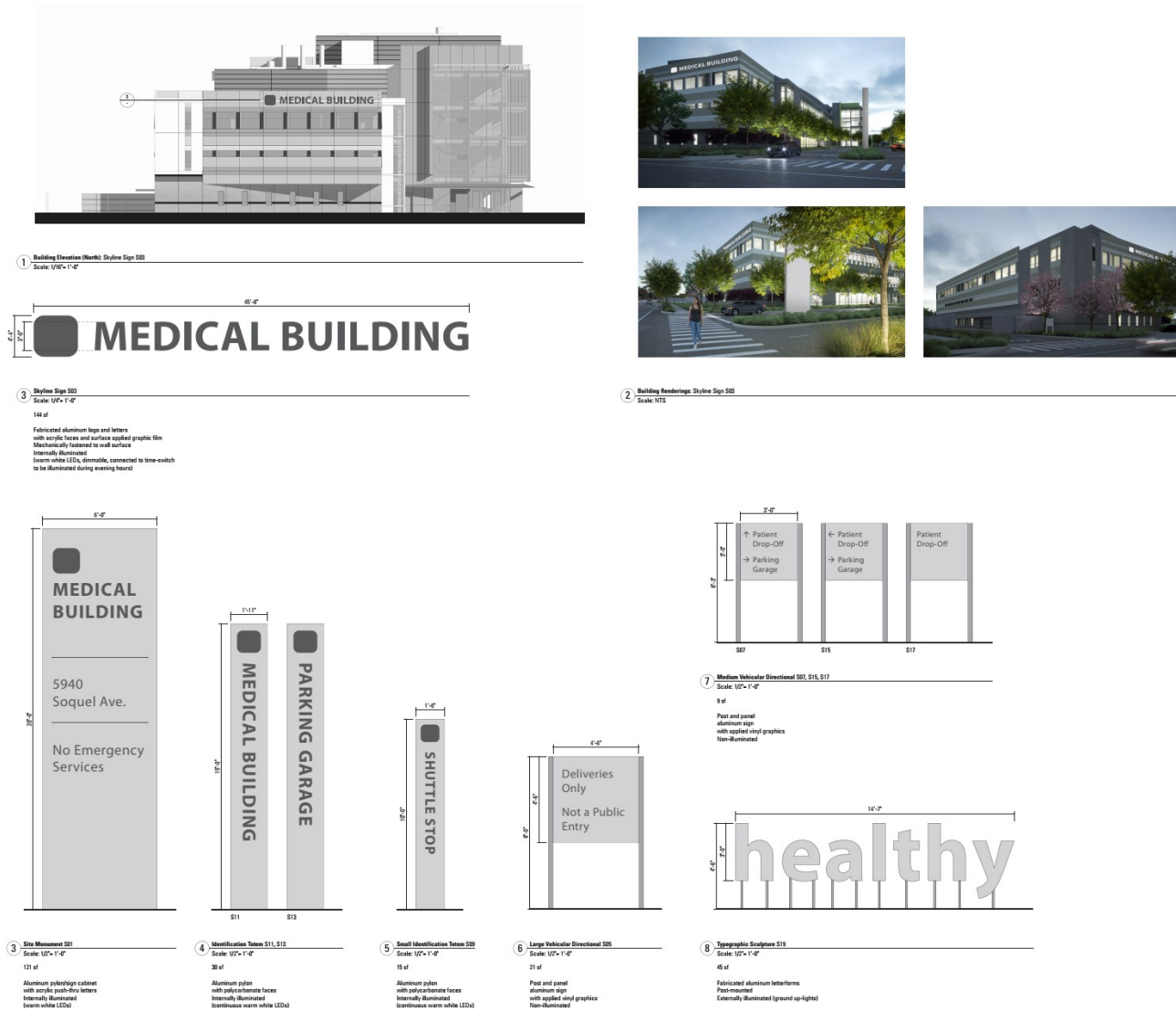
The proposed project would include a monument sign at the new driveway entry to the site along Soquel Avenue, as well as directional signage internal to the site, such as signage directing traffic either into the parking garage or to the patient drop-off areas at the entrance to the medical office building. The monument sign would be approximately 20 feet tall, made of aluminum with acrylic lettering, and internally illuminated. Directional signage on-site would be between approximately 6 feet and 15 feet tall, depending on the specific signage. A large illuminated sign would be mounted at the top of the north side of the medical office building, facing Soquel Avenue. Lettering on the sign would be approximately 3 feet in height and include a logo that may be as large as up to approximately 4.25 feet tall. The building-mounted sign would have a total length of approximately 46 feet. Illumination would be internal to the sign and consist of white LED lights that are dimmable and timed to operate only during evening and night hours. Figure 2-11 shows the proposed locations of signage, and Figure 2-12 shows corresponding signage details.

Figure 2-11 Signage Location Plan



Source: Smith Group 2019

Figure 2-12 Signage Detail



Source: Smith Group 2019



## 2.5.5 Utilities and Infrastructure

The proposed project would provide improvements, infrastructure, and facilities for wet and dry utilities. The following section describes provisions related to water supply, sanitary sewer, on-site and off-site stormwater management, and electricity and other dry utilities.

### 2.5.5.1 *Water Supply*

Water to the project site would be provided by the City of Santa Cruz Water Department. Approximately 305 linear feet of buried water pipe would be installed for the proposed project. The water pipe would connect to existing infrastructure within Soquel Avenue and convey water to the proposed medical office building. Approximately 270 linear feet of the new water pipe would be located within the project site on the east side of the medical office building. This segment of pipe would be located primarily beneath the surface of the ambulatory and service vehicle access driveway. The remaining approximately 35 linear feet of new water pipeline would be installed between the project site boundary and the existing water main beneath Soquel Avenue. Figure 2-13 shows proposed location of water infrastructure for the project.

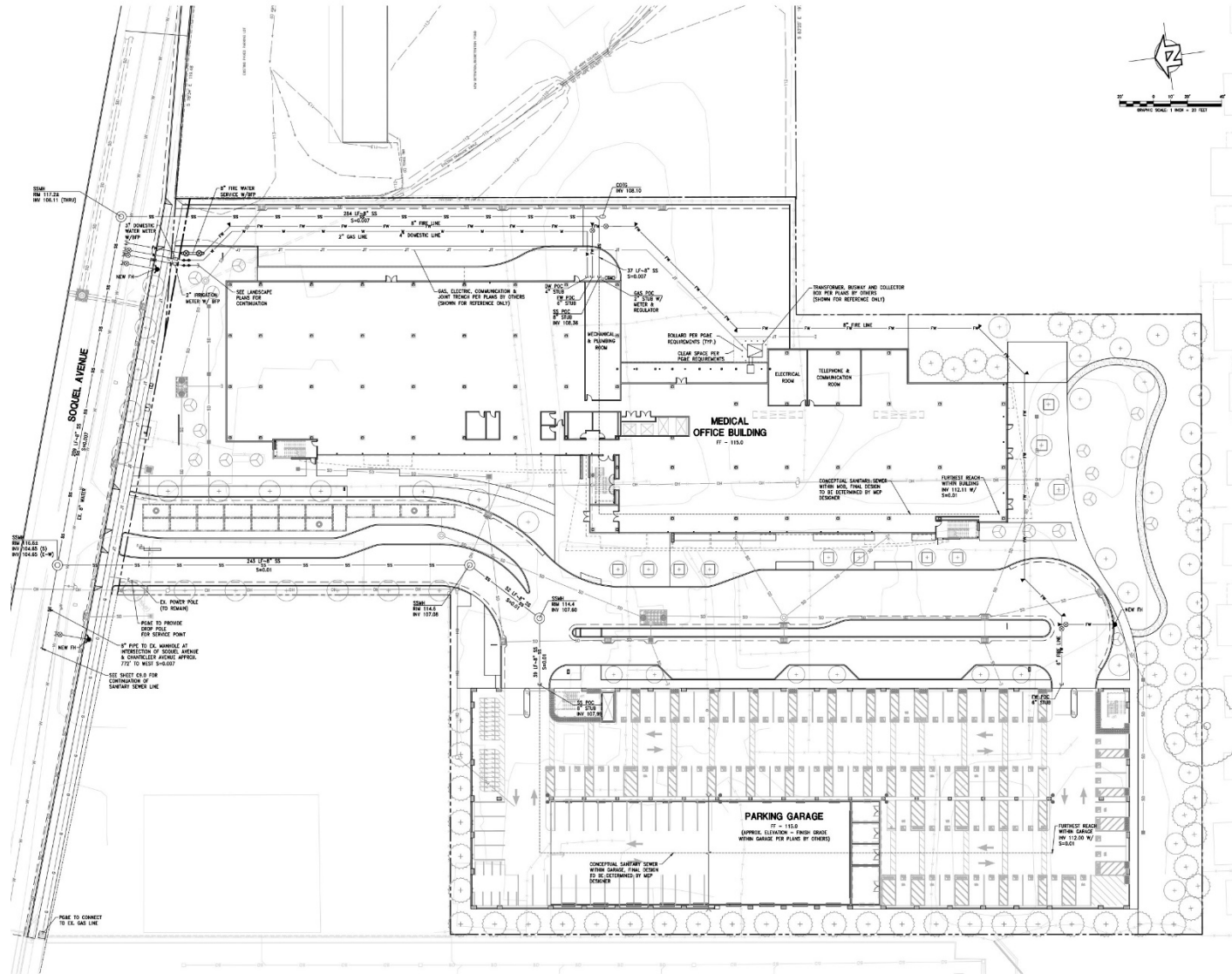
### 2.5.5.2 *Sanitary Sewer/Wastewater*

Wastewater generated by the proposed project would be conveyed through existing mains and treated at the wastewater treatment facility located in the City of Santa Cruz. Sanitary sewer service conveyance pipe system servicing the project site would be provided by the Santa Cruz County Sanitation District (SCCSD). Figure 2-13 shows proposed sanitary sewer infrastructure on the project site. Sanitary sewer lines within the development site would be privately maintained.

Implementation of the proposed project requires construction of additional wastewater conveyance infrastructure, including installing pipelines to connect to the existing sanitary sewer pipeline beneath 17th Avenue, approximately 1,300 feet west of the project site. Wastewater generated by the proposed project would be collected and conveyed through a conventional gravity system through 8-inch sanitary sewer pipes located both on-site and off-site. No pump stations are proposed. Approximately 2,600 linear feet of the new 8-inch sanitary sewer pipe would be located within and beneath Soquel Avenue, Chanticleer Avenue, and Rodriguez Street. The connection of proposed new pipe and existing pipe would occur within the intersection of 17<sup>th</sup> Avenue and Rodriguez Street. The proposed project would include abandoning the existing sanitary sewer pipe beneath both Chanticleer Avenue and Rodriguez Street and installing a new pipe at a lower depth below ground surface. Existing lateral connections within Chanticleer Avenue and Rodriguez Street along approximately 1,700 linear feet would be transferred from the existing pipe to the new pipe as directed by the SCCSD. Construction of wastewater main and infrastructure would occur either within the project site or beneath existing roadway surfaces, such as Soquel Avenue, Chanticleer Avenue, and Rodriguez Street.

The proposed sanitary sewer pipe replacement activities are a result of a current moratorium on sewer connections in the Rodeo Gulch Basin. If the Santa Cruz County Sanitation District upgrades sanitary sewer pipelines in the Rodeo Gulch Basin prior to commencement of construction of the proposed project, the full extent of the proposed sanitary sewer pipe replacement activities would be unnecessary. In this event, the proposed project would connect to the newly installed pipeline at Chanticleer Avenue and no replacement of pipeline within Chanticleer Avenue or Rodriguez Street would be conducted.

Figure 2-13 Utilities Plan



Source: Ifland Engineers 2019

### 2.5.5.3 Stormwater Management

The project site would be divided into two separate stormwater drainage management areas. One area would be developed with pervious surfaces consisting of graded slopes around the parking garage, the landscaped open space area at the south of the site, and areas east of the medical office building. Stormwater runoff in this management area would drain offsite following existing drainage patterns.

The second stormwater drainage management area would consist of the medical office building, parking structure, driveways and access road, pedestrian sidewalks, and landscaping area to the north of the medical office building. This drainage management area would be approximately 89 percent impervious due to structures and asphalt pavement. Stormwater generated from this area would be directed to and treated through an Oldcastle Perk Filter Vault Media Filtration System (MFS) unit. Runoff would be collected on-site in swales and inlets and directed to the MFS unit. Runoff would first enter an inlet chamber intended to remove large debris and floatables by passing runoff through a series of baffles. The stormwater would then enter the treatment chamber, which houses a number of percolation filter cartridges required to treat the design storm. The treatment chamber would fill from the bottom up and flow through the cartridges from the outside to a collection tube in the center of each cartridge. As the chamber fills, gravity would cause sedimentation of large particles, which are collected in the bottom of the treatment chamber. Runoff would then flow through the media cartridges, where physical filtration and chemical sorption remove small solids, hydrocarbons, and heavy metals from the runoff. Finally, treated effluent would flow through a false floor into the outlet chamber, where it would be gathered and directed to the outlet pipe. In the event of storms larger than the treatment design storm, a high-level overflow incorporated into each cartridge would allow water to directly enter the collection tube while bypassing the treatment media.

After passing through the MFS Unit, water would continue into 19 Oldcastle Storm-capture detention vaults. Each vault would have an external footprint of 8 feet by 16 feet and would provide approximately 420 cubic feet of storage. These vaults would be located beneath the outbound drive aisle and would be sized to meet the detention requirements for the difference in runoff pre- to post-construction. An outlet control structure located in the landscape area between the medical office building and Soquel Avenue would release water through an orifice at the pre-development rate for a 10-year storm and would provide safe overflow over a weir plate for storms beyond the design storm. Water released from the vault system would then flow offsite through a catch basin located within the Soquel Avenue right-of-way.

Storm drain improvements would be installed within Soquel Avenue, including curb and gutter along the frontage with inlets to be installed at the curb returns near the driveways of the project site and existing adjacent properties. These would also connect to an existing curb inlet near the northeastern corner of the Live Oak Business Park, as well as a catch basin from the northeast corner of the neighboring landscape supply company property, both of which currently daylight<sup>2</sup> to an existing drainage ditch. Finally, the project outlet control structure would discharge through the back of one of the proposed inlets.

To provide drainage for the existing 36-inch reinforced concrete pipe (RCP) culvert from the north side of Highway 1, the culvert would be intercepted where it crosses under the westbound travel lane at the north edge of Soquel Avenue. A 72-inch square junction box would be installed, and the

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<sup>2</sup> Daylighting refers to the exiting of a fluid from a piping system, which in this case, is exiting of stormwater runoff from pipes.

remaining section of 36-inch RCP would be abandoned. Downstream of this junction box, a 48-inch RCP pipe would travel east along Soquel Avenue for approximately 1,050 feet, with junction boxes as necessary to service the line. At this point, Soquel Avenue begins to dip into Rodeo Creek Gulch, and the 48-inch pipe would divert to the south to cross the street into Rodeo Creek Gulch. After diverting once again to the southeast, the RCP pipe would align perpendicular to the slope until it daylighted at a proposed outfall on a flat bench set back from the flowline of Rodeo Creek Gulch.

Figure 2-14 shows proposed on-site drainage improvements, and Figure 2-15 shows off-site improvements, including the location of the proposed outfall at Rodeo Creek Gulch.

#### 2.5.5.4 *Dry Utilities*

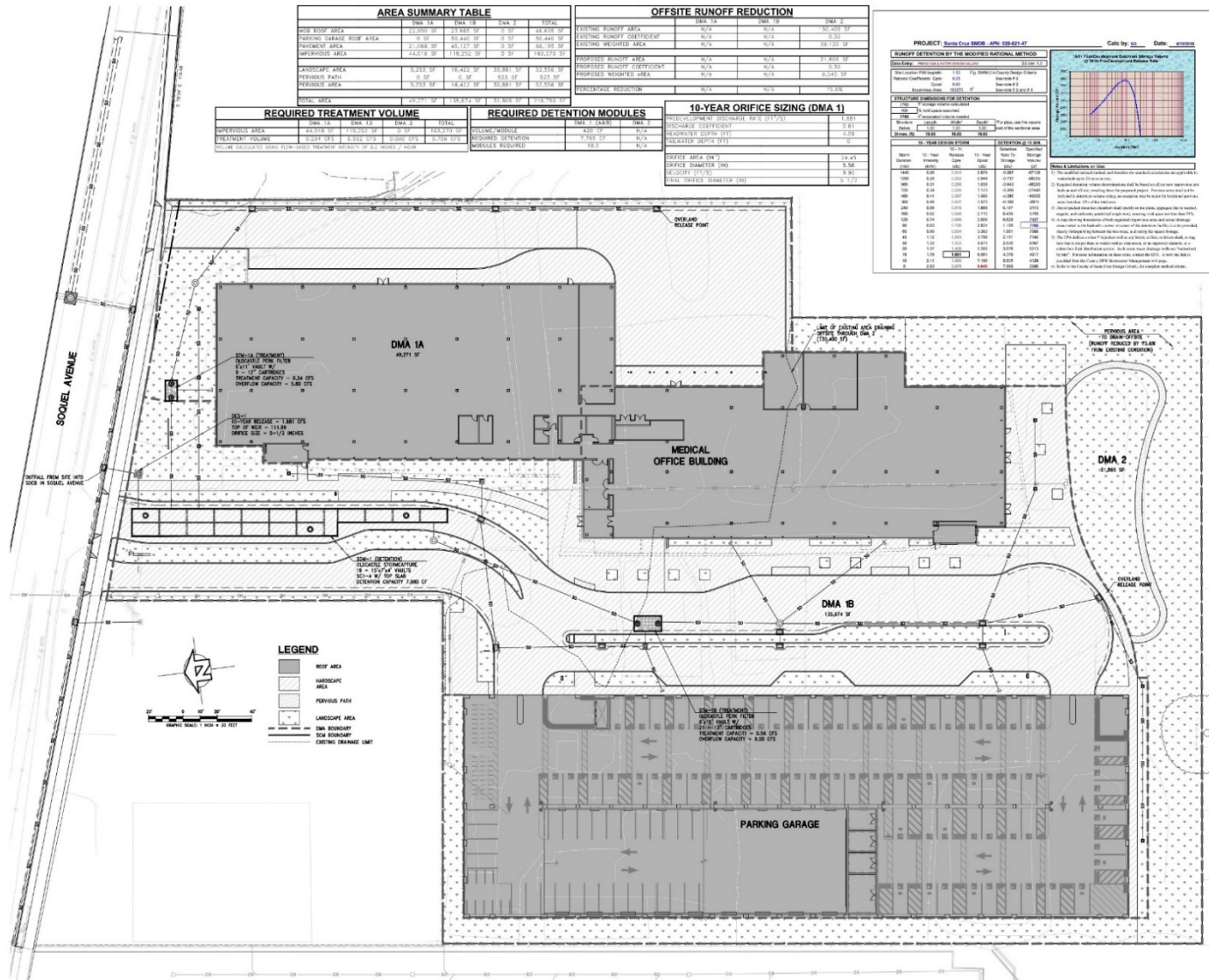
For purposes of this EIR, dry utilities are assumed to include electricity, gas, and telecommunications. Electricity service would be provided by Monterey Bay Community Power via transmission lines owned by Pacific Gas and Electric (PG&E). Gas service would be provided by PG&E. PG&E owns existing gas and electric facilities in proximity to the project site. Connections would be made in typical shallow dry utility trenches that are backfilled. AT&T, Comcast, and other telecommunications companies provide telephone and internet service to the project site and surrounding areas. Telecommunication utilities would also be installed in typical shall utility trenches. Shallow utility trenches would be between ground surface and deeper wet utilities, such as water utility pipes.

#### 2.5.6 Landscaping and Lighting

The proposed landscaping plan, shown on Figure 2-16, includes planting a mix of deciduous trees, evergreen trees, ornamental trees, shrubs and grasses, and perennial plants. The primary driveway would be lined with deciduous trees on either side, and the median would be planted with native grasses. Deciduous trees would also be planted as street trees along the site frontage on Soquel Avenue. A mix of ornamental trees, shrubs, grasses, and perennial plants would be planted between the medical office building and Soquel Avenue. Evergreen trees would be planted along the north and west sides of the parking garage.

The proposed project would include a landscaped open space area at the rear of the site, between the southern property boundary and the proposed medical office building and parking garage, as shown on Figure 2-16. Plantings in this area would be a mix of deciduous, evergreen, and ornamental trees. Smaller shrubs and perennial plants would be dispersed throughout the area. A pedestrian pathway would be provided in the area for use by the medical office building staff and patients, as well as the general public. The pathway would be 4 feet wide and comprised of decomposed granite. Benches and seating would be provided within the open space area. Additionally, a patio area with benches and tables would be provided on the south end of the medical office building and connected to the open space area via the pathway. The patio would be paved with concrete.

Figure 2-14 Stormwater Control Plan



Source: Ifland Engineers 2019

Figure 2-15 Off-Site Storm Drain Plan

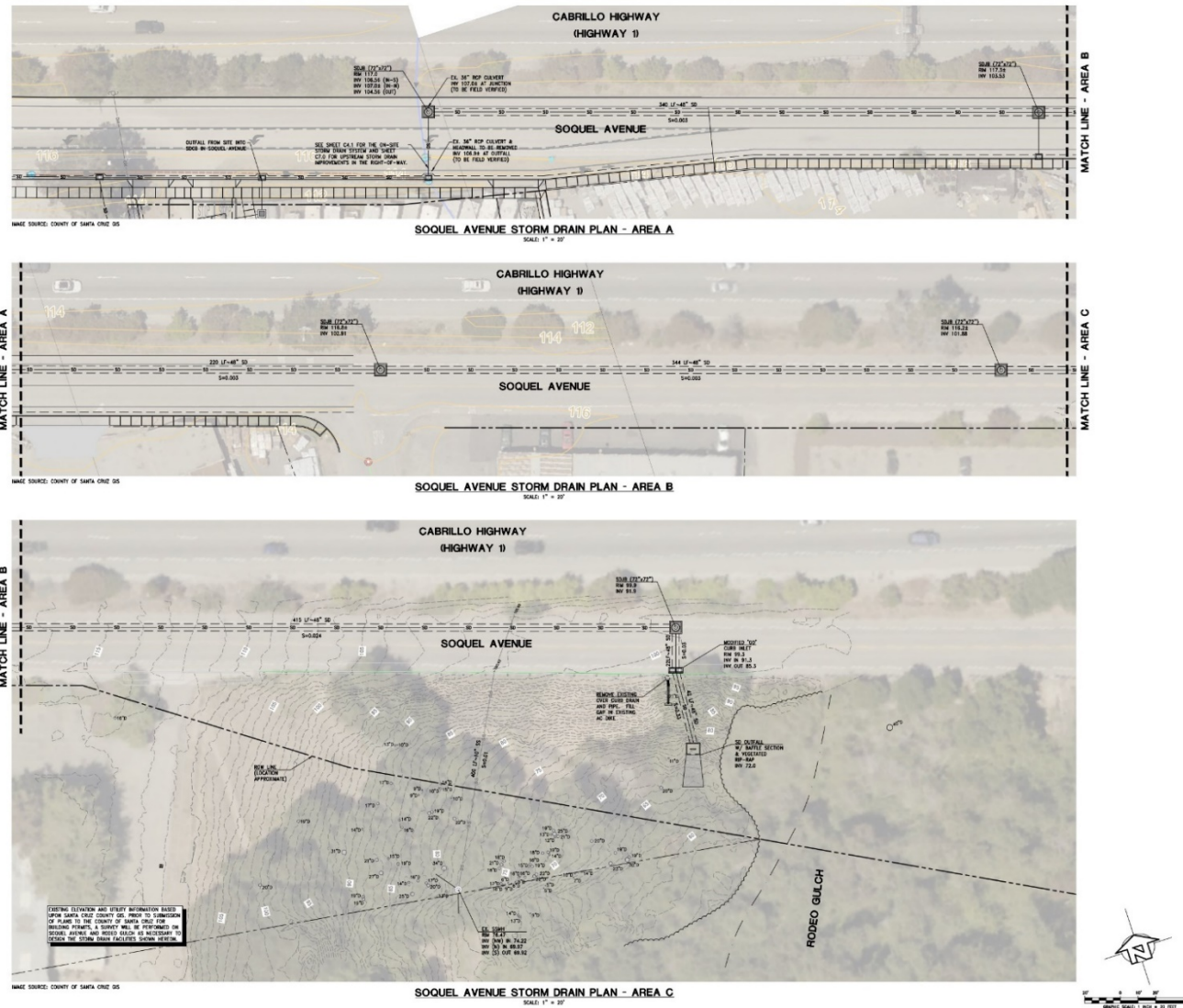




Figure 2-16 Conceptual Landscape Plan



Source: Smith Group 2019

To provide for directional cues, safety, and security of staff and the public, the proposed project would be equipped with a range of lighting features. These would include overhead driveway and sidewalk pole-mounted luminaires, low-level bollard-mounted lighting to illuminate landscaped areas and sidewalks, and building-mounted lighting at entrances and within the parking garage. Decorative lighting would also be used to illuminate key architectural features. The project would include tree-mounted lights in the landscaped open space area at the rear of the site, south of the medical office building and parking garage. Linear LED strip lighting would be incorporated under seating areas in the landscape areas.

Light fixtures would use premium-efficiency LED light sources. Area lighting would automatically turn off during the day, and motion-activated controls would be provided to dim the lighting at night when activity levels are low. Lighting would be designed to meet County standards to minimize light trespass, reduce sky-glow to increase night sky access, and improve nighttime visibility through glare reduction.

## 2.5.7 Roadway and Road Frontage Improvements

The proposed project would include a range of improvements within and along the Soquel Avenue right-of-way. As shown on Figure 2-17, the road frontage improvements would extend from approximately 270 feet west of the project site (where improvements would connect to existing curb, gutter, and sidewalk), and eastward to the intersection of Soquel Avenue and Mattison Lane. Frontage improvements would include new curb and gutter, sidewalk, and Class II bicycle lane striping. All curb, gutter, and sidewalks would be constructed to County standards. A new traffic signal would be installed at the intersection of Soquel Avenue and the main driveway for the medical office building and parking garage.

In order to maintain acceptable intersection operations in the vicinity of the site, the proposed project includes offsite improvements and modifications at select intersections. A summary of the improvements is provided below:

### **Soquel Avenue**

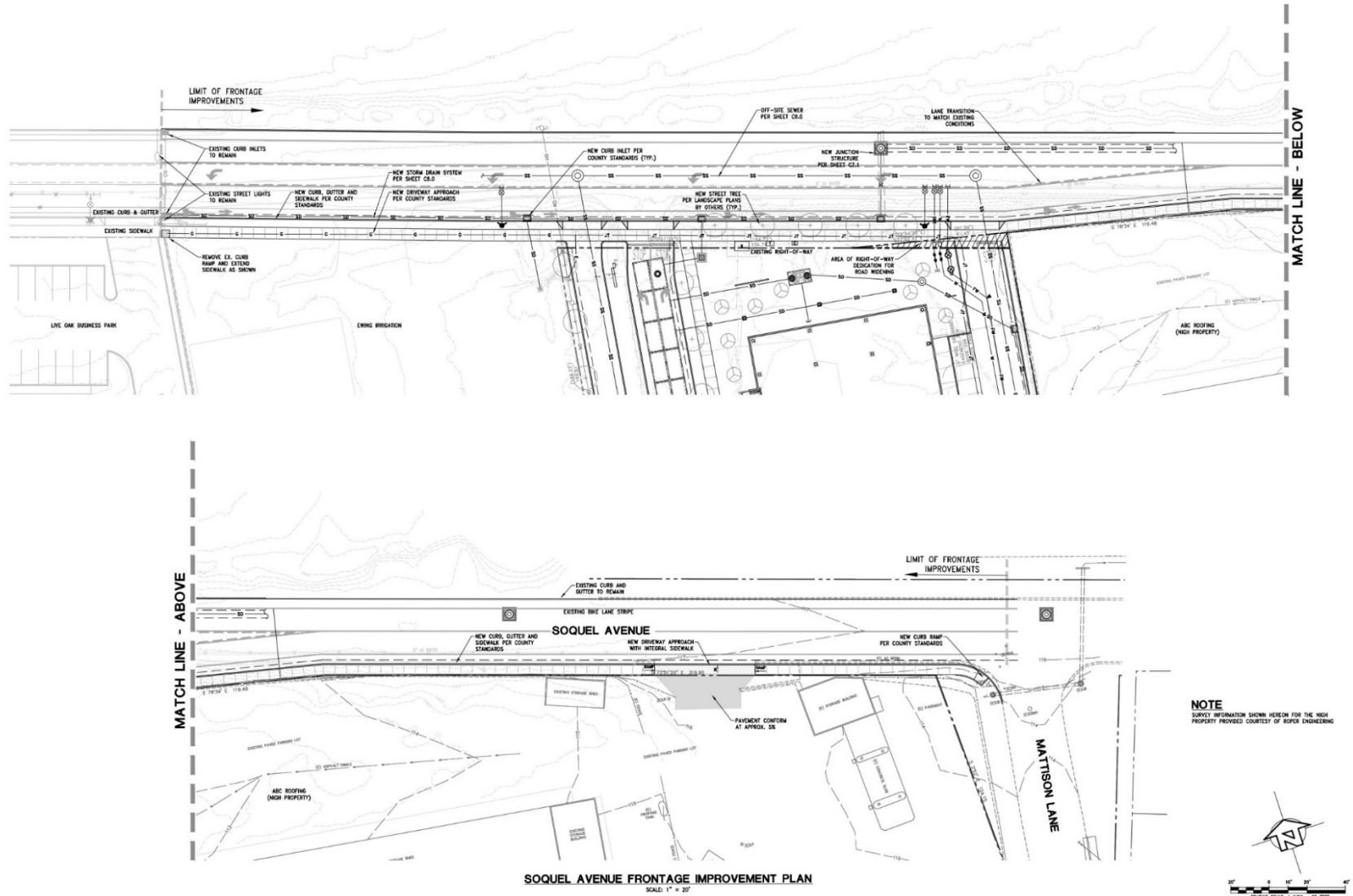
Including the frontage improvements noted above, the proposed project will implement a total of approximately 3,500 feet of two-way left-turn lane striping (and restriping) along Soquel Avenue from Paul Minnie Avenue to the existing creek crossing (east of Mattison Lane). The project will also provide Class II bicycle lane striping along approximately 4,200 feet of Soquel Avenue from Soquel Drive to just east of Mattison Lane.

### **Soquel Avenue/40th Avenue & Gross Road Intersection**

A diagonal diverter would be installed at this intersection extending from the northwest corner of the intersection to the southeast corner. The diverter would be designed to prevent cut-through traffic on Gross Road through the residential neighborhood to the east along Gross Road. The diverter would also eliminate the congestion caused by the four-way stop currently in place at the intersection.



Figure 2-17 Road Frontage Improvements



Source: Ifland Engineers 2019

## 41st Avenue/Gross Road Intersection

Overhead signs and roadway markings would be installed at this intersection in order to improve lane selection and use on the eastbound approach of Gross Road. The lane selection would be for southbound Highway 1 and northbound Highway 1 movements. A physical barrier would be installed between the limit line, which is the white line that appears across the street before an intersection or crosswalk, and the divergence of the Highway 1 southbound on-ramp on 41st Avenue to prevent vehicles from jumping the queue for southbound on-ramp traffic.

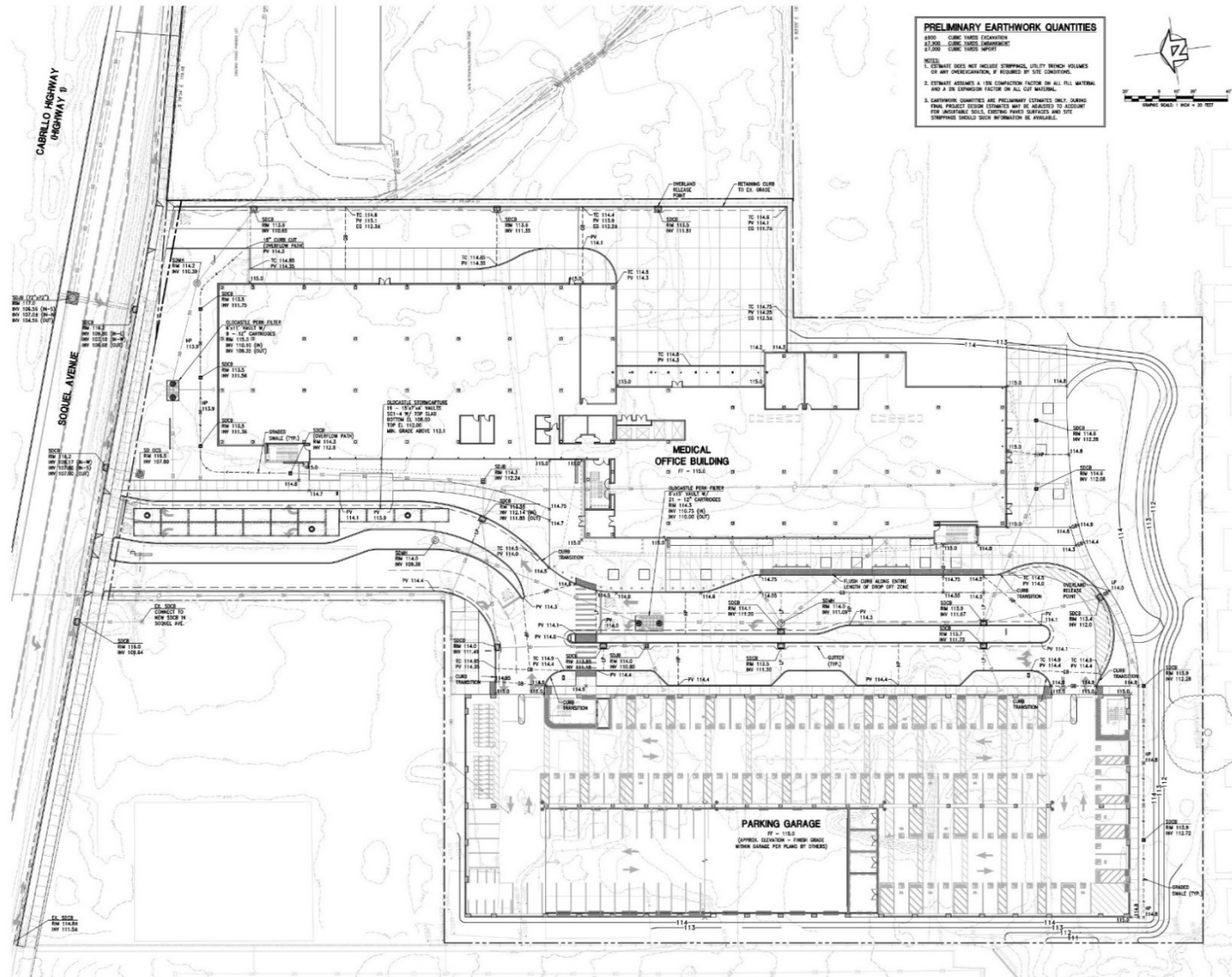
### 2.5.8 Construction and Grading

Construction of the proposed project is expected to occur over approximately 18 to 24 months, depending on factors such as weather. Construction would occur in two primary phases. The first phase would consist of initial site preparation, including demolition of existing buildings and removal of items, vehicles, and all other miscellaneous material from the project site. Debris removed from the site would be transported to and disposed of at licensed area landfills or other facilities permitted to accept wastes, such as automotive scrap yards. Limited soil sampling would be conducted to determine if contamination is present.

The second phase of construction would involve grading and soil preparation, excavation for utilities, foundation construction, and construction of the medical office building and parking garage. It would also include other project components such as road frontage improvements. The project site is currently nearly flat, but the rear of the site is lower than the north end near Soquel Avenue. Therefore, grading would involve constructing an approximately 4-foot-tall embankment at the rear of the lot to make the site nearly level from the front of the lot to the rear, as shown on Figure 2-18. Grading and excavation would result in approximately 900 cubic yards of material. The excavated material would be used to construct the embankment. However, an additional approximately 7,000 cubic yards of fill material would be imported to the site to fully construct the embankment. The maximum depth of excavation would be approximately 4 to 6 feet below existing ground surface.

Construction equipment for the proposed project would include typical heavy machinery, such as a grader, dozers, dump trucks, and backhoes. Concrete trucks, pavers, and a construction crane or cranes would also be required. Flatbed trucks and tractor trailers would be used to remove existing materials on the site and to deliver construction equipment and materials. Other equipment and miscellaneous power tools and hand tools would also be required.

Figure 2-18 Conceptual Grading Plan



Source: Ifland Engineers 2019

## 2.5.9 Green Building Features

The proposed project's overall design would meet Leadership in Energy and Environmental Design (LEED) Gold or equivalent standards, which would be achieved by using less water and energy and reducing greenhouse gas emissions compared to a non-certified LEED office building.<sup>3</sup> Solar panels and water conservation elements would be incorporated into the proposed project design to reduce the building's energy utilization and achieve LEED certification. The roof level of the parking garage would contain solar panels to capture solar energy. The proposed project would also include on-site bicycle parking and bicycle improvements on Soquel Avenue to encourage active transportation in place of vehicle travel. Additionally, the parking garage would include preferred parking for electric vehicles.

## 2.6 Project Objectives

The objectives for the proposed project are to:

- Develop a medical office building containing no less than approximately 160,000 square feet of medical office space that is capable of providing a diverse range of consolidated outpatient services-such as primary care, specialty care, ancillary healthcare, retail services, and educational programs.
- Locate the medical office building in a centralized location within the County on a key transportation corridor thereby reducing out of County health trips, encouraging virtual care where appropriate.
- Implement a voluntary transportation demand management plan that furthers County 511 programs, such as Ride Amigos, Emergency Ride Home, and bike-share programs.
- Provide an enclosed parking structure of approximately 730 parking spaces with convenient and safe pedestrian access to the medical office building to ensure that there is adequate, accessible on-site parking to serve both employees and members.
- Develop a medical office building with adequate square footage and a minimum of 46,000 gross square feet per floor to accommodate current and future technological advances, thereby allowing the building to be relevant today and into the future by providing the infrastructure for healthcare planning modules, adjacent complimentary programs, and the appropriate scale to allow for future adaptability while at the same time remaining operational.
- Redevelop a highly visible, underutilized site used for storage, salvage, and a concrete contractor with a modern, attractive, LEED Gold certified, energy efficient, community-serving healthcare use.

## 2.7 Required Approvals

The following discretionary approvals and permits by the County of Santa Cruz would be required for the proposed project:

- General Plan Amendment to change the land use designation of the project site from Urban High-Density Residential (R-UH) to Professional and Administrative Office Designation (C-O)

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<sup>3</sup> A building can earn credits toward LEED certification through performance in five key areas, including sustainable sites, water savings, energy and atmosphere, materials and resources, and indoor environmental quality. The sixth category, innovation and design process, awards points for exceeding the minimum criteria in the first five categories.

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- Rezoning to change the zoning district of the site from Multi-Family Residential (RM-2-R) to Professional-Administrative Office (PA) District
- Planned Unit Development (PUD) Approval
- Commercial Development Permit
- Riparian Exception
- Demolition Permit
- Preliminary Grading Approval
- Grading Permit
- Encroachment Permit
- Department of Public Works approval of road and drainage improvements
- Building Permit

The following includes a list of other government agencies that would or may have some level of approval for one or more components of the proposed project, as required by *State CEQA Guidelines* Section 15124(d):

- CDFW – Lake and Streambed Alteration Agreement for construction of a stormwater outfall within the banks of Rodeo Creek Gulch
- Caltrans – Construction permit for proposed barrier at the limit line and the diverge of the Highway 1 southbound on-ramp on 41st Avenue
- Central Coast RWQCB – Construction work within banks and associated riparian zone of Rodeo Creek Gulch for a stormwater outfall
- City of Santa Cruz Water Department – Connection of the City’s existing municipal water system
- Santa Cruz County Sanitation District – Connection to and modifications to the District’s existing sanitary sewer system

## 3 Environmental Setting

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This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4.0, *Environmental Impact Analysis*.

### 3.1 Regional Setting

The project site is contained on a single five-acre parcel identified as Assessor's Parcel Number (APN) 029-021-47. It is located on the southern frontage of Soquel Avenue, just south of the State Route (Highway) 1 Freeway in the unincorporated Live Oak community in Santa Cruz County. The street address is 5940 Soquel Avenue, Santa Cruz, California 95062. The intersection of Soquel Avenue and Chanticleer Avenue is approximately 730 feet west of the project site, and the intersection of Soquel Avenue and Mattison Lane is approximately 400 feet east of the site's eastern edge. The site is approximately 0.7 mile east of the corporate boundary of the City of Santa Cruz and approximately 0.35 mile northwest of the corporate boundary of the City of Capitola. Figures 2-1 and 2-2 in Section 2, *Project Description*, show the project site in relationship to the surrounding neighborhood and roadway network.

The project site is in the south-central portion of Santa Cruz County, approximately 1.5 miles inland from the coastline of the Monterey Bay. Areas of Santa Cruz County in proximity to the coastline of the Monterey Bay or Pacific Ocean have mild weather throughout the year, experiencing a Mediterranean climate characterized by cool, wet winters and warm, mostly dry summers. Due to its proximity to Monterey Bay, fog and low overcast can be common in the project area during the night and morning hours, especially in the summer.

Multiple vegetation communities exist in Santa Cruz County including grasslands, coastal scrub, salt marshes, riparian woodland, sandhills, mixed evergreen forests, pine forests, redwood forest, chaparral, foothill woodlands, and oak woodlands (California Native Plant Society 2020). Redwood forest, dominated by California coast redwood (*Sequoia sempervirens*) is more common in the inland Santa Cruz Mountains area of the County, while coastal scrub, salt marshes, and sandhills are found more commonly near the Monterey Bay of Pacific coastline.

### 3.2 Project Site Setting

As shown on Figure 2-5 in Section 2, *Project Description*, is on the south side of Soquel Avenue, directly south of Highway 1. A landscape supply business adjoins a portion of the project site between the site boundary and Soquel Avenue. Light-industrial and commercial development adjoin the site to the east, including a roofing supply operation and a landscape nursery. A single-family manufactured home residential development is adjacent to the south side of the project site. An electrical supply store and an assisted living facility are located to the southwest of the project site. Three buildings of more recent construction and associated surface parking are located to the west of the project site.

The project site is currently used for storage, salvage, and salvage yard purposes. Several vehicle towing business and storage companies list the site as their address, and a concrete contractor is also on-site. Temporary storage containers are dispersed across much of the site, as are vehicles,

boats, and campers which appear either no longer operational or rarely operated. In addition to temporary storage containers, the site contains an office trailer and attached workshop, as well as three sheds. There is a single driveway for ingress/egress, with an open graded drainage swale between the paved Soquel Avenue and the private property. A coarsely paved road leads to various internal roads providing access to smaller areas within the site. Part of the northwestern portion of the site is also paved with concrete pads.

The General Plan designates the project site R-UH (Urban High-Density Residential). The project site is in RM-2-R (Multi-Family Residential) zoning district. As described in Section 2.4.1, *Current Land Use Designation and Zoning*, the “-R” nomenclature of the zoning denotes “Regional Housing Need” and is applied to sites for development of 20 dwelling units per acre to meet the County’s Regional Housing Need Allocation. The proposed off-site stormwater outfall would be constructed on APNs 029-031-11 and 029-031-14. The General Plan designates these parcels as C-S (Service Commercial and Light Industrial) and O-U (Urban Open Space). These parcels are zoned M-1 (Light Industrial).

### 3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. *State CEQA Guidelines* Section 15355 defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, noise impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Pursuant to Section 15130(b) of the *State CEQA Guidelines*, and EIR cumulative impact analysis should considering either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in proximity, generally 3 miles, to the project site in Santa Cruz County and surrounding areas, including the City of Santa Cruz and the City of Capitola, are listed in Table 3-1. These projects are considered in the cumulative analyses in Section 4.0, *Environmental Impact Analysis*.

**Table 3-1 Cumulative Projects List**

<b>Project Name</b>	<b>Project Description</b>
<b>Unincorporated Santa Cruz County</b>	
Maplethorpe	Eleven new residential units in a detached single-family subdivision
Habitat for Humanity Project	Eleven new residential units in a subdivision including ten semi-detached and 1 detached single-family units (all affordable)
Capitola Road Extension	Seven new residential units within one new apartment building (two affordable), including demolition of existing duplex for five net new units
Workbench	Thirteen new townhouse units (two affordable) on existing lot with two existing single-family dwelling units
Mattison Lane Residential Project	Four new residential duplex units (eight total units)

<b>Project Name</b>	<b>Project Description</b>
Mission Drive Residential Project	Twenty-one new townhouse units (three affordable), including demolition of one single-family unit for 20 net units
Mid Penn Housing Project on Capitola Road	Fifty-seven new residential units (all affordable); 30,178 square-foot dental and medical clinic; and 1,000 square feet of retail
2606 Paul Minnie Avenue Project	Fifteen new residential units and 2,826 square feet of office
Portola Mixed Use	Thirty-three new residential apartment units (five affordable); 11,525 square feet of retail; and 2,971 square feet of office
Lumberyard	Eight new residential condominium units and 9,600 square feet of commercial
Interlight	Eighty-two beds within a new assisted living facility
Dominican Hospital	84,000 square-foot surgery center and 410 space parking garage addition to an existing hospital
CVS on Commercial Way	13,111 square-foot retail with pharmacy
Nissan Dealership	Car dealership with 12,550 square-foot sales area and 10,000 square-foot service area
Capitola and 7 <sup>th</sup> Mixed Use Project	Mixed use development comprised of 922 square-foot take-out restaurant and parking, three detached accessory structures (coffee shop, micro-brewery, café) outdoor patio, and nine attached multifamily dwelling units
East Cliff Village Center Mixed Use Project	Redevelopment of East Cliff Shopping Center as mixed use development in four buildings: Assisted living and memory care facility with 131 units, 40 unit apartment building, mixed use building with 10,000 square feet of retail with restaurant on ground level and 71 apartment units above, apartment building with 63 units
Harbor Landing Mixed Use Project	Forty room lodge with bar/lounge, restaurant, 43 cabins, conversion of existing single family dwelling to a 21-bed youth hostel; mixed use building with ground floor restaurant, retail space, 8 residential units; and 49 townhomes at southern part of site zoned in R-combining district
Landess Project Mixed Use Project	5800 square-foot medical office building with five rental residential units above
Sutter Campus	Mixed medical use
Pure Water Pump Station	Construction of a new water pump station on the northside of Soquel Avenue near the intersection of Soquel Avenue and Chanticleer Avenue
<b>City of Santa Cruz</b>	
Riverfront Project	Demolition of existing commercial buildings and construction of a seven-story, 188,694 square-foot mixed use building with 175 residential condominium units and 11,498 square feet of ground floor commercial space
908 Ocean Street	Demolition of existing commercial building and 15 residential units followed by construction of 408 small ownership residential units and commercial space
1930 Ocean Street Extension	32-unit condominium development
Pacific Front Mixed-Use Development Project	Demolition of five commercial buildings, and construction of a six-story, 315,698 square foot mixed-use building with 205 residential apartments and 10,656 square feet of ground floor commercial space



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<b>Project Name</b>	<b>Project Description</b>
530 Front Street Project	Demolition of two commercial buildings including one historic building, and construction of a six-story, mixed-use building with 8,839 square feet of commercial uses and 170 residential condominiums
119 Coral Street Project	Demolition of six transitional housing units and construction of 120 studio units to be used as permanent supportive housing and one manager's unit with a ground floor recuperative care center, behavioral health clinic, and a residential lobby
<b>City of Capitola</b>	
Capitola Mall Redevelopment Project	Redevelopment of a portion of the existing Capitola Mall with a new open-air design with a main commercial street, 339,131 square feet of new commercial space including a theater, and 637 residential units

## 4 Environmental Impact Analysis

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This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. A “significant effect” as defined by the *State CEQA Guidelines* §15382:

means 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. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the County and other resource agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the *State CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the *State CEQA Guidelines*.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures, if required, and the residual effects or level of significance remaining after implementation of the measure or measures. In cases where the mitigation measure or measures for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*. The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

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## 4.1 Aesthetics

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This section describes the aesthetic and visual resources conditions within the project site and project vicinity and assesses the potential aesthetic impacts that may result with implementation of the proposed project.

### 4.1.1 Setting

#### a. Regional Setting

The project site is located on the southern frontage of Soquel Avenue, just south of Highway 1 in Santa Cruz County. The intersection of Soquel Avenue and Chanticleer Avenue is approximately 730 feet west of the project site, and the intersection of Soquel Avenue and Mattison Lane is approximately 400 feet east of the site's eastern edge. The site is approximately 0.7 mile east of the corporate boundary of the City of Santa Cruz and approximately 0.35-mile northwest of the corporate boundary of the City of Capitola. An important drainage feature in the vicinity is Rodeo Gulch, located approximately 1,200 feet east of the project site.

#### b. Existing Visual Character

The project site is relatively flat with most of the site gradually sloping downward toward the east. The project site is currently used primarily for storage, salvage, and salvage yard purposes. Temporary storage containers are dispersed across much of the site, as are vehicles, boats, and campers which appear either no longer operational or rarely operated. In addition to temporary storage containers, the site contains an office trailer and attached workshop, as well as three sheds. These structures are all one story in height. Part of the northwestern portion of the site is also paved with concrete pads, and a concrete contractor is on-site. There is a single driveway for ingress/egress, with an open graded drainage swale between the paved Soquel Avenue and the private property. A coarsely paved road leads to various internal roads providing access to smaller areas within the site. The visual quality of the site is low, due to the disorganized nature of the placement and condition of the storage sheds, vehicles, and materials.

A landscape supply business adjoins a portion of the project site between the site boundary and Soquel Avenue at the northwest corner of the site. Light-industrial and commercial development adjoin the site to the east, including a roofing supply operation and a landscape nursery. A mobile-home park is adjacent to the south side of the project site. An electrical supply store and an assisted living facility are located to the southwest of the project site. Three buildings of more recent construction and associated surface parking are located to the west of the project site. These uses contribute to the suburban industrial nature of the visual environment of the site and vicinity, and the newer structures contrast notably with the historic use pattern and scene. The collective impression is that of a ex-urban area in transition to urbanization.

Because the project site is currently used for primarily for storage, salvage, and salvage yard purposes, it is highly disturbed, and very little vegetation cover exists on the project site. As described in Section 4.3, *Biological Resources*, the project site consists of mostly bare ground, with little ruderal vegetation, such as black acacia (*Acacia mearnsii*) trees, pampas grass (*Cortaderia selloana*), fennel (*Foeniculum vulgare*), and Himalayan blackberry (*Rubus armeniacus*). Except for some of the black acacia trees, most vegetation on the project site is inches to several feet in height, and on-site items, such as storage containers and vehicles, block views from public vantage points,

such as Soquel Avenue. Views of the site from public vantage points are generally characterized by the items stored or discarded on the site, such as vehicles, boats, campers, and storage containers. However, a large and prominent conifer, believed to be Monterey pine (*Pinus radiata*) based on site photographs, is located just outside of the site boundary, next to Soquel Avenue. From public vantage points to the north of the site, such as Soquel Avenue and Highway 1, the project site is seen in context with this large conifer tree.

Figure 4.1-1 shows views of the project from the Soquel Avenue right-of-way, which is the closest public vantage point to the project site. Figure 4.1-2 shows the typical visual character of the site from locations internal to the project site. All images used in Figure 4.1-1 and Figure 4.1-2 are from October 9, 2019. However, on-site conditions remained consistent with these images when the Notice of Preparation (NOP) of this EIR was circulated in March 2020.

Figure 4.1-1 Existing Views of Project Site



Project site frontage from Soquel Avenue at the existing site ingress/egress. View is toward the south-southeast.



Project site frontage from Soquel Avenue at the northeast corner of site. View is toward the south-southeast.



Figure 4.1-2 Project Site Visual Character



Typical conditions within the project site.



Typical conditions within the project site.

### c. Scenic Vistas and Highways

Scenic vistas are places from which expansive views of an area are available, such as an elevated place that looks over a valley or remarkable views available from public roadways across broad expanses of the landscape. The project site does not feature any scenic vistas as the topography is relatively flat and the area is developed with buildings and infrastructure that restricts views to the surrounding area.

According to the California Department of Transportation (Caltrans), there are no designated State Scenic Highways within Santa Cruz County. However, Caltrans does identify the entire length of Highway 1 as eligible for designation as State Scenic Highway (Caltrans 2019). Additionally, the County's General Plan designates Highway 1 as a scenic road and indicates the views from Highway 1 shall be valued for their vistas. As described above, the project site is located just south of Highway 1, approximately 85 feet from the nearest travel lane of the roadway. Views of the project site from Highway 1 are similar to those from Soquel Avenue, shown in Figure 4.1-1. No other designated scenic roadways or vistas are located in the project vicinity.

### d. Light and Glare Conditions

Lighting nuisances can generally be categorized by the following:

- Skyglow/Nighttime Illumination – Artificial lighting from urbanized sources that alters the rural landscape in sufficient quantity to cause lighting of the nighttime sky and reduction of visibility of stars and other astronomical features;
- Spillover Lighting – Artificial lighting that spills over onto adjacent properties, which could interrupt sleeping patterns or cause other nuisances to neighboring residents; and
- Glare – Intense light that shines directly or is reflected from a surface into a person's eyes.

The project site is surrounded on the east, south, and west by existing urban development, which contributes to nighttime lighting in the project area. Existing pole-mounted lights are in portions of the project site, such as along the shared boundary with the adjacent landscape supply business to the northwest. There are also external auxiliary lights mounted on structures at the landscape supply business. Pole-mounted streetlamps are present along the segment of Soquel Avenue west of the site and east of Chanticleer Avenue. Pole-mounted lights are present in the parking areas of the office/public facility uses at the southeast corner of the Soquel Avenue-Chanticleer Avenue intersection, shown on Figure 2-5 in Section 2, *Project Description*. Similar pole-mounted lights are present at the light industrial and commercial uses to the east and southwest of the project site. At least one streetlamp with a decorative shade are present with the residential community adjacent to the south of the project site. These residences also include outdoor lighting, such as porch lighting.

Glare in the project area is generally from windshields of parked cars and from glass surfaces, such as windows on the office/public facility uses to the west of the site.

## 4.1.2 Regulatory Setting

### a. Federal Regulations

No federal regulations are in place that address aesthetic resources and visual impacts on private lands.



## b. State Regulations

### *California Environmental Quality Act*

CEQA establishes that it is the policy of the State to take all action necessary to provide residents and visitors “with...enjoyment of aesthetic, natural, scenic, and historic environmental qualities” of the state (California Public Resources Code [PRC] Section 21001[b]). In this way, CEQA requires assessment of new development to determine impacts to vistas, scenic highways, visual quality, and lighting and glare effects.

### *State Scenic Highway Program*

The State Legislature created the California Scenic Highway Program in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to those highways. California Department of Transportation (Caltrans) administers the program, the intent of which is to protect and enhance California’s natural beauty and to safeguard the social and economic values provided by the state’s scenic resources (PRC Section 260 et seq.). Designation is determined based on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon or adds to the traveler’s enjoyment of the view. Caltrans maintains a list of highways that are designated or eligible for designation (Caltrans 2018).

## c. Local Regulations

### *County of Santa Cruz General Plan and Local Coastal Program*

The Conservation and Open Space Element of the County’s General Plan and Local Coastal Program (LCP) includes the following objectives and policies for protecting the aesthetic value of visual resources and that are applicable to the proposed project:

**Objective 5.10a. Protection of Visual Resources.** To identify, protect, and restore the aesthetic values of visual resources.

**Objective 5.10b. New Development in Visual Resource Areas.** To ensure that new development is appropriately designed and constructed to have minimal to no adverse impact upon identified visual resources.

**Policy 5.10.2. Development Within Visual Resource Areas.** Recognize that visual resources of Santa Cruz County possess diverse characteristics and that the resources worthy of protection may include, but are not limited to, ocean views, agricultural fields, wooded forests, open meadows, and mountain hillside views. Require projects to be evaluated against the context of their unique environment and regulate structure height, setbacks and design to protect these resources consistent with the objectives and policies of this section. Require discretionary review for all development within the visual resource area of Highway 1, outside of the Urban/Rural boundary, as designated on the GP/LCP Visual Resources Map and apply the design criteria of Section 13.20.130 of the County's zoning ordinance to such development.

**Policy 5.10.3. Protection of Public Vistas.** Protect significant public vistas as described in policy 5.10.2 from all publicly used roads and vista points by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development which is unavoidably sited within these vistas.

**Policy 5.10.10. Designation of Scenic Roads.** The following roads and highways are valued for their vistas. The vistas from these roads shall be afforded the highest level of protection.

- Highway 1: From San Mateo County to Monterey County

(note Policy 5.10.10 lists additional roads designated as scenic, but these other roads are not near the project site and not listed here)

**Policy 5.10.12. Development Visible from Urban Scenic Roads.** In the viewsheds of urban scenic roads, require new discretionary development to improve the visual quality through siting, architectural design, landscaping and appropriate signage. (See policies 5.10.18, 5.10.19 and 5.10.20.)

**Policy 5.10.13. Landscaping Requirements.** All grading and land disturbance projects visible from scenic roads shall conform to the following visual mitigation conditions:

- (a) Blend contours of the finished surface with the adjacent natural terrain and landscape to achieve a smooth transition and natural appearance; and
- (b) Incorporate only characteristic or indigenous plant species appropriate for the area.

**Policy 5.10.18. Signs Visible from Scenic Roads.** Actively discourage the placement of signs which will be visible from scenic roads; where allowed, require strict compliance with the County Sign ordinance to minimize disruption of the natural scenic qualities of the viewshed. Give priority to sign abatement programs for scenic roads.

**Policy 5.10.20. Highway One Signage in Urban Areas.** In the urban Highway 1 corridor, allow signage where consistent with the Sign ordinance and any applicable village, town, community, or specific plan.

**Policy 5.10.21. Illuminated Signs Visible from Scenic Roads.** In accordance with the County Sign ordinance, allow illuminated signs to be visible from scenic roads only for state and county directional and information signs and in designated commercial and visitor-serving areas. Seek to eliminate all other non-conforming illuminated signs which are visible from scenic roads.

**Policy 5.10.22. Requirement for Sign Plans.** Require new project submittal applications to include standard road sign designs for directional, access, and business identification and designate appropriate locations for these signs consistent with the County Sign ordinance and Caltrans requirements.

### *Santa Cruz County Code*

Chapter 13.10 of the County Code regulates visual and scenic quality around several topics. These include regulation of the following:

- The use of buildings and open space such that enjoyment of scenic beauty is balanced with other purposes (13.10.130 [a])
- The use, design, placement, and installation of signs and billboards (13.10.130 [b])
- The location, height, bulk, number of stories and size of buildings and structures (13.10.130 [c])

Chapter 13.11 provides detailed guidelines on architectural and landscape design review for new development and larger redevelopment projects. It stipulates criteria for desired building design (e.g., massing, building silhouette, space between buildings, scale, character, and proportion/composition of projections, recesses, doors, windows). It also notes that the finish materials should be compatible with the character of surrounding uses in terms of texture and color. Furthermore, it

sets the goal of human-scale design that encourages pedestrian use, including variation in the wall planes, roof lines, and elevations, including avoiding flat, void wall surfaces that have no detailed architectural treatments. Finally, Chapter 13.11 stipulates that rooftop equipment be integrated into the overall building design and screened from view using architectural screens, walls, fences, and/or plant material.

Section 13.11.074 of the Santa Cruz County Code requires that all site, building, security and landscape lighting be directed onto the site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Light sources can be shielded by landscaping, structure, fixture design or other physical means. Building and security lighting shall be integrated into the building design.

### 4.1.3 Impact Analysis

#### a. Methodology and Thresholds of Significance

##### Methodology

**Scenic Vistas, Scenic Resources, and Visual Character Impacts.** The assessment of impacts to scenic vistas, scenic resources, and visual character involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. Visual or aesthetic resources generally are defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur. This evaluation measures the existing visual resource against the changes to that resource that would be imposed by the proposed project. The project site was observed and photographically documented in its surrounding context. The County of Santa Cruz General Plan was reviewed for policy guidance relative to visual resources and design. Conceptual drawings and renderings of the project were used to aid in envisioning what the project would look like in the existing setting.

Only public views or view corridors are evaluated; views from private property such as backyards, front yards, interior living spaces, or private roadways are not considered public view corridors. Furthermore, CEQA distinguishes between public and private views, and focuses on whether a project would affect the public environment rather than of individuals. Private views, such as from individual homes, generally are not analyzed under CEQA. Potential impacts on such individual views would not be environmentally significant. Accordingly, views from private residences are not discussed in this impact analysis.

**Light Impacts.** The analysis of light impacts is based on standards developed by the Illuminating Engineering Society of North America (IESNA), in the absence of any quantitative standards adopted by the County of Santa Cruz that would otherwise apply to the proposed project. The IESNA Lighting Handbook, Ninth Edition (2000), establishes criteria for the significance of illuminance produced by a project, based on existing ambient light levels. Illuminance is the quantity of incident light on a plane surface and is commonly measured in terms of foot-candles (fc) (Pennsylvania Outdoor Lighting Council n.d.).

The IESNA handbook borrows a system from the International Commission on Illumination that ranks geographic areas by the amount and intensity of existing light sources, ranging from E1 (rural and most sensitive) to E4 (urban and least sensitive). Areas that are more rural in character, and therefore exhibit few existing sources of light, are more susceptible to impacts resulting from the

installation of new lighting sources. By contrast, urbanized areas have a large number of existing lighting sources and are therefore less susceptible to adverse effects associated with new lighting sources. Under the International Commission on Illumination ranking system, this analysis conservatively categorizes the project site in the E3 lighting zone, which denotes medium ambient brightness such as urban residential areas (International Commission on Illumination 2003). The International Commission on Illumination recommended light trespass standards for the E3 zone are 0.8 foot-candle during pre-curfew hours (prior to 10 PM) and 0.2 foot-candle during post-curfew hours (after 10 PM).

Light impacts are analyzed by estimating the spillover of light, or “light trespass,” at the nearest residential property lines to the project site. Light trespass is measured on the vertical plane (e.g., light shining through a window) in terms of foot-candles. In this analysis, the County has determined that light trespass would be significant if illuminance produced by the project would exceed 0.8 fc during pre-curfew hours or 0.2 fc during post-curfew hours, as measured on the vertical plane at the nearest residential property lines. As described above, these are the light trespass standards recommended by the International Commission on Illumination.

To quantify ambient light levels after installation of the proposed lights on the project site, this analysis relies on a photometric study prepared and provided as part of the conceptual site plans for the project. Photometric studies report how much light (brightness) a specific lamp, fixture, or group of fixtures, would generate at a specific point. The photometric study estimates the vertical foot-candles generated by proposed lighting within the project site and at the nearest residences to the south of the project site. The photometric study is provided as Appendix B to this EIR.

### Significance Thresholds

The following thresholds of significance are based on Appendix G to the CEQA Guidelines. For purposes of this EIR, implementation of the project would result in a potentially significant adverse impact if it would:

1. Have a substantial adverse effect on a scenic vista
2. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
3. In non-urbanized areas, substantially degrade existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality
4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project have a substantial adverse effect on a scenic vista?

**Threshold 2:** Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

**Impact AES-1** AS THE TALLEST BUILDINGS IN THE AREA, THE PROPOSED MEDICAL OFFICE BUILDING AND PARKING GARAGE WOULD BE VISIBLE FROM HIGHWAY 1, INCLUDING VISTAS FROM HIGHWAY 1. HOWEVER, THE PROJECT WOULD REMOVE UNSIGHTLY DEBRIS FROM THE SITE AND CONTINUE MODERN URBANIZATION OF THE AREA, SUCH AS THE SHERIFF'S OFFICE TO THE WEST OF THE SITE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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The project site contains no scenic vistas, such as scenic overlooks, mountain ridgelines and summits, or ocean panoramas. However, as described above, views from Highway 1 are considered valued vistas in the County's General Plan. The County's General Plan also designates Highway 1 as a scenic roadway corridor. The project site is visible from Highway 1.

The proposed medical office building and parking garage would be the tallest structures in the area. As shown in Figure 4.1-3, generally the upper floors of the medical office building would be visible from the northbound lanes of Highway 1. Because the southbound lanes of Highway 1 are closer to the project site, both upper and lower floors of the medical office building would be visible from the southbound lanes. As shown in Figure 4.1-3, the medical office building would be seen in context with other existing urban development in the area, such as a landscape supply building on an adjacent parcel. The conceptual project renderings in Figure 4.1-3 do not show the proposed parking garage. However, the parking garage would likely also be visible from Highway 1, as well. Similar to the medical office building, the parking garage would be seen in context with existing urban development from Highway 1. Prior to construction of the project, unsightly salvaged equipment, vehicles, and storage containers would be removed from the project site. The removal of these items and replacement with the medical office building, garage, and landscaping would meet the General Plan policy to improve visually degraded areas in the unincorporated County. Project implementation would require the removal of three coast live oak trees on the slope south of Soquel Avenue in the area where the stormwater outfall is proposed. However, there are additional trees on the embankment that would remain and help screen views of development on the south side of Highway 1, including the proposed project. Additionally, project landscaping would include trees, some of which would be visible from and screen views of the building from Highway 1. Therefore, project implementation would not remove resources substantially contributing to the scenic qualities of the Highway 1 corridor. Likewise, due to existing structures and vegetation south of Highway 1 in the project area, views of the Monterey Bay or other scenic resources are not accessible. Therefore, the proposed medical office building and parking garage structure would not obstruct scenic views or vistas from Highway 1. For these reasons, impacts would be less than significant.

Figure 4.1-3 Views of Project from Highway 1



View of the project from northbound travel lane of Highway 1.



View of the project from southbound travel lane of Highway 1.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 3:** Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

**Impact AES-2** THE PROJECT HAS BEEN DESIGNED TO ACHIEVE AESTHETIC REQUIREMENTS OF THE COUNTY, INCLUDING ZONING REGULATIONS PERTAINING TO SCENIC QUALITY. THE MEDICAL OFFICE BUILDING AND PARKING GARAGE WOULD BE AN INCREMENTAL INCREASE IN THE URBANIZED APPEARANCE THAT TYPIFIES ADJACENT PUBLIC VIEWS IN THE AREA AND WOULD ALSO INCLUDE REMOVAL OF MISCELLANEOUS AND UNSIGHTLY DEBRIS AND ITEMS CURRENTLY STORED ON-SITE. HOWEVER, ILLUMINATED SIGNAGE VISIBLE FROM HIGHWAY 1 WOULD CONFLICT WITH APPLICABLE GENERAL PLAN POLICIES GOVERNING SCENIC QUALITY OF HIGHWAY 1. IMPACTS WOULD BE REDUCED TO LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION.

The project site is located within the County's Urban Services Line and in an urbanized area. As discussed above, the visual quality is low on the site and along the stretch of Soquel Avenue from Mattison Lane to the adjacent property west of the project site. The visual character along this stretch of Soquel Avenue is best described as cluttered with a wide variety of construction materials, vehicles, dead or unmaintained vegetation, and miscellaneous debris. The existing visual character generally degrades public views in the area and is incompatible with the Sheriff's Office property, other commercial uses, and the residential neighborhoods that abut or are near the project site.

The project would clear the project site of the existing elements and would construct a contemporarily designed medical office building with a generous landscape plan. The subtle design components and the strategically placed trees, grasses, and signs would change the visual nature of the site but in a way that improves the site and the local area, meeting the goal of the County's General Plan to remediate visually degraded conditions on a project site as part of the permitting process. The proposed project meets and exceeds this goal and policy by installing a well-designed facility using high-quality materials and subtle architectural details that mirror the landscape and reflect a contemporary aesthetic that is also anchored in the place in which it occurs.

The project requires a rezoning designation from Multi-Family Residential (RM-2-R) to Professional-Administrative Office (PA), and thus conflicts with current zoning (see Section 4.10, *Land Use and Planning* for further discussion). With approval to rezone the site, the conflict would no longer occur. Furthermore, the design requirements for PA zoning designations as stipulated in the County Code address compatibility relative to the location, siting, massing, scale, and relationship to natural site features.

This project is designed in such a way that meets or exceeds the general standards in its subtle arrangement of forms and landscape. The project architectural design is contemporary with two large rectangular floor plans offset from one another. The narrower length of the rectangle would face Soquel Avenue and the longer east and west walls would extend toward the south, with the second rectangle being offset to form an irregular L shape and extending to the back of the property, where landscaped open space would occur. The parking garage would form a long rectangle that would begin at the northwestern boundary and extend to the back of the property along the western property boundary (see Figure 2-6).

The northernmost portion of the building, closest to Soquel Avenue, would be three stories and the southernmost segment would rise to four stories. Although the medical building layout features long expanses of flat wall, the facades would feature alternations between windows and solid

exterior segments and tonal shifts in color that mediate these expanses. The preponderance of windows of varying sizes and with different structural components would both reflect the exterior landscape, including the sky and the movement of clouds, and reveal the interior of the building allowing the industrial construction that adds visual variety and breaks up the mass of the solid, flat walls and drawing upon the actual structure of the building as a form of decoration (see Figure 2-8 and Figure 2-9).

The first floor of the medical office building would feature expansive front windows that show the interior hallways. The north-facing wall that pops out from the first larger rectangle would similarly feature the window curtain wall and gray metal cladding, broken up by a subtly contrasting color, such as bright pale green that also draws on the local landscape and enlivens the fairly institutional quality of the gray façade components. Finally, the slight diagonal that informs the Soquel Avenue-facing walls on both the larger rectangular portions of the medical office building parallels the roadway and offers yet one more subtle visual difference that mediates the rectangularity of the building and adds interest that remains orderly and in keeping with the general design and purpose of the facility.

The exterior façades would be rendered in greys and white with a mix of finishes. The walls closest to Soquel Avenue would vary between punched windows and single-tone and three-tone prefabricated, metal cladding that could feature some reflective panels that would capture the colors of the sky and play on the notion of integrating with the landscape. A small pop-out wall would have a “curtain wall” of windows that gives way to the interior staircase and supporting wall structures. Mechanical equipment on the roof would be screened by a slightly arched, curved expanse of corrugated metal with a custom, medium gray colorant. This subtly breaks up the linearity and massing of the large rectangular building while it serves a function of shielding the roof-top equipment from view. Figure 2-8 in Section 2, *Project Description*, provides close-up samples of exterior finishes and window styles.

The parking garage would also be rectangular with the shorter walls closest to Soquel Avenue and the rear property boundary and the longer walls running parallel to the medical office building. The form of the structure is an unmitigated rectangle that stretches the length of about two-thirds of the project site. The mass of the buildings is broken up mainly with the landscaping proposed for the site, which features a mix of deciduous trees, ornamental grasses, and native grasses. The structure would be three stories and feature similar finishes to those described above, although more limited in their variety. However, the north side and the northern portion of the east side of the garage facing Soquel Avenue would feature an artistic representation of ocean waves. (Figure 2-15).

The proposed project includes a relatively densely planted landscape, with trees around much of the perimeter of the property, and a mix of trees and grasses attractively situated around small lawn areas and a larger open space at the back of the property where visitors and workers would be able to walk. The back of the medical office building would open to outdoor seating shaded by large trees and bordered by the open space. The park-like open space also features benches and a decomposed granite walking path. Open space with fewer amenities would also be provided at the south end of parking garage.

At the streetscape level, the proposed project would install sidewalks, crosswalks, and landscaping along Soquel Avenue where none currently exist. It would facilitate pedestrian circulation to the extent possible, with potential to join other redesigned streetscapes as they occur on adjacent sites. The buildings are urban in their aspect and encourage pedestrian and bicycle circulation in a way that fits with the overall spirit of this part of the Highway 1 corridor, particularly as active



transportation facilities come on line through other regional planning initiatives. The human-scale of the project further encourages non-vehicular movement at the same time it accommodates workers and visitors who drive with its substantial parking facility.

A mix of sign styles are proposed for the project. On the north building elevation, a skyline sign would feature an aluminum logo and letters that is fastened to the wall surface. It would be internally illuminated using warm, dimmable LED lights that connect to a timer set to turn on in the evening. At the entrance to the site, a cabinet-style monument sign would be 20 feet tall with acrylic lettering and internal illumination. Signs used to identify facilities, such as parking or shuttle stops, would be 10 to 15 feet tall aluminum, internally illuminated pylons using warm white LED lights. Finally, 8-foot tall post and panel signs would be used for vehicular direction. These would not be illuminated. See Figure 2-10 for sign placement and Figure 2-11 for detailed descriptions and conceptualizations of their placement relative to the building elevations.

The project design, detailed above, would prevent the proposed project from substantially degrading the existing visual character or quality of public views of the site and its surroundings. Further, the project would include removing miscellaneous debris currently stored on the site, such as RVs, cars, and boats. The project must comply with applicable zoning requirements as well, including zoning governing scenic quality. However, the illuminated skyline sign on the north side of medical office building would be potentially inconsistent with the General Plan Policy 5.10.18 and 5.10.21, which pertain to signage visible from scenic roadways. The proposed illumination of the sign would not reduce its visibility or visual obtrusiveness, and would increase its visibility, especially during nighttime. For these reasons, impacts would be potentially significant but mitigable.

## Mitigation Measures

### *AES-2 Channel Letter Signage*

Any skyline sign shall not be internally illuminated. All skyline signage shall consist of channel lettering signage and shall be backlit for illumination. For purposes of this mitigation measure, a channel letter sign is defined a three-dimensional graphic element with an individual structure and separate illumination.

## Significance After Mitigation

The use of channel letter signage for skyline signage would reduce visual obtrusiveness from the Highway 1 corridor. Impacts would be less than significant with implementation of mitigation measure AES-2.

**Threshold 4:** Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

**Impact AES-3** NEW ON-SITE LIGHTING WOULD NOT RESULT IN SUBSTANTIAL LIGHT AT ADJACENT RESIDENTIAL USES BUT WOULD INCREMENTALLY INCREASE ILLUMINATION OF THE NIGHT SKY. WINDOWS ON THE PROPOSED MEDICAL OFFICE BUILDING COULD RESULT IN GLARE, BUT THE ORIENTATION OF THE BUILDINGS AND LANDSCAPING WOULD SHIELD MOST GLARE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The proposed project would introduce light fixtures through development of the project site to provide visibility and security lighting during nighttime hours for the proposed medical office building and associated parking garage. It should be noted that the project site is adjacent to office/public facility uses that currently contain overhead light fixtures, some of which remain on throughout the night. Lights that would be installed on the project site include pole-mounted lights, surface-mounted lights, bollard lights, exterior downlighting, tree-mounted downlighting, tree uplighting, and wall-mounted downlighting. Additionally, some signage would be illuminated with LED lighting. Of these lighting types, the pole-mounted lights and surface lights would have the most potential to spill over into adjacent properties because these lighting types would be mounted more than 10 feet above the ground surface. Other lighting types, such as bollard lights would be low to the ground and light spill would be largely obstructed by landscaping and medical office and parking garage structures. Fifty-six pole-mounted lighting fixtures would be mounted at a height of 12 feet to illuminate the driveway areas and outdoor areas around the medical office building and parking garage structure. Additional pole-mounted lights would be installed on the top level of the parking garage to provide visibility and security for parking. Six surface light fixtures would be mounted on medical office building at a height of 10 feet. Surface lights would be mounted on the east and west sides of the medical office buildings, and not on the south side, which is the side facing the residences adjacent to south. Lighting in the proposed landscape open space area closest to the residences would consist primarily of bollard lighting and tree uplighting. All light fixtures would have light-emitting diodes (LEDs). Exterior lights, including parking garage lights, would range in power from 3 to 76 Watts and would have a neutral color temperature of 2700 to 3000K. Color temperature refers to the warmth or coolness of a light source as perceived by people.

Light trespass is a result of spill light shining in undesirable locations, such as a neighbor's backyard or bedroom window. While the new light fixtures, including those affixed to the medical office building and parking garage would increase ambient light levels on-site, the photometric study indicates that they would not cause substantial light trespass on offsite residential properties adjacent to the south end of the project site. According to the photometric study, project lights would result in up to 0.1 fc at residential property line at the south end of the project site (see Appendix B). Therefore, light produced by the project would not exceed 0.8 fc during pre-curfew hours or 0.2 fc during post-curfew hours, as measured on the vertical plane at the nearest residential property lines. Lights internal to the medical office building, such as lights within hallways and individual doctor's office rooms would be less bright in exterior areas than exterior lights affixed to the outside of the building. Therefore, internal light fixtures would not contribute to light trespass on offsite residential properties.

The project would contribute an incremental amount of night lighting to the visual environment. However, pursuant to Santa Cruz County Code Chapter 13.11, new light fixtures would be required to direct light downward, which would prevent excessive amounts of light from being directed upward toward the night sky. Additionally, many of the lights used on-site, such as pole-mounted lights, would have dimming features to reduce the intensity or brightness of light. Despite

mandatory compliance with the Santa Cruz County Code, the proposed project would increase the number of outdoor lights in the project site. Therefore, the proposed project would result in incremental increase in nighttime illumination, and impacts would be less than significant.

The west- and southwest-facing windows on the medical office building could generate glare during afternoon hours if the sun hits them directly. This has the potential to create an impact for motorists traveling east on Soquel Avenue and south on Highway 1. Nonetheless, the building would only be partially visible from Highway 1 and the topmost portions of the building would not be glass. The lower stories would be shadowed in part by the parking garage and by the tree canopy when proposed landscaping matures. Glare may also be visible from residences within the mobile park home to the south of the project site. However, fencing at the southern boundary of the project site as well as proposed landscaping in the southern portion of the project site would screen much of the glass components of the medical office building from the residences. With compliance with County ordinances and design review processes, impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

#### 4.1.4 Cumulative Impacts

The cumulative impacts assessment area for aesthetics addresses the viewshed in which the proposed project would be visible, including the viewshed seen from any direction on Highway 1 in the project area. This geographic region is appropriate for aesthetics because impacts of the proposed project would only be seen in context with other ongoing and reasonably foreseeable projects in the area. Other foreseeable projects located outside of the viewshed on the proposed project would not have impacts that combine with proposed project impacts.

Most of the cumulative projects listed Table 3-1 in Section 3, *Environmental Setting*, would not be visible from Highway 1 due to distance from the roadway and intervening structures and vegetation that obstruct distance views from the highway. However, some cumulative projects are in proximity to Highway 1, such as the Mission Drive Residential Project, Dominican Hospital Project, and CVS on Commercial Way. Views of these projects from Highway 1 are generally screened by vegetation along the highway corridor, but could be visible from Highway 1 at times, such as during the winter season when deciduous trees have less foliage. These projects, such as the Dominican Hospital Project, would be seen in context with other similar existing structures in the Highway 1 vista. Additionally, these projects would not require removal of trees and landscape within the south side of Highway 1 right-of-way where the project site is located. Therefore, cumulative impacts on scenic vistas and scenic highways would be less than significant.

Most of the cumulative projects listed in Table 3-1 would not be visible in context with the proposed project from public vantage points, such as streets. While the projects listed in Table 3-1 are within approximately 3 miles of the project site, intervening buildings, vegetation, and natural topography limit the extent of viewsheds. However, some projects in proximity to the project site, such as the Mattison Lane Residential Project and the 2606 Paul Minnie Avenue Project could be visible in context with the project from certain public vantage spots, such as the intersection of Soquel Avenue and Mattison Lane. These projects would contribute to increased urbanization of the

viewshed by adding structures and parking. The 2606 Paul Minnie Avenue Project would add approximately 2,826 square feet of office space to a parcel currently with no office space, in addition to new residential units. These structures, as well as the proposed project would be seen in context with other existing urban development, such as the Santa Cruz County Sheriff's building and a large building on the corner of Paul Minnie Avenue and Soquel Avenue housing a healthcare business. Therefore, the cumulative projects, including the proposed project, would be an incremental increase in the urbanization of a viewshed already characterized by urban development. Additionally, reasonably foreseeable projects would undergo design review to ensure consistency with the Santa Cruz County Code to ensure compatibility with the landscape and aesthetics of the area. Because of these reasons, cumulative impacts on visual character and the quality of public views would be less than significant.

The potential for the proposed project to result in light-spillover is site specific because intervening structures and vegetation would prevent project lights from extending beyond the project site and properties adjacent to the project site. As described above, the photometric study for the proposed project indicates that project lighting would not cause substantial light trespass on offsite residential properties adjacent to the south end of the project site. No other cumulative projects listed in Table 3-1 would occur adjacent to the project site. Therefore, the proposed project would have no cumulatively considerable contribution to spillover lighting impacts. However, most of the cumulative projects listed in Table 3-1 would include exterior lighting. Exterior lighting would contribute to increased nighttime illumination, especially mixed-use and commercial projects which typically include more exterior lighting compared to residential units. Given that the project area is characterized by existing urban development, including commercial and office development with exterior lighting, cumulative projects would incrementally increase nighttime illumination. Projects in Santa Cruz County must comply with Santa Cruz County Code Chapter 13.11, which requires new light fixtures to be directed downward, preventing excessive amounts of light from being directed upward into the night sky. Therefore, cumulative impacts related to lighting would be less than significant.

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## 4.2 Air Quality

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This section describes existing regional air quality, outlines the regulatory framework applicable to air quality management, and evaluates impacts related to criteria pollutant emissions as a result of project development and operation.

### 4.2.1 Setting

#### a. Climate and Topography

The project is located in unincorporated central Santa Cruz County, which is within the North Central Coast Air Basin (NCCAB). The NCCAB is composed of Monterey, Santa Cruz, and San Benito counties and covers an area of more than 5,100 square miles. The air basin features varied vegetation, climate, and geography and includes portions of several mountain ranges: the Santa Lucia and Gabilan ranges in Monterey and San Benito counties, the southern portion of the Santa Cruz Mountains in Santa Cruz County, and the Diablo Range in the eastern half of San Benito County. The coastal terraces in the Santa Cruz area, the flat plains surrounding Watsonville, Salinas, and King City, and the southern Santa Clara Valley are markedly defined by these mountain ranges. The topography of the project corridor is dominated by Santa Cruz Mountains which frame the region to the north and west.

The Pacific High, a semi-permanent high-pressure cell in the eastern Pacific Ocean, is the controlling factor in the climate of the NCCAB. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends from the Pacific High, and warms and dries as it descends, resulting in generally sunny skies and dry weather. The relatively cooler temperature of the Pacific Ocean creates a layer of cool air directly over the ocean. This stable temperature inversion of warm air over a cooler coastal layer of air creates an onshore air current that passes over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer aloft air acts as a lid that inhibits vertical air movement and allows air pollutants to concentrate in the lower level (Santa Cruz County 2019).

The generally northwest-southeast orientation of mountainous ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito valleys creates a weak low pressure that intensifies the onshore air flow during the afternoon and evening.

In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High pressure cell, which allows pollutants to build up over a period of a few days. It is most often during this season that north or east winds develop, transporting pollutants from either the San Francisco Bay area or the Central Valley into the NCCAB.

During the winter, the Pacific High migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring (Santa Cruz County 2019).

In Santa Cruz, average annual temperatures are relatively stable and range from winter lows in the low 40s to summer and fall highs in the middle 70s in degrees Fahrenheit (US Climate Data 2020). The total average annual precipitation is approximately 20 inches, with the majority of rainfall occurring from November through March.

## b. Air Pollutants of Primary Concern

The federal and state Clean Air acts mandate the control and reduction of certain air pollutants. Under these acts, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for certain pollutants identified as “criteria” pollutants considered harmful to public health and the environment. Ambient air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions, as well as by the climactic and topographic influences discussed above. The primary determinant of concentrations of non-reactive pollutants, such as carbon monoxide (CO) and particulate matter (PM), is proximity to major sources. Ambient CO levels in particular usually closely follow the spatial and temporal distributions of vehicular traffic. A discussion of the primary “criteria” pollutants of concern is provided below.

### Ozone

Ozone is a colorless gas with a pungent odor. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROG), and oxides of nitrogen (NO<sub>x</sub>). ROG (the organic compound fraction relevant to ozone formation, and sufficiently equivalent for the purposes of this analysis to volatile organic compounds, or VOC<sup>1</sup>) is composed of non-methane hydrocarbons (with some specific exclusions), and NO<sub>x</sub> is made of different chemical combinations of nitrogen and oxygen, mainly NO and NO<sub>2</sub>. A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO<sub>x</sub> levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant.

### Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless, gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the state CO standard are generally associated with major roadway intersections during peak hour traffic conditions. Localized carbon monoxide “hotspots” can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal Ambient Air Quality Standards (AAQS) of 35.0 parts per million (ppm) or the state AAQS of 20.0 ppm.

### Nitrogen Dioxide

Nitrogen dioxide (NO<sub>2</sub>) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by

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<sup>1</sup> ROG is equivalent to VOC per MBARD Rule 101, 2.32

combustion is nitric oxide (NO), but NO reacts rapidly to form NO<sub>2</sub>, creating the mixture of NO and NO<sub>2</sub> commonly called NO<sub>x</sub>. Nitrogen dioxide is an acute irritant. A relationship between NO<sub>2</sub> and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM<sub>10</sub> and acid rain.

## Particulate Matter

Suspended particulate matter (airborne dust) consists of particles small enough to remain suspended in the air for long periods. Fine particulate matter includes particles small enough to be inhaled, pass through the respiratory system, and lodge in the lungs, with resultant health effects. Particulate matter can include materials such as sulfates and nitrates, which are particularly damaging to the lungs. Health effects studies resulted in revision of the Total Suspended Particulate (TSP) standard in 1987 to focus on particulates that are small enough to be considered “inhalable,” (i.e., 10 microns or less in size [PM<sub>10</sub>]). In July 1997, a further revision of the federal standard added criteria for PM<sub>2.5</sub>, reflecting studies that suggested particulates less than 2.5 microns in diameter are of particular concern.

## Lead

Lead (Pb) is a metal found in the environment and in manufacturing products. The major sources of Pb emissions historically have been mobile and industrial sources. In the early 1970s, the USEPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA’s regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least in part as a result of national emissions standards for hazardous air pollutants. Because of phasing out leaded gasoline, metal processing is now the primary source of lead emissions. The highest level of lead in the air is found generally near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

## Toxic Air Contaminants

According to Section 39655 of the California Health and Safety Code, a toxic air contaminant (TAC) is “an air contaminant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.” One hundred eighty-nine substances that have been listed as federal hazardous air pollutants (HAP) pursuant to Section 4712 of Title 42 of the United States Code are classified as TACs under the State’s air toxics program pursuant to Section 39657(b) of the California Health and Safety Code.

TACs can cause cancer and other types of long-term health effects, depending on the particular chemical, their type and duration of exposure; some TACs can also result in short-term health effects. The ten TACs posing the greatest health risk in California are acetaldehyde, benzene, 1-3 butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchlorethylene, and diesel PM. Mobile sources of TACs include freeways and



other roads with high traffic volumes (urban roads with traffic volumes exceeding 100,000 vehicles per day or rural roads exceeding 50,000 vehicles per day), while stationary sources include distribution centers, rail yards, ports, refineries, dry cleaners, and large gas dispensing facilities.

**c. Current Air Quality**

Federal and state standards have been established for ozone, CO, NO<sub>2</sub>, sulfur dioxide (SO<sub>2</sub>), and fine particulates (PM<sub>10</sub> and PM<sub>2.5</sub>). Table 4.2-1 summarizes the current federal and state standards for each of these pollutants. The primary standards listed below have been set at levels intended to protect public health. California standards are generally more restrictive than federal standards.

**Table 4.2-1 Current Federal and State Ambient Air Quality Standards**

<b>Pollutant</b>	<b>Averaging Time<sup>1</sup></b>	<b>Federal Primary Standards</b>	<b>California Standard</b>
Ozone	8-Hour	0.070 ppm	0.070 ppm
	1-Hour	-	0.09 ppm
Carbon Monoxide	8-Hour	9 ppm	9.0 ppm
	1-Hour	35 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.1 ppm	0.18 ppm
Sulfur Dioxide	24-Hour	0.14 ppm	0.04 ppm
	3-Hour	0.5 ppm	-
	1-Hour	0.075 ppm	0.25 ppm
PM <sub>10</sub>	Annual	-	20 µg/m <sup>3</sup>
	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
PM <sub>2.5</sub>	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
	24-Hour	35 µg/m <sup>3</sup>	-
Lead	Calendar Quarter	1.5 µg/m <sup>3</sup>	-
	Rolling 3-month average	0.15 µg/m <sup>3</sup>	-
	30-day average	-	1.5 µg/m <sup>3</sup>

<sup>1</sup> Time period over which emissions are averaged for comparison to threshold.

ppm = parts per million

µg/m<sup>3</sup> = micrograms per cubic meter

Source: CARB 2019a

As indicated above, depending on whether or not the standards are met or exceeded, the air basin is classified as being in “attainment” or in “non-attainment,” respectively. Table 4.2-2 summarizes the federal and state attainment status for criteria pollutants based on the most recently available reporting data. As shown therein, the NCCAB is in attainment or unclassifiable status for all federal AAQS. For state AAQS, the NCCAB is currently in nonattainment status for respirable particulate matter (PM<sub>10</sub>) and ozone.

**Table 4.2-2 North Central Coast Air Basin Attainment Status - 2019**

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone (O <sub>3</sub> )	1 Hour	Nonattainment	No federal standard
	8 Hour		Attainment
Respirable Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	Nonattainment	No federal standard
	24 Hour		Unclassified <sup>1</sup>
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	Attainment	Attainment
	24 Hour	No state standard	
Carbon Monoxide (CO)	8 Hour	Attainment	Unclassified/Attainment
	1 Hour		
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	No state standard	Attainment
	1 Hour	Attainment	No federal standard
Sulfur Dioxide	24-Hour	Attainment	Attainment
	3-Hour	No state standard	No federal standard
	1-Hour	Attainment	Attainment
Lead	Calendar Quarter	No state standard	Unclassified/Attainment
	Rolling 3-month average	No state standard	Unclassified/Attainment
	30-day average	Attainment	No federal standard

<sup>1</sup> Unclassified; indicates data are not sufficient for determining attainment or nonattainment.

Attainment = Meeting air quality standards

Nonattainment = Exceeding air quality standards

Source: CARB 2019a

The Monterey Bay Air Resources District (MBARD) oversees air quality in of all three counties in the NCCAB, including Santa Cruz County, and the project is under the jurisdiction of MBARD. MBARD is responsible for air monitoring, permitting, enforcement, long-range air quality planning, regulatory development, education and public information activities related to air pollution in the NCCAB. MBARD monitors ambient air pollutant levels to assure that air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Table 4.2-3 summarizes the annual air quality data for measurements taken in the NCCAB for the most recent years available (2016-2018). Measurements of different air pollutants collected at an air monitoring station (AMS) depend on the nature of the station. The nearest is the Santa Cruz AMS located at 2544 Soquel Avenue, which is about one mile west of the site. The station collects measurements of ozone and PM<sub>2.5</sub>. Measurements of PM<sub>10</sub> reported below were collected at the Hollister AMS, and measurements of nitrogen dioxide were collected at the Salinas AMS. No data for CO is available from any monitoring station in the NCCAB after 2012, and no data for sulfur dioxide is available after 1990. Therefore, measurements of these air pollutants are not presented.

**Table 4.2-3 Ambient Air Quality Data**

Pollutant	Monitoring Station	2016	2017	2018
Ozone, ppm - Worst Hour	Santa Cruz AMS	0.064	0.082	0.075
Number of days of state exceedances (>0.09 ppm)		0	0	0
Ozone, ppm – Worst 8-hour Average	Santa Cruz AMS	0.057	0.075	0.061
Number of days of federal/state exceedances (>0.07 ppm)		0	1	0
Particulate Matter <10 microns, µg/m <sup>3</sup> Worst 24 Hours	Hollister AMS	44.3	80.9	95.9
Number of samples of state exceedances (>50 µg/m <sup>3</sup> ) <sup>1</sup>		-	-	-
Number of samples of federal exceedances (>150 µg/m <sup>3</sup> ) <sup>1</sup>		-	-	-
Particulate Matter <2.5 microns, µg/m <sup>3</sup> Worst 24 Hours	Santa Cruz AMS	12.7	47.3	92.0
Number of days federal exceedances (>35 µg/m <sup>3</sup> )		0	2	9
Nitrogen Dioxide, ppm – Worst Hour	Salinas AMS	0.033	0.034	0.047
Number of days of state exceedances (>0.18 ppm)		0	0	0

Note: There is no data available yet for 2019.

1: Available data is insufficient to determine the number of state and federal exceedances according to CARB 2019b.

Source: CARB 2019b

Given that the NCCAB is designated as nonattainment for ozone and PM<sub>10</sub>, these are the primary pollutants of concern for the NCCAB. As indicated in Table 4.2-3, there was one Federal and State ozone exceedance in 2017. The exact number of days with PM<sub>10</sub> exceedance cannot be determined based on available data, however, the highest measurements reported above show that exceedance did occur in 2017 and 2018. Federal standards for PM<sub>2.5</sub> were exceeded in 2017 and 2018.

### Sensitive Receptors

Certain population groups are more sensitive to air pollution than others. In particular, children, the elderly, and acutely ill and chronically ill persons, especially those with cardio-respiratory diseases. As described in the MBARD’s 2008 *CEQA Air Quality Guidelines*, a sensitive receptor is defined as: any residence, including private homes, condominiums, apartments, and living quarters; education facilities such as preschools and kindergarten through grade twelve (K-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes.

Sensitive receptors located adjacent to the property include mobile homes immediately south of the project site. These residences are part of a larger neighborhood occupying the area south of the project site.

## 4.2.2 Regulatory Setting

### a. Federal

#### Clean Air Act

The Clean Air Act (CAA) of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. The CAA authorizes the USEPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. In 1977, Congress again added several provisions, including non-

attainment requirements for areas not meeting NAAQS and the Prevention of Significant Deterioration program. The 1990 federal CAA amendments represent the latest in a series of federal efforts to regulate air quality in the United States. The federal CAA allows states to adopt more stringent standards or to include additional pollution species. Current NAAQS are listed in Table 4.2-1.

## **National Ambient Air Quality Standards**

The federal CAA requires USEPA to establish primary and secondary NAAQS for a number of criteria air pollutants. The air pollutants for which standards have been established are considered the most prevalent air pollutants known to be hazardous to human health. NAAQS have been established for ozone, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and Pb.

The USEPA has classified air basins (or portions thereof) as being in “attainment,” “nonattainment,” or “unclassified” for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 4.2-2 lists the attainment status of the NCCAB for the criteria pollutants.

## **Title III of the Federal Clean Air Act**

The CAA was amended in 1990 to better address hazardous air pollutants (HAPs) (Title III). Title III offers a comprehensive plan for achieving significant reductions in emissions of HAPs from major sources. It includes a list of 189 toxic air pollutants of which emissions must be reduced. The USEPA maintains and updates a list of source categories including (1) major sources emitting 10 tons per year of any one, or 25 tons per year of any combination, of those pollutants; and (2) area sources (smaller sources, such as dry cleaners). As required by Title III, the USEPA developed Maximum Achievable Control Technology (MACT) standards. MACT standards use the HAP emissions of the best-performing industry sources to set the “MACT floor”, which becomes the minimum standard that an industry must at least meet in order to comply with the CAA.

### **b. State**

#### **California Clean Air Act and California Ambient Air Quality Standards**

As a part of the California Environmental Protection Agency, CARB is responsible for the coordination and administration of both federal and state air pollution control programs in California. The federal CAA allows states to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. The California Clean Air Act (CCAA) became effective in 1989 and requires all areas of the state to attain the state ambient air quality standards at the earliest practicable date. To that end, California has adopted ambient standards (California Ambient Air Quality Standards or CAAQS) that are equal to or stricter than the federal standards for six criteria air pollutants. The California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations, and are provided in Table 4.2-1 above. Similar to the federal CAA, areas have been designated as attainment, nonattainment, or unclassified with respect to the state ambient air quality standards.

## **Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act**

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807—Tanner Act) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588—Hot Spots Act). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC. The Hot Spots Act requires that existing facilities that emit toxic substances above specified levels 1) prepare a toxic emission inventory, 2) prepare a risk assessment if emissions are significant (i.e., 10 tons per year or on the Air District's Hot Spots Risk Assessment list), 3) notify the public of significant risk levels, and 4) prepare and implement risk reduction measures.

## **Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles**

In September 2000, CARB approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). The plan outlines a comprehensive and ambitious program that includes the development of numerous control measures aimed at substantially reducing emissions from new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators). CARB has adopted several regulations that will reduce diesel emissions from in-use vehicles and engines throughout California. In some cases, the particulate matter reduction strategies also reduce smog-forming emissions such as NO<sub>x</sub>. As an ongoing process, CARB reviews air contaminants and identifies those that are classified as TACs. CARB also continues to establish new programs and regulations for the control of TACs, including diesel particulate matter, as appropriate.

## **Air Quality and Land Use Handbook**

In 2005, CARB's Community Health Program made available the *Air Quality and Land Use Handbook: A Community Health Perspective* to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process (CARB 2005). The recommendations in the handbook are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts.

### **c. Regional**

#### **Monterey Bay Air Resources District**

MBARD regulates air quality in the NCCAB and is responsible for attainment planning related to criteria air pollutants and for district rule development and enforcement. It also reviews air quality analyses prepared for CEQA assessments and has published the *CEQA Air Quality Guidelines (MBARD Guidelines)* document (last revised February 2008) for use in evaluation of air quality impacts (MBARD 2008).

The purpose of the *MBARD Guidelines* is to assist in the review and evaluation of air quality impacts from projects that are subject to CEQA. The *MBARD Guidelines* are an advisory document intended to provide lead agencies, consultants, and project proponents with uniform procedures for assessing potential air quality impacts and preparing the air quality section of environmental

documents. The *MBARD Guidelines* are also intended to help these entities anticipate areas of concern from the MBARD in its role as a lead, commenting and/or responsible agency for air quality.

MBARD has established rules and regulations to reduce the generation of criteria pollutants, including the following:

- **MBARD Rule 402 – Nuisances.** Prohibits the discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **MBARD Rule 426 – Architectural Coatings.** Limits the VOC content for architectural coatings; specifically, limits the VOC content of flat coatings to 50 grams/liter (g/L) and non-flat coatings to 100 g/L.

## Air Quality Management Plan

In accordance with the California Clean Air Act, MBARD has developed the *2012-2015 Air Quality Management Plan for the Monterey Bay Region* (MBARD 2017). The focus of the plan is achieving the 8-hour ozone standard in the region. The plan includes an updated air quality trends analysis; emissions inventory that includes the latest information on stationary, area, and mobile emission sources; and mobile source programs. Projects that are inconsistent with the Air Quality Management Plan (AQMP) would result in a significant cumulative impact related to ozone emissions. A project is consistent with the AQMP if it is consistent with the growth assumptions in the AQMP and, therefore, accommodated in the emissions inventories.

### d. Local

#### *County of Santa Cruz General Plan and Local Coastal Program*

The Conservation and Open Space Element of the Santa Cruz County General Plan contains programs and policies related to air quality that pertain to meeting state and federal air standards, protecting the public from air quality related hazards and preventing scenic impacts due to poor air quality. Policies 5.18.1 through 5.18.3, below, require new developments to achieve consistency with the MBARD AQMP, meet established pollutant thresholds, and mitigate high levels of air quality pollutants (County of Santa Cruz 1994, rev. 2020).<sup>2</sup>

**Policy 5.18.1. New Development.** Ensure new development projects are consistent at a minimum with the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan and review such projects for potential impact on air quality.

**Policy 5.18.2. Non-Attainment Pollutants.** Prohibit any net increase in emissions of non-attainment pollutants or their precursors from new or modified stationary sources with emit 25 tons per year or more of such pollutants.

**Policy 5.18.3. Air Quality Mitigation.** Require land use projects generating high levels of pollutants (i.e., manufacturing facilities, hazardous waste handling operations) to incorporate air quality mitigations in their design.

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<sup>2</sup> Recent amendments to the General Plan currently under consideration by the California Coastal Commission relocated these policies to the Public Safety Element and renumbered them 6.18.1 through 6.18.3.

## 4.2.3 Impacts Analysis

### a. Methodology and Thresholds of Significance

#### Methodology

The analysis of potential project air quality impacts conforms to the methodologies recommended in the MBARD's *CEQA Air Quality Guidelines* (2008) and in Appendix G of the *State CEQA Guidelines*. This includes thresholds for emissions associated with both construction and operation of proposed projects.

#### *Construction Emissions*

Construction of the project may begin as early as 2021. Construction would last approximately 18 months and be composed of the following phases: demolition, site preparation, grading, building construction, asphalt paving and architectural coating.

In general, construction activities for the project would include removal of existing structures and materials at the project site, clearing and grubbing, site grading, construction of the MOB and associated parking garage and paving of asphalt. Large construction equipment would include, but not be limited to dozers, loaders, rollers, construction cranes, and dump trucks.

The following best management practices would be implemented during all phases of construction to comply with the MBARD's Rule 402 (Nuisance):

- Grading activities will be prohibited during periods of high wind (over 15 mph)
- Active construction areas will be watered, as needed and at least twice daily, based on the activity, soil and wind exposure
- Chemical soil stabilizers will be applied to inactive construction areas (disturbed lands unused for four consecutive days)
- Native hydro-seed or non-toxic binders will be applied to exposed areas after cut/fill operations
- Haul trucks will maintain a minimum 2-foot freeboard, and dirt, sand, or other loose materials will be covered when being hauled to and from the construction areas
- Native vegetative ground cover will be planted in disturbed areas as soon as possible, in coordination with the project landscape plan
- Inactive storage piles will be covered

The project's criteria pollutant emissions from construction are estimated using the California Emissions Estimator Model (CalEEMod Version 2016.3.2). CalEEMod worksheets showing model inputs and results are provided in Appendix C. Model inputs reflect a combination of applicant provided project information and model defaults where project specific information was not available. Construction emissions of criteria pollutants would primarily result from use of construction equipment and disturbance of soils during grading. The analysis below estimates a conservative worst-case scenario based on currently available information and assumptions provided by the project applicant. The analysis of air quality impacts associated with the proposed project follows the guidance and methodologies recommended in the MBARD Guidelines and in Appendix G of the *CEQA Guidelines*.

### *Operational Emissions*

Operational emissions of criteria pollutants and potential for CO hotspots are also evaluated using CalEEMod. Operational emissions of criteria pollutants would primarily result from vehicle trips to and from the project site. CalEEMod inputs for vehicle trips reflect the project's trip generation rates from the Transportation Impact and Operational Analysis provided in Appendix D.

### **Significance Thresholds**

The significance thresholds used in this analysis are based on Appendix G of the *CEQA Guidelines*. For purposes of this EIR, implementation of the project would result in a potentially significant adverse impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard
3. Expose sensitive receptors to substantial pollutant concentrations
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

For air quality, CEQA Appendix G states that "where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon" in making significance determinations. Thus, the *MBARD CEQA Air Quality Guidelines* are relied upon in this analysis.

Regarding criteria pollutant emissions, during construction, an impact would occur if the project would:

1. Emit greater than 82 lbs/day of PM<sub>10</sub> if located nearby or upwind of sensitive receptors (note: projects which require minimal earthmoving on 8.1 or more acres per day or grading and excavation on 2.2 or more acres per day are likely to exceed this threshold); or
2. Use equipment that is not "typical construction equipment" as specified in the *MBARD Guidelines*. Examples of typical construction equipment are dump trucks, scrapers, bulldozers, compactors and front-end loaders. Examples of non-typical equipment are grinders and portable equipment. The MBARD does not identify quantitative thresholds for other criteria pollutants during construction. Construction projects using typical construction equipment are accommodated in the emission inventories of federally and state-required air plans and would not have a significant impact.

The *MBARD Guidelines* state that the 82 lbs/day threshold for construction emissions of PM<sub>10</sub> is the threshold for both individual and cumulative impacts on local air quality.

During operation, an impact would occur if the proposed project would be inconsistent with the AQMP or:

1. Generate direct (area source or stationary) plus indirect (operational or mobile) emissions of either ROG or NOX that exceed 137 lbs/day;
2. Generate on-site emissions of PM<sub>10</sub> exceeding 82 lbs/day;
3. Generate direct emissions of CO exceeding 550 lbs/day; or



4. Generate direct emissions of SO<sub>x</sub> exceeding 150 lbs/day

For impacts related to CO, the *MBARD Guidelines* indicate that the following traffic effects should be assumed to generate a significant CO impact, unless CO dispersion modeling demonstrates otherwise:

1. Intersections or road segments that operate at LOS D or better that would operate at LOS E or F with the project's traffic;
2. Intersections or road segments that operate at LOS E or F where the volume-to-capacity (V/C) ratio would increase 0.05 or more with the project's traffic;
3. Intersections that operate at LOS E or F where delay would increase by 10 seconds or more with the project's traffic;
4. Unsignalized intersections which operate at LOS E or F where the reserve capacity would decrease by 50 or more with the project's traffic, based on the turning movement with the worst reserve capacity; or
5. Project would generate substantial heavy-duty truck traffic or generate substantial traffic along urban street canyons or near a major stationary source of CO

## b. Project Impacts and Mitigation Measures

<b>Threshold 1:</b> Would the project conflict with or obstruct implementation of the applicable air quality plan?
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**Impact AQ-1** THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE ADOPTED MBARD AQMP. IMPACT WOULD BE LESS THAN SIGNIFICANT.

According to MBARD's CEQA Guidelines, a project would conflict with or obstruct implementation of the AQMP for the NCCAB if it is inconsistent with the growth assumptions included in the AQMP, in terms of population, employment, or regional growth in vehicle miles traveled (VMT) (MBARD 2008). The proposed project does not contain a residential component and would therefore not increase residential population in the region. Construction of the proposed project would generate temporary employment opportunities, but construction jobs would likely be filled by the existing workforce given their duration of approximately 18 months.

Operation of the proposed medical office would include employ professionals requiring specialized training and certifications, such as neurologists and obstetrician-gynecologists. While some employment at the medical office building would be filled by the local workforce, these types of specialized professions may be filled by people outside Santa Cruz County. For example, neurologists currently located in the San Francisco Bay Area may relocate to Santa Cruz County to fill employment created by the proposed project. If future employees at the proposed medical office building do not currently live in Santa Cruz County, the project could induce population growth in the County as they relocate to be closer to their workplace.

As shown in Table 4.12-2, in Section 4.12, *Population and Housing*, the Association of Monterey Bay Area Governments (AMBAG) projects that the number of employees in the unincorporated County will increase by 6,948 people (or 18 percent) between 2015 and 2040 (AMBAG 2018). The estimated net gain of approximately 300 employees on the project site would account for approximately 5 percent of the projected increase in employment across the unincorporated County. Job growth under the project would not exceed the planned level of countywide growth. The AQMP growth

assumptions utilize the AMBAG projections. Therefore, growth anticipated from operation of the project would not exceed the growth assumptions in the AQMP.

The medical office building would serve existing Santa Cruz County residents, providing additional access to various health services. Access to the project site would primarily be provided by personal vehicles and the project would include a parking garage. However, as discussed in Section 4.14, *Transportation*, the project is anticipated to reduce overall regional VMT by eliminating the need for area residents to travel longer distances (e.g., to the San Francisco Bay Area) to access certain medical services. Ultimately, as discussed in Section 4.14, *Transportation*, regional VMT is anticipated to decrease as a result of the project. Therefore, the proposed project would not result in conflict with the VMT assumptions of the AQMP.

The AQMP outlines strategies for reducing vehicle-related emissions of ozone precursors. Unlike previous versions of the AQMP that focused on alternative modes of transportation and reducing VMT, the 2012-2015 AQMP mobile source programs focus on direct emissions reduction. Programs include roundabout design and construction and the application of adaptive traffic signal control at intersections, incentives for purchase or lease of electric vehicles, funding for electric vehicle infrastructure, and voluntary accelerated vehicle retirement programs for older vehicles. These programs focus on the choices of individual consumers. Implementation of the proposed project is not related to consumer vehicle choice and the proposed project would have no impact on implementation of the AQMP mobile source programs. Additionally, the proposed parking garage would include parking spaces for electric vehicles and bicycles, and a new bicycle lane would be constructed on Soquel Avenue, encouraging active transportation. Therefore, the proposed project would not conflict with the emissions reduction goals of the AQMP. Impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 2:** Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

**Impact AQ-2** THE PROJECT WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF A CRITERIA POLLUTANT. IMPACTS OF THE PROPOSED PROJECT WOULD BE LESS THAN SIGNIFICANT.

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Construction and operational impacts related to criteria pollutant emissions are addressed separately below. Emissions are addressed separately because operation, and thus operational emissions would not occur until after project construction is completed.

### *Construction*

Construction of the proposed project would result in the temporary generation of air pollutants from operation of heavy construction equipment and generation of fugitive dust in the construction area. As described above in the Methodology subsection of Section 4.2.3, *Methodology and Significance Thresholds*, construction emissions were modeled using CalEEMod Version 2016.3.2.

Detailed construction modeling worksheets produced from CalEEMod are provided as Appendix C to this EIR. Maximum daily emission levels associated with construction of the proposed project, are shown in Table 4.2-4. MBARD has only adopted a quantitative threshold for PM<sub>10</sub> emissions during construction; however, emissions from the other criteria pollutants are also provided for informational purposes.

**Table 4.2-4 Estimated Construction Daily Maximum Air Pollutant Emissions (lbs/day)**

Year	Estimated Maximum Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub> (exhaust)	PM <sub>2.5</sub> (exhaust)	SO <sub>x</sub>
2021 Maximum Daily Emissions	11.7	126.0	79.3	5.6	5.2	0.2
2022 Maximum Daily Emissions	7.1	68.5	59.0	3.0	2.8	0.1
2023 Maximum Daily Emissions	39.6	31.7	37.8	1.2	1.2	0.1
<b>Maximum Daily Construction Emissions</b>	<b>39.6</b>	<b>126.0</b>	<b>79.3</b>	<b>5.6</b>	<b>5.2</b>	<b>0.2</b>
MBARD Thresholds (average daily emissions)	-	-	-	82	-	-
<b>Threshold Exceeded?</b>	-	-	-	<b>No</b>	-	-

See Table 2.1, Overall Construction (Unmitigated), in CalEEMod worksheets provided in Appendix C. Winter emissions results are shown for all emissions, because winter emissions are either equal to or greater than summer emissions for all criteria pollutants. Emission quantities are rounded to the tenth decimal place.

Source: CalEEMod Version 2016.3.2

As shown in Table 4.2-4, the proposed project is estimated to generate a maximum of 5.6 lbs/day of PM<sub>10</sub> during construction, which is below MBARD’s threshold of 82 lbs/day.

MBARD does not identify quantitative thresholds for other criteria pollutants during construction. Construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NO<sub>x</sub>), are accommodated in the emission inventories of state- and federally required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. However, a project that would use non-typical equipment would have the potential to result in a significant impact related to emissions of VOCs or NO<sub>x</sub>. The proposed project would employ typical construction equipment. It would not require any non-typical construction equipment or techniques that have not been accounted for in the NCCAB emissions inventories. Further, as described in Section 4.3.3, best management practices would be implemented during project construction in compliance with MBARD’s Rule 402 (Nuisance). Therefore, construction of the proposed project would not result in a significant impact related to emissions of VOCs or NO<sub>x</sub>.

Construction of the proposed project would result in a less-than-significant impact related to maximum daily criteria pollutant emissions. Because the emissions would be below the applicable health-based significance thresholds no adverse health effects would occur. Construction of the project would not result in a cumulatively considerable net increase of any criteria pollutant. Therefore, this impact would be less than significant.

### Operation

Emissions associated with project operation would be long term and include vehicle trips to and from the site (mobile sources) electricity and natural gas use (energy sources) and landscape maintenance equipment, consumer products, and architectural coating associated with on-site development (area sources). The air quality analysis, conservatively, does not account for the elimination of existing operational emissions. As shown in Table 4.3-5, project operation would not exceed MBARD thresholds and would not substantially contribute to the emission of criteria pollutants. Because there would be no substantial contribution of criteria pollutant emissions, there would also be no corresponding substantial contribution of adverse health effects. Mobile emissions shown in are zero because, as described in Section 4.14, *Transportation*, operation of the proposed project would reduce existing and future VMT in the region. Therefore, operational impacts would be less than significant.

**Table 4.2-5 Estimated Operational Daily Maximum Air Pollutant Emissions (lbs/day)**

Sources	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub> (exhaust)	PM <sub>2.5</sub> (exhaust)	SO <sub>x</sub>
Area	3.8	<0.1	0.1	<0.1	<0.1	<0.1
Energy	0.1	0.8	0.7	0.1	0.1	0.1
Mobile	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Emissions</b>	<b>3.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
MBARD Thresholds (average daily emissions)	137	137	550	150	82	-
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>-</b>

See Table 2.1, Overall Construction (Unmitigated), in CalEEMod worksheets provided in Appendix C. Winter emissions results are shown for all emissions, because winter emissions are either equal to or greater than summer emissions for all criteria pollutants. Emission quantities are rounded to the tenth decimal place.

Source: CalEEMod Version 2016.3.2

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 3:** Would the project expose sensitive receptors to substantial pollutant concentrations?

**Impact AQ-3** THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. PROJECT IMPACTS RELATED TO EXPOSURE OF SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS WOULD BE LESS THAN SIGNIFICANT.

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### *Construction*

There are residences located adjacent to the southern boundary of the proposed project site, as described under *Sensitive Receptors* in Section 4.2.1. As such, proposed project construction activities would occur near sensitive receptors and potentially expose these receptors to short-term criteria pollutant emissions. The pollutant of primary concern during construction is diesel particulate matter (DPM), which is generally less than 1 micron in diameter, thus it is a subset of PM<sub>2.5</sub>. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM, discussed in the following paragraphs, outweighs the potential non-cancer health impacts (California Office of Environmental Health Hazard Assessment [OEHHA] 2017).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur in phases over approximately 18 to 24 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose, or dosage, is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period. According to OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period. However, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 18 to 24 months) is approximately 2.1 percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (Bay Area Air Quality Management District 2017).

The maximum PM<sub>2.5</sub> emissions would occur during site preparation and grading activities. The DPM emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less heavy construction equipment that uses diesel fuel. While the maximum DPM emissions associated with site preparation and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than one percent of the total exposure period for a health risk calculation. Therefore, given the aforementioned, DPM generated by project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the maximally exposed individual<sup>3</sup> or to generate ground-level concentrations of non-carcinogenic TACs that exceed a hazard index greater than one for the Maximally Exposed Individual. Project construction impacts would be less than significant.

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<sup>3</sup> Hypothetical person receiving the greatest exposure to DPM.

## Operation

As discussed under *MBARD Thresholds of Significance* above, a significant CO impact would occur if project-generated traffic would degrade level of service (LOS) operations at County roadways or intersections, such that those roadways or intersections would degrade from LOS D or better to LOS E or F with the addition of project-generated traffic. In addition, a significant CO impact would occur if project-generated traffic would increase delay by 10 seconds or more on any intersections that currently operate at LOS E or F.

Pursuant to CEQA Guidelines Section 15064.3(a), a project's effect on automobile delay shall not constitute a significant environmental impact. LOS is a measurement of automobile delay. This EIR has been prepared to identify potentially significant impacts of the project and provide mitigation measures, as applicable. Because LOS is measurement of automobile delay, and effects on automobile delay shall not constitute a significant environmental impact, LOS is not discussed further in context to CEQA or CEQA impacts in this EIR. However, LOS resulting from the project is provided for informational purposes in Section 4.14, *Transportation*, and used to determine potential localized impacts on air quality.

As shown in Table 4.14-6 in Section 4.14, *Transportation*, there are no roadways or intersections that would degrade from LOS D or better to LOS E or F with the addition of project-generated traffic to existing conditions. The intersection of Soquel Avenue/40<sup>th</sup> Avenue and Gross Road (intersection #9 in Table 4.14-6) operates at LOS E under existing conditions with 36.5 seconds of delay during the PM peak hour. The addition of project-generated trips would result in LOS F and 78.4 seconds of delays at this intersection during PM peak hour. The increased delay would be 41.9 seconds, which exceeds the MBARD threshold of 10 seconds of delay at intersections currently operating at LOS E or LOS F. However, Table 4.14-6 in Section 4.14, *Transportation*, does not account for roadway improvements included as part the proposed project and described in Section 2.5.7, *Roadway and Road Frontage Improvements*. As described in Section 2.5.7, a diagonal diverter would be installed at the intersection of Soquel Avenue/40<sup>th</sup> Avenue and Gross Road. The diverter would eliminate the congestion caused by the four-way stop currently in place at the intersection. As described on page 81 of the Transportation Impact and Operational Analysis provided in Appendix D, the proposed improvements to the intersection of Soquel Avenue/40<sup>th</sup> Avenue and Gross Road would eliminate potential delay resulting from project-generated trips and improve existing conditions. The proposed intersection improvements would also alleviate delay conditions under cumulative conditions, as described in the Transportation Impact and Operational Analysis. Therefore, the project would not result in volumes of traffic that would create, or substantially contribute to, the exceedance of state and federal AAQS for CO. The project would not expose sensitive receptors to substantial pollutant concentrations related to CO hotspots. Impacts related to CO hotspots would be less than significant.

Additionally, the project would not include any stationary sources of TACs that would expose both on-site and nearby off-site receptors to substantial TAC emissions. No substantial operational TAC emissions would result from the project. Because no substantial operational TAC emissions would result from the project, there would also be no substantial adverse health effects from TAC emissions. Impacts related to TAC emissions would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 4:** Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**Impact AQ-4** THE PROJECT WOULD NOT CREATE OBJECTIONABLE ODORS AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

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Project construction activities would produce temporary odors from vehicle exhaust and construction equipment and fumes from fuel and architectural coatings. Construction-related odors would be short-term and would cease upon completion. In addition, MBARD Rule 402 prohibits the discharge of air contaminants or other materials that would cause a nuisance or detriment to a considerable number of persons or to the public, except for odors from agricultural activities. Because the project would be subject to MBARD Rule 402 and construction would be temporary, construction of the project would not result in significant impacts related to objectionable odors.

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (MBARD 2008). The project does not include any uses associated with objectionable odors. Operational odor emissions from the project would be limited to odors associated with vehicle and engine exhaust, primary within and around the parking garage, and trash receptacles. Vehicle exhaust would be comparable to odors currently present in the area from vehicle travel on Highway 1, Soquel Avenue, and other roadways in the project area. The primarily office use of the project would not generate large amounts of decomposable waste, such as food waste, which may produce noticeable unpleasant odors. Therefore, the proposed project would not expose sensitive receptors to substantial concentrations of odors and would not directly or indirectly generate any objectionable odors, or other emissions that would adversely affect a substantial number of people. Impacts related to objectionable odors would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

### 4.2.4 Cumulative Impacts

Air quality emissions in one location contribute to regional air quality in the NCCAB. Therefore, the geographic scope for considering cumulative impacts to air quality includes the entire NCCAB, which is comprised of Monterey, Santa Cruz, and San Benito counties and covers an area of more than 5,100 square miles. Air pollutants have impacts that are often, though not always, cumulative by nature. Any new source of pollution may contribute with foreseeable future projects to violations of criteria pollutant standards if the existing background sources cause nonattainment conditions, as they do according to the state standards for ozone and particulate matter in the NCCAB. Air districts manage attainment of the criteria pollutant standards by adopting rules, regulations, and attainment plans, which make up a multifaceted programmatic approach to such attainment.

The MBARD *CEQA Air Quality Guidelines* include recommendations for the analysis of cumulative impacts pertaining to ozone and localized pollutants. Inconsistency with the AQMP is considered a cumulatively adverse air quality impact. Future cumulative development would potentially exceed the AQMP growth assumptions and result in cumulatively considerable project emissions. However, as discussed in Impact AQ-1 above, the proposed project would be consistent with the AQMP. Therefore, based on the *MBARD Guidelines*, the project's contribution to a cumulative air quality impact related to AQMP consistency would not be cumulatively considerable. In addition, as indicated in Impact AQ-2, the project would not result in a cumulatively considerable contribution to emissions of criteria pollutants. The proposed project would not result in CO hotspots or substantial objective odors. Because the proposed project would be consistent with the AQMP and would result in less-than-significant impacts pertaining to ozone and localized pollutants, the project's contribution to cumulative air quality impacts would not be cumulatively considerable.



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## 4.3 Biological Resources

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This section evaluates the potential direct and indirect impacts for the proposed project to biological resources, including regulated waterways and wetlands; sensitive vegetation communities and mature native trees; sensitive plants and animals; and wildlife movement corridors. The analysis in this section is based on a reconnaissance-level Biological Resources Evaluation (BRE) and arborist report prepared for the project site (Dudek 2018a; 2018b), as well as a reconnaissance site visit conducted by a Rincon Biologist on June 22, 2020. Additional technical reports were also prepared for the proposed off-site stormwater outfall, the results of which are also incorporated in this section. Technical reports for the stormwater outfall were reviewed, and include: 1) a Biological Resources Assessment (BRA) (Dudek 2020); 2) a Jurisdictional Delineation (JD) Report (Dudek 2019a); 3) a California Red-Legged Frog Habitat Assessment (HA) (Dudek 2019b); and 4) a Special-Status Plant Survey report (Dudek 2019c). The JD, HA, and Special-Status Plant Survey include three options for the location of the off-site stormwater outfall, as they were prepared to inform project design. Option 3 was chosen and incorporated as part of the proposed project because it has the least environmental impacts. Therefore, an evaluation of the potential impacts from options 1 and 2 are not included in this EIR and are not discussed in this section, because options 1 and 2 are no longer under consideration for the proposed project.

The study area evaluated in the 2020 BRA includes the medical office building project site and stormwater outfall site, plus a 300-foot buffer (Dudek 2020). The full technical reports are provided as appendices to this EIR. The BRE and arborist report prepared for the project are provided in Appendix E and Appendix F, respectively. The 2020 BRA is provided as Appendix G, and the JD Report is provided as Appendix H. The HA and Special-Status Plant Survey are provided as Appendix I and Appendix J, respectively.

Other proposed off-site improvements included in the proposed project, such as wastewater line within and beneath Chanticleer Avenue, were not included in biological surveys and field visits because these areas are existing roadways with no wildlife or plant habitat. Because they are existing roadways, there is also no potential for wetlands or other jurisdictional waters.

### 4.3.1 Setting

The medical office building site and stormwater outfall site are in a developed area that is surrounded by a mix of residential, commercial, and light industrial uses. The off-site stormwater outfall is located along the west side of Rodeo Creek Gulch, on the south side of Soquel Avenue, to the east of the project site. The medical office building project site and stormwater outfall site are relatively flat, ranging from 50-feet above mean sea level to 100-feet above mean sea level (Dudek 2019a; see Appendix H). The medical office building project site consists of mostly bare ground, with little ruderal vegetation. The stormwater outfall site and adjacent areas contain riparian oak woodland, disturbed annual grassland, and developed land cover. Sensitive biological resources have been mapped in the vicinity of the project site, and these resources are described in greater detail below.

#### a. Vegetation Communities

Dudek conducted reconnaissance-level surveys at the medical office building project site on August 7, 2018, and at the stormwater outfall site on April 23, 2019. Three vegetation community types

were identified: developed, disturbed annual grassland, and riparian oak woodland (see Appendix G, and Table 4.3-1 below). A description of these vegetation community types follows Table 4.3-1.

**Table 4.3-1 Vegetation Communities and Land Cover Types**

Habitat Type	BRA Study Area (acres)
Developed (including ruderal)	36.89
Disturbed annual grassland	2.29
Riparian oak woodland	5.66
<b>Total</b>	<b>44.84</b>

Source: Dudek 2020

Note: Study area for the BRA includes the medical office building site and stormwater outfall site plus a 300-foot buffer

### *Developed*

Developed areas include transportation routes, parking lots, and commercial land with limited ornamental tree and shrub plantings. This is the only land cover type at the medical office building project site. No vegetation communities were mapped on the medical office building project site (Dudek 2018). The arborist evaluation identified eight non-native trees within the boundary of the medical office building site. Another 21 trees were identified immediately outside of medical office building site. Dominant tree species are largely non-native and ornamental, including London planetree (*Platanus acerifolia*), Arizona ash (*Fraxinus velutina*), bailey acacia (*Acacia baileyana*), Raywood ash (*Fraxinus angustifolia*), and blue gum (*Eucalyptus globulus*) (see Appendix G).

### *Disturbed Annual Grassland*

Disturbed annual grassland contains primarily weedy and non-native species including bur clover (*Medicago polymorpha*), harding grass (*Phalaris* sp.), perennial rye grass (*Festuca perennis*), soft brome (*Bromus hordeaceus*), wild oat (*Avena fatua*), and wild radish (*Raphanus raphanistrum*) (Dudek 2020). This community is located on the west side of Rodeo Creek Gulch.

### *Riparian Oak Woodland*

This community is dominated by coast live oak (*Quercus agrifolia*) with some arroyo willow (*Salix lasiolepis*) and California bay (*Umbellularia californica*). The understory consists of California blackberry (*Rubus ursinus*), curly doc (*Rumex crispus*), English ivy (*Hedera helix*), narrow-leaf plantain (*Plantago lanceolata*), and poison oak (*Toxicodendron diversilobum*) (Dudek 2020). This community occurs within the stormwater outfall site and was heavily disturbed at the time of the field investigations. A significant amount of trash was observed at the bottom of the slope, below the location of the proposed stormwater outfall. Three coast live oak trees (between approximately 4 inches and 10 inches in diameter) are located on the slope just south of Soquel Avenue within the impact area of the stormwater outfall site.

## **b. Jurisdictional Wetlands and Waters**

Certain aquatic resources may be under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife (CDFW). The JD Report identified one jurisdictional intermittent drainage, Rodeo Creek Gulch. At the stormwater outfall site, Rodeo Creek Gulch is highly altered by adjacent development, including Highway 1, Soquel Avenue, and residential and commercial developments (Dudek 2019a;

see Appendix H). A total of 2.82 acres (130 linear feet) of non-wetland waters of the U.S. were delineated (see Table 4.3-2 below and Appendices G and H).

**Table 4.3-2 Delineated USACE, RWQCB, and CDFW Jurisdictional Areas**

Feature	USACE/RWQCB Jurisdiction		RWQCB (Porter-Cologne Act)*	CDFW Jurisdiction
	Non-wetland Waters (acres/linear feet)	Wetland Waters (acres)	Surface Water or Groundwater (acres/linear feet)	Streambed and Associated Riparian (acres/linear feet)
Rodeo Creek Gulch	2.82/130	--	7.61/385	7.61/385

\*Includes streambanks, wetland and edge of riparian or top of bank

Source: Dudek 2019a; 2020

The streambanks of the Rodeo Creek Gulch with its associated riparian habitat are also jurisdictional waters of the state under the Porter-Cologne Act and Section 1600 et seq. of the California Fish and Game Code (CFGC), and subject to the permitting authority of the Central Coast RWQCB and CDFW. As depicted in Table 4.3-2 above, a total of approximately 7.61 acres (385 linear feet) of potential waters of the state are present in the stormwater outfall site (Dudek 2019a). All potential waters of the state occur in the stormwater outfall site.

Rincon also reviewed a jurisdictional delineation of a drainage ditch conducted on the property adjacent to the medical office building site in 2008 (Ecosystems West Consulting Group). Aerial imagery was also used to evaluate this feature. Existing site plans include a culvert under the proposed project site that likely connects with this ditch east of the medical office building site. This ditch contains a potentially jurisdictional wetland; however, it is highly degraded by surrounding development and site conditions.

### c. Special-Status Species

Special-status species are those plants and animals that are one or more of the following:

- Listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act;
- Listed or candidates for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act;
- Designated as “Species of Special Concern” or “fully protected” by CDFW; and
- CDFW Special Plants, specifically those with a California Rare Plant Rank of 1A, 1B and 2 as assigned by the California Native Plant Society’s *Inventory of Rare and Endangered Vascular Plants of California, Online Edition* (CNPS 2020).

Some special-status wildlife species are also considered to be of “local concern.” Animals in this category are of concern because they have limited distributions, are experiencing local or regional population declines, are vulnerable to current or future threats to their preferred habitat, and/or are of unusual scientific, recreational, or educational value.

A target list of special-status plant and animal species that could potentially occur onsite was developed based on a review of the BRE and BRA for the medical office building project site and off-site stormwater outfall site (Dudek 2018, and 2020), the most recent version of the California Natural Diversity Database (CDFW 2020), and general knowledge of the regional flora and fauna. Dudek biologists conducted a site visit at the medical office building project site on August 7, 2018,

and at the stormwater outfall site on April 23, 2019. Focused special-status plant surveys were conducted at the stormwater outfall site on May 22 and June 20, 2019. A reconnaissance survey for the California red-legged frog (*Rana draytonii*) HA was conducted at the stormwater outfall site on November 13, 2019, to determine potential for California red-legged frog.

### *Special-Status Plant Species*

The BRE notes that the medical office building project site does not contain native or natural vegetation communities and vegetation in this area is highly disturbed, therefore no special-status plants are expected to occur in the medical office building site (Dudek 2018). The potential for special-status plants is limited to the disturbed annual grassland and riparian oak woodland habitat at the stormwater outfall site. The BRA identified 50 special-status plant species that occur in the project region, which was defined as the *Soquel California* USGS 7.5-minute topographic quadrangles and the six surrounding quadrangles (Appendix G). According to the BRA, all but two of these species were assessed as not likely to occur at the stormwater outfall site for one or more of the following reasons:

- Absence of suitable habitat types;
- Lack of specific microhabitat or edaphic requirements, such as serpentine, alkaline, or sandy soils;
- The elevation range of the species is outside of the range of the stormwater outfall site; and/or
- Outside the range of the species previously known occurrences.

The BRA identified suitable habitat for Santa Cruz tarplant (*Holocarpha micradenia*) and white-rayed pentachaeta (*Pentachaeta bellidiflora*) within riparian habitat along Rodeo Creek Gulch. Santa Cruz tarplant is listed as threatened by USFWS and endangered by CDFW. White-rayed pentachaeta is listed as endangered by USFWS and CDFW. However, these species were not observed onsite during focused botanical surveys conducted within the appropriate blooming period in 2019, and no other special-status plant species were observed (Dudek 2019c; see Appendix J). Therefore, no special-status plant species are known to occur in the medical office building project or stormwater outfall sites.

### *Special-Status Wildlife Species*

The BRA identified 36 special-status wildlife species that occur in the project region. Given its disturbed condition and ongoing storage and disposal uses, the project site does not contain adequate habitat to support any of the 36 special-status wildlife species. However, bird species protected by CFGC have the potential to nest in ornamental or ruderal vegetation (Dudek 2018). The BRA determined three special-status species have a moderate potential to occur in the stormwater outfall site due to the proximity to aquatic and riparian habitats. These three species include: western pond turtle (*Actinemys marmorata*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*).

Four additional species were discussed based on historical occurrences and regional significance but are not expected to occur in the medical office building site or stormwater outfall site due to the lack of suitable micro habitats. These species include tidewater goby (*Eucyclogobius newberryi*); steelhead (*Oncorhynchus mykiss irideus*); coho salmon (*Oncorhynchus kisutch*); and California red-legged frog (*Rana draytonii*, CRLF). Suitable aquatic habitat for CRLF does not occur in or near the medical office building site and stormwater outfall site. No known populations of California red-legged frog occur within a mile of the stormwater outfall site (Dudek, 2019b; see Appendix I), and

the nearest known occurrences are in the upper San Lorenzo and Soquel Creek watersheds. These watersheds are approximately 7.7 to 8.3 miles away from the stormwater outfall area (Dudek 2019b; see Appendix I). Rodeo Creek Gulch is also channelized and lacks suitable microhabitat features for this species, such as deep off-channel ponds and wetlands with emergent vegetation, and the project impact area is unlikely to provide dispersal habitat for juveniles or non-breeding habitat for adults, with no potential source populations nearby.

Steelhead and coho salmon have not been reported in Rodeo Creek Gulch, and the intermittent nature of the creek would likely limit overwintering, spawning, and juvenile rearing habitat. Tidewater goby is restricted to brackish water habitats downstream in the Corcoran Lagoon, and is not expected to occur in the vicinity of the stormwater outfall site. This species is found in the upper estuary, at the freshwater saltwater interface, and only a short distance upstream. The stormwater outfall site is approximately 1.4 miles upstream of the lagoon; therefore, tidewater goby would not occur in Rodeo Creek Gulch adjacent to the stormwater outfall site.

Three species have a low potential to occur: California giant salamander (*Dicamptodon ensatus*); white-tailed kite (*Elanus leucurus*); and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). In summary, the following special-status species have low to moderate potential to occur within the stormwater outfall site:

- western pond turtle; California Species of Special Concern (SSC); moderate potential
- pallid bat; SSC; moderate potential
- Townsend's big-eared bat; SSC; moderate potential
- California giant salamander; SSC; low potential
- white-tailed kite; Fully Protected; low potential
- San Francisco dusky-footed woodrat; SSC; low potential

#### *Other Protected Species*

Non-game migratory birds protected under the CFGC Section 3503 have the potential to breed throughout all parts of the medical office building site and stormwater outfall site. Native avian species common to oak woodland, riparian and grasslands, landscaping, developed and ruderal areas have the potential to breed and forage throughout the medical office building site and stormwater outfall site. Species of birds common to the area that typically occur in the region include black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), house finch (*Haemorhous mexicanus*), American crow (*Corvus brachyrhynchos*), and Brewer's blackbird (*Euphagus cyanocephalus*).

#### **d. Sensitive Plant Communities and Critical Habitats**

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. The methodology for determining sensitivity continues to be revised and is now based on "A Manual of California Vegetation, Second Edition" (Sawyer et al. 2009). Communities considered sensitive by CDFW are published in the California Sensitive Natural Communities List (CDFW 2019b).

The *Quercus agrifolia-Salix lasiolepis* and *Quercus agrifolia-Umbellularia californica* alliances are both considered sensitive by CDFW. However, the riparian oak woodlands within the stormwater outfall site are heavily disturbed, and isolated by development, therefore would not be considered a sensitive vegetation community.

A review of USFWS online critical habitat mapper revealed several designated critical habitats within the area of the proposed project; however, no critical habitats occur within or immediately adjacent to the medical office building site and stormwater outfall site. Federally designated critical habitats within 10 miles of the medical office building site and stormwater outfall site include tidewater goby (approximately 1.4 miles downstream of the outfall area), Santa Cruz tarplant (approximately 1 mile west of the medical office building site and stormwater outfall site), and Robust spineflower (*Chorizanthe robusta* var. *robusta*) (approximately 2.1 miles west of the medical office building site and stormwater outfall site) (USFWS 2020).

#### e. Wildlife Corridors

Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return.

Rodeo Creek Gulch likely functions as a corridor for local wildlife movement; however, the location of the proposed stormwater outfall is on the outer edge of the riparian corridor adjacent to a largely developed area, and is not within a California Essential Habitat Connectivity area (Spencer et al. 2020). Additionally, the medical office building project site is located within a developed area and is enclosed by a fence that is approximately 6 feet tall, restricting passage across the site for mammals unable to jump the fence or small enough to fit between chain link. Therefore, the medical office building project site is not likely to function as a significant corridor for regional wildlife movement.

#### f. Resources Protected by Local Policies and Ordinances

The stormwater outfall site is located within Rodeo Creek Gulch, which contains sensitive habitat protected by local policies and ordinances. Oak woodlands, perennial drainages, riparian corridors, and habitat for special-status species are considered sensitive habitats and offered special protections under Santa Cruz County's Sensitive Habitat Protection and Riparian Corridor and Wetlands Protection ordinances (Santa Cruz County Code Chapters 16.30 and 16.32).

The project is located outside of the Coastal Zone, so the regulations for protection of Significant Trees in County Code Chapter 16.34 do not apply.

### 4.3.2 Regulatory Setting

#### a. Federal Regulations

##### *Clean Water Act*

Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of the USACE under provisions of Section 404 of the Clean Water Act. Waters of the U.S., as defined by the 2020 Navigable Waters Protection Rule (85 FR 22250) include the territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters (33 Code of Federal Regulations, Part 328.3). Wetlands are generally identified by examining the vegetation, soils, and hydrology of an area use the "Routine Determination Method, On-Site Inspection Necessary (Section D)" outlined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). In non-tidal waters, USACE

jurisdiction extends to the ordinary high-water mark, which is defined in Title 33, Code of Federal Regulations, Part 328.3, as “the line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris.” This guidance is based on the identification of the ordinary high-water mark through examination of physical evidence of surface flow in the stream channel; there is no hydrologic definition of the ordinary high-water mark. Construction activities that directly impact waters of the U.S., such as grading and fill placement, require a Section 404 permit from the USACE.

#### *Federal Endangered Species Act*

The federal Endangered Species Act protects federally listed wildlife species from harm or take, which is broadly defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as take even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the federal Endangered Species Act only if they occur on federal lands or if the take would occur in violation of state law.

The USFWS and the National Oceanic and Atmospheric Administration (NOAA) Fisheries have jurisdiction over federally listed threatened, and endangered species under federal Endangered Species Act. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under the federal Endangered Species Act, but they may become listed in the near future and are often included in their review of a project.

#### *Federal Migratory Bird Treaty Act*

The federal Migratory Bird Treaty Act, 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The Migratory Bird Treaty Act protects whole birds, parts of birds, and bird eggs and nests; and prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described by the Department of the Interior in its April 16, 2003 Migratory Bird Permit Memorandum. Nests that are under construction and do not yet contain eggs are not protected from destruction.

### **b. State Regulations**

#### *Porter-Cologne Water Quality Control Act*

The State Water Resources Control Board (SWRCB) works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority to regulate activities that could result in a discharge of waste into waters of the State comes from the Clean Water Act and the Porter-Cologne Water Quality Control Act (Porter-Cologne).

Porter-Cologne broadly defines waters of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Because Porter-Cologne applies to any water, whereas the Clean Water Act applies only to certain waters, California’s jurisdictional reach overlaps and may exceed the boundaries of waters of the United States. For example, Water Quality Order



No. 2004-0004-DWQ states that “shallow” waters of the state include headwaters, wetlands, and riparian areas. In practice, some RWQCBs often claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters and urbanized areas, jurisdiction is taken to the top of bank or ordinary high watermark. The SWRCB has recently developed a Water Quality Control Policy that addresses numerous policy elements including development of a wetland definition and description of methodology to be used in defining wetlands as part of waters of the state which took effect on May 28. (SWRCB 2019).

Pursuant to Section 401 of the Clean Water Act, projects that are regulated by the USACE must obtain a Water Quality Certification from the RWQCB. This certification ensures that the proposed project upholds state water quality standards.

#### *California Endangered Species Act*

The California Endangered Species Act (CFGC, Chapter 1.5, Sections 2050- 2116) prohibits the take of any plant or animal listed or candidates for listing as threatened or endangered. The California Endangered Species Act also prohibits that take of any plant listed or proposed for listing as rare. In accordance with the California Endangered Species Act, the CDFW has jurisdiction over state-listed species (CFGC Section 2070). The CDFW regulates activities that may result in take of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of take under the CFGC. The CDFW, however, has interpreted take to include the “killing of a member of a species which is the proximate result of habitat modification.”

#### *California Fish and Game Code*

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Streams are defined in Title 14, California Code of Regulations Section 1.72, as “a body of water that follows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Guided by this definition, CDFW extends its jurisdiction to encompass riparian habitats that function as a part of a watercourse. CFGC Section 2786 defines riparian habitat as “lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source.” The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction over a stream’s bed and bank. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to CFGC Section 1602, CDFW regulates any project proposed by any person that will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds.” CFGC Section 1602 requires an entity to notify CDFW of any proposed activity that may modify a river, stream, or lake. If CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement must be prepared. The Lake and Streambed Alteration Agreement sets reasonable conditions necessary to

protect fish and wildlife. The applicant may then proceed with the activity in accordance with the final Lake and Streambed Alteration Agreement.

Certain sections of the CFGC describe regulations pertaining to protection of certain wildlife species. For example, CFGC Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The CFGC Sections 3503, 3513, and 3800, as well as other sections protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered take by the CDFW. Raptors, such as eagles, hawks, and owls, and their nests are specifically protected under CFGC Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

Bats and other non-game mammals are protected by CFGC Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of nongame mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered take by the CDFW.

### c. Local Regulations

#### *County of Santa Cruz General Plan and Local Coastal Program*

The County of Santa Cruz General Plan and Local Coastal Program provides the following objectives and policies to protect biological resources (Santa Cruz County 1994).

**Objective 5.1. Biological Diversity.** To maintain the biological diversity of the County through an integrated program of open space acquisition and protection, identification and protection of plant habitat and wildlife corridors and habitats, low-intensity and resource compatible land uses in sensitive habitats and mitigations on projects and resource extraction to reduce impacts on plant and animal life.

**Policy 5.1.2. Definition of Sensitive Habitat.** An area is defined as a sensitive habitat if it meets one or more of the following criteria:

- (a) Areas of special biological significance as identified by the State Water Resources Control Board.
- (b) Areas which provide habitat for locally unique biotic species/communities, including coastal scrub, maritime chaparral, native rhododendrons, and associated Elkgrass, mapped grasslands in the Coastal Zone, and sand parkland’ and Special Forests including San Andreas Coast Live Oak Woodlands, Valley Oak, Santa Cruz Cypress, indigenous Ponderosa Pine, indigenous Monterey Pine and ancient forests.
- (c) Areas adjacent to essential habitats of rare, endangered or threatened species as defined by (e) and (f) below.
- (d) Areas which provide habitat for Species of Special Concern as listed by the California Department of Fish and Game in Special Animals list, Natural Diversity Database.
- (e) Areas which provide habitat for rare or endangered species which meet the definition of Section 15380 of the California Environmental Quality Act.

- (f) Areas which provide habitat for rare, endangered or threatened species as designated by the State Fish and Game Commission, United States Fish and Wildlife Service, or CNPS.
- (g) Nearshore reefs, rocky intertidal areas, seacaves, islets, offshore rocks, kelp beds, marine mammal hauling grounds, sand beaches, shorebird roosting, resting and nesting areas, cliff nesting areas and marine, wildlife or educational/research reserves.
- (h) Dune plant habitats
- (i) All lakes, wetlands, estuaries, lagoons, streams and rivers
- (j) Riparian corridors.

**Policy 5.1.6. Development in Sensitive Habitats.** Sensitive Habitats shall be protected against a significant disruption of habitat values; and any proposed development within or adjacent to these areas must maintain or enhance functional capacity of the habitat. Reduce in scale, redesign, or if no other alternative exists, deny any project which cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of project is legally necessary to allow a reasonable use of the land.

### *Santa Cruz County Code*

#### **SENSITIVE HABITAT PROTECTION ORDINANCE**

The County of Santa Cruz Sensitive Habitat Protection Ordinance (Santa Cruz County Code Chapter 16.32) is intended to “minimize the disturbance of biotic communities which are rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activity.” Sensitive habitats under the Santa Cruz County Code relevant to the project include areas that provide habitat for locally unique biotic species/communities, such as oak woodlands and coastal scrub; areas adjacent to essential habitats of rare, endangered or threatened species, or other rare species considered under CEQA; dunes, wetlands, lagoons, rivers, and riparian corridors; and areas defined as an Environmental Sensitive Habitat Area under the Coastal Act.

A project is required to mitigate any unavoidable environmental impacts to sensitive habitats. The ordinance calls for protection of sensitive habitats “undisturbed by the proposed development activity” or on an adjacent parcel through measures such as conservation easements. Additionally, restoration “commensurate with the scale of the proposed development” is required for degradation of sensitive habitats caused by a project. Exemptions to this ordinance may be granted concurrently with authorized riparian exceptions.

#### **RIPARIAN CORRIDOR AND WETLANDS PROTECTION ORDINANCE**

The County of Santa Cruz Riparian Corridor and Wetlands Protection Ordinance (Santa Cruz County Code Chapter 16.30) limits development activities in riparian areas<sup>1</sup> and provides buffer/setback requirements<sup>2</sup> based on slope and vegetation composition. Riparian setback exceptions may be authorized by the County on a case by case basis. Exceptions are granted pending an approved application stating the applicant’s proposed activities, best management practices (BMPs), and measures for mitigating impacts to the riparian corridor. Riparian Exception Findings (SCCC

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<sup>1</sup> The Santa Cruz County Code defines riparian vegetation/woodland as “those plant species/woody plant species that typically occur in wet areas along streams or marshes” (Santa Cruz County Code 16.30.030). See also USFWS definition of riparian habitat under the Sensitive Habitats section (USFWS 2009).

<sup>2</sup> The ordinance states that a buffer “shall always extend 50 feet beyond the edge of riparian woodland for perennial streams and 20 feet beyond the edge of other woody vegetation as determined by the dripline” (Section 16.330.040).

16.30.060) must be met for a Riparian Exception to be authorized. Exemptions to the provisions of this Chapter (SCCC 16.30.050) include activities associated with drainage, erosion control, or habitat restoration measures required as a condition of County approval of a permitted project.

### 4.3.3 Impact Analysis

#### a. Methodology and Significance Thresholds

##### Methodology

The impact analysis is based on available literature regarding the existing biological resources within the medical office building site and stormwater outfall site, as described in the previous sections. Other proposed off-site improvements included in the proposed project, such as the wastewater line within and beneath Chanticleer Avenue and off-site intersection modifications, were not included in the following the impact assessment because these areas are within existing roadways. Existing roadways have no biological resources, including wildlife or plant habitat, wildlife corridors, or potential for wetlands and other jurisdictional waters. Therefore, these proposed off-site improvements would have no additional impacts to biological resources.

##### Significance Thresholds

In accordance with Appendix G of the State *CEQA Guidelines*, the project would have a significant impact if it would:

- 1) 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 Wildlife or U.S. Fish and Wildlife Service;
- 2) 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 Wildlife or U.S. Fish and Wildlife Service;
- 3) Have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 4) 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;
- 5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- 6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project 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 Wildlife or U.S. Fish and Wildlife Service?

**IMPACT BIO-1** THE PROPOSED PROJECT WOULD HAVE A SUBSTANTIAL ADVERSE EFFECT ON SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL-STATUS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

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### Plant Species

No sensitive or special-status plant species are expected to occur within the medical office building site or stormwater outfall site. Therefore, no impacts to special-status plant species would occur from implementation of the proposed project.

### Wildlife Species

The medical office building site does not contain suitable habitat for special-status wildlife.

The stormwater outfall site provides marginally suitable habitat for western pond turtle, pallid bat, and Townsend's big-eared bat. Additionally, there is a low potential for California giant salamander, white-tailed kite, and San Francisco dusky-footed woodrat. The stormwater outfall could result in injury or mortality of western pond turtle, California giant salamander, and San Francisco dusky-footed woodrat if individuals are present during construction, but would not result in a significant amount of habitat loss given the location on a hill side adjacent to a road and small size of disturbance (0.06 acre). Impacts to these species could also occur if construction debris, equipment, or leaks are allowed to enter the creek. Construction BMPs required pursuant to State regulations, including, but not limited to, dust control, spill prevention, and erosion control, would prevent off site impacts to aquatic and terrestrial species. State regulations pertaining to BMPs to protect water quality are detailed in Section 4.9, *Hydrology and Water Quality*.

Both the medical office building site and the stormwater outfall site contain trees that may provide habitat for nesting birds and roosting bats. Five trees would require removal for the proposed development at the medical office building site--two bailey acacia and three Raywood ash (Dudek 2018b). Three coast live oak trees will be removed at the stormwater outfall site.

Impacts to pallid bat, Townsend's big-eared bat, and white-tailed kite could occur if individuals are roosting or nesting in the project vicinity and could include nest or maternal colony abandonment as a result of disturbance. Additionally, impacts to nesting birds protected by CFGC could also occur through direct mortality if active nests are present in vegetation to be removed, or in the vicinity through disturbance. Injury or mortality to one of more special-status wildlife species or take of migratory nesting birds or their nests would be a potentially significant impact. The following mitigation measures are required to reduce impacts to less than significant.

## Mitigation Measures

### *BIO-1a Construction Worker Environmental Awareness Training*

A qualified biologist shall conduct an education program for all persons employed on the project prior to performing construction activities. The presentation given by the qualified biologist shall include a discussion of the biology and general behavior of all special-status species that may be in the construction area, how they may be encountered within the work area, and procedures to follow when they are encountered. The training shall also include information about BMPs to be implemented, identification of the limits of work, project-specific avoidance measures, and permit conditions that must be followed. The qualified biologist shall prepare and distribute handouts containing this information for workers to carry on site. Interpretation shall be provided for non-English-speaking workers. All personnel working on the site shall receive this training and shall sign a sign-in sheet showing they received the training. Any personnel joining the work crew later shall receive the same training before beginning work on construction of the project.

### *BIO- 1b Limits of Work*

Prior to commencement of construction activities within the riparian corridor of Rodeo Creek Gulch, the limits of construction shall be identified with the assistance of a biologist to maximize native vegetation retention. High visibility construction fencing or flagging shall be installed around the limits of work to prevent inadvertent grading or other disturbance within the surrounding habitats. No work-related activity, including equipment staging, vehicular access, grading, and/or vegetation removal shall be allowed outside of the limits of work.

### *BIO-1c Preconstruction Survey*

Within 48 hours prior to commencement of project activities within the riparian corridor of Rodeo Creek Gulch, a qualified biologist shall conduct a pre-construction survey for special-status species including western pond turtle and California giant salamander, and other special-status amphibians. The survey area shall include all suitable habitat within a 50-foot buffer of the stormwater outfall site. Suitable habitat for these species occurs within Rodeo Creek and associated coast live oak riparian woodlands where the stormwater outfall is proposed for construction. If any individual special-status species are observed during the pre-construction survey, their location(s) shall be recorded and identified for avoidance. If avoidance is not feasible, the biologist shall relocate individuals to a location that contains suitable habitat not likely to be affected by proposed project activities

To ensure that adverse impacts to special-status species or their habitat do not occur, a biologist shall be present during initial clearing, grubbing, and ground-disturbing activities in the riparian corridor of Rodeo Creek Gulch.

If a special-status species is identified within the project impact area at any time during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm's way on its own or a qualified biologist shall move the animal out of harm's way to a safe relocation site. The biologist shall have the authority to stop work that may harm or result in the "take" of special-status species, and shall be given enough time to move the animal out of harm's way.

If a western pond turtle egg clutch is discovered during pre-construction surveys, or during construction, work in the vicinity of the egg clutch shall be halted immediately. Unless otherwise advised by CDFW, the nest location shall be surrounded with high visibility fencing under the

guidance of a qualified biologist and shall be avoided until the biologist determines that the clutch has hatched and individuals are no longer likely to be injured by work activities.

At the end of each workday, all excavations within the riparian corridor shall be secured with a cover to prevent wildlife entrapment. No trenches or holes shall be left uncovered overnight.

*BIO-1d San Francisco Dusky-Footed Woodrat*

Within two weeks prior to commencement of construction activities within the riparian corridor of Rodeo Creek Gulch (including clearing and grubbing) a qualified biologist shall survey the project disturbance area to identify any woodrat nest locations that may be affected by the proposed development. All woodrat houses within the construction impact area and immediate surroundings shall be clearly flagged.

If no woodrat nests are found during the survey, no further avoidance and minimization measures for this species are necessary.

If woodrat houses are found, the construction contractor shall avoid the houses to the extent feasible by installing a 25-foot buffer with protective fencing or other material that shall prohibit encroachment. A reduction in the size of this buffer, or encroachment into this buffer, may be allowed if the biologist determines that microhabitat conditions such as shade, cover, and adjacent food sources can be retained.

If avoidance of woodrat houses is not possible, a qualified biologist shall develop and implement a Woodrat Relocation Plan to be implemented prior to the commencement of construction. The plan shall be developed in consultation with CDFW and shall include the following:

- Trapping and relocation activities shall be conducted during the months of August – September when the species is active and young are able to disperse on their own. Trapping efforts shall not take place during low night temperatures (below 40 degrees Fahrenheit) or inclement or extreme weather conditions.
- If no San Francisco dusky-footed woodrats are captured at a given house, it shall be dismantled by hand to ground level, and the woody debris spread to reduce the potential for rebuilding.
- For occupied houses, the existing woodrat house shall be dismantled and the woody debris, including cached food and nesting material, carried to the nearest suitable relocation site outside the Project footprint and used to build an artificial shelter.
- Sites for artificial shelters shall be located as near as possible to the original house location and no closer than 20 feet from existing woodrat houses and other artificial shelters. Choose the best available microhabitat, ideally in a location with sun and shade and if possible under the same species of tree or shrub as was present at the original house location. Relocation sites shall contain biologically suitable habitat features (e.g. stands of poison oak, coast live oaks, and dense native brush).
- When releasing woodrats, the occupied live-trap shall be placed against the entrance to the artificial shelter, opened, and the woodrat allowed to enter, ideally on its own accord. After the individual enters, the entrance shall be loosely but completely plugged with dirt and leaf duff to encourage it to stay, at least for the short-term.
- If occupied houses were relocated, monitoring shall be conducted for 30 days after relocation is completed and include infrared and motion activated cameras and an occupancy assessment. A report on San Francisco dusky-footed woodrat nest monitoring shall be provided to CDFW and County Environmental Planning within 30 days following the end of the monitoring period and

shall include the methods and results of trapping and relocation, occupancy determinations, and discussion of any remedies that may be needed.

#### *BIO-1e Bat Surveys and Avoidance*

To the extent practicable, tree removal and demolition shall occur outside peak bat activity timeframes when young or overwintering bats may be present, which generally occurs from March through April and August through October, to ensure protection of bats and their roosts. Additionally, the timing of construction activities shall be limited to daylight hours to reduce disturbance to roosting and foraging bat species.

A preconstruction bat survey shall be conducted within 14 days of the removal of any trees or demolition of buildings within the medical office building project site and stormwater outfall site and a 50-foot buffer around both sites. The biologist shall have access to all structures and interior attics, as needed. The survey shall consist of a visual emergence survey for bats, completed by a qualified biologist with experience identifying bat roosts and behavior. If a colony of bats is found roosting in a structure or vegetation, sufficient acoustic surveys shall be conducted to determine the species present and the type of roost, such as day, night, or maternity roost.

If a non-breeding and non-wintering bat colony is found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations to ensure their protection and to avoid unnecessary harm. If a maternity colony or overwintering colony is found on the project site or within 50 feet of the site, then the qualified biologist shall establish a suitable non-disturbance buffer around the location in coordination with CDFW. The non-disturbance buffer shall remain in place until the qualified biologist determines that the maternal colony or wintering roost is no longer active.

#### *BIO-1f Nesting Bird Surveys and Avoidance*

Construction and tree removal activities shall be conducted outside of the migratory bird nesting season (February 1 through August 31) if feasible, to reduce any potentially significant impact to birds that may be nesting in the medical office building project site or stormwater outfall site. If construction and tree removal activities must occur during the migratory bird nesting season, an avian nesting survey of the medical office building project site, stormwater outfall site, and contiguous habitat within 300 feet of all impact areas shall be conducted for active nests of protected migratory birds. The avian nesting survey shall be performed by a qualified wildlife biologist within 7 days prior to the start of ground or vegetation disturbance or building demolition activities. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate no disturbance buffer, which shall be determined by the biologist based on the species sensitivity to disturbance (50-250 feet for passerines and 250-500 feet for raptors and special-status species). The nest buffer shall be demarcated in the field with flagging and stakes or construction fencing. Work within the nest avoidance buffer shall be prohibited until the juveniles have fledged.

### **Significance After Mitigation**

With implementation of Mitigation Measures BIO-1a through BIO-1f impacts to special-status species, including migratory nesting birds, would be less than significant.



**Threshold 2:** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

**IMPACT BIO-2** THE PROPOSED PROJECT WOULD HAVE A SUBSTANTIAL ADVERSE EFFECT ON RIPARIAN HABITAT. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

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Riparian habitat and other sensitive natural communities do not occur within the medical office building site. However, riparian oak woodlands do occur along Rodeo Creek Gulch, including within the proposed off-site stormwater outfall site.

Construction of the stormwater outfall would impact approximately 0.06 acre of riparian oak woodlands including removal of three coast live oak trees. Approximately 0.05 acre of the temporarily impacted woodlands will be restored to pre-project conditions immediately following completion of construction. However, the stormwater outfall would permanently displace approximately 0.01 acre of the riparian oak woodlands. With standard construction BMPs and compliance with the National Pollutant Discharge Elimination System (NPDES) Permit, explained further in Section 4.9, *Hydrology and Water Quality*, impacts to riparian habitats outside of construction areas would be avoided. Nonetheless, permanent and temporary impacts to riparian oak woodlands would be potentially significant. BIO-1a and Bio-1b included above for protection of special-status species also protect riparian habitat.

The following mitigation measures are required to further reduce impacts to less than significant.

## Mitigation Measures

### *BIO-2a Erosion and Sediment Control*

Erosion and sediment control measures must be in place, and BMPs adhered to during construction. All disturbed soils shall be stabilized to prevent siltation and reduce sediment and chemical-laden runoff into any drainages or water courses within the project vicinity. No refueling, maintenance, or staging of equipment or vehicles shall occur within 60 feet of aquatic or riparian habitat and not in a location from where a spill would drain directly toward aquatic habitat.

### *BIO-2b Oak Woodland Riparian Revegetation*

Direct impacts to sensitive habitats and jurisdictional non-wetland waters of the state, which consist of the riparian oak woodland habitat adjacent Rodeo Creek Gulch shall be mitigated through on-site rehabilitation to conditions similar to those that existed prior to grading and/or ground-disturbing activities. This shall consist of re-contouring temporarily impacted areas to match pre-project grade and revegetating these areas to match surrounding conditions.

A site-specific Habitat Mitigation and Monitoring Plan (HMMP) shall be developed for compensation of unavoidable temporary and permanent impacts to riparian habitat. The HMMP shall be prepared by a qualified biologist or restoration professional and shall include the following minimum elements:

- a. Identification of areas on site where temporary disturbance and re-establishment of native habitat shall occur. All sensitive habitat areas temporarily disturbed as a result of the project shall be restored to pre-project contours to the maximum extent possible and re-vegetated with native plant species appropriate to the surrounding habitat.

- b. Identification of restoration areas to compensate for permanently impacted riparian habitat. All riparian habitat permanently impacted as a result of the project shall be compensated for at a minimum 1:1 ratio through restoration or establishment of in-kind habitat at designated restoration areas within the stormwater outfall site, or in the nearby riparian corridor.
- c. Riparian restoration areas intended for compensation may be identified along previously disturbed portions of Rodeo Creek Gulch where riparian woodland is degraded and/or not currently present. Enhancement activities may include non-native species removal and revegetation followed by monitoring for all disturbed areas.
- d. The plan shall specify the criteria and standards by which the enhancement actions compensate for impacts of the proposed project on the oak woodland vegetation community.
- e. Discussion of the following shall be included: (1) the enhancement objectives, including the type and amount of revegetation to be implemented, taking into account enhanced areas where non-native invasive vegetation is removed, and replanting specifications that take into account natural regeneration of species; (2) the specific methods to be employed for revegetation; (3) success criteria and monitoring requirements to ensure vegetation community restoration success; and, (4) remedial measures to be implemented in the event that performance standards are not achieved.
- f. Site-specific planting plan intended to inform the re-vegetation efforts. Local plant stock shall be used whenever possible. The plant pallet should include native species common to the surrounding native habitats that are being restored and species, size, and locations of all restoration plantings that will occur.
- g. Five-year management plan for maintenance and monitoring of restored areas to maintain 100 percent survival of installed container stock in year 1, 90 percent survival in years 2-3, and at least 80 percent survival in years 4-5. Replacement plants shall be installed as needed during the monitoring period to meet survival rates. Annual habitat monitoring reports shall be submitted to the County Planning Department by December 31 of each monitoring year.
- h. The project proponent shall be responsible for execution of the 5-year management plan for maintenance and monitoring of restored areas. If responsibility is transferred legally to another entity, County Environmental Planning Staff shall be informed of any such transfer of responsibility.

### **Significance After Mitigation**

Implementation of Mitigation Measures BIO-2a and BIO-2b would reduce impacts to riparian habitat to less than significant.

**Threshold 3:** Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**IMPACT BIO-3 THE PROPOSED PROJECT WOULD HAVE A SUBSTANTIAL ADVERSE EFFECT ON JURISDICTIONAL WATERS OF THE STATE. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.**

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Jurisdictional wetlands and other waters do not occur within the medical office building project site. However, the proposed off-site stormwater outfall would be located in the riparian corridor of Rodeo Creek Gulch. The Creek is a jurisdictional stream. The stormwater outfall would not require work within the ordinary high-water mark of the stream. Therefore, the project would have no direct impacts on wetlands or waters of the United States. However, construction of the stormwater outfall would impact approximately 0.06 acre of riparian oak woodlands adjacent to the creek as described above in Impact BIO-2. Riparian vegetation at the stormwater outfall site is RWQCB and CDFW jurisdictional as part of Rodeo Creek Gulch, a streambed/non-wetland waters of the state. Approximately 0.05 acre of the impacted riparian habitat would be restored following construction. However, the stormwater outfall would permanently displace approximately 0.01 acre of the riparian habitat. With standard construction BMPs, Mitigation Measure BIO-2a and 2b, and compliance with the NPDES Permit, explained further in Section 4.9, *Hydrology and Water Quality*, impacts to riparian habitats outside of the stormwater outfall site would be avoided. Nonetheless, permanent and temporary direct impacts associated with construction of the stormwater outfall would be potentially significant.

Currently, precipitation on the medical office building project site either infiltrates the ground, ponds on the ground surface, or becomes stormwater runoff entering roadside ditches on Soquel Avenue or flowing onto adjacent properties. Additionally, there is an existing underground culvert in the northeast corner of the medical office building project site. The culvert is part of a larger series of pipes and drainage ditches that carry runoff from areas along Soquel Avenue and Highway 1 in the vicinity of the project, including areas north of Highway 1 such as the flea market property. The inlet for the culvert is on the south side of Soquel Avenue, adjacent to the northern boundary of the medical office building project site. The culvert outlet, where stormwater exits the culvert pipe, is in a ditch on the property adjacent to the east of the medical office building project site.

In 2008, a jurisdictional delineation report was prepared for an unrelated project that included the medical office building project site and the adjacent parcel to the east, where the ditch is located (EcoSystems West Consulting Group 2008). The 2008 jurisdictional delineation report states that the ditch wetland may be considered an isolated, man-made ditch excavated in uplands and would not be subject to USACE jurisdiction. However, given the hydrophytic vegetation and standing water present during the delineation, the feature may be jurisdictional by the State under Porter-Cologne, although the ditch is man-made and appears to be regularly maintained to avoid overgrowth of vegetation.

According to the 2008 jurisdictional delineation report, the primary hydrologic sources for the ditch wetland appeared to be from precipitation and surface runoff from areas adjacent to the ditch within the property. However, as described above, the existing culvert pipe on the medical office building project site discharges to the ditch. Therefore, runoff conveyed through the existing culvert pipe also likely contributes to the hydrology of the ditch.

The proposed project would alter drainage patterns, including removal of the existing culvert ditch on the medical office building project site. As described in Section 2, *Project Description*, the proposed project would install a new 72-inch square junction box on the north side of Soquel Avenue to intercept and capture stormwater that currently drains to the inlet of the culvert that cross the medical office building project site and discharges to the ditch wetland on the adjacent property. Instead, the 72-inch square junction box would route stormwater runoff directly to Rodeo Creek Gulch. Additionally, stormwater runoff from the medical office building project site would be captured in the proposed stormwater management facilities and then discharged at the proposed stormwater outfall next to Rodeo Creek Gulch. The proposed stormwater improvements along Soquel Avenue, including the outfall into Rodeo Creek Gulch, are included as Conditions of Approval issued by the County Department of Public Works to restore free-flowing drainage in the area. The improvements would also correct improper drainage in the area, such as stormwater that currently collects and pools in the south portion of the project site.

Because the stormwater improvements would intercept the existing stormwater drainage to the culvert inlet at the north boundary of the project site, the proposed project would eliminate some of the hydrology to the ditch wetland on the property adjacent to the medical office building project site. While the proposed project would interrupt some of hydrology to the adjacent ditch wetland, runoff from areas next to the ditch would continue to flow into the ditch and contribute to hydrology. As described above, according to the 2008 jurisdictional delineation report, the primary hydrologic sources for the ditch wetland appeared to be from precipitation and surface runoff from areas adjacent to the ditch within the property. Nonetheless, the function of this ditch as a wetland is marginal given the location within an industrial area. It is largely unvegetated and has no buffer, is isolated from natural habitat areas, and drains an industrial area that lacks modern water quality BMPs. Additionally, this feature doesn't receive natural flow, and only conveys stormwater runoff from developed areas. Given the small size and disturbed-degraded state of the potential wetlands within this off-site ditch, loss of some hydrology would not have a substantial adverse effect on this wetland or significantly reduce the quality or function as a wetland, therefore impacts to this feature from hydrologic interruption would not be significant.

Direct impacts to non-wetland waters of the state at the stormwater outfall site would be potentially significant. With implementation of mitigation measures BIO-2a and BIO-2b, impacts to jurisdictional features and riparian habitat would be reduced to less than significant.

## Mitigation Measures

Implementation of mitigation measures BIO-2a and BIO-2b, above, is required.

## Significance After Mitigation

Implementation of mitigation measures BIO-2a and BIO-2b would reduce impacts to jurisdictional non-wetlands to less than significant. It should also be noted that impacts to state jurisdictional areas also require regulatory permits from the RWQCB (under the Porter-Cologne Water Quality Act) and CDFW (under CFGC Section 1602), and compliance with any permit conditions therein. Compliance with these conditions would further reduce impacts.

**Threshold 4:** Would the project 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?

**IMPACT BIO-4** THE PROPOSED PROJECT WOULD NOT SUBSTANTIALLY INTERFERE WITH THE MOVEMENT OF FISH OR WILDLIFE OR WITH MIGRATORY CORRIDORS AND NURSERY SITES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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Rodeo Creek Gulch is likely a corridor for local wildlife movement, however impacts would largely be temporary during construction of the stormwater outfall. The completed stormwater outfall would not result in any impediments that would interfere with the movement of fish or wildlife. The ditch wetland on APN 029-021-46, adjacent to the east side of the medical office building project site, is seasonal and isolated on that property and not known to connect to the Monterey Bay. Therefore, impacts on wildlife and fish movement, migratory corridors, and nursery sites would be less than significant without mitigation.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 5:** Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**IMPACT BIO-5** THE PROPOSED PROJECT WOULD HAVE NO CONFLICTS WITH POLICIES AND ORDINANCES PROTECTING BIOLOGICAL RESOURCES, INCLUDING TREE PRESERVATION ORDINANCES. THE PROPOSED PROJECT WOULD HAVE IMPACTS THAT ARE LESS THAN SIGNIFICANT.

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Riparian corridors are considered sensitive habitat under the County's Sensitive Habitat Protection and Riparian Corridor and Wetlands Protection ordinances (SCCC Chapters 16.30 and 16.32). Riparian corridors, as defined by Section 16.30.030 are granted special protections. Development activities are prohibited within riparian corridors unless an Exception is granted, and Riparian Exception Findings (SCCC 16.30.060) must be met for a Riparian Exception to be authorized. Exemptions to the provisions of this Chapter (SCCC 16.30.050) include activities associated with drainage, erosion control, or habitat restoration measures required as a condition of County approval of a permitted project.

The stormwater improvements along Soquel Avenue, including the outfall into Rodeo Creek Gulch, were included as Conditions of Approval issued by the Department of Public Works Stormwater Management Section in comments made in April of 2019 on the civil plans dated 3/27/19 and preliminary stormwater control plan dated 10/24/18. Drainage, erosion control, or habitat restoration measures required as a condition of County approval of a permitted project are exempt from the provisions of Chapter 16.30.

In addition, the development activities at the stormwater outfall site meet the findings of a Riparian Exception in the following ways:

- It is necessary for the proper design and function of an existing facility.

- It will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located.
- It will not reduce or adversely impact the riparian corridor, and there is no feasible, less-environmentally damaging alternative.
- It is in accordance with the purpose of the County's ordinance, the objectives of the General Plan, and the Local Coastal Program Land Use Plan.

Oak woodlands, perennial drainages, riparian corridors, and habitat for special-status species are also offered special protections under Santa Cruz County's Sensitive Habitat Protection ordinance (Chapter 16.32).

Implementation of Mitigation Measures BIO-2a and BIO-2b would reduce impacts to riparian habitat and other sensitive habitats to less than significant. The project is therefore consistent with the County of Santa Cruz Sensitive Habitat and Riparian Corridor and Wetlands Protection Ordinances.

### Mitigation Measures

No further mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and mitigation measures are indicated.

**Threshold 6:** Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**IMPACT BIO-6** THE PROPOSED PROJECT WOULD HAVE NO CONFLICTS WITH A HABITAT CONSERVATION PLAN OR NATURAL COMMUNITY CONSERVATION PLAN. THE PROPOSED PROJECT WOULD HAVE NO IMPACT.

The medical office building project site and stormwater outfall site are not located within the jurisdiction of an adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan (CDFW 2019a). Thus, no impact would occur.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

## 4.3.4 Cumulative Impacts

The cumulative setting for biological resources includes proposed developments in Santa Cruz County. This cumulative extent is appropriate because it encompasses the mosaic of representative habitat types (and associated biological resources) affected by the proposed project, including creeks and drainages, natural communities, and coastal development. The proposed project is located in Santa Cruz County between the cities of Santa Cruz and Capitola. Project activities would occur in this area, and the interaction between the affected environment and project activities and facilities would be limited to this area.

Cumulative projects in in this geographic extent are listed in Table 3-1 in Section 3, *Environmental Setting*. They include, but are not limited to: Capitola Road Extension, Workbench affordable housing, Mattison Lane Residential Project, Dominican Hospital, CVS on Commercial Way Capitola and 7th Mixed Use Project, and many other housing, commercial, mixed use, and recreational projects. Both construction of the proposed housing projects and commercial projects would result in increased development and re-development within urban areas.

Taken cumulatively, these impacts would not result in degradation of the natural habitat types and associated biological resources that occur within the cumulative setting in the Santa Cruz/Capitola area due to the level of existing development, and would not result in overall diminished regional ecological functions and values in these urban areas. However, impacts to biological resources would be considered and mitigated on a project-by-project basis. Permanent losses of sensitive habitats, including sensitive natural communities and listed species, associated with cumulative development would be mitigated to a less than significant level. As such, cumulative impacts would be significant but mitigable.

Mitigation measures for biological resources identified in this EIR would reduce project-level impacts to a less than significant level. Mitigation Measures BIO-1a through BIO-1f require avoidance to special-status species. Mitigation Measure BIO-2a requires erosion control and BIO-2b prescribes the development of a project-specific Habitat Mitigation and Monitoring Plan (HMMP), which would mitigate permanent loss of natural communities, and mitigate impacts to other sensitive biological resources known to occur within the project area. The HMMP would specifically address and mitigate for the degradation of riparian oak woodlands, which would minimize the project's contribution to potential cumulative impacts. Outcomes would be monitored both quantitatively and qualitatively to ensure performance criteria are met, and adaptive management strategies would be employed to ensure long-term viability, functions, and values of biological resources in the immediate area around the project.

Mitigation measures outlined in this section would reduce project-level impacts to a less than significant level and would ensure that the project's contribution to cumulative biological resources impacts would not be cumulatively considerable.

## 4.4 Cultural Resources

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This section describes the prehistoric, ethnographic, and historic background of the project region. This section also analyzes the potential impacts to cultural resources that could result from implementation of the proposed project. Cultural resources are defined as follows:

- *Historical resource* is defined in the *State CEQA Guidelines* as a building, site, structure, object, or district, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance, or is eligible for listing or is listed in the California Register of Historical Resources (CRHR).
- *Historic properties* is a term defined by the National Historic Preservation Act (NHPA) as any prehistoric or historic district, site, building, structure, or object included on, or eligible for inclusion on, the National Register of Historic Places (NRHP), including artifacts, records, and material remains related to such property (NPS 2015).
- *Unique archaeological resource* is defined in *State CEQA Guidelines* as an artifact, object, or site associated with an important historic or prehistoric event, contains a special quality or characteristic, or provides information on scientific progress, environmental adaptations, group ideology, or other human advancements.

This section is based primarily on a Cultural Resources Assessment prepared for the project by Dudek in October 2018. The 2018 report is included as Appendix K to this EIR.

### 4.4.1 Setting

The project site lies in what is generally described as the Central Coast Archaeological Region, one of eight organizational divisions of the state. This region extends from the area south of San Francisco to Morro Bay, and includes all of Santa Cruz County.

#### Regional Prehistory

It is generally believed that human occupation of California began at least 10,000 years before present. The archaeological record indicates that between approximately 10,000 and 8,000 before present, a predominantly hunting economy existed, characterized by archaeological sites containing numerous projectile points and butchered large animal bones. Animals that were hunted probably consisted mostly of large species still alive today. Bones of extinct species have been found but cannot definitively be associated with human artifacts. Although small animal bones and plant grinding tools are rarely found within archaeological sites of this period, small game and floral foods were probably exploited on a limited basis. A lack of deep cultural deposits from this period suggests that groups included only small numbers of individuals who did not often stay in one place for extended periods. However, north of the project site, at the Metcalf site in southern Santa Clara Valley, archaeologists recovered two large side-notched points associated with charcoal dates ranging from 9,960 to 8,500 years ago. South of the project site, in San Luis Obispo County, archaeological sites yielded radiocarbon dates from approximately 9,000 years ago (Dudek 2018; see Appendix K).

Around 8,000 before present, there was a shift in focus from hunting towards a greater reliance on plant resources. Archaeological evidence of this trend consists of a much greater number of milling tools for processing seeds and other vegetable matter. Sites are often associated with shellfish remains and small mammal bones, which suggests a collecting-focused economy. This period, which



extended until around 3,500 years before present, is sometimes referred to as the Millingstone Horizon. Projectile points are found in archaeological sites from this period, but they are far fewer in number than from sites dating to before 8,000 before present. People living during this period are thought to have been highly mobile (Dudek 2018; see Appendix K).

In sites dating to after about 3,500 before present, archaeological evidence indicates that reliance on both plant gathering and hunting continued as in the previous period, with more specialized adaptation to particular environments. Mortars and pestles were added to milling tools for grinding seeds and other vegetable material. Flaked-stone tools became more refined and specialized, and bone tools were more common. During this period, new peoples from the Great Basin began entering southern California. These immigrants, who spoke a language of the Uto-Aztecan linguistic stock, seem to have displaced or absorbed the earlier population of Hokan-speaking peoples. During this period, known as the Late Horizon, population densities were higher than before, and settlement became concentrated in villages and communities along the coast and interior valleys. Regional subcultures also started to develop, each with its own geographical territory and language or dialect. These were most likely the basis for the groups encountered by the first Europeans during the eighteenth century. Despite the regional differences, many material culture traits were shared among groups, indicating a great deal of interaction. The introduction of the bow and arrow into the region sometime around 2,000 before present is indicated by the presence of small projectile points (Dudek 2018; see Appendix K).

The project site lies within an area traditionally occupied by the Ohlone, or Costanoan, people. Ohlone territory extends from San Pablo Bay to Point Sur, with the inland boundary most likely constituted by the interior Coast Ranges (Kroeber, 1925). The Ohlone language belongs to the Penutian family, with several distinct dialects throughout the region (Kroeber, 1925). Ohlone subsistence was based on hunting, gathering, and fishing (Kroeber 1925; Skowronek, 1998). Seven Franciscan missions were built within Ohlone territory in the late 1700s, and members of the Ohlone group were eventually brought into the mission system (Kroeber, 1925; Skowronek, 1998). The descendants of the Ohlone united in 1971 and have since arranged political and cultural organizations to revitalize aspects of their culture (Skowronek, 1998). Please refer to Section 4.15, *Tribal Cultural Resources*, for more information on tribal cultural resources.

## Regional History

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He reported that Monterey was an excellent location for a port. Despite its advantages for a Spanish port, the epicenter of Spanish settlement into the Monterey Bay did not occur until the second half of the eighteenth century (Dudek 2018; see Appendix K).

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterey Bay Area in 1769. The expedition reached what is now present-day Live Oak on October 17, 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and pueblos (towns) were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in

Sonoma established in 1823. The Mission Santa Cruz was established in 1791. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. Presidios were established at San Francisco and Monterey (Dudek 2018; see Appendix K).

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California with its capitol at Monterey. The Mexican government closed the missions in the 1830s and former mission lands, as well as previously unoccupied areas, were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or “ranchos” (Robinson 1948). During the Mexican period there were small towns at San Francisco (then known as Yerba Buena) and Monterey. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848 (Dudek 2018; see Appendix K).

The American period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Santa Cruz was designated as one of the 27 original counties in California in February 1850. The lumber, fishing, lime, cement, and leisure industries formed the economic foundation of the County (Dudek 2018; see Appendix K).

The project site is in the Live Oak region of the County. The name Live Oak is derived from the title Alejandro Rodriguez gave to his newly settled 1,500-acre territory known as *Rancho Encinalito Del Rodeo*. In Spanish, the word *Encino* indicates a variety of evergreen white oak common to regions in Europe. Upon settling the area, Alejandro encountered a vast quantity of trees commonly known as the Live Oak, which is similar to the European variety (Dudek 2018; see Appendix K).

## Project Setting

The Area of Potential Effects (APE) for cultural resources consists of the project site and the proposed stormwater outfall area along Rodeo Creek Gulch. In order to comply with County Ordinances (Santa Cruz County Code Chapter 16.40) and CEQA, the following tasks were completed: 1) background historical research and a records search at the Northwest Information Center (NWIC); 2) initial outreach with the Native American Heritage Commission (NAHC) and local Native American Tribes to determine if there are any Tribal or other cultural resources in the APE of significance to these communities; 3) pedestrian field survey of the entire APE; and 4) preparation of a Cultural Resources Assessment.

Dudek conducted a background cultural resource records search at the California Historical Resource Information System Northwest Information Center (NWIC) located at Sonoma State University to identify previous cultural resources work and previously recorded cultural resources within a one-half mile radius of the project site. Due to the large quantity of previously conducted studies in the area, Dudek reduced the geographic search radius to one-fourth mile radius of the project site. Because the record search includes a one-fourth mile area surrounding the project site, the search included the entire APE. The records search results were received on September 14, 2018 and revealed no previous archaeological studies have been conducted within the APE. However, nine studies had been conducted within a one-fourth mile radius of the project site. No resources are recorded within the APE and two resources are recorded within a one-fourth mile radius of the project site: Highway 1, which runs in an east-west trajectory north of the project site, and a prehistoric lithic isolate.

Dudek archaeologist Sarah Brewer conducted an archaeological survey of the project site on September 5, 2018. A Dudek archaeologist conducted an archaeological survey of the remaining portion of the APE (i.e., proposed stormwater outfall along Rodeo Creek Gulch) on November 18, 2020. Despite visibility challenges due to the project site's current use as a junkyard and miscellaneous storage space, enough ground surface was visible to conduct an adequate inspection for cultural resources. No archaeological resources were identified in the APE during the surveys.

Given the presence of multiple known precontact and historic period sites within a half-mile of the APE, there is a possibility that previously undiscovered subsurface archaeological resources exist that are not visible on the surface or on available historic imagery, and therefore not identified during field studies. Additionally, the County maintains an inventory of archaeological resource areas, identifying areas more sensitive for potential for cultural resources to occur. The proposed stormwater outfall area along Rodeo Creek Gulch is within an archaeological resources area mapped by the County. No other portions of the APE are within a mapped archaeological resources area.

#### **NATIVE AMERICAN CONSULTATION**

The County conducted consultation with California Native American Tribes pursuant to Senate Bill (SB) 18 and California Government Code Section 65352.3. Due to the proposed General Plan amendment, the County notified and consulted with five California Native American Tribes. Native American tribal contacts provided by the Native American Heritage Commission (NAHC) to comply with SB 18. Following the end of the specified 90-day consulting period, no comments were received. The consultation letters sent by the County identified the project site only, since proposed off-site improvements, such as the stormwater outfall along Rodeo Creek Gulch do not require a General Plan amendment, which is the trigger for SB 18 consultation.

As part of the Cultural Resources Assessment, Dudek sent a request to the NAHC on August 13, 2018 to check the project site against their Sacred Lands File and requested a list of Native American representatives who may have additional information about cultural resources in the project vicinity. NAHC responded on August 17, 2018 with a letter confirming a negative finding on the Sacred Lands File search and providing a list of Native American representatives. No Native American groups were contacted by Dudek regarding this study in 2018. However, in December 2020, Dudek sent letters to the California Native American Tribes that the County first contacted as part of its SB 18 consultation. The follow-up letter described the proposed stormwater outfall along Rodeo Creek Gulch, which was not described in the County's consultation letters. At the time of preparation of this EIR, no response or comments were received.

### 4.4.2 Regulatory Setting

#### **a. State Regulations**

##### *Public Resources Code Section 5024.1*

Under California law, cultural resources are protected by Public Resource Code Section 5024.1, which established the CRHR. Administered through the State Office of Historic Preservation, the CRHR is an authoritative guide to identify, evaluate, register, and protect California's historical resources. The CRHR must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR is used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.

### *Regulations Pertaining to Human Remains*

Section 15064.5 of the *State CEQA Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. The disposition of human remains is governed by Health and Safety Code Section 7050.5 and Public Resource Code Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the County Coroner must be notified within 48 hours and there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the County Coroner has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Section 15064.5 of the *State CEQA Guidelines* directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

### *Assembly Bill 52*

California Assembly Bill (AB) 52 was enacted on July 1, 2015, and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resource Code § 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (Public Resource Code § 21084.3). Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria (Public Resource Code § 21074(a)(1) and (2):

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also requires a lead agency formally notify a California Native American tribe that is traditionally and culturally affiliated within the geographic area of the discretionary project when formally requested. As of this writing, no California Native American tribes traditionally and culturally affiliated with the Santa Cruz County region have formally requested a consultation with the County of Santa Cruz (as Lead Agency under CEQA) regarding Tribal Cultural Resources. Tribal cultural resources are discussed in Section 4.16, *Tribal Cultural Resources*.

### *Senate Bill 18*

California Government Code Section 65352.3, adopted pursuant to the requirements of SB 18, requires local governments to contact, refer plans to, and consult with tribal organizations prior to deciding to adopt or amend a general or specific plan. The tribal organizations eligible to consult

have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the NAHC. As noted in the California Office of Planning and Research’s Tribal Consultation Guidelines (2005), “The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

## b. Local Regulations

### *County of Santa Cruz General Plan and Local Coastal Program*

The Conservation and Open Space Element of the County of Santa Cruz General Plan and Local Coastal Program (LCP) (1994, rev. 2020) includes goals, objectives, and policies to protect archaeological, historical, and paleontological resources. The goals and policies pertaining to archaeological and historical resources that are applicable to the proposed project are discussed below.

#### **GOAL: NATURAL AND CULTURAL RESOURCES PROTECTION**

To protect and restore unique, rare, threatened, endangered and other natural and cultural resources that warrant preservation because of their biological value, scarcity, scientific value, aesthetic quality or cultural significance.

**Objective 5.19: Archaeological Resources.** To protect and preserve archaeological resources for their scientific, educational and cultural values, and for their value as local heritage.

**Policy 5.19.1: Evaluation of Native American Cultural Sites.** Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites without an appropriate permit. Maintain the Native American Cultural Sites ordinance.

**Policy 5.19.2: Site Surveys.** Require an archaeological site survey (surface reconnaissance) as part of the environmental review process for all projects with very high site potential as determined by the inventory of archaeological sites, within the Archaeological Sensitive Areas, as designated on General Plan and LCP Resources and Constraint Maps files in the Planning Department.

**Policy 5.19.3: Development Around Archaeological Resources.** Protect archaeological resources from development by restricting improvements and grading activities to portions of the property not containing these resources, where feasible, or by preservation of the site through project design and/or use restrictions, such as covering the site with earthfill to a depth that ensures the site will not be disturbed by development, as determined by a professional archaeologist.

**Policy 5.19.4: Archaeological Evaluations.** Require the applicant for development proposals on any archaeological site to provide an evaluation, by a certified archaeologist, of the significance of the resource and what protective measures are necessary to achieve General Plan and LCP Land Use Plan objectives and policies.

**Policy 5.19.5: Native American Cultural Sites.** Prohibit any disturbance of Native American Cultural Sites without an archaeological permit which requires, but is not limited to, the following:

- (a) A statement of the goals, methods, and techniques to be employed in the excavation and analysis of the data, and the reasons why the excavation will be of value;

- (b) A plan to ensure that artifacts and records will be properly preserved for scholarly research and public education;
- (c) A plan for disposing of human remains in a manner satisfactory to local Native American Indian groups.

### *Santa Cruz County Code*

The County of Santa Cruz Native American Cultural Sites Ordinance (Santa Cruz County Code Chapter 16.40) establishes regulations for the protection, enhancement, and perpetuation of Native American cultural sites in order to promote the public welfare, and to implement the stated policies of the County's General Plan and the Land Use Plan of the Local Coastal Program. The ordinance defines a Native American cultural site as any mound, midden, cave, place of settlement, burial ground, ceremonial ground, mine, trail, rock art, or other feature or location containing either human remains or artifacts of Native Californians which are at least 100 years of age. The ordinance requires an archaeological survey for discretionary projects that result in ground disturbance and will be located within a mapped archaeological sensitive area.

Whenever a Native American cultural site is discovered during the review of a proposed project, any permit subsequently issued must contain whatever conditions the decision-making body determines to promote the purposes of the ordinance. Conditions could include, but are not limited to:

- Preservation of the site through project design or restrictions on use and/or grading, such as restricting improvement and grading activities to portions of the property not containing the resource, or covering the site with fill to a depth where the site will not be disturbed by development as determined by a professional archaeologist; and/or
- Excavation of the site by a professional archaeologist in order to preserve a sample of the remains, artifacts, or other evidence. Such excavation may take place only as authorized by an archaeological excavation permit.

Pursuant to the Native American Cultural Sites ordinance, any property owner who, at any time in the preparation for or process of excavating or otherwise disturbing the ground, discovers any human remains of any age, or any artifact or other evidence of a Native American cultural site that reasonably appears to exceed 100 years of age, must:

1. Cease and desist from all further excavations and disturbances within 200 feet of the discovery.
2. Arrange for staking completely around the area of discovery by visible stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery; provided, however, that such staking need not take place on adjoining property unless the owner of the adjoining property authorizes such staking.
3. Notify the Sheriff-Coroner of the discovery if human remains have been discovered. Notify the Planning Director if the discovery contains no human remains.
4. Grant all duly authorized representatives of the Coroner and the Planning Director permission to enter onto the property and to take all actions consistent with the ordinance.

If the Planning Director determines that the discovery is a site of cultural significance, the Director must notify the property owner that the site is of cultural significance and that an archaeological report must be prepared and no further excavation or development may take place except as authorized by an archaeological site development approval.

The County's Historic Preservation ordinance is located in Chapter 16.42 and implements the General Plan historic resources policies to designate, preserve, protect, enhance, and perpetuate those historic structures, districts and sites. The ordinance protects and enhances the County's historic structures, objects, sites and districts as a physical record of its heritage.

### 4.4.3 Impact Analysis

#### a. Methodology and Significance Thresholds

According to Appendix G of the *State CEQA Guidelines*, impacts related to cultural resources from the proposed project would be significant if the project would:

- 1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5
- 2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
- 3 Disturb any human remains, including those interred outside of formal cemeteries

The significance of a cultural resource and subsequently the significance of any impact are determined by among other things, consideration of whether or not that resource can increase our knowledge of the past. The determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the *State CEQA Guidelines*.

*State CEQA Guidelines* Section 15064.5 (Determining the Significance of Impacts to Archaeological and Historical Resources) states:

(3) [...] Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852).

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Historical resources are "significantly" affected if there is demolition, destruction, relocation, or alteration of the resource or its surroundings. Generally, impacts to historical resources can be mitigated to below a level of significance by following the Secretary of the Interior's Guidelines for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings [Guidelines § 15064.6(b)]. In some circumstances, documentation of an historical resource by way of historic narrative photographs or architectural drawings will not mitigate the impact of demolition below the level of significance [Guidelines § 15126.4(b)(2)].

Preservation in place is the preferred form of mitigation for archaeological resources as it retains the relationship between artifact and context and may avoid conflicts with groups associated with the site [Guidelines § 15126.4 (b)(3)(A)]. If an archaeological resource does not meet either the historic resource or the more specific “unique archaeological resource” definition, impacts do not need to be mitigated [Guidelines § 15064.5(c)(4)].

## b. Project Impacts and Mitigation Measures

<b>Threshold 1:</b> Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
<b>Threshold 2:</b> Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

**Impact CUL-1** GRADING AND EXCAVATION REQUIRED FOR THE PROPOSED PROJECT WOULD HAVE THE POTENTIAL TO UNEARTH AND ADVERSELY CHANGE OR DAMAGE PREVIOUSLY UNIDENTIFIED HISTORICAL AND ARCHAEOLOGICAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION.

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The project site is developed, and a search of records reported that no cultural resources studies have been conducted within the APE; however, nine studies have been conducted within a one-fourth mile of the project site. According to NWIC records, there are two cultural resources within a one-fourth mile radius of the proposed project: a prehistoric lithic isolate and historic-age Highway 1. Pre-construction reconnaissance can only confidently assess the potential for encountering surficial archaeological materials. Therefore, the possibility remains for encountering subsurface archaeological resources during ground-disturbing project activities, such as grading and excavation.

Grading within the project site necessary before construction of the project could unearth and either damage or destroy buried or otherwise unknown subsurface cultural resources. Likewise, excavation required for installation of utilities, such as sanitary sewer pipeline to serve the proposed project within the project site could also encounter and either damage or destroy these cultural resources, if present. Likewise, installation of the stormwater outfall at Rodeo Gulch could disturb or destroy cultural resources that are currently unknown. The potential damage or destruction of cultural resources would be a potentially significant but mitigable impact. The following mitigation measures are required to reduce impacts to cultural resources, including historical and archaeological resources, to less than significant.

## Mitigation Measures

### *CUL-1a Cultural Resources Construction Monitoring*

All project-related ground disturbing activities in native soils within the Area of Potential Effect (APE), which includes the project site and off-site disturbance areas, shall be monitored by a qualified archaeologist. Archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for archaeology (National Park Service 1983). Should the project site or off-site disturbance be determined to have little if any potential to yield subsurface cultural resources deposits, the qualified archaeologist may recommend that monitoring be reduced or eliminated after consulting with the County and Native American representatives.



*CUL-1b Unanticipated Discovery of Cultural Resources*

In the event that cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt, and the qualified archaeologist shall evaluate the find. Evaluation of significance for the find may include the determination of whether or not the find qualifies as a cultural resource. The qualified archaeologist shall evaluate the find and determine if it is material that may be of importance to Native Americans and, in consultation with the County, whether further Native American consultation is required. If necessary, the evaluation shall require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical, archaeological, and/or tribal cultural resources. Mitigation of significant impacts to the find may include a damage assessment of the find, archival research, and/or data recovery to remove any identified archaeological deposits, as determined by the qualified archaeologist. After effects to the find have been appropriately mitigated, work in the area may resume.

**Significance After Mitigation**

Implementation of mitigation measures CUL-1a and CUL-1b would reduce impacts to previously undiscovered cultural resources to a less than significant level.

<p><b>Threshold 3:</b> Would the project disturb any human remains, including those interred outside of formal cemeteries?</p>
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**Impact CUL-2 GRADING AND EXCAVATION REQUIRED FOR THE PROPOSED PROJECT WOULD HAVE THE POTENTIAL TO UNEARTH AND DISTURB PREVIOUSLY UNIDENTIFIED OR UNKNOWN HUMAN REMAINS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MANDATORY ADHERENCE WITH EXISTING REGULATIONS PERTAINING TO DISCOVERY OF HUMAN REMAINS.**

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There are no known cemeteries or burial sites within the APE or within the limits of off-site disturbance, such as the proposed sewer improvements within Soquel Avenue, Chanticleer Avenue, and Rodriguez Street. However, there is always potential for previously unrecorded or unidentified human remains to exist below ground surface. Construction of the project would require grading and excavation. Grading and excavation activities would have the potential to unearth and disturb previously unidentified human remains, if present. Section 7050.5 of the California Health and Safety Code states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. If the Coroner determines the remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall contact by telephone within 24 hours the NAHC. In addition, any person who mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor.

Thus, in the event that previously unidentified human remains are uncovered within the project site, the NAHC will identify a Native American Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. *State CEQA Guidelines* Section 15064.5 directs the lead agency or applicant, under certain

circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains and associated grave goods. Pursuant to compliance with these existing requirements, impacts of the proposed project on human remains would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.

#### **4.4.4 Cumulative Impacts**

The cumulative impacts assessment area for cultural resources consists of the APE for the proposed project, which is the project site and the outfall area next to Rodeo Gulch. This area was selected as appropriate because implementation of the proposed project would result in no ground disturbance or associated potential to impact buried cultural resources beyond these areas. Therefore, the proposed project can have no impacts on buried cultural resources outside of these areas.

There are no other ongoing or reasonably foreseeable future projects within the cumulative impacts assessment area other than the proposed project. Potential impacts to cultural resources associated with implementation of the proposed project are described above. With implementation of mitigation measures CUL-1a and CUL-1b, impacts would be less than significant. Therefore, the proposed project would have less than significant cumulative impacts, as well.

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## 4.5 Energy

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This section describes current regional energy use, outlines the regulatory framework applicable to energy consumption, and evaluates impacts related to energy usage from construction and operation of the proposed project. To assure project decisions consider energy implications, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Air quality impacts are discussed in Section 4.2, *Air Quality*; greenhouse gas (GHG) emissions and climate change impacts are discussed in Section 4.7, *Greenhouse Gas Emissions*; and impacts related to vehicle miles traveled (VMT) are discussed in Section 4.14, *Transportation*, of this EIR. The analysis herein is supported by data and information from those sections and topic analyses.

### 4.5.1 Setting

#### a. Existing Energy Usage

##### State

California is one of the lowest per capita energy user states in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (U.S. Energy Information Administration [EIA] 2019a). In 2017, statewide direct use of electricity was 12,794,860 million kilowatt hours (kWh) (EIA 2019b), and California consumed 20,375 million therms<sup>1</sup> of natural gas (EIA 2019c). Additionally, total consumption of motor gasoline for California's transportation sector amounted to 3,175 trillion Btu in 2017 (EIA 2019a). According to the EIA, one gallon of motor gasoline is equivalent to 120,333 Btu (EIA 2019d). Therefore, California's transportation sector consumed approximately 26.4 billion gallons of motor gasoline in 2017. The single largest end-use sector for energy consumption in California is transportation (40 percent), followed by industrial (23 percent), commercial (19 percent), and residential (18 percent) land uses (EIA 2019a).

##### Region

Santa Cruz County consumers used approximately 1,212 gigawatt hours (GWh) of electricity in 2018 for both residential and non-residential uses (CEC 2018a).

Santa Cruz County consumers used approximately 52 million therms of natural gas in 2018 for both residential and non-residential uses (CEC 2018b). Residential usage accounted for approximately 21 million therms and non-residential usage accounted for approximately 31 million therms.

### 4.5.2 Regulatory Setting

#### a. Federal

##### *Energy Policy and Conservation Act, and CAFE Standards*

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this Act, the National Highway Traffic and Safety Administration, part of

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<sup>1</sup> The EIA reports that natural gas consumption in 2017 was 2,110,829 million cubic feet. Cubic feet was converted to therms using a conversion factor of 1.036 therms per 100 cubic feet (EIA 2019e).

the U.S. Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

In October 2012, the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA), on behalf of the Department of Transportation, issued final rules to further reduce greenhouse gas (GHG) emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond (77 FR 62624). NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon (mpg) limiting vehicle emissions to 163 grams of carbon dioxide (CO<sub>2</sub>) per mile for the fleet of cars and light-duty trucks by model year 2025 (77 FR 62630).

#### *Safer Affordable Fuel-Efficient Vehicles Rule*

On August 2, 2018, NHTSA and EPA proposed the Safer Affordable Fuel-Efficient Vehicle Rule (SAFE Rule). This rule addresses emissions and fuel economy standards for motor vehicles and is separated in two parts. Part One addresses emission standards, while Part Two addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026, but comment is sought on a range of alternatives discussed throughout the proposed rule. The final SAFE Rule Part Two was released on March 31, 2020. The outcome of any pending or potential lawsuits (and how such lawsuits could delay or affect its implementation) are unknown at this time.

#### *Energy Independence and Security Act of 2007*

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law. In addition to setting increased Corporate Average Fuel Economy (CAFE) standards for motor vehicles, the act includes the following provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels to replace petroleum (Section 202, RFS). The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act of 2007, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of GHG emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of the nation's renewable fuels sector (City of Ukiah 2017).

## b. State

### *Warren-Alquist Act*

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The Act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

### *California Renewables Portfolio Standard Program*

SB 1078 (Chapter 516, Statutes of 2002) establishes a Renewable Portfolio Standard (RPS) for electricity supply. The RPS requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 20 percent of their supply from renewable sources by 2017. This target date was moved forward in 2006 under SB 107 to require compliance by 2010. In addition, electricity providers subject to the RPS must increase their renewable share by at least 1 percent each year. The outcome of this legislation will impact regional transportation powered by electricity. As of 2016, the state has reported that a minimum of 25 percent of electricity has been sourced from certified renewable sources.

SB X1-2 of 2011, known as the California Renewable Energy Resources Act, requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011–2013 compliance period, at least 65 percent for the 2014–2016 compliance period, and at least 75 percent for 2016 and beyond.

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) extended the RPS target and requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

In September 2018, SB 100 was signed by Governor Brown, committing California to 100 percent clean energy by 2045. SB 100 requires all California utilities to generate 52 percent of their electricity from renewables by 2027, 60 percent by 2030, and 100 percent by 2045.

### *Integrated Energy Policy Report*

SB 1389 (Chapter 568, Statutes of 2002; PRC 25300–25323) required CEC to “conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop and evaluate energy policies and programs that conserve resources, protect the environment, ensure energy reliability, enhance the state’s economy, and protect public health and safety” (PRC Section 25301[a]). This work culminated in the Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every 2 years and an update every other year. The 2019 IEPR is the most recent IEPR, which was adopted on February 20, 2020 (CEC 2020). The 2019 IEPR provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the state's goal of ensuring reliable, affordable, and environmentally responsible energy sources. Energy topics covered in the IEPR include progress toward statewide renewable energy targets, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the preliminary transportation energy demand forecast, and renewable gas.

#### *Assembly Bill 1493: Reduction of Greenhouse Gas Emissions*

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code sections 42823 and added 43018.5 requiring the California Air Resources Board (CARB) to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

#### *California Energy Action Plan*

The CEC, in collaboration with CPUC, is responsible for preparing the California Energy Action Plan (EAP), which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The 2003 California Energy Action Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access. The plan also identifies strategies for energy conservation in new residential construction, heating and ventilation and air conditioning systems.

In the October 2005 Energy Action Plan II (EAP II), the CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as information on the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the state's ongoing actions in the context of global climate change. In 2008, the CEC determined an update to the plan was not needed due to state regulations such as Assembly Bill (AB) 32.

#### *Assembly Bill 32, the California Global Warming Solutions Act of 2006*

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020.

#### *Senate Bill 32 and Assembly Bill 197 of 2016*

In August 2016, Governor Brown signed SB 32 and AB 197, which extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which

contains language to authorize CARB to achieve a statewide GHG emissions reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target of 80 percent below 1990 emissions levels by 2050. AB 197 requires CARB to prioritize direct emission reductions and consider social costs when adopting regulations to reduce GHG emissions as a means to protect what are perceived as impacted and disadvantaged communities. The legislation requires CARB to prioritize those rules and regulations that would result in direct emissions reductions at large stationary and mobile sources.

### *Assembly Bill 1007: State Alternative Fuels Plan*

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other state, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

### *Assembly Bill 2076: Reducing Dependence on Petroleum*

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), the CEC and CARB prepared and adopted a joint-agency report, *Reducing California's Petroleum Dependence*. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One performance-based goal for AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

### *Bioenergy Action Plan, Executive Order S-06-06*

Executive Order (EO) S-06-06, April 25, 2006, establishes targets for the use and production of biofuels and biopower, and directs State agencies to work together to advance biomass programs in California, while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications



- Create jobs and stimulate economic development, especially in rural regions of the State
- Reduce fire danger, improve air and water quality, and reduce waste

#### *California Air Resources Board*

CARB has a number of regulations and standards that seek to limit emissions from mobile sources and pollution from specific types of operation or source pollution. These policies indirectly impact energy consumption. These include:

- **In-Use Off-Road Diesel Rule:** Imposes limits on idling, restricts the addition of older vehicles, and requires the retirement or replacement of older engines depending on their fleet size category.
- **Phase 1 Medium- and Heavy-Duty Engine and Vehicle GHG Emission Standards:** establishes standards for new medium- and heavy-duty engines and vehicles sold in California
- **Advanced Clean Cars Plan:** Coordinates regulating smog-causing pollutants and GHG emissions through developing more stringent emissions standards for vehicles and improving the number of zero-emission vehicles on the roadways.

#### *Title 24, California Code of Regulations – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen).*

The 2019 Building Energy Efficiency Standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less.

The CALGreen Standards establish green building criteria for residential and nonresidential projects. Updates to the 2016 Standards include the following: increasing the number of parking spaces that must be prewired for electric vehicle chargers in residential development; requiring all residential development to adhere to the Model Water Efficient Landscape Ordinance; and requiring more appropriate sizing of HVAC ducts.

### **c. Regional**

#### *Electric Vehicle Infrastructure for the Monterey Bay Area*

In 2013, the Association of Monterey Bay Area Governments (AMBAG) published *Electric Vehicle Infrastructure for the Monterey Bay Area*. The publication includes a siting plan to identify potential charging locations and presents a framework for establishing an electric vehicle charging network in the Monterey Bay Area (AMBAG 2018). The three major goals of the publication are to:

- Provide charging opportunities for plug-in electric vehicle owners that lack access to home charging;
- Extend the range of plug-in electric vehicle for intra- and interregional travel along various corridors; and
- Maximize all electric miles by providing ample opportunities for charging while minimizing the risk of stranded plug-in electric vehicles.

### *Metropolitan Transportation Plan/Sustainable Communities Strategy*

AMBAG has prepared a Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) that integrates land use and transportation planning at a regional level to achieve GHG emission reduction targets from passenger vehicles. The most recent MTP/SCS is *Moving Forward Monterey Bay 2040*, which was adopted in June 2018. CARB set a target for the Monterey Bay Area of 5 percent reduction from 2005 per capita GHG emissions for the year 2030. The MTP/SCS demonstrates the region's ability to exceed the GHG emission reduction target set forth by CARB through transportation investments, strategic land use development, and performance measures (AMBAG 2018).

### *Monterey Bay Plug-In Electric Vehicle Readiness Plan*

The Electric Vehicle Infrastructure for the Monterey Bay Area plan was the precursor to the Monterey Bay Plug-In Electric Vehicle Readiness Plan, a comprehensive regional plan to promote plug-in electric vehicle adoption throughout the region completed in July 2013. The goal of the Readiness Plan is to encourage the mass adoption of plug-in electric vehicles in the region and reduce GHG emissions by providing a toolbox of recommended approaches for public, private and non-profit organizations. The Readiness Plan identifies specific regional targets for significantly expanding plug-in electric vehicle adoption in the Monterey Bay Area by 2020 and 2025 (AMBAG 2018).

### *AMBAG Energy Watch Program*

AMBAG works closely with PG&E to promote reduced energy use and energy savings through the AMBAG Energy Watch Program. AMBAG Energy Watch reduces energy use by providing the following resources to eligible PG&E customers:

- Developing Energy Action Strategies for jurisdictions,
- Compiling GHG inventories for jurisdictions,
- Energy assessments and audits,
- Direct installation of energy efficient equipment,
- Technical assistance and financial incentives for energy efficient retrofits in municipal buildings,
- Energy efficiency seminars and training courses in the region,
- Information on other PG&E energy efficiency programs and services, and
- Assistance accessing financing for energy efficiency projects.

In addition, AMBAG Energy Watch has developed programs that would help reduce GHG emissions including preparing local GHG inventories, climate action planning support services and Energy Action Strategies (AMBAG 2018).

## **d. Local**

### *Santa Cruz County Climate Action Strategy*

Santa Cruz County adopted a Climate Action Strategy (CAS) in 2013. The CAS outlines a course of action to reduce GHG emissions produced by governmental operations and community activities within unincorporated Santa Cruz County. The CAS articulates a broad strategy for reaching emission reduction goals, and then goes further to identify the individual programs, policies, and

initiatives that, together, will move County operations and the community toward the goals. Strategies are included to reduce emissions in the major focus areas of transportation, energy, and solid waste (County of Santa Cruz 2013). The CAS is not a certified climate action plan for CEQA compliance.

## Santa Cruz County General Plan and Local Coastal Program

The Conservation and Open Space Element of the Santa Cruz County General Plan contains programs and policies to maximize conservation and efficient use of energy and encourage the development of locally available renewable energy resources. Policies 5.17.1 through 5.17.3 and Policy 5.17.5, below, include promotion of renewable energy, environmentally sound design, maximizing solar access, and retrofit and weatherization programs (County of Santa Cruz 1994, rev. 2020).

**Policy 5.17.1. Promote Alternative Energy Sources.** Promote the use of energy sources which are renewable, recyclable and less environmentally degrading than non-renewable fossil fuels.

**Policy 5.17.2. Design Structures for Solar Gain.** Require the incorporation of environmentally sound active and passive heating and cooling and/or natural daylighting design principles in the location and construction of all new buildings and in the renovation and remodeling of existing buildings.

**Policy 5.17.3. Solar Access.** Encourage maximum solar access orientation in siting new development and require the protection of solar access in existing development.

**Policy 5.17.5. Weatherization Improvements.** Require energy efficiency and weatherization improvements in existing and new development including insulation, water conservation techniques, and encourage the installation of solar heating systems. Require a retrofit to meet energy efficiency standards upon sale or transfer of ownership.

### 4.5.3 Impact Analysis

#### a. Methodology and Significance Thresholds

##### Methodology

Public Resources Code Section 21100(b)(3) states that an EIR shall include “mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” The physical environmental impacts associated with the use of energy including the generation of electricity and burning of fuels have been accounted for in Section 4.2, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*.

Energy consumption is analyzed herein in terms of construction and operational energy usage. Construction energy demand accounts for anticipated energy consumption during construction of the project, such as fuel consumed by construction equipment and construction workers’ vehicles traveling to and from the construction site. Operational energy demand accounts for the anticipated energy consumption during operation of project, such as fuel consumed by cars; natural gas consumed for on-site power generation and heating building spaces; and electricity consumed for building power needs, including, but not limited to lighting, water conveyance, and air conditioning.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions resulting from the proposed project. The CalEEMod results (Appendix C) provide the

average travel distance, vehicle trip numbers, and vehicle fleet mix used during construction and operation of the project. The CalEEMod results additionally provide the estimated gross electricity and natural gas consumption during operation of the project. The values contained therein are used in this analysis to determine the anticipated energy consumption during construction and operation of the project.

This analysis takes into consideration the equipment and processes employed during construction of the project and operation of the project to qualitatively determine whether energy consumed during construction and operation would be wasteful, inefficient, or unnecessary.

## Significance Thresholds

The significance thresholds used in this analysis are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

### b. Impact Analysis

**Threshold 1:** Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**Impact E-1**            **NEITHER CONSTRUCTION NOR OPERATION OF THE PROJECT WOULD RESULT IN A SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO THE WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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## Demolition and Construction

Demolition and construction activities associated with the project would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary power may also be provided for construction trailers and electric construction equipment. Table 4.5-1 summarizes the anticipated energy consumption from construction equipment and vehicles, including construction worker trips to and from the project site. Construction of the project would also use building materials that would require energy use during the manufacturing and/or procurement of that material; however, as noted in the California Natural Resources Agency's Final Statement of Reasons, "a full 'lifecycle' analysis that would account for energy used in building materials and consumer products will generally not be required" (California Natural Resources Agency 2018). It is reasonable to assume that manufacturers of building materials such as concrete, steel, lumber, or other building materials would employ energy conservation practices in the interest of minimizing the cost of doing business. It also is reasonable to assume that non-custom building materials, such as drywall and standard-shaped structural elements, would have been manufactured regardless of the project and, if not used for the project, would be used in a different project. Therefore, the consumption of energy required for the manufacturing of building and construction material is not part of the quantitative analysis.

**Table 4.5-1 Proposed Project Construction Energy Usage**

Source	Fuel Consumption (Gallons)	
	Gasoline	Diesel
Construction Equipment & Vendor/Hauling Trips	–	109,423.75
Construction Worker Vehicle Trips	29,380.06	–

See Appendix C for CalEEMod default values for fleet mix and average distance of travel, as well as and energy fuel consumption calculations.

As shown in Table 4.5-1, demolition and construction activities associated with the proposed project would require approximately 29,380 gallons of gasoline and 109,424 gallons of diesel fuel. Energy use during demolition and construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, the project would utilize construction contractors that demonstrate compliance with applicable CARB regulations that restrict the idling of heavy-duty diesel motor vehicles and govern the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Construction contractors would be required to comply with the provisions of 13 California Code of Regulations Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, which would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard (discussed in detail in Section 4.2, *Air Quality*), which would minimize inefficient fuel consumption. These construction equipment standards (i.e., Tier 4 efficiency requirements) are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Electrical power would be consumed during demolition and construction activities, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area.

Overall, demolition and construction activities would not have any adverse impact on available electricity supplies or infrastructure. Demolition and construction activities would utilize fuel-efficient equipment consistent with state and federal regulations and would comply with state measures to reduce the inefficient, wasteful, or unnecessary consumption of energy. In addition, per applicable regulatory requirements such as CALGreen, the project would comply with construction waste management practices to divert from disposal at a landfill a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost efficiency, construction contractors would not be anticipated to utilize fuel in a manner that is wasteful or unnecessary.

Therefore, project demolition and construction activities would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

## Operation

Energy demand from project operation would include fuel consumed by passenger vehicles; natural gas consumed for heating; and electricity consumed by lighting, water conveyance, and air conditioning.

As discussed under Impact T-2 in Section 4.14, *Transportation*, regional VMT would be reduced compared to existing conditions because healthcare provider members would drive to the project

site rather than locations in the San Francisco Bay Area. Regional VMT would be reduced because the project site is closer to population centers in the County, such as cities of Santa Cruz, Capitola, and Watsonville, where users of the proposed project live, than these populations are to the San Francisco Bay Area. Therefore, the proposed project would reduce VMT compared to existing VMT conditions because fewer people would have to make the lengthier trip to the San Francisco Bay Area for advanced medical services. Because the project would reduce VMT, gasoline and diesel fuel use would be reduced as well.

Additionally, the project would include on-site bicycle parking and bicycle improvements on Soquel Avenue to encourage active transportation in place of vehicle travel, and the parking garage would include preferred parking for electric vehicles. This would further reduce reliance on gasoline-powered automobiles, thereby lowering the potential for wasteful and unnecessary fuel consumption. Vehicles driven by future employees, patients, and visitors to the project would be subject to increasingly stringent federal and state fuel efficiency standards, thereby minimizing the potential for the inefficient consumption of vehicle fuels. As a result, vehicle fuel consumption resulting from the project would not be wasteful, inefficient, or unnecessary.

As shown in Table 4.5-2, in addition to transportation energy use, the project would require permanent grid connections for electricity and natural gas. The project would consume approximately 3,484,240 kWh, or 11,889 MMBtu per year of electricity for lighting and large appliances, and approximately 3,046,620 kBtu, or 3,047 MMBtu per year of natural gas for heating and other purposes (see Appendix C for CalEEMod results). Electricity would be supplied by on-site rooftop solar generation and Central Coast Community Energy (3CE) via transmission owned by PG&E, and gas service would be provided by PG&E.

**Table 4.5-2 Proposed Project Operational Energy Usage**

Source	Energy Consumption	
<b>Built Environment</b>		
Electricity	3,484,240 kWh	11,889 MMBtu
Natural Gas Usage	3,046,620 kBtu	3,047 MMBtu

See Appendix C for CalEEMod default values for fleet mix and average distance of travel and energy calculation sheets.

Construction of the project would comply with the 2019 California Building Energy Efficiency Standards for Residential and Non-residential Buildings and CALGreen (California Code of Regulations Title 24, Parts 6 and 11) or later versions, which are anticipated to be more stringent than the 2019 codes. The 2019 standards require the provision of electric vehicle supply equipment, water-efficient plumbing fixtures and fittings, recycling services, solar-readiness on commercial development, and other energy-efficient measures that would reduce the potential for the inefficient use of energy. Furthermore, the project’s overall design would meet Leadership in Energy and Environment Design (LEED) Gold or equivalent standards, which would be achieved by using less water and energy and reducing GHG emissions compared to a non-certified LEED office building.

Additionally, one of the project objectives is to locate a medical office building in a centralized location within the County on a key transportation corridor, thereby reducing out of County health trips. This would reduce average VMT, as described under Impact T-2 of Section 4.14, *Transportation*, and operational energy demand would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Less than significant.

**Threshold 2:** Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**IMPACT E-2** THE PROPOSED PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.5.2, *Regulatory Setting*, several state plans as well as the County General Plan include energy conservation and energy efficiency strategies intended to enable the State and the County to achieve GHG reduction and energy conservation goals. A full discussion of the proposed project’s consistency with GHG reduction plans is included in Section 4.7, *Greenhouse Gas Emissions*. As shown in Table 4.5-3, the project would be consistent with state renewable energy and energy efficiency plans.

**Table 4.5-3 Consistency with State Renewable Energy and Energy Efficiency Plans**

Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
<p><b>California Energy Action Plan.</b> The plan identifies several strategies, including initiatives in new residential construction and heating, ventilation, and air conditioning (HVAC) systems; and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.</p>	<p><b>Consistent.</b> The project would comply with energy efficiency regulations related to construction energy use and HVAC energy use. The parking structure will be equipped with electric vehicle charging stations, accommodating the growing EV fleet in the region. The project would also include on-site bicycle parking and bicycle improvements on Soquel Avenue to encourage active transportation in place of vehicle travel.</p>
<p><b>Assembly Bill 2076: Reducing Dependence on Petroleum.</b> Pursuant to AB 2076, the CEC and CARB prepared and adopted a joint-agency report, <i>Reducing California’s Petroleum Dependence</i>, in 2003. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. One of the performance-based goals of AB 2076 is to reduce petroleum demand to 15 percent below 2003 demand.</p>	<p><b>Consistent.</b> The project would reduce VMT compared to existing conditions because healthcare provider members would drive to the project site rather than locations in the San Francisco Bay Area. Regional VMT would be reduced because the project site is closer to population centers in the County, such as cities of Santa Cruz, Capitola, and Watsonville, where users of the project live, than these populations centers are to the San Francisco Bay Area. Therefore, the proposed project would reduce VMT compared to existing VMT conditions because fewer people would have to make the lengthier trip to the San Francisco Bay Area for advanced medical services. Because the project would reduce VMT, gasoline and diesel fuel use would be reduced as well. Finally, the project will be equipped with bicycle parking and the parking garage will be equipped with EV charging facilities and solar panels.</p>

Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
<p><b>2019 Integrated Energy Policy Report.</b> The 2019 report highlights the implementation of California’s innovative policies and the role they have played in establishing a clean energy economy, as well as provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.</p>	<p><b>Consistent.</b> The proposed project includes rooftop solar panels. Electricity would be provided by C3E, which sources some of their power from renewable sources. C3E has plans to source all of their power from renewable sources by 2030. The garage would be equipped with EV charging stations. The project would facilitate result in an increase energy efficiency savings, and the integration of more renewable energy into the electricity system. Therefore, the project would not conflict with or obstruct implementation of the 2018 Integrated Energy Policy Report.</p>
<p><b>California Renewable Portfolio Standard.</b> California’s RPS obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020, 60 percent by 2030, and 100 percent by 2045.</p>	<p><b>Consistent.</b> C3E, which will service the project, currently sources some of its electricity supply from renewable sources. C3E has plans to source all of its electricity from renewable sources by 2030.</p>
<p><b>AB 1493: Reduction of Greenhouse Gas Emissions.</b> AB 1493 requires CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.</p>	<p><b>Consistent.</b> Vehicles used by employees and patrons of the development would be subject to the regulations adopted by CARB pursuant to AB 1493. Therefore, the proposed project would not conflict with or obstruct implementation of AB 1493. Additionally, the project would result in lower regional VMT, and support EV use though the provision of EV charges in the garage. The garage would also be fitted with solar energy production panels, offsetting demand for carbon-sourced energy sources</p>
<p><b>Energy Action Plan.</b> In the October 2005, the CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the state’s ongoing actions in the context of global climate change. The nine major action areas in the EAP include energy efficiency, demand response, renewable energy, electricity adequacy/reliability/infrastructure, electricity market structure, natural gas supply/demand/infrastructure, transportation fuels supply/demand/infrastructure, research/development/demonstration, and climate change.</p>	<p><b>Consistent.</b> The project would include rooftop solar panels. Additionally, energy would be provided by C3E, which currently sources some of its energy from renewable suppliers and plans to obtain all of its supply from renewable sources by 2030. Given these features, the project would facilitate implementation of the nine major action areas in the EAP. Therefore, the project would not conflict with or obstruct implementation of the EAP.</p>
<p><b>AB 1007: State Alternative Fuels Plans.</b> The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California’s goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.</p>	<p><b>Consistent.</b> The project would not interfere with or obstruct the production of biofuels in California. Vehicles used by future employees and users of the development would be fueled by gasoline and diesel fuels blended with ethanol and biodiesel fuels as required by CARB regulations. Therefore, the project would not conflict with or obstruct implementation of the Bioenergy Action Plan or the State Alternative Fuels Plan.</p>



Renewable Energy or Energy Efficiency Plan	Proposed Project Consistency
<p><b>Bioenergy Action Plan, Executive Order S-06-06.</b>                      The EO establishes the following targets to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050.</p>	
<p><b>Title 24, California Code of Regulations – Part 6 (Building Energy Efficiency Standards) and Part 11 (CALGreen).</b> The 2019 Building Energy Efficiency Standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less.</p> <p>The CALGreen Standards establish green building criteria for residential and nonresidential projects. Updates to the 2016 Standards include the following: increasing the number of parking spaces that must be prewired for electric vehicle chargers in residential development; requiring all residential development to adhere to the Model Water Efficient Landscape Ordinance; and requiring more appropriate sizing of HVAC ducts.</p>	<p><b>Consistent.</b> The project would meet the requirements Title 24 standards. It would include solar energy production panels on the garage structure and would include EV charging facilities.</p>

The County General Plan includes an objective and policies that encourage energy conservation and efficiency measures through an array of strategies. As shown in Table 4.5-4, the project would be consistent with the energy conservation and efficiency strategies contained in the County General Plan.

**Table 4.5-4 Consistency with the County General Plan**

Energy Efficiency Goal, Policy, or Strategy	Proposed Project Consistency
<p><b>Objective 5.17 Energy Conservation:</b> maximize conservation and efficient use of energy in the private and public sectors and encourage the development and use of locally available renewable energy resources in order to reduce dependence on imported and nonrenewable energy supplies.</p>	<p><b>Consistent.</b> The proposed project will include rooftop solar panels. Electricity would be provided by C3E, which sources their power from renewable sources. The project would increase in energy efficiency savings and the integrate more renewable energy into the electricity system.</p>
<p><b>Policy 5.17.1: Promote Alternative Energy Sources.</b> Promote the use of energy sources which are renewable, recyclable and less environmentally degrading than non-renewable fossil fuels.</p>	<p><b>Consistent.</b> The project includes rooftop solar panels, and would be served by C3E, which sources some of their power from renewable energy production companies.</p>
<p><b>Policy 5.17.3: Solar Access.</b> Encourage maximum solar access orientation in siting new development, and require protection of solar access in existing development</p>	<p><b>Consistent.</b> The project will include rooftop solar panels for on-site energy generation.</p>

The project would be consistent with the County's adopted energy conservation and efficiency strategies contained in its General Plan. As described under Impact E-1, construction and operation of the proposed project would be required to comply with relevant provisions of CALGreen and Title 24 of the California Energy Code. Therefore, this impact would be less than significant, and no mitigation is required.

#### 4.5.4 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines Section 15065[a][3]). The geographic scope for energy consumption is Santa Cruz County. This geographic scope is appropriate because the smallest scale at which energy consumption information is readily available is the county level. Cumulative buildout of the County's General Plan is considered as part of this cumulative analysis.

Cumulative development would increase demand for energy resources. However, new iterations of the California Building Energy Efficiency Standards and CALGreen would require increasingly more efficient appliances and building materials that reduce energy consumption in new development. In addition, vehicle fuel efficiency is anticipated to continue improving through implementation of the existing Pavley regulations under AB 1493, and implementation of the 2040 MTP/SCS would reduce VMT in Santa Cruz County. Nevertheless, the combined increase in energy consumption in Santa Cruz County would potentially result in a significant cumulative impact related to the wasteful, inefficient, and unnecessary consumption of energy resources. It is conservatively assumed, therefore, that cumulative development could result in a significant impact related to the wasteful, inefficient, or unnecessary consumption of energy resources.

As described under Impact E-1, the project would be constructed in accordance with the California Building Energy Efficiency Standards and CALGreen, and to LEED Gold standards. Therefore, the project would not have a cumulatively considerable contribution to a significant cumulative impact related to energy. Additionally, the project would reduce regional VMT and result in less consumption of gasoline and diesel fuel.

The project would not result in a wasteful, inefficient, or unnecessary consumption of energy, and operation of the project would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and therefore the Project would not result in a cumulatively considerable contribution to a significant cumulative impact.

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## 4.6 Geology and Soils

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This section analyzes the project's temporary and long-term impacts from the exposure of people to geologic, seismic, and soil-related hazards, as well as impacts on subsurface paleontological resources.

### 4.6.1 Setting

#### a. Regional Geology and Soils

Santa Cruz County is located in the Coast Ranges Geomorphic Province, which is one of 11 distinct geologic regions in California (California Geological Survey 2002). This province is characterized by parallel northwest-trending mountain ranges formed over the past 10 million years or less by active uplift as a result of the complex tectonics of the San Andreas fault/plate boundary system. The coastline of the province is uplifted, terraced and wave-cut. Steep coastal bluffs, deep mountain canyons, and river valleys characterize the County. The following discussion describes existing geologic formations, seismicity, and soil stability in the region.

#### Geologic Formations and Seismicity

Southwest of the San Andreas fault, the Coast Ranges, including the Santa Cruz Mountains, are underlain by a large, northwest-trending segment of granitic and metamorphic basement rocks (Clark 1981). The granitic and metamorphic basement is Cretaceous in age or older and is overlain by a sequence of dominantly marine sedimentary rocks of Paleocene to Pliocene age and non-marine sediments of Pleistocene and Holocene age. In Santa Cruz and San Mateo counties to the southwest of the San Andreas fault, a succession of Tertiary sandstone and mudstone units overlays a Salinian basement complex of granitic and older metasedimentary rocks that ranges in age from Paleocene to Pliocene and has a composite thickness of as much as 7,390 meters (Clark 1981).

This Tertiary section is divisible into four sedimentary rock sequences which are virtually continuous (Clark 1981). Resting on the basement complex, the oldest sequence consists of erosional remnants of the Locatelli Formation of Paleocene age. The next younger sequence ranges from early Eocene to early Miocene age and consists of the Butano Sandstone, San Lorenzo Formation, Zayante Sandstone, Vaqueros Sandstone, and Lambert Shale. The two younger sequences are the products of two separate and successive marine cycles of sedimentation. The older cycle was a middle Miocene event that produced a widely transgressive basal sandstone unit, the Lompico Sandstone, and an overlying organic mudstone unit, the Monterey Formation. The younger cycle was initiated in late Miocene time and likewise produced a transgressive basal sandstone unit, the Santa Margarita Sandstone, and an overlying siliceous mudstone unit, the Santa Cruz Mudstone. The basal sandstone beds of each of these two sequences were deposited in a nearshore, shallow-marine environment, whereas the overlying mudstone beds were laid down in deeper water. A later and shallower phase of the younger cycle is recorded by the Purisima Formation of Pliocene age.

The San Andreas fault, the Zayante-Vergeles fault, the San Gregorio fault zone, and the Monterey Bay–Tularcitos fault zone are the major faults in Santa Cruz County (Santa Cruz County Regional Transportation Commission [SCCRTC] 2019). These faults are associated with Holocene activity (movement in the last 11,000 years) and are considered to be active (California Geological Survey 2010). Southwest of the San Andreas fault, the older sedimentary rocks in the Coast Ranges are moderately to strongly deformed, with steep-limbed folds and several generations of faults

associated with uplift of the Santa Cruz Mountains. Along the coast, the ongoing tectonic activity is most evident in the gradual uplift of the coastline, as indicated by the series of uplifted marine terraces that have been cut along coastline (Santa Cruz 2011).

Based on historical evidence, all of Santa Cruz County is vulnerable to ground-shaking from earthquakes (Santa Cruz County 2015). The epicenter of the Loma Prieta earthquake in October 1989, the most intense to strike California since 1906, was located on the San Andreas fault, approximately 10 miles east-northeast of the City of Santa Cruz.

### Soils and Soil Conditions

Almost all of the soils in Santa Cruz County are classified as belonging to the Mollisols soil order (SCCRTC 2019). Mollisols are characterized by a thick, dark surface horizon and are the most extensive soil order in the United States (Global Rangelands 2018). The soils are base-rich throughout and therefore are fertile agricultural soils (Natural Resources Conservation Service [NRCS] 2018). Mollisols characteristically form under grass in climates with moderate to pronounced seasonal moisture deficit.

Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thus becoming similar to quicksand. Lateral spreading can occur when a liquefied soil moves toward a free slope face during the cyclic earthquake loading. Liquefaction-induced lateral spreading can also occur on mild slopes (flatter than 5 percent) underlain by loose sands and a shallow water table. If liquefaction occurs, the unsaturated overburden soil can slide as intact blocks over the lower, liquefied deposit, creating fissures, and scarps. Liquefaction can cause serious damage to foundations and bases of structures. The potential for liquefaction and lateral spreading to occur in Santa Cruz County is high in lowland areas of Santa Cruz, the Soquel Valley, and the Pajaro River Valley (Santa Cruz County 2015).

Landslides and other forms of mass wasting, including mud flows, debris flows, soil slips, and rock falls, occur as soil or rock moves downslope under the influence of gravity. Intense rainfall or seismic shaking could trigger landslides. Areas subject to landslide hazards are widely dispersed across inland portions of Santa Cruz County (Santa Cruz County 2015). The most concentrated areas of past landslide activity in the County are in the western foothills of Ben Lomond Mountain and the foothills that border Santa Clara County, southeast of Highway 17 (Roberts et al. 1998).

Expansive soils are associated with clay-rich sediment deposits on alluvial floodplains and generally occur in the southern portion of Santa Cruz County and along the coast, especially in the coastal terraces in Live Oak, Seacliff, and Rio Del Mar, and near Watsonville (Santa Cruz County 2015).

Santa Cruz County does not have a high susceptibility to subsidence (Santa Cruz County 2015). The coastal areas of the County and inland areas toward the middle of the County have a low susceptibility to subsidence (California Department of Water Resources [DWR] 2014).

### Paleontological Resources

Pleistocene-era marine terraces, which have produced scientifically significant vertebrate fossils specimens from multiple locations in coastal California, occur in coastal Santa Cruz County. Five prominent emergent marine terraces, which are presumably of Pleistocene age, occur on the seaward slopes of Ben Lomond Mountain between Santa Cruz and Año Nuevo Point (Clark 1981). In southern and central coastal California, Pleistocene marine terrace deposits have yielded vertebrate fossil specimens of camel, horse, ground sloth, whale, mastodons, dolphin, shark, and fish (Jefferson

et al. 1992; Woodring et al. 1946). In Santa Cruz County, Pleistocene alluvial deposits have preserved invertebrate, plant, and microfossil specimens from multiple localities (Clark 1981; Weber and Allwardt 2001).

## **b. Geology and Soils on the Project Site**

This discussion of geology and soils on-site is based primarily on the *Geotechnical Investigation for Proposed Medical Building and Parking Structure*, prepared by Dees & Associates, Inc. in September 2018. The geotechnical investigation is provided as Appendix L to this EIR. Additional background data was obtained from online databases maintained by the California Geological Survey and California Department of Conservation, and from primary literature on paleontological resources.

### Geologic Formations and Seismicity

According to the U.S. Geological Survey's National Geologic Map Database, the project site is underlain by Pleistocene-era marine terrace deposits (Qmt2), which date to approximately 83,000 to 96,000 years before present (USGS 2020; Delattre and Rosinski 2012). Several borings conducted on the project site indicate that the terrace deposits extend to a depth of roughly 26 to 40 feet below the ground surface, overlying very dense Purisima Formation sandstone (Dees 2018).

The Zayante-Vergeles fault, Monterey Bay fault, San Andreas fault, and San Gregorio fault are located within 7 to 12 miles of the project site, and activity on each of these faults can generate moderate to severe groundshaking (Dees 2018). The nearest fault trace to the project site is the southern end of the Ben Lomond fault, located just west of the San Lorenzo River in the City of Santa Cruz, approximately 2.7 miles from the project site (California Department of Conservation 2015). This fault has experienced displacement in the last 700,000 years. No known fault traces occur on or near the project site, so the risk of fault rupture on-site is very low (Dees 2018).

### Soils and Soil Conditions

Up to three feet of loose imported fill was encountered at the ground surface on the western portion of the site (Dees 2018). The fill consists of granular soils with a loose to medium density. Below the fill layer, the marine terrace deposits on the project site vary from clayey sand to silty sand and sandy clay. The native soils primarily have a medium density. Clayey soils on-site range from slightly to highly expansive. Several borings encountered layers of expansive clay up to two feet thick.

The risk of landslide activity on the project site is very low because the site is nearly level and the nearest steep slope is located more than 1,000 feet away (Dees 2018). There is a potential for liquefaction to occur at depths ranging from approximately 18 to 26 feet below ground surface; however, no surface effects are expected because of the small thickness and the depth of liquefiable layers. Additionally, the County has mapped the project area in a low liquefaction zone. The potential for lateral spreading is very low due to the discontinuity of the liquefiable soils.

### Paleontological Resources

As discussed above, the project site overlies Pleistocene-era marine terrace deposits (Qmt2). Marine terrace deposits dating to this geologic era have produced scientifically significant vertebrate fossils specimens from multiple locations in coastal California.

## 4.6.2 Regulatory Setting

### a. Federal Regulations

#### Clean Water Act

Stormwater discharges from construction activities that disturb one or more acres, which can cause soil erosion, are regulated under the Clean Water Act through the National Pollutant Discharge Elimination System (NPDES) stormwater program. Prior to discharging stormwater, construction operators must obtain coverage under an NPDES permit. In California, the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit) is promulgated by the State Water Resources Control Board (SWRCB) and administered through the local Regional Water Quality Control Board, which for this area is the Central Coast Regional Water Quality Control Board (CCRWQCB).

The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography before and after construction, and drainage patterns across the project site. The SWPPP must list Best Management Practices (BMPs) that the discharger will use to minimize stormwater runoff and indicate the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if BMPs fail, and a sediment monitoring plan if the site discharges directly to a water body listed under Section 303(d) of the Clean Water Act as impaired by sediment pollution. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

### b. State Regulations

#### Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (PRC 2621 et seq.) is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults, and strictly regulates construction in the corridors along active faults (Earthquake Fault Zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to Earthquake Fault Zones. Under the Alquist-Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined as within the last 11,000 years). A fault is considered well-defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (CDMG 1997).

#### Seismic Hazards Mapping Act of 1990

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC 2690–2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground-shaking, liquefaction, and seismically induced landslides. Its provisions are similar in

concept to those of the Alquist-Priolo Act in that the State is charged with identifying and mapping areas at risk of strong ground-shaking, liquefaction, landslides, and other corollary hazards. Cities and counties are required to regulate development within mapped Seismic Hazard Zones.

### California Building Code

The California Building Code (CBC) is based on the International Building Code, which is used widely throughout United States and has been modified for California conditions with numerous, more detailed or more stringent regulations. Part 2 of the CBC provides standards for various aspects of construction, including, but not limited to: excavation, grading and earthwork construction; fills and embankments; expansive soils; foundation investigations; and liquefaction potential and soil strength loss. In accordance with California law, proponents of specific projects are required to comply with all provisions of the CBC for certain aspects of design and construction. The 2019 CBC is the current version of this State code.

## c. Local Regulations

### County of Santa Cruz General Plan and Local Coastal Program

The Conservation and Open Space Element of the Santa Cruz County General Plan and Local Coastal Program (Santa Cruz County 1994, as amended) contains the following objective and policy applicable to the project and paleontological resources:

**Objective 5.9. Hydrological, Geological, and Paleontological Resources.** To protect hydrological, geological and paleontological resources which stand out as rare or unique and representative in Santa Cruz County because of their scarcity, scientific or educational value, aesthetic quality or cultural significance.

**Policy 5.9.1. Protection and Designation of Significant Resources.** Protect significant geological features such as caves, large rock outcrops, inland cliffs and special formations of scenic or scientific value, hydrological features such as major waterfalls or springs, and paleontological features, through the environmental review process. Designate such sites on the General Plan and LCP Resources and Constraints Maps where identified. Currently identified sites of Significant Hydrological, Geological and Paleontological Features are as follows:

Bonny Doon Planning Area:

- (a) Majors Creek Canyon: The cliffs and exposed rocks of this canyon to the east of Highway 1 are outstanding scenic features.
- (b) Martin Road: East and west of Martin Road, encompassed in the botanical sites, are unusual sandhill outcroppings.
- (c) Wilder Creek: This area contains a concentration of limestone caves worth protecting.
- (d) Table Rock: Highly scenic coastal rock formations (sedimentary intrusive bodies) can be found in the vicinity of Table Rock and Yellow Bank Creek.

The Public Safety Element of the Santa Cruz County General Plan and Local Coastal Program contains the following objectives and policies applicable to the project and related to seismic hazards, geologic and slope hazards, and soil erosion:<sup>1</sup>

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<sup>1</sup> Recent amendments to the General Plan affecting these objectives and policies are currently pending certification by the California Coastal Commission.



**Objective 6.1. Seismic Hazards.** To reduce the potential for loss of life, injury and property damage resulting from earthquakes by: regulating the siting and design of development in seismic hazard areas; encouraging open space, agricultural or low density land use in the fault zones; and increasing public information and awareness of seismic hazards.

**Policy 6.1.1. Geologic Review for Development in Designated Fault Zones.** Require a review of geologic hazards for all discretionary development projects, including the creation of new lots, in designated fault zones. Fault zones designated for review include the Butano, Sargent, Zayante, and Corralitos complexes, as well as the State designated Seismic Review Zones. Required geologic reviews shall examine all potential seismic hazards and may consist of a Geologic Hazards Assessment and a more complete investigation where required. Such assessment shall be prepared by County staff under supervision of the County Geologist or a certified engineering geologist may conduct this review at the applicant's choice and expense.

**Policy 6.1.4. Site Investigation Regarding Liquefaction Hazard.** Require site-specific investigation by a certified engineering geologist and/or civil engineer of all development proposals of more than four residential units in areas designated as having a high or very high liquefaction potential. Proposals of four units and under and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment, and when a significant potential hazard exists a site-specific investigation shall be required.

**Policy 6.1.5. Location of New Development Away from Potentially Hazardous Areas.** Require the location and/or clustering of development away from potentially hazardous areas where feasible and condition development permits based on the recommendations of the site's Hazard Assessment or other technical reports.

**Objective 6.2. Slope Stability.** To reduce safety hazards and property damage caused by landslides and other ground movements affecting land use activities in areas of unstable geologic formations, potentially unstable slopes and coastal bluff retreat.

**Policy 6.2.1. Geologic Hazards Assessments for Development On and Near Slopes.** Require a geologic hazards assessment of all development, including grading permits, that is potentially affected by slope instability, regardless of the slope gradient on which the development takes place. Such assessment shall be prepared by County staff under supervision of the County Geologist, or a certified engineering geologist may conduct this review at the applicant's choice and expense.

**Policy 6.2.2. Engineering Geology Report.** Require an engineering geology report by a certified engineering geologist and/or a soils engineering report when the hazards assessment identifies potentially unsafe geologic conditions in an area of proposed development.

**Policy 6.2.3. Conditions for Development and Grading Permits.** Condition development and grading permits based on the recommendations of the Hazard assessment and other technical reports.

**Policy 6.2.4. Mitigation of Geologic Hazards and Density Considerations.** Deny the location of a proposed development or permit for a grading project if it is found that geologic hazards cannot be mitigated to within acceptable risk levels; and approve development proposals only if the project's density reflects consideration of the degree of hazard on the site, as determined by technical information.

**Objective 6.3. Erosion.** To control erosion and siltation originating from new and existing cannabis activity and related development, in order to reduce damage to soil, water, and biotic resources.

**Policy 6.3.2. Grading Projects to Address Mitigation Measures.** Deny any grading project where a potential danger to soil or water resources has been identified and adequate mitigation measures cannot be undertaken.

**Policy 6.3.3. Abatement of Grading and Drainage Problems.** Require, as a condition of development approval, abatement of any grading or drainage condition on the property which gives rise to existing or potential erosion problems.

**Policy 6.3.4. Erosion Control Plan Approval Required for Development.** Require approval of an erosion control plan for all development, as specified in the Erosion Control ordinance. Vegetation removal shall be minimized and limited to that amount indicated on the approved development plans, but shall be consistent with fire safety requirements.

**Policy 6.3.5. Installation of Erosion Control Measures.** Require the installation of erosion control measures consistent with the Erosion Control ordinance, by October 15, or the advent of significant rain, or project completion, whichever occurs first. Prior to October 15, require adequate erosion control to be provided to prevent erosion from early storms. For development activities, require protection of exposed soil from erosion between October 15 and April 15 and require vegetation and stabilization of disturbed areas prior to completion of the project. For agricultural activities, require that adequate measures are taken to prevent excessive sediment from leaving the property.

**Policy 6.3.7. Reuse of Topsoil and Native Vegetation Upon Grading Completion.** Require topsoil to be stockpiled and reapplied upon completion of grading to promote regrowth of vegetation; native vegetation should be used in replanting disturbed areas to enhance long-term stability.

**Policy 6.3.8. On-Site Sediment Containment.** Require containment of all sediment on the site during construction and require drainage improvements for the completed development that will provide runoff control, including onsite retention or detention where downstream drainage facilities have limited capacity. Runoff control systems or Best Management Practices shall be adequate to prevent any significant increase in site runoff over pre-existing volumes and velocities and to maximize on-site collection of non-point source pollutants.

**Policy 6.3.9. Site Design to Minimize Grading.** Require site design in all areas to minimize grading activities and reduce vegetation removal based on the following guidelines:

- (a) Structures should be clustered;
- (b) Access roads and driveways shall not cross slopes greater than 30 percent; cuts and fills should not exceed 10 feet, unless they are wholly underneath the footprint and adequately retained;
- (c) Foundation designs should minimize excavation or fill;
- (d) Building and access envelopes should be designated on the basis of site inspection to avoid particularly erodable areas;
- (e) Require all fill and sidecast material to be recompacted to engineered standards, reseeded, and mulched and/or burlap covered.

**Policy 6.3.10. Land Clearing Permit.** Require a land clearing permit and an erosion control plan for clearing one or more acres, except when clearing is for existing agricultural uses. Require that any erosion control and land clearing activities be consistent with all General Plan and LCP Land Use Plan policies.

## Santa Cruz County Code

The Santa Cruz County Code Chapter 16.10 pertains to geologic hazards in the County.<sup>2</sup> The purpose of Chapter 16.10, with regard to geologic hazards, is to implement the policies of the State of California Alquist-Priolo Earthquake Fault Zoning Act and the County's General Plan, and to minimize injury, loss of life, and damage to property caused by the natural physical hazards of earthquakes, floods, landslides, and coastal processes. Chapter 16.10 sets forth regulations and review procedures for development and construction activities within mapped geologic hazards areas.

Chapter 16.20 of the Santa Cruz County Code contains the County's grading regulations. The purpose of Chapter 16.20 is to safeguard health, safety, and the public welfare; to minimize erosion and the extent of grading; to protect fish and wildlife; to protect the watersheds; to ensure the natural appearance of grading projects; and to otherwise protect the natural environment of Santa Cruz County. The chapter sets forth rules and regulations to control all grading, including excavations, earthwork, road construction, dredging, diking, fills and embankments; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspections. Section 16.20.140 provides the design standards for excavation such as cut slopes. Cut slopes shall be no steeper than one and one-half horizontal to vertical unless approved by the Planning Director. No vegetation removal or grading pursuant to a permit will be allowed that will result in erosion. Section 16.20.150 provides design standards for fill slopes. Fills shall not be constructed on natural slopes steeper than two to one unless a civil engineer devises a method of placement which will assure the fill will remain in place.

Santa Cruz County Code Chapter 16.22 is designed to prevent accelerated erosion. Under Section 16.22.040 of the County Code, no person shall allow for the continued existence of condition on any site that is likely to cause accelerated erosion. Chapter 16.22 requires projects to have an erosion control plan, implement measures adequate to control runoff from a 10-year storm, and establish vegetation that controls erosion in order to obtain approval for land clearing activities. Section 12.10.215 of the County Code adopts by reference (with specified amendments) the 2019 CBC, which incorporates seismic design standards for structures.

The Santa Cruz County Code Chapter 16.44 is designed to protect paleontological resources. Section 16.44.040 requires preparation of a paleontological survey for the following development resulting in ground disturbance or certain shoreline projects that are located in areas of known paleontological resources as shown on the paleontological resource protection maps. A paleontological report shall be required if the County Environmental Coordinator determines on the basis of the paleontological survey that further information is required to ensure protection of paleontological resources. Where environmental review of a development project is also required by the Santa Cruz County environmental review guidelines, the paleontological survey or report shall be incorporated into the environmental review procedures established therein. Pursuant to Section 16.44.060, in granting the required permit(s) for a project on the site of a significant paleontological resource, the Planning Director shall attach reasonable conditions to ensure compliance with the purposes of this chapter. Such conditions could include but are not limited to, having a qualified paleontologist approved by the County present to observe, to examine and to evaluate the site during ground disturbing development activities; and to convey fossil finds to an appropriate museum or research institute. Pursuant to Section 16.44.070, after a development permit has been issued, if the paleontologist determines from observation and examination during development activities that significant paleontological resources exist on the project site that were

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<sup>2</sup> Recent amendments to the Zoning Ordinance are currently pending certification by the California Coastal Commission.

not identified in the paleontological survey or report, then the paleontologist shall notify the property owner and developer and the Planning Director. The project developer, upon notification, shall immediately cease and desist from excavation or disturbance of the project site, and shall allow inspection of the site by the Planning Director.

#### County of Santa Cruz Local Hazard Mitigation Plan 2015-2020

The County of Santa Cruz Local Hazard Mitigation Plan identifies potential hazards in the County, include geologic hazards such as earthquakes, landslides, liquefaction, erosion, and tsunami hazards. The plan provides hazard mitigation. The purpose of hazard mitigation is to implement and sustain actions that reduce vulnerability and risk from hazards or reduce the severity of the effects of hazards on people and property. Mitigation actions include both short-term and long-term activities that reduce the impacts of hazards, reduce exposure to hazards, or reduce effects of hazards through various means, including preparedness, response and recovery measures. Effective mitigation actions also reduce the adverse impacts and cost of future disasters.

### 4.6.3 Impact Analysis

#### a. Methodology and Significance Thresholds

The impact analysis is based on an assessment of baseline conditions for the project site, including topography, geologic formations, seismicity, soils, and soil conditions, as described in Section 4.6.1, *Setting*. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction and operation of the project, and recommends mitigation measures, when necessary, to avoid or minimize impacts.

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project would result in potentially significant impacts related to geology and soils if it would:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - a. 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
  - b. Strong seismic ground shaking
  - c. Seismic-related ground failure, including liquefaction
  - d. Landslides
2. Result in substantial soil erosion or the loss of topsoil
3. Be located on a 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
4. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property
5. 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
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

## b. Project Impacts and Mitigation Measures

**Threshold 1a:** Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

**Impact GEO-1** NO KNOWN FAULTS OCCUR ON OR NEAR THE PROJECT SITE; THEREFORE, THE PROPOSED PROJECT WOULD NOT EXPOSE PEOPLE TO RISKS FROM THE RUPTURE OF KNOWN FAULTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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As discussed in Section 4.6.1, *Setting*, Santa Cruz County is a geologically active area, with several major faults located within 12 miles of the project site (Dees 2018; see Appendix L). The nearest fault trace is the Ben Lomond fault, located approximately 2.7 miles west of the site (Dees 2018, California Department of Conservation 2015). No known fault traces underlie or occur near the project site. Therefore, despite the presence of active faults in the region, people using the proposed medical office building and parking structure on the project site would not be at risk from the rupture of a known fault. This impact would be less than significant.

### Mitigation Measures

Mitigation measures are not required.

### Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 1b:** Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

**Impact GEO-2** THE PROPOSED PROJECT WOULD BE IN A SEISMICALLY ACTIVE AREA, AND GROUND SHAKING COULD CAUSE STRUCTURAL FAILURE IF THE PROJECT IS NOT PROPERLY DESIGNED AND CONSTRUCTED. IMPACTS WOULD BE REDUCED TO LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION.

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The project site is in a seismically active area, within 2.7 miles of the Ben Lomond fault and within 7 to 12 miles of several other faults including, but not limited to, the Zayante-Vergeles fault, the Monterey Bay fault, the San Andreas fault, and the San Gregorio fault (Dees 2018). While the San Andreas fault is the largest and most active fault in the project area, activity on each of these faults could generate moderate to severe ground shaking on the project site. In this setting, the proposed medical office building and parking structure would likely experience strong ground shaking during their design lifetime. However, the proposed structures would be designed and constructed in accordance with the most recent seismic design standards. Santa Cruz County has adopted the 2019 CBC, which incorporates seismic design standards, with specific amendments related to seismic safety and other structural issues (Section 12.10.215 of the Santa Cruz County Code).

In the 2019 CBC, Section 1613.1 requires that structures be designed and constructed to resist the effects of earthquake motions in accordance with standards in the American Society of Civil Engineers publication ASCE 7. Section 1613.1 sets seismic design standards for different site classes, based on the soil properties of a site, ranging from Site Class A to F. The project site is located in Site

Class D. As a result, the proposed building would be designed and constructed to attain the seismic design standards for this site class. Attainment of these State standards would minimize the risk of exposing people to substantial adverse effects from ground shaking on the project site.

The proposed medical office building must still be designed to ensure structural stability compliant with the 2019 CBC. In compliance with Section 16.10.050 of the County Code, the applicant has retained a registered geotechnical engineer to prepare a Geotechnical Investigation for the project. This report recommends a series of measures that apply to grading activity, structural foundations, pavement, utility trenches, earthwork construction, retaining walls, and site drainage (Dees 2018). These measures would ensure structural stability. Pursuant to Section 16.10.070, these recommendations shall be included as conditions of approval of any permit issued for the proposed development. Therefore, the applicant would be required to implement the recommended measures to ensure structural stability. The Geotechnical Investigation, provided as Appendix L to this EIR, was prepared in 2018 and references the 2016 CBC. The County has since adopted the 2019 CBC. Thus, impacts could be potentially significant without confirmation that the measures in the current Geotechnical Investigation also meet the standards of the 2019 CBC. Impacts would be reduced to less than significant with implementation of the following mitigation measures.

## Mitigation Measures

### *GEO-2 Geotechnical Investigation Update*

Prior to issuance of the grading permit for the proposed project, the project applicant shall have an updated Geotechnical Investigation prepared for the proposed project that references and utilizes standards meeting the most recent version of the California Building Code adopted by Santa Cruz County. All measures recommended in the Geotechnical Investigation shall be incorporated into the final plans for the proposed project and made conditions of approval.

## Significance After Mitigation

With implementation mitigation measure GEO-2, the project would be designed to meet State and County standards for stability in seismically active areas. Impacts would be less than significant.

<b>Threshold 1c:</b>	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?
<b>Threshold 1d:</b>	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?
<b>Threshold 3:</b>	Would the project be located on a 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?

**Impact GEO-3 THE POTENTIAL FOR LIQUEFACTION, LANDSLIDES, LATERAL SPREADING, AND SUBSIDENCE ON THE PROJECT SITE IS LOW. THE PROJECT SITE IS ALSO AT LOW RISK FROM UNSTABLE GEOLOGIC UNITS OR SOILS. HOWEVER, IMPROPER PROJECT DESIGN, GRADING, OR CONSTRUCTION COULD EXPOSE PEOPLE OR STRUCTURES TO DAMAGE FROM UNSTABLE SOILS. IMPACTS WOULD BE REDUCED TO LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION.**

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In Santa Cruz County, the potential for liquefaction is high in lowland areas of Santa Cruz, the Soquel Valley, and the Pajaro River Valley (Santa Cruz County 2015). Liquefaction can cause serious damage to foundations and bases of structures. Two key factors in determining a site's susceptibility to liquefaction are earthquake intensities and groundwater levels. The Geotechnical Investigation prepared for the project analyzed liquefaction potential, assuming an earthquake intensity of 0.5 g and using an estimate of the historic maximum in groundwater levels on-site (Dees 2018; see Appendix L). An intensity of 0.5 g is a measure of the ground movement during an earthquake, expressed as a proportion of gravity (g) (USGS n.d.). This Geotechnical Investigation found a potential for liquefaction to occur on the project site during earthquakes, at depths ranging from approximately 18 to 26 feet below the ground surface (Dees 2018). However, it is not expected that subsurface liquefaction would cause movement at the ground surface because of the small thickness of liquefiable soil layers and their depth. The potential for lateral spreading of soils is also very low because the liquefiable soils on-site occur in discontinuous layers. Therefore, the project would be at a low risk of adverse effects from liquefaction and lateral spreading.

As discussed in Section 4.6.1, *Setting*, landslides occur as soil or rock moves downslope under the influence of gravity. The risk of landslide activity on the project site is very low because the site is nearly level and the nearest steep slope is located more than 1,000 feet away (Dees 2018). The proposed grading of the site would also not create substantial slopes, and all grading must be in conformance with design standards to ensure stability. As a result, people using the proposed medical office building and parking structure would not be exposed to substantial adverse effects from landslides. The project site is located in Santa Cruz County, which has a low risk of subsidence (DWR 2014). Neither the County's Local Hazard Mitigation Plan 2015-2020 nor the Geotechnical Investigation prepared for the project indicate a potential risk of instability from collapse outside shoreline areas (Santa Cruz County 2015; Dees 2018).

Although the project site is not located on a geologic unit or soil that is inherently unstable, the proposed medical office building must still be designed to ensure structural stability. In compliance with Section 16.10.050 of the County Code, the applicant has retained a registered geotechnical engineer to prepare a Geotechnical Investigation for the project. This report recommends a series of measures that apply to grading activity, structural foundations, pavement, utility trenches, earthwork construction, retaining walls, and site drainage (Dees 2018). Pursuant to Section 16.10.070, these recommendations shall be included as conditions of approval of any permit issued for the proposed development. Therefore, the applicant would be required to implement the

recommended measures to ensure structural stability. As noted above in Impact GEO-2, the Geotechnical Investigation, provided as Appendix L to this EIR, was prepared in 2018 and references the 2016 CBC. The County has adopted the 2019 CBC. Thus, impacts could be potentially significant without confirmation that the measures in the current Geotechnical Investigation also meet the standards of the 2019 CBC. Impacts would be reduced to less than significant with implementation of the following mitigation measure.

## Mitigation Measures

Implementation of mitigation measure GEO-2, above, would be required.

## Significance After Mitigation

With implementation mitigation measure GEO-2, the project would have a less than significant impact related to the stability of geologic units or soils, including liquefaction, lateral spreading, landslides, subsidence, and collapse.

<b>Threshold 2:</b> Would the project result in substantial soil erosion or the loss of topsoil?
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**Impact GEO-4** PROJECT CONSTRUCTION COULD RESULT IN SOIL EROSION. ADHERENCE TO NPDES PERMIT REQUIREMENTS AND COUNTY ORDINANCES WOULD ENSURE THAT CONSTRUCTION AND OPERATION OF THE PROJECT DO NOT RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

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As detailed in Impact HWQ-1 in Section 4.9, *Hydrology and Water Quality*, construction of the project could result in soil erosion due to earth-moving activities such as excavation, grading, soil compaction and moving, and soil stockpiling. Since the project site is nearly flat with a slight southwest slope, runoff during storm events reaches the storm drain system either as sheet flow or by slowing into the drainage ditch to the north, where it is discharged into Rodeo Gulch. Runoff from the construction site has the potential to cause substantial amounts of erosion, resulting in off-site sediment transport to Rodeo Gulch and ultimately to Monterey Bay.

Because construction of the project would disturb more than an acre, it would be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB, also known as the Construction General Permit. This order amended NPDES General Permit Order No. 2009-0009-DWQ, which the agency has administratively extended until a new Construction General Permit is adopted and becomes effective (SWRCB 2020). To comply with the current permit, the applicant would be required to prepare and implement a SWPPP. The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit. Construction BMPs could include inlet protection, silt fencing, fiber rolls, stabilized construction entrances, stockpile management, solid waste management, and concrete waste management. As described above in Section 4.6.2, Regulatory Setting, mandatory compliance with Santa Cruz County Code Chapter 16.22 would require development and implementation of an erosion control plan. Additionally, Santa Cruz County Code Section 7.79.100 requires implementation of a Stormwater Pollution Control Plan during project construction. The plan must focus on measures to be installed while the project is under construction and include appropriate BMPs from the County Construction Site Stormwater Pollution Control BMP Manual

Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events. In addition, the project would be subject to the NPDES



General Permit for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4 Permit) as well as the County's Erosion Control and Grading Ordinances, which require a grading plan and erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment movement prior to issuance of a building permit or development permit. Implementation of the required SWPPP and compliance with local ordinances would reduce the potential for soil erosion and off-site transport following a storm event during construction.

Development of the project would increase the area of impervious surface on-site from approximately 56,616 square feet (SF) to 163,270 SF, for a net increase of 106,654 SF (as detailed in the Preliminary Post-Construction Stormwater Control Plan for Santa Cruz SMON, Appendix M). Impervious surfaces can allow sediment to accumulate and be transported to waterways during precipitation events. However, the project would be required to implement post-construction stormwater BMPs to reduce the discharge of pollutants, pursuant to the MS4 Permit. These post-construction stormwater management requirements are standard practice and have been proven effective regionally for areas covered under MS4 Permits at preventing increases in stormwater volume and runoff rates, as well as loads of pollutants such as sediment. Additionally, the project site would be landscaped. Landscaping, such as grass, shrubs, and trees stabilize soils with their root systems. Groundcover, such as grass, also slows the rate of overland flow of runoff.

As a result of compliance with construction and post-construction permit requirements, the project would have a less than significant impact related to erosion and the loss of topsoil.

## Mitigation Measures

Mitigation measures are not required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

<p><b>Threshold 4:</b> Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</p>
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**Impact GEO-5** THE PROJECT SITE INCLUDES HIGHLY EXPANSIVE SOILS, BUT THE APPLICANT WOULD BE REQUIRED TO IMPLEMENT RECOMMENDATIONS IN THE GEOTECHNICAL INVESTIGATION TO MINIMIZE THIS RISK AND IMPROVE SOIL STABILITY. THEREFORE, THE IMPACT FROM EXPANSIVE SOILS WOULD BE SIGNIFICANT BUT MITIGABLE.

The project site includes thin layers of highly expansive clayey soils in the zone where structural foundations would be installed (Dees 2018). Expansive soils tend swell with increases in soil moisture and shrink as the soil moisture decreases. The volume changes that the soils undergo in this cyclical pattern can stress and damage slabs and foundations if precautionary measures are not incorporated into construction. To prevent structural hazards, the Geotechnical Investigation recommends that highly expansive soils be removed from the site or used in landscaped areas. In addition, it recommends that native fill be capped with 12 inches of select granular fill to help minimize soil expansion and provide a firm base for slab floors. The Geotechnical Investigation finds that properly moisture-conditioned and blended soils with at least 12 inches of granular fill on top would have a low potential to swell under the proposed building loads. Soil blending applies to moderately expansive soils; as described above, highly expansive soils should be removed. As discussed in Impact GEO-3, Section 16.10.070 of the County Code would require that the applicant

implement recommended measures in a geotechnical study prepared for the project. However, as discussed above, the current Geotechnical Investigation utilizes standards from the 2016 CBC, while the County has adopted the more recent 2019 CBC. Therefore, the measures in the current Geotechnical Investigation may not utilize the most recent methods for addressing expansive soils, which could in turn create risks to people using the medical office building and parking garage, or to the structures themselves. With the required implementation of the following mitigation measures, impacts would be reduced to less than significant.

### Mitigation Measures

Implementation of mitigation measure GEO-2, above, would be required.

### Significance After Mitigation

With implementation mitigation measure GEO-2, the project would be designed to meet State and County standards for stability, including measures addressing expansive soils. Impacts would be less than significant.

**Threshold 5:** Would the project 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?

**Impact GEO-6** THE PROJECT WOULD NOT INVOLVE THE USE OF SEPTIC TANKS OR OTHER ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS. NO IMPACT RELATED TO SUCH SYSTEMS WOULD OCCUR.

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As discussed in Section 2, *Project Description*, wastewater generated by the proposed project would be conveyed to existing sanitary mains and treated at the wastewater treatment facility located in the City of Santa Cruz. The project would not involve the use of septic tanks or other alternative wastewater disposal systems. Therefore, no impact related to alternative wastewater disposal systems would occur.

### Mitigation Measures

Mitigation measures are not required.

### Significance After Mitigation

The proposed project would have no impact.

**Threshold 6:** Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Impact GEO-7** THE PROJECT SITE OVERLIES PLEISTOCENE-ERA MARINE TERRACE DEPOSITS, A GEOLOGIC UNIT WITH HIGH PALEONTOLOGICAL SENSITIVITY. GROUND DISTURBANCE HAS THE POTENTIAL TO DISTURB INTACT FOSSILS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION TO IDENTIFY AND PRESERVE POTENTIAL FOSSIL RESOURCES.

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The project site overlies Pleistocene-era marine terrace deposits, a geologic unit which has produced vertebrate fossil specimens of camel, horse, ground sloth, whale, mastodons, dolphin, shark, and fish in southern and central coastal California (Jefferson et al. 1992; Woodring et al. 1946). Because of the documented history of finding intact vertebrate fossils in these marine terrace deposits in Santa Cruz County and elsewhere along the California coast, it is assumed that they have a high paleontological sensitivity, with the potential to yield significant resources on the project site. Excavation and ground disturbance during construction of the project could potentially reach previously undisturbed strata with high paleontological sensitivity. The impact would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. Therefore, this impact would be potentially significant. Impacts would be reduced to less than significant with implementation of the following mitigation measure.

## Mitigation Measures

### *GEO-7 Protection of Paleontological Resources*

The following measures shall be required for all grading and excavation at depths of 3 feet or greater below the existing grade:

- **Paleontological Mitigation and Monitoring Program.** A qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program to be implemented during ground disturbance activity below existing grade for the project, in areas where native soils would be encountered. A qualified paleontologist is defined as an individual who meets the education and professional experience standards as set forth by the Society of Vertebrate Paleontology (2010), which includes a BS or BA degree in geology or paleontology, one year of monitoring experience, and knowledge of the local paleontology and collection/salvation paleontological procedures and techniques. This program shall outline the procedures for construction staff Worker Environmental Awareness Program (WEAP) training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.
- **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of ground disturbance activity below existing grade, in areas where native soils would be encountered, construction personnel shall be informed on the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.
- **Paleontological Monitoring.** All grading and excavation that would involve disturbance below the existing grade, in areas where native soils would be encountered, shall be monitored on a full-time basis by a qualified paleontological monitor. Should no fossils be observed during the first 50 percent of such excavations, paleontological monitoring could be reduced to weekly spot-checking under the discretion of the qualified paleontologist. Monitoring shall be

conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources.

- **Salvage of Fossils.** If fossils are discovered, the County shall be notified immediately, and the qualified paleontologist (or paleontological monitor) shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the paleontologist should have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.
- **Preparation and Curation of Recovered Fossils.** Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection, along with all pertinent field notes, photos, data, and maps.
- **Final Paleontological Mitigation and Monitoring Report.** Upon completion of ground disturbing activity (and curation of fossils if necessary) the qualified paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.

### Significance After Mitigation

With implementation of Mitigation Measure GEO-7, intact paleontological resources would be identified and preserved if encountered during construction of the project. Therefore, the impact on such resources would be reduced to a less-than-significant level after mitigation.

### 4.6.4 Cumulative Impacts

The geographic scope for considering cumulative impacts to geology and soils is the project site and immediately adjacent areas. The geographic scope would also include off-site lands where ground disturbance on-site could affect adjacent property. This scope is appropriate because geologic materials and soils occur at specific locales and are generally affected by activities directly on or immediately adjacent to the soils, and not by activities occurring outside the area. In addition, any geologic impacts of the project would be site-specific.

There are no planned projects immediately adjacent to the project site. Cumulative buildout of the Santa Cruz County General Plan could expose new residents and structures to seismic and other geologic hazards in the county. However, these seismic and soil issues are specific to each project and, for purposes of this cumulative analysis, the geographic context focuses on the project site and immediately adjacent lands. Because of the site-specific nature of potential seismic and soil issues, any future development along the corridor would be required to address these issues on a case-by-case basis through preparation of required soils and geotechnical engineering studies and adherence to the recommendations therein. They would also be required to adhere to existing local and state laws and regulations including the applicable CBC standards and requirements. Thus, the combination of the project with other cumulative development would not have a significant cumulative impact. Furthermore, with adherence to the applicable laws and regulations and required mitigation identified above, the project's contribution to any cumulative geology and soils impacts would not be cumulatively considerable.

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## 4.7 Greenhouse Gas Emissions

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This section analyzes greenhouse gas (GHG) emissions associated with the proposed project and potential impacts related to climate change. This section describes regional GHG emission sources and inventories, the regulatory framework applicable to GHG emissions, and evaluates potential project impacts related to GHG emissions as a result of project construction and operation.

### 4.7.1 Existing Conditions

#### a. Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans, along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. Per the United Nations Intergovernmental Panel on Climate Change (IPCC), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC 2014).

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. They are present in the atmosphere naturally and are released by natural sources or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

The following discusses the primary GHGs of concern.

#### Carbon Dioxide

The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO<sub>2</sub> are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (United States Environmental Protection Agency [USEPA] 2018a). CO<sub>2</sub> was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th century. Concentrations of CO<sub>2</sub> in the atmosphere have risen approximately 40 percent since the industrial revolution. Currently, CO<sub>2</sub> represents an estimated 76 percent of total GHG emissions (USEPA 2018b). The largest source of CO<sub>2</sub> and of overall GHG emissions is fossil fuel combustion.

## Methane

Methane (CH<sub>4</sub>) is an effective absorber of radiation, though its atmospheric concentration is less than that of CO<sub>2</sub>, and its lifetime in the atmosphere is limited to 10 to 12 years. Since 1750 (pre-industrial years), the concentration of CH<sub>4</sub> in the atmosphere has increased by 150 percent, although emissions have declined from 1990 levels (IPCC 2013). Anthropogenic sources of CH<sub>4</sub> include agricultural activities, fossil fuel production, transport, waste management, energy use, and biomass burning (USEPA 2018b).

## Nitrous Oxide

Concentrations of nitrous oxide (N<sub>2</sub>O) began to rise at the beginning of the industrial revolution and continue to increase at a relatively uniform growth rate (NOAA 2018). N<sub>2</sub>O is produced by microbial processes in soil and water, including those reactions that occur in fertilizers that contain nitrogen, fossil fuel combustion, and other chemical processes. Use of these fertilizers has increased over the last century. Agricultural soil management and mobile source fossil fuel combustion are the major sources of N<sub>2</sub>O emissions.

## Fluorinated Gases

Fluorinated gases are powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances such as chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and were phased out under the Montreal Protocol (1987) and Clean Air Act Amendments of 1990. Electrical transmission and distribution systems account for most SF<sub>6</sub> emissions, while PFC emissions result from semiconductor manufacturing and as a by-product of primary aluminum production.

### b. Global Warming Potential

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). The carbon dioxide equivalent (CO<sub>2</sub>e) metric is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. It is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, CH<sub>4</sub> has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis. Therefore, one metric ton (MT) of CH<sub>4</sub> is equal to 25 MT CO<sub>2</sub>e. The GWP for nitrous oxide is approximately 298 times that of CO<sub>2</sub>. Fluorinated gases are typically emitted in smaller quantities than CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O; but these compounds have much higher GWPs. SF<sub>6</sub> is the most potent GHG the IPCC has evaluated, with a GWP of 22,800 (USEPA 2019). The total emissions of the pollutants of concern for the project (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) are reported together using the CO<sub>2</sub>e metric in this analysis.

### c. Greenhouse Gas Emissions Inventories

Worldwide anthropogenic emissions of GHG were approximately 49,000 million metric tons (MMT) CO<sub>2</sub>e in 2010 (IPCC 2014). CO<sub>2</sub> emissions from fossil fuel use accounts for 32,000 MMT. CO<sub>2</sub> emissions from all sources account for 76 percent of the total. Methane emissions account for 16 percent of GHG, and N<sub>2</sub>O emissions account for six percent (IPCC 2014).

Total U.S. GHG emissions were 6,457 MMT CO<sub>2</sub>e in 2016 (USEPA 2018c). Total U.S. emissions have increased by 1.3 percent since 1990; and emissions decreased by 0.5 percent from 2016 to 2017 (USEPA 2019). This decrease was primarily due to a decrease in fossil fuel consumption, both from substitution of coal with non-fossil energy sources, and milder weather that decreased energy demand. Relative to 1990, gross emissions in 2017 are higher by 1.3 percent, down from a high of 15.7 percent above 1990 levels in 2007. CO<sub>2</sub>emissions from fossil fuel consumption continue to be the largest source of U.S. GHG emissions, accounting for approximately 77 percent of emissions since 1990 (USEPA 2019).

Based upon the California Air Resources Board (CARB) California Greenhouse Gas Inventory for 2000-2016, California produced 429 MMT CO<sub>2</sub>e in 2016, 12 MMT CO<sub>2</sub>e lower than 2015 levels (CARB 2019). Transportation is the major source of GHG in California, contributing 39 percent of the state's total GHG emissions. Industrial operations are the second largest source, contributing 21 percent of the state's GHG emissions. California's GHG emissions have followed a declining trend since 2007. Specifically, emissions from the electricity sector continue to decline due to growing zero-GHG energy generation sources, dominated by solar.

An inventory of GHG emissions in the Monterey Bay area was prepared as part of the 2040 Metropolitan Transportation Plan/ Sustainable Communities Strategy and Regional Transportation Plans for Monterey, San Benito and Santa Cruz Counties (MTS/SCS). In 2015, counties within the Association of Monterey Bay Area Governments (AMBAG) region, including Santa Cruz County, emitted 4,842,695 MT CO<sub>2</sub>e of GHGs (AMBAG 2018a). On-road vehicle use accounted for 2,692,239 MT CO<sub>2</sub>e, or approximately 56 percent, of total emissions.

#### **d. Potential Effects of Climate Change**

Potential impacts of climate change in California may include sea level rise, loss of water supply and snow pack, more and larger forest fires, damage to agriculture, public health impacts, and habitat destruction (Office of the Attorney General [OAG] 2018). These potential impacts are also anticipated and have been observed in the Santa Cruz County area.

The most relevant effects of climate change to the project site are those that could result in potential damage to the structure or its occupants, including water shortages during drought conditions. As described in Section 4.16, *Utilities and Service Systems*, water for the project would be provided by the City of Santa Cruz, which has insufficient water supply to meet demand during a dry water year or years.

Climate change makes open space areas and the built environment at the edge of natural areas more vulnerable to fires by increasing temperatures and making forests and brush drier. Potential increases in the severity and frequency of drought would exacerbate the risk of wildfire. The fire season in California has begun to start earlier, last longer, and be more intense than in the last several decades. Wildfire occurrence statewide could increase several fold by the end of the century, increasing fire suppression and emergency response costs and damage to property (OAG 2018).

As described in Section 5, *Other CEQA Required Discussions*, the project site is located approximately 1.5 miles south from lands classified as moderate fire severity zones and over two miles from lands classified as very high fire hazard severity zones (California Department of Forestry & Fire Protection 2007). The project site is not adjacent to wildland fuels, such as forest, chaparral, or annual grasslands, but is just west of a natural drainage course that supports natural vegetation. The project site is developed as a junkyard and miscellaneous storage area and surrounded by urban



and built up lands and does not contain wildland fuels, such as forest or grassland. However, the smoke from wildland fires in other areas of the County, as well as other areas of the State could impact health of potential occupants of the medical office building.

## 4.7.2 Regulatory Setting

### International

#### *Intergovernmental Panel on Climate Change*

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

### Federal

#### *U.S. Environmental Protection Agency Endangerment Finding and Cause or Contribute Finding*

In its Endangerment Finding, signed in December 2009, the administrator of the USEPA found that GHGs in the atmosphere threaten the public health and welfare of current and future generations. Although the Endangerment Finding does not place requirements on industry, it is an important step in the EPA's process to develop regulations. This action was a prerequisite to finalizing the USEPA's proposed GHG emission standards for light-duty vehicles.

In the USEPA's Cause or Contribute Finding, the administrator found that the combined emissions of these well-mixed GHG from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

### State

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

#### *Executive Order S-3-05 and EO B-30-15*

In 2005, Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels (CalEPA 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks,

an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc. In April 2015, the governor issued EO B-30-15 calling for a new target of 40 percent below 1990 levels by 2030.

#### *Executive Order S-13-08*

On November 14, 2008, the Governor issued Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive that provided clear direction for how the state should plan for future climate impacts. S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

1. Initiate California's first statewide Climate Change Adaptation Strategy that will assess the state's expected climate change impacts, identify where California is most vulnerable and recommend climate adaptation policies
2. Request the National Academy of Science establish an expert panel to report on sea level rise impacts in California in order to inform state planning and development efforts
3. Issue interim guidance to state agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects
4. Initiate studies on critical infrastructure projects, and land use policies vulnerable to sea level rise

The *Climate Change Adaptation Strategy* was developed by the California Natural Resources Agency (CNRA), in coordination with Cal EPA; California Climate Action Team (CCAT); the Business, Transportation and Housing Agency; California Department of Public Health; and other key stakeholders. Adopted in 2009, the *Climate Change Adaptation Strategy* synthesizes the most up-to-date information on expected climate change impacts to California for policy-makers and resource managers, provides strategies to promote resiliency to these impacts, and develops implementation plans for short- and long-term actions (CNRA 2009).

In January 2018, the California Natural Resources Agency, in coordination with other state agencies, released an update to the Climate Change Adaptation Strategy called the *Safeguarding California Plan: 2018 Update*. The update provides recommendations and a framework for policy initiatives in response to the impacts of climate change (CNRA 2018). Expected impacts in California include rising temperatures, rising sea levels, declining snowpack, increasing storm intensity, increased drought intensity, and increased wildfire risk.

#### *Assembly Bill 32, the California Global Warming Solutions Act of 2006*

In September 2006, the California State Legislature adopted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs as defined under AB 32 include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CFCs, HFCs, PFCs, and SF<sub>6</sub>. Under AB 32, CARB has the primary responsibility for reducing GHG emissions and continues the CCAT to coordinate statewide efforts and promote strategies that can be undertaken by many other California agencies. AB 32 required CARB to adopt rules and regulations that would achieve GHG emissions equivalent to state-wide levels in 1990 by 2020.

In general, AB 32 directed CARB to do the following:

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020, and update the Scoping Plan every five years

- Maintain and continue reductions in emissions of GHG beyond 2020
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010
- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions
- Convene an Environmental Justice Advisory Committee to advise the Board in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research and GHG emission reduction measures

Regarding the first bullet, the initial Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (CARB 2008).

The 2014 Scoping Plan Update was adopted in May 2014 (CARB 2014). This first update identified opportunities for GHG reductions using existing and new funding sources, defined CARB's climate change priorities for the next five years, and established the plan for meeting the long-term goals of EO S-3-05, described above. The update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the initial Scoping Plan and evaluates GHG reduction strategies may be aligned with other state priorities for water, waste, natural resources, clean energy, transportation, and land use. According to the Scoping Plan, California is on track to meet the 2020 GHG emission reduction goal.

#### *Senate Bill 97*

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency adopted amendments to the *State CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

#### *Senate Bill 32*

On September 8, 2016, the governor signed SB 32 into law extending AB 32 by requiring the state to further reduce GHGs to 40 percent below 1990 levels by 2030, while leaving other provisions of AB 32 remain unchanged.

#### *CARB 2017 Scoping Plan*

In December 2017, in response to SB 32, CARB adopted an updated its *2017 Scoping Plan*, which identifies GHG reductions by emissions sector to achieve a statewide emissions level that is 40 percent below 1990 levels by 2030 (CARB 2017). In that document, CARB recommends statewide targets of no more than six metric tons CO<sub>2</sub>e per capita by 2030 and no more than two metric tons CO<sub>2</sub>e per capita by 2050. However, CARB specifically states that these goals are appropriate for the plan level (city, county, sub-regional, or regional level, as appropriate), but not for specific individual projects because they include all emissions sectors in the state.

The 2017 Scoping Plan Update also includes the following recommendations for local governments when considering discretionary approvals and entitlements of individual projects through CEQA:

Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development. There are recent examples of land use development projects in California that have demonstrated that it is feasible to design projects that achieve zero net additional GHG emissions. Several projects have received certification from the Governor under AB 900, the Jobs and Economic Improvement through Environmental Leadership Act (Buchanan, Chapter 354, Statutes of 2011), demonstrating an ability to design economically viable projects that create jobs while contributing no net additional GHG emissions.

To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT [vehicle miles traveled], and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally. For example, on-site design features to be considered at the planning stage include land use and community design options that reduce VMT, promote transit-oriented development, promote street design policies that prioritize transit, biking, and walking, and increase low carbon mobility choices, including improved access to viable and affordable public transportation, and active transportation opportunities. Regionally, additional GHG reductions can be achieved through direct investment in local building retrofit programs that can pay for cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting, energy efficient appliances, energy efficient windows, insulation, and water conservation measures for homes within the geographic area of the project. These investments generate real demand side benefits and local jobs, while creating the market signals for energy efficient products, some of which are produced in California. Other examples of local direct investments include financing installation of regional electric vehicle (EV) charging stations, paying for electrification of public school buses, and investing in local urban forests.

(CARB, California's 2017 Climate Change Scoping Plan, p. 102 [footnotes omitted].)

#### *Senate Bill 350*

In the 2015 legislative session, the Legislature passed SB 350 (Stats. 2015, ch. 547). This legislation added language to the Public Utilities Code that essentially puts into statute the 2050 GHG reduction target already identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain state agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code now states that "[t]he Legislature finds and declares [that]...[r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification." Furthermore, Section 740.12(b) now states that the California Public Utilities Commission (PUC), in consultation with ARB and the California Energy Commission (CEC), must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, . . . and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

## Local

### *AMBAG 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy and SCCRTC 2040 Santa Cruz County Regional Transportation Plan*

The 2040 Santa Cruz County Regional Transportation Plan for Santa Cruz County (RTP) was adopted by the Santa Cruz County Regional Transportation Commission (SCCRTC) in June 2018 to guide short- and long-range transportation planning for the County. The RTP is incorporated into the 2040 Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS) adopted by AMBAG in June 2018 (AMBAG 2018b) to meet the requirements of Senate Bill 375. The MTP/SCS includes active transportation as a key element to reduce greenhouse gases, reduce roadway congestion, and increases health and the quality of life of residents, and refers to SCCRTC projects that would enhance walking and biking facilities.

### *County of Santa Cruz General Plan and Local Coastal Program*

The Conservation and Open Space Element of the County's General Plan and Local Coastal Program (LCP) includes Policy 5.18.9 for reducing GHG emissions and that is applicable to the proposed project. Policy 5.18.9 states:

**Policy 5.18.9. Greenhouse Gas Reduction.** Implement state and federal legislation promoting the national goal of 35 percent reduction of carbon dioxide and other greenhouse gases by 2000.

### *Santa Cruz County Climate Action Strategy*

Santa Cruz County adopted a Climate Action Strategy (CAS) in 2013. The CAS outlines a course of action to reduce GHG emissions produced by governmental operations and community activities within unincorporated Santa Cruz County. The CAS articulates a broad strategy for reaching emission reduction goals, and then goes further to identify the individual programs, policies, and initiatives that, together, will move County operations and the community toward the goals. Strategies are included to reduce emissions in the major focus areas of transportation, energy, and solid waste (County of Santa Cruz 2013).

As described in the CAS, Santa Cruz County has already met the emissions target set by AB 32 of reducing GHG emissions to 1990 levels by 2020. The CAS also includes GHG emissions targets for the years 2035 and 2050. The emissions reduction policies of the CAS are organized into three topical areas: Energy Use, Transportation and Solid Waste. A discussion of the project's consistency with the CAS is provided under Threshold 2, below.

## 4.7.3 Impact Analysis

This section describes the potential environmental impacts of the proposed project relevant to greenhouse gas emissions.

### a. Methodology and Significance Thresholds

#### Methodology

GHG emissions are reported as the worst-case daily emissions. The analysis focuses on CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O because these represent most of the project's GHG emissions, which would result from operation of construction equipment and operation of the medical office building.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate construction emissions for the proposed project, using the same assumptions as described in Section 4.3, *Air Quality*, in addition, to those described below.

### *Construction Emissions*

The construction emissions associated with development of the proposed project were calculated using the CalEEMod version 2016.3.2 by using a combination of project specific data inputs provided by the applicant for the type and size of proposed land uses and modeling defaults where project specific information was unavailable. Project specific data inputs related to construction included:

- Construction phase duration for demolition, site preparation, grading, building construction, paving and architectural coating
- Area to be graded and paved and volume of excavated soil
- Engine specifications of bulldozers that would be used during construction

Detailed lists of construction equipment are not available at this time. As such CalEEMod defaults were used for construction equipment. The proposed project was assumed to utilize typical demolition and construction equipment including but not limited to compactors, cranes, crawler tractors, dozers, excavators, forklifts, graders, loaders, rollers, scrapers, signal boards, tractors and trenchers. CalEEMod is based on parameters including the duration of construction activity, area of disturbance, and anticipated equipment used during construction. It is assumed that all of the construction equipment used would be diesel-powered.

This analysis assumes that demolition of the existing on-site structures, grading, and construction of the proposed medical office building and parking structure on the project site would begin in November 2021. Based on construction scheduling information provided by the project applicant, construction would occur over approximately 18 to 24 months and complete buildout would occur by 2023. For the purposes of this analysis, it is assumed that construction would end in May 2023.

### *Operational Emissions*

Operational emissions of the project were also calculated using CalEEMod. CalEEMod estimates GHG emissions from energy use by multiplying average rates of non-residential energy consumption by the quantities of non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider.

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the building, such as plug-in appliances. Non-building energy use, or “plug-in energy use,” can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.). Emissions attributed to energy use include emissions from natural gas consumption for lighting as well as space and water heating. In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting.

Because project construction would begin in November 2021, the project would be constructed in accordance with the 2019 Title 24 standards. Energy usage from non-residential energy usage was reduced by 30 percent to account for the requirements of 2019 Title 24 standards (California Energy Commission 2019).

Furthermore, the project would include rooftop solar photovoltaic (PV) panels mounted atop the parking garage. According to specifications provided by the applicant, the solar PV panels would generate approximately 793.8 MWh of energy annually. Therefore, the energy reduction achieved by the requisite on-site PV system was included in CalEEMod as “mitigation” for the project’s energy use emissions, which is a term of art for the modeling input and is not equivalent to mitigation measures that may apply to the CEQA impact analysis.

As discussed in Section 4.5, *Energy*, the project would be served by Central Coast Community Energy (3CE), which was until recently known as Monterey Bay Community Power (MBCP) in the project area. 3CE is a community choice aggregator that sources some of its electricity from renewable sources for Monterey, San Benito, Santa Cruz and parts of San Luis Obispo and Santa Barbara counties. Electricity is delivered through PG&E’s transmission infrastructure. 3CE’s energy intensity factors (i.e., the amount of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O per megawatt-hour) were used to calculate GHG emissions. As of 2018, 3CE’s emission factor for CO<sub>2</sub> was 2 pounds per megawatt hour (lbs/MWh) (MBCP 2018). Given that 3CE does not provide electricity from fuel sources that generate CH<sub>4</sub> and N<sub>2</sub>O such as natural gas or coal, CH<sub>4</sub> and N<sub>2</sub>O emission factors were assumed to be negligible.

CalEEMod was also used to calculate emissions associated with area sources, including consumer products, landscape maintenance, and architectural coatings.

To calculate the GHG emissions generated by solid waste disposal, the total volume of solid waste was calculated using waste disposal rates identified by the California Department of Resources Recycling and Recovery (CalRecycle). According to a CalRecycle report to the Legislature, as of 2013 California had achieved a statewide 50 percent diversion of solid waste from landfills through “reduce/recycle/compost” programs. AB 341 mandates that 75 percent of the solid waste generated be reduced, recycled, or composted by 2020. Santa Cruz County has achieved a diversion rate of 75 percent and this level of waste reduction was therefore incorporated in to the CalEEMod (County of Santa Cruz 2016).

The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute’s *Waste Not, Want Not: The Potential for Urban Water Conservation in California* (2003) (CAPCOA 2017). Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use.

CalEEMod does not incorporate water use reductions achieved by 2016 CalGreen (Part 11 of Title 24). New development would be subject to CalGreen, which requires a 20 percent increase in indoor water use efficiency. Therefore, in order to account for compliance with CalGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for new development.

For mobile sources, typically CO<sub>2</sub> and CH<sub>4</sub> emissions from vehicle trips to and from a project site are quantified using in CalEEMod. Vehicle emissions are calculated based on the vehicle type and the trip rate for each land use. The vehicle emission factors and fleet mix used in CalEEMod are derived from CARB’s Emission Factors 2011 model, which includes GHG reductions achieved by implementation of Pavley I (Clean Car Standards) and the Low Carbon Fuel Standard and are thus considered in the calculation of standards for project emissions. Because CalEEMod does not calculate N<sub>2</sub>O emissions from mobile sources, N<sub>2</sub>O emissions are typically quantified using guidance from CARB (2018). However, for mobile-source emissions for the proposed project were not included in the analysis. Mobile-source GHG emissions were not included because, as described in Section 4.14, *Transportation*, the proposed project would reduce existing VMT in the region.

Because VMT would decrease compared to existing conditions, there would be a corresponding decrease in mobile-source GHG emissions. Therefore, the proposed project would result in no net new mobile-source emissions.

## Significance Thresholds

Neither the Monterey Bay Air Resources District (MBARD), AMBAG, nor Santa Cruz County have adopted an evidence-based numeric threshold consistent with the 2017 Scoping Plan and the state's long-term GHG reduction goals. The County of Santa Cruz has adopted a climate action strategy, but these plans do not include a threshold or project specific requirements for determining whether project emissions are cumulatively considerable. Therefore, they are not considered "qualified" to determine the significance of a project, according to *State CEQA Guidelines* Section 15183.5.

As identified in Section 15064.7(c) of the *State CEQA Guidelines*, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence. GHG analysis guidance published by the state, MBARD, and AMBAG, was reviewed and considered in determining an applicable standard for the project. As described below, existing thresholds generally fall into two categories: bright-line thresholds and per service population thresholds.

### *Bright Line Thresholds*

Bright-line thresholds address the state's long-term emissions reduction goals by determining a screening level under which a project would not be considered to hinder the state's ability to meet long-term goals. Bright-line thresholds are typically intended to screen out smaller projects with relatively minimal emissions. These thresholds were ultimately rejected for this analysis because they do not specifically address the contribution of emissions in Santa Cruz County to the statewide goals. Numeric thresholds adopted by other agencies were considered as an option, including a threshold of 900 MT CO<sub>2</sub>e (annual emissions) recommended by the California Air Pollution Control Officers Association (CAPCOA) (CAPCOA 2008), and a threshold of 1,150 MT CO<sub>2</sub>e (annual emissions) adopted by the San Luis Obispo County Air Pollution Control District (SLOAPCD). These thresholds were ultimately rejected for this analysis because they do not specifically address the contribution of emissions in Santa Cruz County to the statewide goals.

### *Per Service Population Thresholds*

Numeric thresholds based on service population (defined as residents and employees) or per capita thresholds are also acceptable per the 2017 Scoping Plan. Land use projects under the jurisdiction of MBARD have used the quantitative thresholds established SLOAPCD to assess GHG impacts. In April 2012, SLOAPCD, whose jurisdiction is adjacent to MBARD's to the south, adopted quantitative thresholds for GHG emissions for most land use projects (SLOAPCD 2012). The SLOAPCD CEQA Handbook includes an efficiency threshold of 4.9 MT of CO<sub>2</sub>e per service population (SP) per year (where service population = number of residents + employees). The most appropriate threshold available to evaluate potential GHG emissions impacts is SLOAPCD's adopted efficiency threshold of 4.9 MT of CO<sub>2</sub>e per service population per year. SLOAPCD's supporting evidence for the efficiency threshold states that it is appropriate for large projects because it reflects the consistency of highly efficient large projects with the state's GHG reduction targets despite such projects' relatively high mass emissions (SLOAPCD 2012). Because the efficiency metric is tied to ensuring every resident and



employee does his or her fair share to achieve statewide GHG reduction targets, it is appropriate for use anywhere in the state, and not just in the region within SLOAPCD's jurisdiction.

SLOAPCD designed its efficiency threshold to achieve consistency with the 2020 target set by AB 32 and has not yet updated this threshold to achieve consistency with the 2030 target set by SB 32. However, using the same methodology SLOAPCD used to derive the 2020 target results in a threshold of 2.8 MT CO<sub>2</sub>e per service population per year in 2030. In the absence of an updated threshold, the SLOAPCD efficiency threshold as updated for 2030 is the appropriate threshold to use in evaluating the significance of the proposed project's GHG emissions. Project per capita emissions, which primarily result from vehicle trips, would continue to decrease over time due to implementation and expansion of statewide policies, regulations, and programs, such as fuel efficiency standards, renewable energy requirements for utility providers, and incentive programs to support hybrid and EV adoption. Therefore, the GHG efficiency threshold of 2.8 MT CO<sub>2</sub>e per service population per year for 2030 is applied to projected development under the project. Emissions greater than 2.8 MT CO<sub>2</sub>e per service population per year may conflict with substantial progress toward GHG reduction targets, and the project's cumulative contribution of emissions would be considered cumulatively considerable. As the project is estimated to be operational in 2024, using the 2030 target as a significance threshold is conservative.

The significance thresholds used in this analysis are based on Appendix G of the State CEQA Guidelines. The CEQA Guidelines do not quantify the amount of GHG emissions that would constitute a significant impact on the environment. Determination of the significance of GHG emissions is at the discretion of the lead agency, which may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts (CEQA Guidelines Section 15064.4(a), 15064.7(c)). As described in the previous paragraph, an efficiency threshold of 2.8 MT CO<sub>2</sub>e per service population per year for 2030 is used for the threshold of significance in this analysis.

Therefore, for the purposes of this EIR, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

**Impact GHG-1** THE PROJECT WOULD NOT GENERATE NEW, ONGOING SOURCES OF GHG EMISSIONS THAT WOULD HAVE A DIRECT OR INDIRECT SIGNIFICANT IMPACT ON THE ENVIRONMENT. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction and operation of the proposed project would generate GHG emissions. Project-related construction emissions would be confined to the estimated construction duration of approximately 18-24 months, a relatively short period of time in relation to the overall life of the proposed project. Therefore, construction-related GHG emissions were amortized over a 30-year period to determine the annual construction-related GHG emissions over the life of the project. As shown in Table 4.7-1, project construction would result in an average of approximately 44.4 MT of CO<sub>2</sub>e per year.

**Table 4.7-1 Estimated Project Construction GHG Emissions**

Year	Project Emissions (MT of CO <sub>2</sub> e)
Construction Total	1,331.4
Total Amortized over 30 Years	44.4

See Appendices C for CalEEMod results.

Table 4.7-2 summarizes the long-term operational GHG emissions generated by the project from area sources, energy use, solid waste, water use, and mobile sources combined with construction GHG emissions. Mobile emissions shown in Table 4.7-2 are zero because, as described in Section 4.14, *Transportation*, operation of the proposed project would reduce existing and future VMT in the region. Therefore, there would be an associated decrease on mobile-source GHG emissions in the region.

**Table 4.7-2 Project Combined Annual Emissions of Greenhouse Gases**

Emission Source	Annual Project Emissions (MT of CO <sub>2</sub> e)
<b>Construction (Amortized Annual)</b>	44.4
<b>Operational</b>	
Area	<0.1
Energy	166.7
Solid Waste	434.5
Water	22.0
<b>Mobile<sup>1</sup></b>	
CO <sub>2</sub> and CH <sub>4</sub>	0
N <sub>2</sub> O	0
<b>Total Project</b>	667.6
<b>Service Population</b>	300
<b>Total GHG Emissions per Service Population</b>	2.2

Emission Source	Annual Project Emissions (MT of CO <sub>2</sub> e)
<b>Threshold</b>	<b>2.8</b>
Exceed Threshold	No

<sup>1</sup> The Transportation Impact and Operational Analysis prepared for the project indicated that vehicle miles traveled would be reduced by approximately 30,030 miles. The project would not result in new mobile emissions.  
 See Appendices C for CalEEMod results and Appendix D for Transportation Impact and Operational Analysis.

As shown in Table 4.7-2, the proposed project would generate approximately 667.6 MT of CO<sub>2</sub>e per year or 2.2 MT of CO<sub>2</sub>e per service person per year. These emissions would not exceed the 2.8 MT project-specific GHG threshold and impacts related to GHG emissions would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 2:** Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**Impact GHG-2** THE PROPOSED PROJECT WOULD NOT CONFLICT WITH APPLICABLE PLANS, POLICIES, OR REGULATIONS ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The plans, policies, and regulations that were adopted to reduce GHG emissions and apply to the project are described below.

The County of Santa Cruz Climate Action Strategy (CAS) reports the GHG emissions inventory for Santa Cruz County, proposes targets for GHG reduction, and outlines strategies and implementing actions to achieve the targets (Santa Cruz County 2013). GHG reduction strategies are proposed for the three sectors with the highest emissions: transportation, energy, and solid waste. The CAS includes energy strategies, such as increasing energy efficiency in new and existing buildings. The proposed project would be constructed to achieve a minimum of LEED Gold standards, which would meet and exceed CalGreen energy efficiency standards. Additionally, the project would include solar panels to offset some of the electricity demand from the local power provider, 3CE.

The CAS includes a transportation strategy to reduce VMT through County and regional planning efforts. As described in Section 4.14, *Transportation*, the proposed project would reduce VMT below existing levels in the County. Therefore, the proposed project would reduce mobile-source GHG emissions compared to existing conditions because fewer vehicle miles would be traveled. The project would also be consistent with CAS strategies that promote bicycling and pedestrian travel modes because the project would include a new pedestrian sidewalk and bicycle lane on Soquel Avenue, as well as bike lockers on the project site. The project would be consistent with CAS Policies T-1.10 and T-3.1, which ensure that development projects contain measures that enhance multi-modal transportation options; and which considers requirements to install EV charging stations in parking lots for new development, respectively. As described in Section 2, *Project Description*, the proposed project would include a new bicycle lane and paved sidewalk on Soquel Avenue and EV charging stations in the proposed parking garage.

The CAS contains a solid waste strategy to reduce the amount of solid waste, particularly recyclable and compostable materials, in the commercial and residential waste stream. Construction of the project would comply with the 2019 California Building Energy Efficiency Standards for Residential and Non-residential Buildings and CALGreen (California Code of Regulations Title 24, Parts 6 and 11) or later versions, which are anticipated to be more stringent than the 2019 codes. The 2019 standards require the provision recycling services.

CalEPA's Climate Action Team (CAT) published the 2006 CAT Report which includes GHG emissions reduction strategies intended for projects emitting less than 10,000 tons CO<sub>2</sub>e/year. In addition, the California Attorney General's Office has developed Global Warming Measures (2008) and OPR's CEQA and Climate Change (CAPCOA 2008) document includes GHG reduction measures intended to reduce GHG emissions in order to achieve statewide emissions reduction goals. All of these measures aim to curb the GHG emissions through recommendations pertaining to land use, transportation, renewable energy, and energy efficiency. Several of these actions are already required by California regulations, such as:

- AB 1493 (Pavley) requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks.
- In 2004, CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.
  - The Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989) established a 50-percent waste diversion mandate for California.
  - Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).
  - California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 33 percent of retail electricity sales from renewable energy sources by 2020, within certain cost constraints.
  - Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.

The proposed project would be required to comply with applicable state and local regulations and MBARD AQMP policies which would further reduce project-generated GHG emissions. Refer to Section 4.7.2, *Regulatory Setting*, for local regulation and policy discussion.

In addition, the County's General Plan includes several goals and policies that encourage energy and water conservation techniques, as well as energy efficiency considerations in all new building design, orientation, and construction methods. Consistent with the General Plan Goals and Policies, the project would include energy and water-efficient measures such as biofiltration swales, EV charging stations, and high efficiency lighting. The project would also include solar panel arrays on the garage rooftop. See Section 2.0, *Project Description*, for more details.

MBARD has not established significance thresholds for GHG emissions, nor has MBARD adopted specific goals or policies designed to reduce GHG emissions. However, the project would be required to comply with applicable state regulations and MBARD AQMP plans and policies intended to reduce criteria pollutant emissions (refer to Section 4.2, *Air Quality*, for additional detail regarding adopted MBARD plans) which would also reduce GHG emissions from development on the project site. The project would be required to comply with state regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32, as well as applicable state regulations

and MBARD AQMP plans and policies to reduce criteria pollutant emissions. The project would also implement adopted County goals and policies that encourage energy and water conservation techniques and energy efficiency in all new building design, orientation and construction, and establish development and construction standards which encourage energy conservation.

The AMBAG 2040 MTP/SCS is reflective of legislation SB 375 described in the *Regulatory Setting* above, to focus land use development in such a way to reduce GHG emissions. Table 4.7-3 below describes the project’s consistency with the applicable central goals of the 2040 MTP/SCS.

**Table 4.7-3 Project Consistency with the AMBAG 2040 MTP/SCS**

Policy	Consistency
<p><b>Access and Mobility.</b> Provide convenient, accessible, and reliable travel options while maximizing productivity for all people and goods in the region</p>	<p><b>Consistent</b></p> <p>The project would include interior driveways, sidewalks and walking paths to provide vehicle and pedestrian access to medical office building and between the medical office building and parking garage. The proposed project includes the construction of a pedestrian sidewalk and striped bicycle lane along the Soquel Avenue frontage. Additionally, as described in Section 2, Project Description, the proposed project includes several improvements to existing roadway intersections to improve operation of the circulation system. The project site is not located near any transit stops. The project would reduce regional VMT, which would have a positive effect on the transportation system regionally. As described in Section 4.14, <i>Transportation</i>, the project would not substantially affect the local transportation system. Therefore, the project would not interfere with local and regional mobility.</p>
<p><b>Environment.</b> Promote environmental sustainability and protect the natural environment.</p>	<p><b>Consistent</b></p> <p>The project would include open space at the southern end of the project site as well as landscaped spaces interspersed around the project site. These green spaces would serve to reduce a heat island effect and sequester carbon. The project would be located on a currently undeveloped lot that is used for miscellaneous storage and a junkyard. The project would include several sustainable design features, including those required by Title 24 and CalGreen standards, as well as solar panels would be installed on the rooftop of the parking garage.</p>
<p><b>Healthy Communities.</b> Protect the health of our residents; foster efficient development patterns that optimize travel, housing, and employment choices and encourage active transportation.</p>	<p><b>Consistent</b></p> <p>The project would provide medical and health services in Santa Cruz County, and would minimize transregional trips occurring today by patrons seeking some of these services. The project would therefore result in a reduction of overall VMT. The project would include new bicycle lane and pedestrian sidewalk along the Soquel Avenue frontage, which would support active transportation modes. However, the project is not located within reasonable walking distance of a transit stop. The project would also include interior driveways, sidewalks and walking paths to provide vehicle and pedestrian access to the medical office building and between the medical office building and parking garage. Therefore, the project would provide health services and employment in a manner that is accessible by both vehicle and active transportation modes.</p>
<p><b>System Preservation and Safety.</b> Preserve and ensure a sustainable and safe regional transportation system.</p>	<p><b>Consistent</b></p> <p>As described in Section 4.14, <i>Transportation</i>, the project would not substantially affect the local transportation system. The project includes several improvements to existing roadway intersections in the project area, which would improve vehicle circulation. In addition, the proposed parking garage would include EV charging stations and bicycle lockers. As described in Section 4.14, <i>Transportation</i>, the proposed project would result in an overall reduction of vehicle-miles travelled in the region. Collectively, the project would not interfere with the safety or sustainability of the regional transportation system.</p>

Source: AMBAG 2017, 2018

As indicated in the discussion above, the project would not conflict with any applicable plan, policy or regulation intended to reduce GHG emissions. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.

## **4.7.4 Cumulative Impacts**

The emissions of GHG and climate change are, by definition, cumulative impacts. The baseline against which to compare potential impacts of the proposed project includes the natural and anthropogenic drivers of climate change, including global GHG emissions from human activities that have grown more than 70 percent between 1970 and 2004 (IPCC 2007). As such, the geographic extent of the climate change and GHG cumulative impact discussion is global.

As discussed above, the majority of individual projects do not generate sufficient GHG emissions to create an individual project-specific impact through a direct influence to climate change. However, the proposed project in conjunction with other cumulative development would increase the accumulation of GHGs in the atmosphere. Therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (State CEQA Guidelines, Section 15355).

Neither the state, MBARD, nor Santa Cruz County has adopted GHG emissions thresholds to determine if individual projects are cumulatively considerable. Therefore, for the purposes of this analysis, a project which falls below the impact thresholds discussed above is considered to have a less than significant impact, both individually and cumulatively. As indicated above in Impact GHG-1, GHG emissions associated with the proposed project would not exceed SLOAPCD-identified thresholds applied for the purpose of this analysis. The project would not be growth-inducing and is located within an urbanized area. Therefore, the proposed project's GHG impacts would not be cumulatively considerable.

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## 4.8 Hazards and Hazardous Materials

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This section addresses potential impacts of the proposed project associated with hazards and hazardous materials. Specifically, this analysis addresses impacts related to hazardous materials use and transportation, the accidental release of hazardous materials, potential for release of contamination for hazardous sites, air traffic hazards, and interference with emergency response and evacuation plans. An analysis of wildfire hazards is contained in Section 5, *Other CEQA Required Discussions*.

This section is based, in part, on a Phase I Environmental Site Assessment (ESA) conducted by Terracon Consultants, Inc. and completed June 15, 2018, and on a Phase II ESA conducted by Terracon Consultants, Inc. and completed October 25, 2018. The Phase I ESA and Phase II ESA are provided as Appendix N and Appendix O, respectively. State records and databases pertaining to hazardous waste sites were also consulted in the preparation of this analysis.

### 4.8.1 Setting

#### a. Definition of Hazardous Materials and Hazardous Wastes

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous waste is defined in Title 22, Section 66261.10 of the California Code of Regulations (CCR) as one that has a characteristic that may:

Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed.

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosiveness, and reactivity. Sections 66261.20 through 66261.24 of Title 22 of the CCR defines the aforementioned properties for hazardous waste and may be used to define such characteristics of a hazardous material. The release of hazardous materials or hazardous wastes into the environment can contaminate soils, surface water, and groundwater supplies.

#### b. Project Area History

According to the Phase I ESA, the project site had been consistently vacant land with possible agricultural uses from the early 1910s through the late 1950s. The site was used as a vehicle storage facility and plant nursery from the late 1960s to the 1980s. In 1982, the nursery was moved off-site, and the entire site has since been used as a junkyard and for miscellaneous storage. Additionally, automotive sales, towing, and repair service tenants used the site between 1995 and 2014.

The properties adjoining the project site were used for agricultural cultivation and residential development through the early 1940s. Properties adjoining to the north were developed with existing Soquel Avenue and the Highway 1 Freeway by the mid-1950s. The properties to the east of the site were developed with a plant nursery and warehouses in the early 1960s. The mobile home residential park to the south of the site was constructed in the 1960s. Properties to the west were used for various commercial and residential uses through the 1990s and were developed with existing office buildings in the early 2000s.



### c. Project Site Conditions

The Phase I ESA identified three potential recognized environmental conditions (RECs) on the project site. A REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property; due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The three RECs identified on-site consist of the following:

1. **Historical sump:** The potential for undocumented spills or releases to have occurred in connection with the historical sump.
2. **Significant data gap:** Most of the ground surface throughout the site was covered with vehicles, equipment, and storage containers that prevented observation of the entire ground surface.
3. **Automotive maintenance and dismantling operations:** Unknown hazardous materials handling practices associated with the automotive storage, sales, maintenance, and towing operations present at the site from the early 1960s through the present, the potential for undocumented spills or releases to have occurred in connection with the hazardous materials storage present at the site represents a potential vapor encroachment condition and REC.

The Phase II ESA, provided as Appendix O, was conducted to evaluate the potential impact to the site for the above listed RECs. The Phase II ESA included 12 soil borings and samplings, a geophysical survey around the boring locations, and soil vapor sampling. The Phase II ESA found the following:

1. No groundwater within 45 feet below ground surface.
2. No organic vapors above 0.1 parts per million.
3. No odors or visual indications of chemical or petroleum impacts.
4. Total petroleum hydrocarbons (TPHs) exceeded the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESLs) in four soil samples for residential land uses but not for commercial/industrial land uses. While the project is within the jurisdictional area of the Central Coast Regional Water Quality Control Board, the Central Coast Regional Water Quality Control Board has not adopted ESLs. Therefore, the San Francisco Bay Regional Water Quality Control Board's ESLs were used.
5. Volatile organic compounds (VOCs) did not exceed ESLs for residential or commercial land uses; however, higher concentrations of VOCs may be present, as the presence of various VOCs indicates a potential release of solvents into the site soils.
6. Pesticides, with the exception of dieldrin, did not exceed ESLs for residential or commercial uses. Dieldrin exceeded the Tier 1 ESL but not the direct exposure human health risk ESL.
7. California Administrative Manual 17 metals did not exceed ESLs, with the exception of arsenic and lead.
8. Soil vapor testing found no VOC concentrations above applicable ESLs for residential and commercial land uses; however, tetrachloroethene (PCE) was detected in soil vapor and could indicate higher concentrations of PCE on site.

According to the Phase I ESA, there is the potential for lead-based paint (LBP) on the shed and office building structures on the northern portion of the project site. The structures were constructed in the early 1970s. Prior to the enactment of federal regulations limiting their use in the late 1970s, LBP was often used in residential construction. Lead is a highly toxic metal that was used for many years in products found in and around homes. Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death.

According to the Phase I ESA, there are potential asbestos-containing materials located on the project site based on the construction dates of the shed and office building structures. Asbestos is a highly crumbly material often found in older buildings, typically pre-1979. It was formerly popular as an insulating material; however, it can pose a health risk when very small particles become airborne. In conformance with the Clean Air Act, the United States Environmental Protection Agency (EPA) established the National Emissions Standards for Hazardous Air Pollutants (NESHAP) to protect the public. Under NESHAP, the Toxic Substances Control Act banned most spray-applied surfacing materials that contain asbestos beginning in 1973, as well as use of the substance for fireproofing or insulation since 1978.

Neither the Phase I ESA nor the Phase II ESA indicate that aboveground storage tanks were formerly present on the project site. However, the County of Santa Cruz Environmental Health Division (CSCEHD) has indicated that an unpermitted gasoline aboveground storage tank was observed on the project site in March 1998 but noted to have been moved in May 1998.

#### **d. Surrounding Conditions**

Publicly available information from the following State databases was reviewed to determine the potential for nearby off-site sources of contamination to affect the project site:

- State Water Resources Control Board (SWRCB) GeoTracker database (2020)
- Department of Toxic Substances Control (DTSC) EnviroStor database (2020a)
- Cortese List: Section 65962.5 (DTSC 2020b)
- CalEPA List of Solid Waste Disposal Sites (2020a)
- CalEPA List of active Cease and Desist Orders (CDOs) and Cleanup and Abatement Orders (CAOs) (CalEPA 2020b).

According to these databases, there are no sites with open cases of potential contamination within approximately 0.25 mile of the project site. However, there are five leaking underground storage tank cases within 0.25 mile of the project site. All of these cases have been closed (SWRCB 2020). The closest of these cases is approximately 265 feet east of the project site, at an existing plant nursery. This case was remediated and closed in 1989. Because all five cases are closed, they do not represent potential sources of contamination.

Highway 1 is located to the north of the project site. Highway 1 is a primary truck route through the Monterey Bay region, including through Santa Cruz County. Trucks hauling or transporting hazardous materials may utilize Highway 1 in proximity to the project site. For example, trucks hauling bulk supplies of gasoline may travel past the project site on Highway 1 when delivering to fueling stations in the cities of Santa Cruz and Watsonville, as Highway 1 is the primary route between these two cities.

#### **e. Airport Safety Hazards**

Two airports are located within Santa Cruz County: Bonny Doon Village Airport and Watsonville Municipal Airport. The project site is located approximately 10.3 miles southeast of Bonny Doon Village Airport and approximately 10.7 miles northwest of Watsonville Municipal Airport. The Federal Aviation Administration requires runway protection zones and height limits on structures near airports to reduce risks to the public. The Bonny Doon Village Airport is a private, single runway airport that does not have an airport land use plan. The project site is not within an airport land use plan zone for Watsonville Municipal Airport (Watsonville Municipal Airport 2003).

## 4.8.2 Regulatory Setting

The management of hazardous materials and hazardous wastes is regulated at federal, state, and local levels, including, among others, through programs administered by United States EPA, DTSC, federal and state occupational and safety agencies, and Santa Cruz County Environmental Health. Regulations pertaining to flood hazards are further discussed in Section 4.9, *Hydrology and Water Quality*, and regulations for geologic and soil related hazards are discussed in Section 4.6, *Geology and Soils*.

### a. Federal Regulations

#### *United States Environmental Protection Agency*

The United States EPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained in the Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136 et seq.)
- Superfund Amendments and Reauthorization Act of 1986 (Public Law 99 499)
- Toxic Substances Control Act (15 USC 2601 et seq.)

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. The United States EPA provides oversight and supervision for federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

#### *Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act (1976)*

These acts established a program administered by the United States EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes and waste generation. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

#### *Comprehensive Environmental Response, Compensation, and Liability Act (1980), amended by the Superfund Amendments and Reauthorization Act (1986)*

This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Among other things, CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous substances at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The act also enabled revision of the National Contingency Plan, which provided the guidelines and

procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List.

#### *The Federal Insecticide, Fungicide, and Rodenticide Act*

FIFRA (7 United States Code [USC] 136 et seq.) provides federal control of pesticide distribution, sale, and use. The United States EPA was given authority under FIFRA to study the consequences of pesticide usage and to require users (farmers, utility companies, and others) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered (licensed) by the United States EPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to the environment.

#### *Hazardous Materials Transportation Act*

The Secretary of the United States Department of Transportation (DOT) receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act, which administers container design and labelling, shipper and carrier responsibilities, training requirements, and incident reporting requirements. These regulations are contained in Title 49 – Transportation, CFR, parts 100 to 180 and include all modes of transportation – air, highway, rail, and water (Federal Motor Carrier Safety Administration [FMCSA] 2014).

#### *Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations*

The Lead-Based Paint Elimination Final Rule, 24 CFR 33, addresses LBP elimination and is governed by the United States Department of Housing and Urban Development, which requires sellers and lessors to disclose known LBP and LBP hazards to prospective purchasers and lessees. Additionally, all LBP abatement activities must follow California and federal OSHA and with the State of California Department of Health Services requirements. Only LBP-trained and -certified abatement personnel are allowed to perform abatement activities. All LBP removed from structures must be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste.

#### *Lead and Asbestos Standards*

The United States EPA oversees lead abatement through its lead policy and guidance program. This program addresses lead that might occur in paint, dust, soil, water, and air. It offers guidance on clean up and reporting. Title IV of the Toxic Substances Control Act and other authorities in the Residential Lead-Based Paint Hazard Reduction Act of 1992 direct the United States EPA to regulate LBP hazards. The statutes cover types of locations where LBP must be assessed and the training and certification that must be held by those performing abatement activities.

United States EPA regulations under Title 40 CFR regulate the removal and handling of asbestos-containing materials (ACM), but the statute is implemented by the Monterey Bay Air Resources District (MBARD). The California Occupational Safety and Health Administration (Cal/OSHA) has a survey requirement under Title 29 CFR implemented under Title 8 California Code Regulations. These regulations require facilities to take all necessary precautions to protect employees and the public from exposure to asbestos.

The MBARD asbestos program regulates the handling of asbestos and is in place to protect the public from uncontrolled emissions of asbestos by its enforcement of the federal Asbestos Standard, Air District Rule 424, and Air District Rule 439. The program covers most renovation and demolition projects in the North Central Coast Air Basin. Program management includes issuing permits and providing guidance for asbestos surveys, removal, and disposal. The program approaches ACM management on a cradle-to-grave basis as it regulates all aspects related to handling ACMs from discovery and removal, through transportation and disposal (MBARD 2020).

## **b. State Regulations**

### *Department of Toxic Substances Control*

As a department of the California Environmental Protection Agency, the DTSC is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in the state. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code.

DTSC also administers the California Hazardous Waste Control Law to regulate hazardous wastes. While this law is generally more stringent than federal RCRA, until the United States EPA approves the California program, both state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and the California Department of Resources, Recycling, and Recovery to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before the lead agency accepts an application for any development project as complete, the applicant must consult these lists to determine if the site at issue is included.

If any soil is excavated from a site containing hazardous materials, it would be considered a hazardous waste if it exceeded specific criteria in Title 22, Division 4.5 of the California Code of Regulations. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis with DTSC guiding the process.

### *California Department of Pesticide Regulation*

The California Department of Pesticide Regulation (DPR) protects human health and the environment by regulating pesticide sales and use and by fostering reduced-risk pest management relative to chemical applications. The DPR's *Guide to Pesticide Regulation in California* offers information on pesticide laws and regulations, details about state and local enforcement, and information about initiatives designed to protect people and the environment (DPR 2017). State pesticide regulations are some of the most stringent in the country, and they address the effects of pesticide use on water, ground water, soil, and air (DPR 2020).

### *California Occupational Safety and Health Administration*

Cal/OSHA is the agency responsible to ensure worker safety in the handling and use of chemicals in the workplace, and has primary responsibility to develop and enforce workplace safety regulations concerning the use of hazardous materials in the workplace, including requirements for employee safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA also enforces hazard communication program regulations, including procedures for identifying and labeling hazardous substances. It requires Material Safety Data Sheets to be available for employee information and training programs.

CCR Title 8 governs the Cal/OSHA lead standard for construction activities, and applies to any construction activity that may release lead dust or fumes, including, but not limited to, manual scraping, manual sanding, heat gun applications, power tool cleaning, rivet busting, abrasive blasting, welding, cutting, or torch burning of lead-based coatings. Unless otherwise determined by approved testing methods, all paints and other surface coatings are assumed to contain lead, depending on the application date of the paint or coating.

### *California Department of Food and Agriculture*

The State of California Food and Agricultural Code regulates the use of pesticides. Section 12972 requires that the use of pesticides not result in substantial drift to non-target areas. Section 12977 empowers the regional or local agricultural commissioner to enforce this provision. Section 12982 states that the local health officer shall investigate any health hazard from pesticide use and take necessary action, in cooperation with the agricultural commissioner, to abate the hazard. CCR Title 3, section 6614 restricts pesticide application when there is a reasonable possibility of substantial drift to non-target areas; contamination of the bodies or clothing of persons not involved in the application process; damage to non-target crops, animals, or other public or private property; or contamination of public or private property, including the creation of a health hazard that prevents normal use that property.

### *Hazardous Materials Business Plan*

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a hazardous materials business plan that describes their facilities, inventories hazardous materials, emergency response plans, and training programs.

### *Medical Waste Management Act*

The Medical Waste Management Act, codified in California Health and Safety Code 117600-118360, regulates the generation, handling, storage, treatment and disposal of medical waste. Medical waste includes any biohazardous, pathology, pharmaceutical, or trace chemotherapy waste that is not regulated by the federal RCRA; sharps and trace chemotherapy wastes generated in the diagnosis, treatment, immunization, or care of humans or animals; waste generated in research pertaining to the production or testing of microbiologicals; and, waste generated in research using human or animal pathogens.

### c. Local Regulations

#### *County of Santa Cruz General Plan and Local Coastal Program*

The County of Santa Cruz adopted the General Plan and Local Coastal Program in 1994. The 1994 General Plan and Local Coastal Program includes the Chapter 6, Public Safety (revised in 2020), which provides the following objectives and policies pertaining to hazards and hazardous materials applicable to the proposed project:<sup>1</sup>

**Objective 6.6 Hazardous and Toxic Materials.** To eliminate, to the greatest degree possible, the use of hazardous and toxic materials, and where it is not feasible completely to eliminate the use of such materials, then to minimize the reduction in the use of such materials, so as to ensure that such materials will not contaminate any portion of the County's environment, including the land, water, and air resources of the County.

**Policy 6.6.1 Hazardous Materials Ordinance.** Maintain the County's Hazardous Materials ordinance, placing on users of hazardous and toxic materials the obligation to eliminate or minimize the use of such materials wherever possible, and in all cases to minimize the release, emission, or discharge of hazardous materials to the environment, and properly to handle all hazardous materials and to disclose their whereabouts. Further, maintain the County's ordinance relating to ozone-depleting compounds. Ensure that any amendment of existing ordinance provisions is based on a finding that the amendments will provide protection to the environment and the community against toxic hazards that is equal to or stronger than the existing provisions.

**Policy 6.6.3 Maintenance of Standards for Use and Control.** Ensure that Santa Cruz County maintains standards for the use and control of hazardous materials which are at least equal in their protection for the environment and the community to measures imposed by other local governments within Santa Cruz County, and in adjoining counties.

#### *Santa Cruz County Code*

The Santa Cruz County Code contains several chapters that address hazards and hazardous materials, including Chapter 7.22, Medical Waste, and Chapter 7.100, Hazardous Materials-Hazardous Waste-Underground Storage Tanks. Chapter 7.22 addresses the California Medical Waste Management Act and establishes the County Environmental Health Division as the enforcement agency for the act. Chapter 7.22 requires that medical waste generators obtain and maintain a permit from the County. Chapter 7.100 addresses general provisions, permits, hazardous materials management plans, use, handling and storage responsibilities, unauthorized releases, and administration and enforcement.

### 4.8.3 Impact Analysis

#### a. Methodology and Significance Thresholds

This assessment of impacts is based on the ESAs performed by Terracon Consultants, Inc. (2018 Phase I and 2018 Phase II) and review of records contained in the DTSC Envirostor, DTSC Cortese List, SWRCB GeoTracker, CalEPA List of Solid Waste Disposal Sites, and CalEPA List of active CDO and CAOs (DTSC 2020a, DTSC 2020b, SWRCB 2020, CalEPA 2020a, CalEPA 2020b).

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<sup>1</sup> Recent amendments to the General Plan currently under consideration by the California Coastal Commission renumbered this objective and these policies 6.9, 6.9.1, and 6.9.3 respectively.

For the purpose of this analysis, a significant impact would occur if physical changes that could be facilitated by the proposed project would result in the following conditions, listed in Appendix G of the *CEQA Guidelines*:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. 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;
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site which is included on a list of hazardous material 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;
5. 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 or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Threshold 7, above, relates to wildland fire hazards. Impacts related to wildfire and wildland fires are discussed in Section 5, *Other CEQA Required Discussions*.

## b. Project Impacts and Mitigation Measures

<b>Threshold 1:</b> Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
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**Impact HAZ-1** OPERATION OF THE PROPOSED PROJECT WOULD INCLUDE THE ROUTINE USE, STORAGE, OR TRANSPORT OF HAZARDOUS MATERIALS AND MEDICAL WASTES THAT COULD POTENTIALLY CREATE A SAFETY HAZARD TO THE PUBLIC OR THE ENVIRONMENT. PURSUANT TO COMPLIANCE WITH APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO HAZARDOUS MATERIALS AND MEDICAL WASTES, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The proposed project would involve the routine transport, use, and disposal of hazardous materials and medical wastes for operation of the medical uses within the medical office building. Materials associated with the medical uses would include a variety of chemicals and maintenance products. Patient care activities involve relatively small quantities of hazardous materials, primarily in clinical offices, cleaning and sterilizing processes, and pharmacies. The types of hazardous materials found in medical facilities include chemotherapy reagents and other pharmaceuticals; chemicals used to sterilize equipment; formaldehyde for specimen preservation; and solvents, oxidizers, corrosives, and stains used in clinical laboratories. Facilities maintenance and utility plant operation would require various common hazardous materials, including cleaners (which may include solvents and corrosives, in addition to soaps and detergents); paints; pesticides and herbicides; fuels (e.g., diesel); and oils and lubricants. Biohazardous materials and medical wastes, along with chemical waste, would potentially be generated. There would be potential for spill and release of hazardous



substances during operation of the medical uses. Federal, state, and local regulations are in place to protect the public and the environment from adverse impacts related to the routine transport, use, and disposal of hazardous materials. Disposal of all hazardous materials would be in compliance with all regulations, such as the Medical Waste Management Act.

Most hazardous materials would generally be stored in small, individual containers of about 5 gallons or less except for the few products that could be stored in large quantities, such as liquid oxygen or nitrogen. Should accidental releases occur, the consequences of such accidents would not be severe due to the typically small quantities of materials handled at any particular time.

The project-related effects of hazardous materials handling and storage would generally be limited to the immediate areas where the materials would be located, because this is where exposure would be most likely. For this reason, individuals most at risk would be hospital employees, patients, visitors, or others in the immediate vicinity of the hazardous materials. While the use and handling of hazardous materials would increase on the project site, existing regulations minimize the risk of public exposure to hazardous materials.

California Health and Safety Code, Section 25500, et seq. and the related regulations in 19 CCR 2620, et seq., address the storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials are required to submit a Hazardous Materials Business Plan to their local Certified Unified Program Agency (CUPA) and report releases to the CUPA or lead agency. The threshold quantities for hazardous materials are 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases measured at standard temperature and pressure. The CUPA for Santa Cruz County is the Santa Cruz County Environmental Health Division of the County Health Services Agency. If the project were to store any hazardous material in excess of these threshold quantities, a Hazardous Materials Business Plan would be prepared for Environmental Health, detailing the location and quantities of hazardous materials and waste.

Additionally, pursuant Santa Cruz County Code Section 7.100.060, no person or business shall store any hazardous materials regulated by this County Code until a Hazardous Materials permit has been issued by the County. Under County Code, should regulated hazardous materials be stored on the project site, the project applicant or tenant must file a modified Hazardous Materials Management Plan and obtain the associated Hazardous Materials permit unless the materials are excluded pursuant to Section 7.100.050 of the County Code. Section 7.100.050 excludes regulated materials “where it has been demonstrated to the satisfaction of the Health Officer that the material in the quantity and/or solution stored and/or used does not present a significant actual or potential hazard to human health, safety, and the environment.” On July 9, 2018, the CSCEHD issued a Policy to Establish Threshold Quantities for HMMP and Permit Requirement. Pursuant with the policy, under most circumstances the following quantities of hazardous materials are exempt from permit requirements:

- Acids in quantities less than 10 gallons or 25 pounds (exclusive of hydrofluoric acid)
- Bases in quantities of less than 10 gallons or 25 pounds
- Combustible and flammable liquids less than 20 gallons
- Sodium hypochlorite solution less than 25 gallons in solution of 12.5 percent (or less)
- Oxygen less than 130 cubic feet
- Acetylene less than 130 cubic feet

To be consistent with California Health and Safety Code 25507, the chemicals in the following quantities are be excluded from permit requirements:

- Propane in quantities less than 500 gallons that is for the sole purpose of cooking, heating employee work areas, and heating water within that facility
- Nonflammable refrigerator gases less than 1000 cubic feet
- Carbon dioxide less than 1000 cubic feet
- Oxygen, nitrogen, and nitrous oxide less than 1000 cubic feet at a physician, dentist, podiatrist, veterinarian, pharmacist, or emergency medical service provider at their place of business
- Gases classified as hazardous as simple asphyxiates or hazard from pressure release, such as Argon and Helium, less than 1000 cubic feet
- Gases in closed fire suppression systems.

Therefore, hazardous material stored on-site would be subject to Safety Code, Section 25500, et seq. and the related regulations in 19 CCR 2620, et seq. depending on quantity stored, and also to the County's Hazardous Materials permit, unless exempted by the CSCEHD policy outlined above. Hazardous materials would be transported via truck to and from the project site. Trucks would be expected to travel to the project site via Highway 1 and exit at either Soquel Drive or 41<sup>st</sup> Avenue, and then turn onto Soquel Avenue to reach the project site. These roadways are not included on the list of prohibited roads for truck travel (Santa Cruz County Code 9.50.010), and, therefore, are suitable for travel by trucks. All truck drivers would be required to possess a valid commercial driver license with requisite hazardous materials endorsements. Additionally, truck drivers would be subject to federal and state requirements that govern the safe operation of such vehicles (such as hours of service limits). Moreover, the truck units would be required to undergo regular inspection, with documentation kept on file for verification by law enforcement or regulatory agencies. These requirements reduce the potential for hazardous materials releases to occur in the unlikely event of an accident involving transportation of hazardous material to or from the project site.

In summary, operation of the medical center would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. All non-medical activities discussed above would not require the use of hazardous materials to the extent which would create a significant impact. All medical activities discussed above would be regulated by federal, state, and local laws, such as the California Medical Waste Management Act. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 2:** Would the project 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?

**Impact HAZ-2** CONSTRUCTION AND OPERATIONS ON THE PROJECT SITE COULD CAUSE EXPOSURE TO EXISTING CONTAMINATION ON SITE. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

As described in Section 2, *Project Description*, the proposed project includes demolition and removal of existing structures and uses on the project site. The existing vehicles, structures, and pavement would be removed from the site. Existing debris and waste, as well as demolition debris would be transported off site and disposed of in accordance with local and state regulatory requirements. Existing structures on the project site may contain asbestos and/or lead, as the shed and office building were constructed in the early 1970s. The Phase I ESA prepared by Terracon Consultants, Inc. on June 15, 2018 (Appendix N) did not include ACMs and LBPs in the evaluation, because access to structures was not possible. Therefore, it is assumed that ACMs and LBPs are associated with these structures. Potential release of ACMs and LBPs during demolition activities would be a potentially significant impact. Implementation of Mitigation Measure HAZ-2a would reduce this impact to a less-than-significant-level.

Construction of the proposed project may involve use and storage of some materials that are considered hazardous. Hazardous or flammable materials used during construction would consist primarily of petroleum hydrocarbons and their derivatives (e.g., gasoline, diesel fuels, oils, lubricants, and hydraulic fluids) required for the operation of construction equipment. In addition, it is anticipated that small quantities of additional common hazardous materials would be used and produced on-site during construction, including antifreeze and used coolant, latex and oil-based paint, paint thinners and other solvents, cleaning products, and herbicides. These materials would not be substantially different from chemicals and solvents already in general and wide use throughout the County and in the vicinity of the project site. The use of hazardous materials during project construction would be in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, RCRA, and the CCR Title 22. Therefore, the use of hazardous materials during demolition and construction would not create a significant risk to the public or environment. Impacts would be less than significant.

The project site is bounded on the north by Soquel Avenue and. Additionally, Highway 1 is located approximately 100 feet north of the project site. Soquel Avenue is designated as an arterial roadway by the Santa Cruz County General Plan (1994). In the unlikely event of an accident involving the transport of hazardous wastes and materials on roadways abutting the site, the health of people in the area could be adversely affected. The Santa Cruz County Hazardous Materials Area Plan (January 2017 Update) summarizes how the County deals with hazardous materials spills or releases. The Santa Cruz Hazardous Materials Interagency Team is comprised of approximately 30 members from various fire departments throughout Santa Cruz County who are part of a trained team of specialized professionals. The hazardous technicians and specialists rotate shift coverage 24 hours per day, 365 days per year. Additionally, Environmental Health has five hazardous materials specialists, with one on-call at all times (County of Santa Cruz 2017).

United States EPA and DOT laws and regulations have been promulgated to track and manage the safe interstate transportation of hazardous materials and waste. United States EPA administers permitting, tracking, reporting, and operations requirements established by RCRA. DOT regulates the transportation of hazardous materials through implementation of the Hazardous Materials

Transportation Act. This act administers container design and labeling and driver training requirements. State and local agencies enforce the application of these acts and provide coordination of safety and mitigation responses in case of an accident involving hazardous materials. Enforcement of these acts and rapid response by local agencies would ensure that hazards to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment are less than significant.

A Phase I ESA and Phase II ESA were performed for the project site, which identified environmental conditions associated with a historical sump and automotive maintenance and dismantling operations. Soil and soil gas sample data identified the presence of TPH, dieldrin, arsenic, and lead above acceptable ESLs. The Phase II ESA also reported concentrations of VOCs and PCE that could indicate higher concentrations of these contaminants within site soils, though the samples were below ESLs. Impacts to project construction workers, visitors, and employees of the project would be potentially significant. Mitigation Measures HAZ-2b and HAZ-2c, below, would reduce these impacts through the implementation of a soil management plan and site remediation actions for the protection of public health or safety or the environment during development activities. Following implementation of these measures, impacts would be less than significant.

## Mitigation Measures

### *HAZ-2a Asbestos and Lead*

Pursuant to Cal/OSHA regulations, each structure constructed before 1978 within the project site shall be inspected by a qualified environmental specialist for the presence of ACMs and LBPs prior to obtaining a demolition permit from the County of Santa Cruz Planning Department. If ACMs and LBPs are found during the investigations, the project applicant shall develop a remediation program to ensure that these materials are removed and disposed of by a licensed contractor in accordance with all federal, state, and local laws and regulation, subject to approval by the Monterey Bay Air Resources District, and Santa Cruz County Environmental Health, as applicable. Any hazardous materials that are removed from the structures shall be disposed of at an approved landfill facility in accordance with federal, state, and local laws and regulations.

### *HAZ-2b Soil Management Plan*

Before the issuance of a grading permit, impacted soil on the project site shall be mitigated in accordance with a Soil Management Plan prepared for the entire project area. The laboratory data for the impacted soil shall be used to profile the soil for transport, treatment, and recycling at a licensed treatment facility. The Soil Management Plan shall also include health and safety information for workers and the general public, and shall inform the various contractors and workers of the presence of impacted soil and the appropriate measures to safely deal with the soil. The Soil Management Plan shall be submitted to and approved by the CSCEHD prior to commencement of ground disturbance within the project site.

### *HAZ-2c Site Remediation*

Prior to construction of the project, additional hazardous material site evaluations shall be implemented, per the recommendations included in the Phase II ESA dated October 25, 2018, by Terracon, following removal of existing barriers to full site access:

1. Conduct further evaluation of the location and conditions of the suspected drain and sump.

2. Access the interior portions of the site with hand-sampling / limited access equipment to facilitate soil sampling of TPH, VOC, and lead within the site tenant operation areas.
3. Conduct additional surface soil sampling in the vicinity of boring SV10 and inaccessible portions of the site, including tenants who perform landscaping operations, to evaluate the presence or absence of organochlorine pesticides.
4. Evaluate groundwater for the presence of petroleum hydrocarbons and solvents. Advance a minimum of two deep soil borings using hollow-stem auger drilling equipment to a depth of 75 feet below ground surface.
5. Investigate soil vapor in the interior of the tenant operation areas.

Additionally, additional hazardous material site evaluations shall be implemented, per the recommendations of the CSCEHD, including:

1. Historical use of the project site includes the possibility of agricultural land use from the early 1910s through the late 1950s. Based on historical site use, further organochlorine pesticides sampling and characterization shall be conducted. Organochlorine pesticides sampling and characterization shall be conducted at locations throughout the project site, in such a way, that soils across the entire site are characterized, such as placing samples on a grid.
2. Because arsenic is known to naturally occur in areas of Santa Cruz County, a site-specific arsenic background concentration for soil should be developed for the subject site. Based on prior detected arsenic concentrations in the County of Santa Cruz, the detections of arsenic that are most likely to exceed background concentrations would be the soil samples collected from B3, B5, and B6 at depths of 0.5 feet below ground surface, where arsenic was detected at 13.9 milligrams per kilogram (mg/kg), 12.0 mg/kg, and 8.84 mg/kg, respectively, according to the Phase II ESA.
3. A Site Mitigation Program Well Permit must be approved by CSCEHD prior to the destruction of or addition of new gas monitoring wells.
4. Laboratory results for all media shall be compared at a minimum to the current version of each of the following guidance screening concentrations: (1) ESLs published by the San Francisco Bay Regional Water Quality Control Board; (2) screening levels from the DTSC Office of Human and Ecological Risk (HERO) Human Health Risk Assessment Note Number 3 or, for chemicals without a Note 3 value, the USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites (RSLs); (3) for soil only, the RSLs for protection of groundwater; (4) for metals in soil only, the background concentrations, if established; and (5) for groundwater only, the groundwater cleanup goals based on the Water Quality Control Plan (Basin Plan) established by the Central Coast Regional Water Quality Control Board.

Upon completion of the above items, and pending testing and analysis results, construction of the project shall include on-site remediation and engineering controls such as capping, vapor barrier, and proper air exchanges. This shall be required in areas that indicate contamination above the residential ESLs. A work plan for remediation shall be prepared in accordance with all applicable federal, state and local regulations prior to issuance of a grading permit. The work plan shall be submitted to and approved by the CSCEHD prior to commencement of remediation fieldwork or ground-disturbing activities.

## Significance after Mitigation

Implementation of these mitigation measures would reduce this impact to less than significant by ensuring proper handling of contaminated soils and remediation of existing hazardous materials potentially on-site.

<b>Threshold 3:</b> Would the project emit or handle hazardous emissions or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?
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**Impact HAZ-3** THE PROJECT SITE IS LOCATED WITHIN ONE-QUARTER MILE OF AN EXISTING SCHOOL, AND DEMOLITION OF EXISTING USES COULD EMIT AIRBORNE ASBESTOS OR LEAD. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH INCORPORATION OF MITIGATION.

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The proposed project is located approximately 350 feet south of Good Shepherd School, which is located at 2727 Mattison Lane, across Highway 1 from the project site. As discussed under Impact HAZ-1, operation of the medical office building would involve the transport and use of hazardous materials and medical waste, which would be conducted in accordance with applicable federal, state, and local regulations. Therefore, operation of the medical office building would not create a significant hazard to the nearest school through the routine transport, use, or disposal of hazardous materials.

During construction, minor amounts of potentially hazardous materials such as fuels, lubricants, and solvents could be used. However, the transport, use, and storage of hazardous materials during construction would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, RCRA, and the CCR Title 22.

Demolition of existing structures could result in release of airborne asbestos or lead. However, Mitigation Measure HAZ-2a, described above, would ensure any asbestos- or lead-containing materials are properly removed and disposed of prior to demolition. Therefore, construction activity would not generate hazardous emissions.

## Mitigation Measures

Implementation of mitigation measure HAZ-2a, above, is required.

## Significance after Mitigation

Implementation of Mitigation Measure HAZ-2a would reduce this impact to less than significant by ensuring that any ACM or lead-containing materials are properly removed and disposed of, thus reducing the exposure of the nearby school to ACM and lead contaminants.

**Threshold 4:** Would the project be located on a site that is included on a list of hazardous material 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?

**Impact HAZ-4** NO ACTIVE LISTED HAZARDOUS MATERIALS SITES, AS LISTED PURSUANT TO GOVERNMENT CODE SECTION 65962.5, ARE LOCATED ON THE PROJECT SITE OR WITHIN ONE-QUARTER MILE OF THE SITE. THERE WOULD BE NO IMPACT.

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The following hazardous materials databases were searched in June 2020:

- State Water Resources Control Board (SWRCB) GeoTracker database (2020)
- Department of Toxic Substances Control (DTSC) EnviroStor database (2020a)
- Cortese List: Section 65962.5 (DTSC 2020b)
- CalEPA List of Solid Waste Disposal Sites (2020a)
- CalEPA List of active Cease and Desist Orders (CDOs) and Cleanup and Abatement Orders (CAOs) (CalEPA 2020b).

Based on this search, no open or active hazardous cleanup sites are located within 0.25 mile of the site. The GeoTracker database was the only database that listed sites within 0.25 mile of the project site; however, all five listed sites are closed. The project site itself was not listed on any of these sites. Therefore, the proposed project would not create a significant hazard to the public associate with hazardous material sites. The proposed project would have no impact.

### Mitigation Measures

No mitigation measures are required.

### Significance after Mitigation

The proposed project would have no impact.

**Threshold 5:** Would the project be 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 or excessive noise for people residing or working in the project area?

**Impact HAZ-5** THE PROPOSED PROJECT IS NOT WITHIN AN AIRPORT LAND USE PLAN OR WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT. THERE WOULD BE NO IMPACT.

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There are no operational public use airports in the vicinity of the proposed project. The nearest airport, Watsonville Municipal Airport, is located approximately 10 miles southeast of the project site. The project site is thus is not located within any adopted airport land use plan. There would be no impact.

### Mitigation Measures

No mitigation measures are required.

### Significance after Mitigation

The proposed project would have no impact.

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**Threshold 6:** Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**Impact HAZ-6** THE PROPOSED PROJECT WOULD NOT INTERFERE WITH ANY ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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The project site would be accessed via two driveways on Soquel Avenue, one limited to use by ambulance and service vehicles. The minimum driveway width would be 16 feet at the inbound main driveway. The outbound main driveway includes two driving lanes for a total width of 24 feet. The ambulance and service vehicle driveway would also be 24 feet in width, providing space for one inbound and one outbound lane. The site circulation plan provides a turn-around area for both access areas, which do not connect. With dual access, and a minimum drive width of 16 feet, the project site would provide adequate circulation to allow for emergency evacuation. While the County of Santa Cruz does not have a specified evacuation route, the project is in the vicinity of Highway 1 and Soquel Avenue, which provide regional access to the area and would allow for evacuation from the area.

The County of Santa Cruz Operational Area Emergency Management Plan addresses the planned response to large scale emergency incidents in Santa Cruz County. The plan provides guidance to area agencies involved in protecting public health and safety and preparing for and responding to all-hazards. The Emergency Management Plan provides guidance and describes roles and responsibilities. The project would not impede the implementation of the plan.

Due to the project site access, on-site circulation, and accessibility to regional roads for evacuation, the project would not impede emergency response or evacuation. The project would not impede the implementation of any emergency access plan or response plan. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.



**Threshold 7:** Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Threshold 7 relates to wildland fire hazards. Impacts related to wildfire and wildland fires are discussed in Section 5, *Other CEQA Required Discussions*.

#### 4.8.4 Cumulative Impacts

Although some hazardous materials cover a large area and interact with other releases (e.g., atmospheric contamination, contamination of groundwater aquifers), incidents of hazardous materials contamination are more typically isolated to a small area, such as leaking underground storage tank sites or release at individual businesses. These relatively isolated areas of contamination typically do not interact in a cumulative manner with other sites of hazardous materials contamination. However, if the project would create a new site of contamination or contribute substantially to a hazardous condition in the general project area, it could be considered to contribute to a cumulative impact.

The CSCEHD, which is the local CUPA for both unincorporated Santa Cruz County and the cities of Santa Cruz, Scotts Valley, Capitola, and Watsonville, implements local, state, and federal laws and regulations regarding the storage, use, transport, and disposal of hazardous materials through routine site inspections.

Some of the reasonably foreseeable future projects listed in Table 3-1, in Section 3, *Environmental Setting*, would require the use or disposal of hazardous materials, such as the Dominican Hospital project and Nissan Dealership project. These projects would be subject to the same hazardous materials regulation. Furthermore, these projects would be required to implement project-specific mitigation, consistent with applicable laws and regulations related to the transport, use, and disposal of hazardous materials, to reduce any significant hazardous materials impacts. Additionally, the risk of more than one accident involving hazardous materials occurring concurrently is negligible. Therefore, assuming compliance with applicable laws and regulations for nearby projects, cumulative impacts from hazardous materials during project construction and operation are considered less than significant.

## 4.9 Hydrology and Water Quality

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This section evaluates the environmental effects related to hydrology and water quality associated with implementation of the proposed project. The analysis includes a review of the local hydrologic setting, surface water, groundwater, water quality, and flooding. The existing environmental and regulatory setting for water resources is described, and potential impacts of the proposed project are analyzed.

Water supply and wastewater conveyance and treatment are discussed in Section 4.16, *Utilities and Service Systems*. Impacts regarding wetlands and other waters subject to the federal or state jurisdiction are discussed in Section 4.3, *Biological Resources*.

### 4.9.1 Setting

#### a. Hydrologic Setting

The project area lies within the Coast Range Geomorphic Province. This province is characterized by parallel northwest trending mountain ranges formed over the past 10 million years or less by active uplift related to complex tectonics of the San Andreas fault/plate boundary system (California Geological Survey 2002).

The proposed project is located along the coastal plain within Santa Cruz County. The coastline in Santa Cruz County is situated on an uplifted marine terrace – one of the many marine terraces that form the uplands east of Highway 1 along the coastal flank of the Santa Cruz Mountains. In general, surface water runoff originates in the upland areas and is conveyed by various coastal creeks across the marine terraces to Monterey Bay. During the last approximately one million years, coastal uplift, together with an oscillating sea level, caused the streams to incise deep canyons across the marine terraces. Lagoon environments and beaches, built by sediment carried in the creeks, formed at the coast where these creeks and canyons meet the Pacific Ocean. Ongoing accumulation of sediment transported by the creeks and coastal erosion processes continue to sculpt the Santa Cruz County coastline (Soquel Creek Water District 2018).

The coastal plains within this region have a Mediterranean climate with mild rainy winters and warm dry summers. The project area is located along the western margin of the Coast Range and the climate is dominated by the Pacific Ocean. The project area is characterized by moderate coastal climate with mild, wet winters and generally dry summer days, which are often overcast or have coastal fog and cool temperatures. The average maximum temperature varies between approximately 60 degrees Fahrenheit in December and January, to approximately 75 degrees Fahrenheit in August and September. Average annual precipitation is approximately 30 inches, with the majority of the precipitation falling between November and March and typically very little or no precipitation falling between June and August (Soquel Creek Water District 2018).

#### b. Surface Water

The State Department of Water Resources (DWR) divides surface watersheds in California into ten Hydrologic Regions (HRs). The project area is in the Central Coast HR. This region covers approximately 7.22 million acres and includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara counties, and parts of San Benito, San Mateo, Santa Clara, and Ventura counties. Major geographic features that define the region include the Pajaro, Salinas, Carmel, Santa Maria, Santa Ynez, and Cuyama valleys; the coastal plain of Santa Barbara; and the Coast Range. The region

is largely defined by the northwest-trending southern Coast Range, with a climate generally classified as Mediterranean. Major drainages in the Central Coast HR include the Salinas, Cuyama, Santa Ynez, Santa Maria, San Antonio, San Lorenzo, San Benito, Pajaro, Nacimiento, Carmel, and Big Sur rivers (DWR 2003). The region depends heavily on groundwater, which makes up the vast majority of available water supply, but recycled water is becoming a more plentiful, supplemental source for agricultural and other non-potable uses (DWR 2009). The Central Coast Regional Water Quality Control Basin (RWQCB) governs basin planning and water quality in the Central Coast HR (Central Coast RWQCB 2016).

DWR subdivides HRs into Hydrologic Units (HU), otherwise referred to as major watersheds or hydrologic sub-areas. The project site is located in the Big Basin HU (Central Coast RWQCB 2016). Within the Big Basin HU, the area is further divided into smaller sub-watersheds; the project site is located with the Arana Gulch-Rodeo watershed. The Arana Gulch-Rodeo watershed drains a 3.5 square-mile area at the outer (eastern) edges of the City of Santa Cruz. The project site lies in near three drainages. Rodeo Creek Gulch lies 0.25 mile to the east, Leona Creek 0.6 mile southwest, and Arana Gulch 0.75 mile west. Other waterways and water bodies in this watershed include Arana Gulch, Leona Creek, Schwann Lake, Rodeo Creek Gulch, and several unnamed drainages. Schwann Lake (also known as Schwann Lagoon) is located within the Twin Lakes State Beach area between Corcoran Lagoon to the east and the Santa Cruz Small Craft Harbor to the west. Schwann Lake is supplied by flows from three streams, the largest being Leona Creek, draining a 1.1-mile urbanized area (County of Santa Cruz Environmental Health 2016).

Principal land uses in the watershed are urban, primarily residential, commercial, and light industrial. The area also includes institutional areas such as schools, hospitals, and cemeteries. Habitat types present in the watershed include wetlands and freshwater marsh, streambank vegetation, mixed evergreen/mixed broadleaf forest, and a few patchy areas of chaparral habitat. High sediment loads threaten the quality of habitat for the steelhead trout and other aquatic species in Arana Gulch. Reducing the delivery of sand and sediments to Arana Gulch, its tributaries, and the Santa Cruz Small Craft Harbor, as well as providing passage for anadromous fish to the eastern and central branches of Arana Gulch are identified as principal goals for the Arana Gulch watershed. The City of Santa Cruz provides potable water to residents living in this watershed, and pumps groundwater from the Beltz wells near Rodeo Creek Gulch (County of Santa Cruz Environmental Health 2016).

### **c. Groundwater**

The primary source of water for urban uses and agricultural operations within Santa Cruz County is groundwater. None of the three major groundwater basins in Santa Cruz County are adjudicated, and all three are in some level of overdraft. Adjudicated means that groundwater pumping rights have been set by a court or Board decision. Overdraft means that more water is extracted from the aquifers than is naturally recharged through the soils and stream valleys. Santa Cruz County designates the areas where major groundwater recharge or infiltration is known to occur as Primary Groundwater Recharge (PGR) zones. PGR zones are given special consideration and protection from development to allow the aquifers to maintain the quantity and quality of groundwater recharge. The project site is not within a PGR, but Rodeo Creek to the east of the site is a PGR (County of Santa Cruz 2020).

The California DWR's Bulletin 118 is the State's official compendium on groundwater, and it defines the boundaries and describes the hydrologic characteristics of California's groundwater basins. The California DWR periodically updates Bulletin 118, which includes revising the basin boundaries as

applicable. An interim update of Bulletin 118 was released in 2003 and again in 2016 (DWR 2003, 2016).

In the 2003 update of Bulletin 118, the project site was underlain by the West Santa Cruz Terrace Basin. As part of the Santa Cruz Mid-County Groundwater Agency's (MGA's) 2016 Groundwater Sustainability Agency (GSA) application, the former Soquel Valley Basin was expanded to include portions of three adjacent basins— West Santa Cruz Terrace Basin, the former Santa Cruz Purisima Formation Basin, and the original Pajaro Valley Basin. This change was reflected in the 2016 update of Bulletin 118 revised the boundaries, and the Soquel Valley Basin was then renamed the Santa Cruz Mid-County Basin.

The Santa Cruz Mid-County groundwater basin is bounded by the Pajaro Valley basin to the southeast and the Santa Margarita basin to the northwest. The southern boundary follows the Pacific Ocean up to the Santa Cruz Small Craft Harbor. The western boundary follows the watershed boundary between Carbonera Creek and Branciforte Creek up through Blackburn Gulch. The Santa Cruz Mid-County Groundwater Basin consists of the Purisima Formation and the Aromas Formation, both of which extend under the Pajaro Valley. The groundwater basin is managed by a joint-powers agency known as the MGA and consisting of the County of Santa Cruz, the City of Santa Cruz, the Soquel Creek Water District, and the Central Water District. In its final January 2016 list, DWR defined this basin as being subject to conditions of critical overdraft. The basin boundary was recently approved by DWR (and the MGA has been accepted as the GSA) for the basin. See Section 4.9.2, *Regulatory Setting*, below for more information on the Sustainable Groundwater Management Act. Historic over-pumping of the basin beyond the sustainable yield has created serious problems in the basin, particularly seawater intrusion. Because the Purisima and Aromas Formations extend offshore beneath Monterey Bay, overdraft of the basin has pulled seawater into the aquifer beneath the inland areas.

#### d. Water Quality

Water quality in the project area is regulated by the Central Coast RWQCB, which sets water quality standards in the Water Quality Control Plan for the Central Coastal Basin (Basin Plan) (Central Coast RWQCB 2016). The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The identified beneficial uses and the water quality objectives to maintain or achieve those uses are together known as water quality standards. The Central Coast RWQCB designates beneficial uses for some individual waterbodies in the Central Coast Basin. All other waterbodies not designated individually are assigned the designated uses of municipal and domestic water supply and protection of recreation and aquatic life. Table 4.9-1 presents the designated beneficial uses listed in the Basin Plan for these two surface waters.

The Clean Water Act 303(d) list is a register of impaired and threatened waters which the Clean Water Act requires all states to submit for United States (U.S.) Environmental Protection Agency (USEPA) approval. The list identifies all waters where the required pollution control measures have so far been unsuccessful in reaching or maintaining the required water quality standards. Waters that are listed are known as "impaired." Both Rodeo Creek Gulch and Arana Gulch are classified as category 5 on the 303(d) list (State Water Resources Control Board [SWRCB] 2017). Category 5 indicates that a total maximum daily load (TMDL) is required but not yet completed. Common impairments for these waterbodies include pesticides, solvents, bacteria, nutrients, nitrates, low dissolved oxygen, pH imbalances, sedimentation, and turbidity. Table 4.9-1 presents the beneficial

uses as well as the TMDL and water quality concern for impaired streams in the within the project vicinity.

**Table 4.9-1 Basin Plan Beneficial Uses**

<b>Waterbody</b>	<b>Beneficial Uses</b>	<b>TMDL/Water Quality Concern</b>
Rodeo Creek Gulch	Municipal; Agricultural; Industrial; Groundwater Recharge; Water Contact Recreation; Non-Contact Water Recreation; Wildlife Habitat; Cold Fresh Water Habitat; Spawning, Reproduction and/or Early Development; Freshwater Replenishment; Commercial & Sport Fishing	High Turbidity and pH
Arana Gulch	Municipal; Groundwater Recharge; Water Contact Recreation; Non-Contact Water Recreation; Wildlife Habitat; Cold Fresh Water Habitat; Spawning, Reproduction and/or Early Development; Rare, Threatened, or Endangered Species; Freshwater Replenishment; Commercial & Sport Fishing	Chlorpyrifos, <i>E. coli</i> , Fecal Coliform, Sediment
Schwann Lake	Ocean, Commercial, and Sport Fishing; Shellfish Harvesting; Preservation of Rare and Endangered Species; Spawning, Reproduction, and/or Early Development; Preservation of Biological Habitats of Special Significance; Warm Freshwater Habitat; Wildlife Habitat; Water Contact Recreation; Non-Contact Water Recreation	<i>E. coli</i> , Fecal and Total Coliform, Nutrients
Pacific Ocean (Point Año Nuevo to Soquel Point)	Industrial Service Supply, Ocean, Commercial, and Sport Fishing; Shellfish Harvesting; Preservation of Rare and Endangered Species; Wildlife Habitat; Water Contact Recreation; Non-Contact Water Recreation	PCBs, Dieldrin, Chlordanes, and DDTs

Source: Central Coast RWQCB 2016

### e. Flood Hazards

#### *Flood Hazard Zones*

Flood hazards can occur when the amount of rainfall exceeds the infiltration capacity of the surrounding landscape or the conveyance capacity of the storm water drainage system. The Federal Emergency Management Agency (FEMA) delineates regional flooding hazards as part of the National Flood Insurance Program. FEMA identifies flood hazard risks through its Flood Insurance Rate Map (FIRM) program. Higher flood risk zones are called Special Flood Hazard Areas; these areas have a one percent chance or greater of flooding in any given year (also called the 100-year flood). Although a 100-year flood will, on average, occur once every 100 years, the probability of a 100-year flood is one percent for any particular year. Two 100-year floods could occur in the same year or even in the same month, but the likelihood that two 100-year flood events would occur consecutively is very small. The project site is mapped on Santa Cruz County FIRM Panel 351. The project site is in an Area of Minimal Flood Hazard (Zone X) (FEMA 2012).

#### *Tsunami and Seiche*

The project site is located approximately 1.5 miles from the shoreline of the Pacific Ocean and is not located in a Tsunami Inundation Area as shown on the 2009 Tsunami Inundation Map for Emergency Planning, Soquel Quadrangle (California Department of Conservation 2009). Also, no

enclosed waterbodies are located near the project site and therefore the site would not be subject to inundation by seiche<sup>1</sup>.

### *Drainage*

The project site is located just south of the Soquel Avenue frontage road to Highway 1. The site is bounded by an industrial storage parcel and nursery to the east, a mobile home park to the south, an assisted living facility to the southwest, Live Oak Business Park to the west, and an industrial property to the northwest.

Currently, the site is used as a junkyard and for miscellaneous storage for boats, trucks, recreational vehicles, shipping containers, and other equipment. There is little vegetation on-site, and no natural waterways. There are a number of appurtenant buildings on-site, including sheds, trailers and storage buildings. The rest of the site is a mix of hardscape, hardpacked dirt, gravel, decomposed asphaltic concrete and pervious grasses. At present, the site is 26 percent impervious, with the dirt, gravel and degraded asphaltic concrete conservatively counted at 50 percent pervious and 50 percent impervious (Ifland Engineers 2019).

The existing site generally slopes in a southwesterly direction, with approximately 7 feet of fall across the site, with slopes generally between 0 to 5 percent. The general Natural Resources Conservation Service (NRCS) soils classification in the site area is Elkhorn Sandy Loam, a deep, well-drained soil with moderately slow permeability. The NRCS saturated conductivity of the limiting layer of soil is estimated at 0.383 inch per hour. A geotechnical investigation was completed by Dees & Associates, Inc., dated September 2018. Subsurface conditions are similar to that of the NRCS classification with interbedded layers of clayey sand and sandy clay to a depth of approximately 20 feet, underlain by sandy gravel and sand stone encountered at a depth of approximately 40 feet. There is also a layer of loose fill that covers the project site with an average depth of 3 feet. Groundwater was reported in three of eight boring holes at depths varying from 9 to 43.5 feet. Perched groundwater was also found above clay layers in some of the borings, and there is potential for perched groundwater to develop during and following the rainy season. It is expected that the average seasonal high groundwater table may vary from the groundwater encountered during the borings (Ifland Engineers 2019).

Along with borings, Dees and Associates provided percolation test results for two areas of the site. The first test was performed at the south end of the site, and the second in the driveway near the front of the proposed medical office building. Infiltration rates of 0.01 inch per hour and 0.03 inch per hour, respectively, were documented at the level where infiltration would occur (Ifland Engineers 2019).

A patchwork of storm drain improvements exists around the site, which conveys runoff generally to the southeast toward Rodeo Creek Gulch. Currently, along the south side of the project frontage on Soquel Avenue, there is a drainage ditch which flows toward the northeastern corner of the property. There is a 36-inch diameter concrete culvert that terminates near the northern property line of the site. This culvert conveys runoff from the drive-in movie theater/flea market site, Good Shephard School, and an apartment complex to the north of Highway 1, and the culvert outfalls into the drainage ditch. Runoff in the drainage ditch is picked up through an 18-inch corrugated metal pipe culvert, then conveyed generally to the south through a system of pipes, vegetated swales, and open concrete channels, until it reaches the Greystone subdivision, at which point it is conveyed

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<sup>1</sup> A seiche is a wave or disturbance of water level that may occur in any semi- or fully enclosed body of water. Seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area.

through a closed pipe system through the development to Mattison Lane. At the bend in Mattison Lane, the collection system turns to the east and outfalls into Rodeo Creek Gulch, approximately 1,350 feet southeast of the project site (Ifland Engineers 2019).

At present, there are minimal on-site storm drain improvements. Runoff from the site is either retained on-site or allowed to flow uncontrolled off-site to neighboring properties. Approximately 24 percent of the site drains west to the Live Oak Business Park, where it is collected in catch basins. From here, it travels south in the storm drain along Chanticleer Avenue, until it reaches an outfall in Rodeo Creek Gulch near Ivy Lane, approximately 3,700 feet to the south. The remaining 76 percent of the site drains into Rodeo Creek Gulch through the existing storm drain system described above (Ifland Engineers 2019).

## 4.9.2 Regulatory Setting

Hydrology and water quality are governed by a multiple regulations and laws at the federal, state, and local levels that would apply to the proposed project, these regulations are summarized below.

### a. Federal Regulations

#### *Clean Water Act*

In 1972, Congress passed the Federal Water Pollution Control Act, commonly known as the Clean Water Act, with the goal of “restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation’s waters” (33 United States Code § 1251(a)). The Clean Water Act directs states to establish water quality standards for all “waters of the United States” and to review and update such standards on a triennial basis. Section 319 mandates specific actions for the control of pollution from non-point sources. The USEPA has delegated responsibility for implementation of portions of the Clean Water Act, including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) Program, to the SWRCB and the RWQCBs.

Section 303(c)(2)(b) of the Clean Water Act requires states to adopt water quality standards for all surface waters of the U.S. based on the water body’s designated beneficial use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Water quality standards applicable to the project are contained in the Basin Plan (Central Coast RWQCB 2016).

Section 303(d) of the Clean Water Act bridges the technology-based and water quality-based approaches for managing water quality. Section 303(d) requires that states make a list of waters that are not attaining standards after the technology-based limits are put into place. For waters on this list (and where the USEPA administrator deems they are appropriate), states are to develop TMDLs, which are established at the level necessary to implement the applicable water quality standards. A TMDL must account for all sources of the pollutants that caused the water to be listed. Impaired water bodies in the project vicinity, including the pollutants that cause impairments, and the potential sources of the pollutants are outlined in Table 4.9-1 above.

#### *Clean Water Act Section 401*

Under Section 401 of the Clean Water Act, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the U.S. unless a Section 401

water quality certification is issued, verifying compliance with water quality requirements, or certification is waived. Authorized Native American tribes and states where the discharge would originate are generally responsible for issuing water quality certifications. In California, the RWQCBs issue water quality certifications, which are issued in conjunction with any federal permit (e.g., permits issued by the U.S. Army Corps of Engineers [USACE] under Section 404 of the Clean Water Act, described below). Section 401 of the Clean Water Act provides the SWRCB and the RWQCBs with the regulatory authority to waive, certify, or deny any proposed activity that could result in a discharge to surface waters of the State. To waive or certify an activity, these agencies must find that the proposed discharge would comply with state water quality standards, including those protecting beneficial uses and water quality. If these agencies deny the proposed activity, the federal permit cannot be issued. This water quality certification is generally required for projects requiring Section 404 authorization involving the discharge of dredged or fill material to wetlands or other waters of the U.S.

### *Clean Water Act Section 402*

Section 402 of the Clean Water Act requires that all construction sites on an acre or greater of land, as well as municipal, industrial and commercial facilities discharging wastewater or stormwater directly from a point source (e.g., pipe, ditch, or channel) into a surface water of the U.S. must obtain permission under the NPDES permit. All NPDES permits are written to ensure that the surface water receiving discharges will achieve specified water quality standards.

According to federal regulations, NPDES permit coverage for stormwater discharges associated with construction activity can be obtained through individual state permits or general permits. Individual permitting involves the submittal of specific data on a single construction project to the appropriate permitting agency that will issue a site-specific NPDES permit to the project. NPDES coverage under a general permit involves the submittal of a Notice of Intent by the regulated construction project that they intend to comply with a general permit to be developed by USEPA or a state with delegated permitting authority.

In California, the NPDES program is administered by the SWRCB through the RWQCBs and requires municipalities to obtain permits that outline programs and activities to control wastewater and stormwater pollution. The Federal Clean Water Act prohibits discharges of stormwater from construction projects unless the discharge is in compliance with an NPDES permit. The SWRCB is the permitting authority in California, and adopted an NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2009-0009, as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Containment and spill cleanup are also encompassed in the Storm Water Pollution Prevention Plan (SWPPP). This includes inspections for spills, a requirement that chemicals be stored in watertight containers with secondary containment to prevent spillage or leakage, procedures for addresses hazardous and non-hazardous spills, including a spill response and implementation procedure, include on-site equipment for cleanup and spills, and spill training for construction personnel.<sup>2</sup>

The Order applies to construction sites that include one or more acre of soil disturbance. Construction activities include clearing, grading, grubbing, excavation, stockpiling, and reconstruction of existing facilities involving removal or replacement. The Construction General Permit requires that the landowner and/or contractor file permit registration documents prior to commencing construction and then pay a fee annually through the duration of construction. These

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<sup>2</sup> See [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/constpermits/wqo\\_2009\\_0009\\_complete.pdf](https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_complete.pdf)



documents include a notice of intent, risk assessment, site map, SWPPP, and signed certification statement. The SWPPP must include measures to ensure that: all pollutants and their sources are controlled; non-stormwater discharges are identified and eliminated, controlled, or treated; site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and BMPs installed to reduce or eliminate pollutants after construction are completed and maintained. The Construction General Permit specifies minimum BMP requirements for stormwater control based on the risk level of the site. The Permit also specifies minimum qualifications for a qualified SWPPP developer and qualified SWPPP practitioner.

The County of Santa Cruz has developed a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable, the performance standard specified in Clean Water Act Section 402, typically through the application of BMPs. Discharges from storm drain system in this area are permitted under NPDES General Permit for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4s), Order No. 2013-0001-DWQ (MS4 General Permit). This regional program was developed in response to the SWRCB's implementation of the NPDES Phase II Stormwater Program. The purpose of this program is to implement and enforce BMPs to reduce the discharge of pollutants from municipal separate storm sewer systems.

The City of Santa Cruz operates the regional Santa Cruz Wastewater Treatment Facility (WWTF) that provides services to approximately 135,000 people in the cities of Santa Cruz and Capitola, and unincorporated portions of Santa Cruz County. Santa Cruz operates the WWTF under a current NPDES permit, renewed in 2017 by the RWQCB (Order No. R3-2017-0030, NPDES No. CA 0048194). The minimum initial dilution established in the individual NPDES permit at the point of effluent discharge is 1:139 (parts effluent to seawater). The minimum initial dilution is used by the Central Coast RWQCB to determine compliance with the water quality effluent limitations established in the NPDES permit for in-pipe water quality (i.e., prior to discharge) that are based on water quality objectives contained in the SWRCB's Ocean Plan. The effluent limitations in the permit are based on and are consistent with the water quality objectives contained in the Ocean Plan. Further discussion of the Ocean Plan is provided in discussion of State regulations, below.

#### *Clean Water Act Section 404*

Under Section 404 of the Clean Water Act, proposed discharges of dredged or fill material into waters of the U.S. require USACE authorization. Waters of the U.S. generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands (with the exception of isolated wetlands). Federal regulations are currently pending that would revise the definition of "waters of the United States" subject to Section 404 of the Clean Water Act, as further discussed in Section 4.3, *Biological Resources*. The USACE identifies wetlands using a multi-parameter approach, which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. According to the *Corps of Engineers Wetlands Delineation Manual (1987)*, except in certain situations, all three parameters must be satisfied for an area to be considered a jurisdictional wetland. The *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008)* is also used when conducting jurisdictional wetland determinations in areas identified within the boundaries of the arid west.

When an application for a Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;

- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

#### *National Flood Insurance Act/Flood Disaster Protection Act*

The National Flood Insurance Act of 1968 made flood insurance available for the first time. The Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. These laws are relevant because they led to mapping of regulatory floodplains and to local management of floodplain areas according to guidelines that include prohibiting or restricting development in flood hazard zones.

#### *Safe Drinking Water Act*

The federal Safe Drinking Water Act was enacted in 1974 and allows the USEPA to promulgate national primary drinking water standards specifying Maximum Contaminants Levels for each contaminant present in a public water system with an adverse effect on human health. Primary Maximum Contaminants Levels have been established for approximately 90 contaminants in drinking water. The USEPA also adopts secondary Maximum Contaminants Levels as non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects. States have the discretion to adopt them as enforceable standards. USEPA has delegated to the SWRCB the responsibility for administering California's drinking-water program. In 1976, two years after the Federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (see *California Safe Drinking Water Act* described in the State regulatory section below).

#### *Federal Emergency Management Agency*

FEMA administers the National Flood Insurance Program (NFIP) to provide flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify land areas subject to flooding. FIRMS identify flood hazard zones in the community and provide flood elevation profiles used to determine the 100-year base flood elevation (BFE) in riverine areas. The design standard for flood protection is established by FEMA. FEMA's minimum level of flood protection for new development is the 100-year flood event, also described as a flood that has a one percent chance of occurring in any given year.

## **b. State Regulations**

#### *California Ocean Plan*

The *Water Quality Control Plan for Ocean Waters of California* (or Ocean Plan) (SWRCB 2015) establishes water quality objectives and beneficial uses for waters of the Pacific Ocean adjacent to the California Coast outside of estuaries, coastal lagoons, and enclosed bays. The Ocean Plan establishes effluent quality requirements and management principles for specific waste discharges. The water quality requirements and objectives of the Ocean Plan are incorporated into NPDES permits for ocean discharges, such as permit for discharge of treated wastewater from the Monterey One Water Regional Wastewater Treatment Plant to Monterey Bay.

#### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) is the primary statute covering the quality of waters in California. Under the act, SWRCB has the ultimate

authority over the State's water quality policy. SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the nine RWQCBs conduct planning, permitting, and enforcement activities. The RWQCBs also regulate water quality under this act through the regulatory standards and objectives set forth in Water Quality Control Plans (also referred to as Basin Plans) prepared for each region.

The proposed project is located in the jurisdiction of the Central Coast RWQCB. The most current version of the Central Coast RWQCB's Basin Plan was adopted in 2016. The Basin Plan has five major components: 1) identifies the waters of the region, including the Monterey Bay; 2) designates beneficial uses of those waters; 3) establishes water quality objectives for the protection of those uses; 4) prescribes an implementation plan; and 5) establishes a monitoring and surveillance program to assess implementation efforts. Water quality objectives of the Basin Plan are incorporated into individual NPDES permits authorized by the Central Coast RWQCB.

#### *Central Coast Regional Water Quality Control Board Resolution No. R3-2013-0032*

The Central Coast RWQCB adopted post-construction requirements that municipal stormwater permittees must apply to new development and redevelopment projects to protect the beneficial uses of waters of the State. The performance requirements include site design and runoff reduction measures, water quality treatment measures, stormwater control plan requirements, runoff retention requirements, and peak runoff management requirements. The County of Santa Cruz Design Criteria provides requirements for stormwater management for all new development within Santa Cruz County. The RWQCB has approved use of the stormwater management requirements contained in the County's Design Criteria in place of the adopted post-construction requirements in Resolution No. R3-2013-0032.

#### *California Safe Drinking Water Act*

The USEPA has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. In 1976, two years after the Federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (contained in the Health and Safety Code) and adopted implementing regulations (contained in Title 22 California Code of Regulations). California's program sets drinking water standards that are at least as stringent as the Federal standards. Each community water system also must monitor for a specified list of contaminants, and the monitoring results must be reported to the state. Responsibility for the state's Drinking Water Program was transferred from the Department of Public Health to the Division of Drinking Water, which is a division of the SWRCB that was created in July 2014.

#### *Sustainable Groundwater Management Act*

In September 2014, the governor signed legislation requiring that California's critical groundwater resources be sustainably managed by local groundwater GSAs. The Sustainable Groundwater Management Act (SGMA) gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins. A Groundwater Sustainability Plan for the Mid-County Basin was submitted by the MGA Board in January 2020 and posted on February 19, 2020.

## c. Local Regulations

### *County of Santa Cruz General Plan and Local Coastal Program*

The 1994 General Plan and Local Coastal Program for the County of Santa Cruz provides the following goals, policies and programs pertaining to hydrology and water quality that are relevant to this analysis. The Conservation and Open Space Element of the General Plan (revised 2018) provides the following objectives and policies applicable to the proposed project and pertaining to hydrology and water quality.

**Objective 5.4 Monterey Bay and Coastal Water Quality.** To improve the water quality of Monterey Bay and other Santa Cruz County coastal waters by supporting and/or requiring the best management practices for the control and treatment of urban run-off and wastewater discharges in order to maintain local, state and national water quality standards, protect County residents from health hazards of water pollution, protect the County's sensitive marine habitats and prevent the degradation of the scenic character of the region.

**Policy 5.4.1 Protecting the Monterey Bay National Marine Sanctuary from Adverse Impacts.**

Prohibit activities which could adversely impact sensitive habitats of the Monterey Bay National Marine Sanctuary, including the discharge of wastes and hazardous materials. The main sources of concern are wastewater discharge, urban runoff, toxic agricultural drainage water, including that originating outside of Santa Cruz County, and the accidental release of oil or other hazardous material from coastal tanker traffic.

**Policy 5.4.3 Wastewater Discharges into Coastal Waters.** Require a review of any new and/or increased wastewater discharge into the Monterey Bay or other coastal waters to address the potential marine water quality impacts and determine necessary mitigations.

**Policy 5.4.14 Water Pollution from Urban Runoff.** Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Utilize erosion control measures, on-site detention and other appropriate storm water best management practices to reduce pollution from urban runoff.

**Objective 5.5a Watershed Protection (LCP).** To protect and manage the watersheds of existing and future surface water supplies to preserve the quality and quantity of water produced and stored in these areas to meet the needs of County residents, local industry, agriculture, and the natural environment.

**Policy 5.5.9 Development Activities Within Water Supply and Least Disturbed Watersheds.**

Require all grading, building, and timber harvesting in Water Supply and Least Disturbed Watersheds to meet strict standards for erosion control and protection of water quality as outlined in the Erosion Hazard and Drainage Facilities sections of this Plan and as identified in the San Lorenzo River Watershed Management Plan.

**Policy 5.5.12 Drainage Design in Water Supply Watersheds.** Require retention of stormwater runoff from impervious surfaces for all new development in Water Supply Watersheds through on-site percolation methods where feasible, so that runoff will not exceed pre-development runoff levels. Utilize on-site detention methods where percolation methods are not feasible. Either system should conform to the minimum design storm as determined by the County Design Criteria.

**Objective 5.7 Maintaining Surface Water Quality.** To protect and enhance surface water quality in the County's streams, coastal lagoons and marshes by establishing best management practices on adjacent land uses.

**Policy 5.7.3 Erosion Control for Stream and Lagoon Protection.** For all new and existing development and land disturbances, require the installation and maintenance of sediment basins, and/or other strict erosion control measures, as needed to prevent siltation of streams and coastal lagoons.

**Policy 5.7.4 Control Surface Runoff.** New development shall minimize the discharge of pollutants into surface water drainage by providing the following improvements or similar methods which provide equal or greater runoff control:

- (a) include curbs and gutters on arterials, collectors and locals consistent with adopted urban street designs; and
- (b) oil, grease and silt traps for parking lots, land divisions or commercial and industrial development.

**Objective 5.8a Groundwater Protection.** To protect the quantity and quality of the County's groundwater resources through an integrated program of land use regulation and runoff management in groundwater recharge areas, careful water quality monitoring and management of extractions consistent with long-term sustainable water supply yields.

**Objective 5.8b Overdrafted Groundwater Basins.** To act directly and coordinate and work with relevant water purveyors and agencies to eliminate long-term groundwater overdraft in all water basins where overdraft has been documented.

**Policy 5.8.3 Uses in Primary Groundwater Recharge Areas.** Prohibit any land use in a Primary Groundwater Recharge Area which would allow the percolation of pollutants into the groundwater system.

**Policy 5.8.4 Drainage Design in Primary Groundwater Recharge Areas.** Require retention of stormwater runoff from impervious surfaces for all new development in Primary Groundwater Recharge Areas through on-site percolation methods so as not to exceed predevelopment runoff levels. Utilize on-site detention methods where percolation methods are not feasible; either system should be designed for a minimum design storm as determined by the County Design Criteria.

## *Santa Cruz County Code*

### **CHAPTER 7.69 – WATER CONSERVATION**

Section 7.69.030, Prohibited Water Uses, of the Santa Cruz County Code prohibits various wasteful uses of water in the County including the watering of grass, lawn, groundcover, shrubbery, open ground, crops and trees, including agricultural irrigation, in a manner or to an extent which allows water to run off from the area being watered.

### **CHAPTER 7.79 – RUNOFF AND POLLUTION CONTROL**

Section 7.79.040, Prohibited Discharges, Exemptions and Limitations, of the Santa Cruz County Code prohibits any non-storm water discharge to leave private property, enter the storm drain system, enter receiving waters of the County, or percolate into groundwater. Irrigation water contained on private property is exempt from the prohibition of discharge if it does not result in contamination or

pollution; however, section 7.69.030 disallows excess runoff from the area being watered. Section 7.79.070, Storm Drain System and Channel Modification Prohibited, prohibits the unpermitted alteration to drainage patterns or modifications to the storm drain system or any channel that is part of a receiving water of the County. This section also prohibits the deposit of fill, debris, or other material in the storm drain system, a drainage channel, or on the banks of a drainage channel where it might enter the storm drain system or receiving waters and divert or impede flow. The County is granted the authority under this chapter to inspect a property with permission from the owner whenever it has probable cause to believe that there exists, or potentially exists, any condition which constitutes a violation of the chapter.

#### *County of Santa Cruz Grading Ordinance*

Chapter 16.20 of the Santa Cruz County Code is the Santa Cruz County Grading Ordinance. The purpose of this chapter is to safeguard health, safety, and the public welfare; to minimize erosion and the extent of grading; to protect the watersheds; to ensure the natural appearance of grading projects; and to otherwise protect the natural environment of Santa Cruz County. This chapter sets forth rules and regulations to control all grading, including excavations, earthwork, road construction, dredging, diking, fills and embankments. It also establishes the administrative procedure for issuance of permits and provides for approval of grading plans and inspections. A proposed grading plan must be accompanied by an erosion control plan and erosion preventative measures, in accordance with the requirements of the County Erosion Control Ordinance.

#### *County of Santa Cruz Erosion Control Ordinance*

Chapter 16.22 of the Santa Cruz County Code is the Santa Cruz County Erosion Control Ordinance. The purpose of this chapter is to eliminate and prevent conditions of accelerated erosion that have led to, or could lead to, degradation of water quality, damage to property, loss of topsoil and vegetation cover, disruption of water supply, and increased danger from flooding. This chapter requires control of all existing and potential conditions of accelerated erosion and sets forth required provisions for preparation of erosion control plans, runoff control, and land clearing approval. An erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment movement must be submitted and approved with a grading plan prior to issuance of a building permit or development permit. Erosion control plans are designed to minimize erosion during construction and throughout the life of the project.

### 4.9.3 Impact Analysis

#### **a. Methodology and Significance Thresholds**

The analysis of potential hydrology and water quality impacts reviews the existing hydrology and water quality issues identified in Section 4.9.1, *Setting*, and determines whether the proposed project has the potential to create impacts due to such hydrology and water quality issues. Impacts to hydrology and water quality are assessed through the evaluation of site information and conditions (e.g., known impairments to water quality, proximity to streams and flood zones, and groundwater sustainability plans and management).

An impact is considered significant if development under the proposed project would result in one or more of the following conditions:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:
  - a. result in substantial erosion or siltation on- or off-site,
  - b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite,
  - c. 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, or
  - d. impede or redirect flood flows;
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impacts to groundwater supply are also discussed in Section 4.16, *Utilities and Service Systems*.

**Threshold 1:** Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

**Impact HWQ-1** PROJECT OPERATION COULD RESULT IN POLLUTED RUNOFF AND CONTAMINATION OF DOWNSTREAM WATERBODIES AND THUS VIOLATE WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

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## Construction

Construction activities associated with the proposed project would include demolition of existing buildings and removal of items, grading and soil preparation, excavation for utilities, foundation construction, and construction of the medical office building and parking garage. It would also include other project components such as road frontage improvements. Construction activities could result in soil erosion due to earth-moving activities such as excavation, grading, soil compaction and moving, and soil stockpiling. As described above, the proposed project site is nearly flat with a slight southwest slope, runoff during storm events reaches the storm drain system either as sheet flow or by flowing into the drainage ditch to the north, where it is discharged into Rodeo Creek Gulch. The types of pollutants contained in runoff from construction sites in the proposed project may include sediment and other existing contaminants such as nutrients, pesticides, herbicides, trace metals, and hydrocarbons that can attach to sediment and be transported downstream through erosion via Rodeo Creek Gulch and ultimately into the Monterey Bay, contributing to degradation of water quality.

Construction activities would utilize hazardous materials such as diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids required for the operation of construction vehicles or equipment. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by County, state, and federal regulations and compliance with applicable standards discussed in Section 4.9.2, *Regulatory Setting*, above.

Development associated with the proposed project would be required to comply with state and local water quality regulations designed to control erosion and protect water quality during construction. This includes compliance with the requirements of the SWRCB Construction General Permit, which requires preparation and implementation of a SWPPP for projects that disturb one acre or more of land. Since the proposed project is greater than one acre in size, it would be subject to the SWRCB Construction General Permit and would be required to develop a SWPPP. The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit. Construction BMPs could include inlet protection, silt fencing, fiber rolls, stabilized construction entrances, stockpile management, solid waste management, and concrete waste management. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events. Implementation of the required SWPPP would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event.

In addition, the proposed project would be subject to the NPDES MS4 Permit as well as Santa Cruz County Code Erosion Control and Grading Ordinances, which require a grading plan and erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment movement prior to issuance of a building permit or development permit.

Compliance with the regulations and policies discussed above would reduce the risk of water degradation from soil erosion and other pollutants related to proposed project construction activities. Because violations of water quality standards would be minimized through compliance with existing regulations, impacts to water quality from construction activities would be less than significant.

## Operation

The proposed project would be located in an area that is currently developed, in an urban setting served by existing stormwater collection and conveyance systems, and generally covered with impervious surface. Stormwater would be treated using a proprietary filtration and detention system located within the access road and landscape areas on-site. An outlet control structure would be placed near the project frontage and would connect to the proposed storm drain in Soquel Avenue, metering the release of runoff from the site and allowing runoff beyond the design storm to bypass the exit. In addition, the project proposes to redirect stormwater runoff flowing under Highway 1 to the existing Soquel Avenue drainage ditch using a large pipe traveling east along Soquel Avenue to a new outfall at Rodeo Creek Gulch. Development of the proposed project would result in an increase of impervious surfaces from approximately 56,616 square feet to 163,270 square feet for a net increase of impervious surface of 106,654 square feet (as detailed in the Preliminary Post-Construction Stormwater Control Plan for Santa Cruz SMON; see Appendix M).

An increase in impervious area would alter the ability for stormwater to infiltrate on the project site and limit the natural filtration of stormwater through the soils. Additionally, paved surfaces, such as the proposed driveway and parking bays would add contaminants to stormwater runoff, including oils and heavy metals from vehicles. Routine maintenance of landscape areas would have the potential to introduce chemicals such as herbicides and pesticides. In addition to these contaminants, naturally occurring substances such as nitrates and sediment can increase and accumulate between precipitation events in impervious areas, damaging the ecosystem and polluting the water.

The effects of urban runoff can have a variety of impacts to the surrounding natural ecosystems and organisms. Even at low concentrations, oil, grease, and heavy metals such as lead, cadmium, and



copper can be toxic to aquatic organisms. Bacteria from pet waste can have negative impacts to organisms in the receiving waters. Nutrients from fertilizers have been found to accelerate growth of nuisance vegetation and algae, resulting in a decrease in dissolved oxygen levels which effect the survival of fish, invertebrates, bacteria, and aquatic plants. Dissolved oxygen is also critical for the decomposition of organic matter, a natural process in aquatic ecosystems. The pollutants of concern in Santa Cruz County include sediment, nutrients, and bacteria. These pollutants are likely to be on the proposed site.

The proposed project would be required to adhere to the stormwater runoff management criteria identified in the Central Coast RWQCB Resolution No. R3-2013-0032, "Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region." The County of Santa Cruz Design Criteria provides requirements for stormwater management for all new development within Santa Cruz County. The RWQCB has approved use of the stormwater management requirements contained in the County's Design Criteria in place of the "Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region."

On-site development and any associated off-site improvements greater than one acre in size would be required to comply with the NPDES Construction General Permit, which requires the development of a SWPPP. SWPPP implementation would reduce the risk of water degradation on- and off-site from soil erosion and other pollutants related to project operation because a SWPPP requires the design, installation, and maintenance of post-construction stormwater controls. Further, because the project is creating more than 5,000 square feet of new impervious area it is categorized as a Large Project by the County. Large Projects must incorporate Low Impact Development (LID) and BMPs to reduce and treat pollution from the 85<sup>th</sup> percentile storm. Large projects are also required to retain runoff produced from the 2-year, 2-hour storm on-site and maintain predevelopment discharge rates up to the 10-year, 15-minute design storm through detention and metered release. Based on the site improvements and grading, on-site drainage would be divided into two separate Drainage Management Areas (DMAs). DMA 1 encompasses the on-site improvements. The Preliminary Post-Construction Stormwater Control Plan for Santa Cruz SMON found that the infiltration rates are too low at the project site to retain stormwater on-site, therefore runoff from these DMAs would be detained in a detention vault, to meet the above-listed requirements. DMA 2 makes up the remainder of the site and would be left completely pervious. Any stormwater that drains into DMA 2 from pervious surfaces would be allowed to drain off-site, following the existing drainage patters. Given the existing compacted dirt roads, buildings, and pavement currently on-site, runoff from DMA 2 would be reduced runoff from pre- to post-construction by approximately 76 percent. The project also proposes to redirect stormwater runoff flowing under Highway 1 to the existing Soquel Avenue drainage ditch using a large pipe traveling east along Soquel Avenue to a new outfall at Rodeo Creek Gulch. These improvements would address existing deficiencies with the existing drainage channel and would be constructed to minimize disturbance to the maximum extent practicable, with oversight from Santa Cruz County and other regulatory bodies.

Due to the number of constraints upon the project, especially the low percolation rate, it would be infeasible to retain stormwater onsite. Infiltration of the 2-year, 2-hour storm would not be technically feasible given the low percolation rate. Pursuant with County conditions of approval, the project applicant must provide technical documentation as to why on-site biofiltration of stormwater is not feasible so that the proposed structural treatment system can be used. Additionally, to reduce the amount of runoff, a number of measures would be implemented,

including limiting the disturbance to natural features; limiting soil compaction to areas below hardscape, building and parking garage areas; and, in DMA 2, capturing stormwater from areas that currently run off onto adjacent properties. In addition, a number of source control measures to address and reduce potential pollution sources would be incorporated into the proposed project; these are listed in Table 4.9-2.

**Table 4.9-2 Project Source Control Measures**

Pollution Source	Source Control Measures
Accidental Spills or Leaks	<ul style="list-style-type: none"> <li>▪ Owner/operator would prepare a spill prevention plan to be located on-site</li> <li>▪ Employees would be trained on spill prevention and cleanup</li> <li>▪ Spill cleanup materials would be located onsite</li> </ul>
Interior Floor Drains	<ul style="list-style-type: none"> <li>▪ All interior floor drains would be connected to sanitary sewer system</li> </ul>
Parking/Storage Area Maintenance	<ul style="list-style-type: none"> <li>▪ Covered parking garage areas would drain to sanitary sewer</li> <li>▪ Parking area would be maintained per project O&amp;M Manual and CASQA BMP Fact Sheets SC-43 Parking Area</li> <li>▪ Maintenance &amp; SC-74 Drainage System Maintenance</li> </ul>
Indoor and Structural Pest Control	<ul style="list-style-type: none"> <li>▪ Owner/operator would incorporate integrated pest management practices into maintenance plan</li> </ul>
Fire Sprinkler Test Water	<ul style="list-style-type: none"> <li>▪ Fire sprinkler test water would not be released to the storm drain system</li> <li>▪ A fire sprinkler test drain would be installed and connected to the sanitary sewer system</li> </ul>
Unauthorized Non-stormwater Discharges	<ul style="list-style-type: none"> <li>▪ Storm drains would be painted "NO DUMPING - DRAINS TO BAY. NO TIRE - DESECHO CORRE AL MAR"</li> </ul>
Building and Ground Maintenance	<ul style="list-style-type: none"> <li>▪ Building and landscape would be maintained per project O&amp;M Manual and CASQA BMP Fact Sheets SD-20 Pervious Pavement, SC-41 Building Grounds &amp; Maintenance, SC-43 Parking Area Maintenance, SC-73 Landscape Maintenance &amp; SC-74 Drainage System Maintenance</li> </ul>
Drain or Wash Water from Boiler Drain Lines, Condensate Drain Lines, Rooftop Equipment, Drainage Sumps and Other Sources	<ul style="list-style-type: none"> <li>▪ Condensate lines will discharge to the sanitary sewer or landscape areas</li> </ul>
Landscape/Outdoor Pesticide Use	<ul style="list-style-type: none"> <li>▪ Owner/operator would incorporate integrated pest management practices into maintenance plan</li> <li>▪ Owner/operator would minimize pesticide use onsite</li> <li>▪ Pesticides would be applied with a handheld sprayer to minimize quantity used and spray drift</li> <li>▪ Pesticides would not be applied prior to rain</li> <li>▪ Landscape areas would be maintained per project O&amp;M Manual and CASQA BMP Fact Sheets SC-41 Building</li> <li>▪ Grounds &amp; Maintenance &amp; SC-73 Landscape Maintenance</li> </ul>

Source: Central Coast RWQCB 2016

As described in the *Regulatory Setting* above, the County operates its storm drain system under the MS4 General Permit. The MS4 General Permit was issued to the County as part of the Stormwater Management Plan/Program. This regional program was developed in response to the SWRCB's implementation of the NPDES Phase II Stormwater Program. In accordance with the MS4 General Permit the proposed project would be required to implement post-construction stormwater BMPs to reduce the discharge of pollutants from municipal separate storm sewer systems, such as the

County's storm drain system. These post-construction stormwater management requirements are standard practice and have been proven effective regionally for areas covered under MS4 Permits at preventing increases in stormwater volume and runoff rates, as well as pollutants loads transported by stormwater, both on- and off-site.

Although site design measures and compliance with existing regulations would reduce the potential for water quality impacts, operation of the proposed project could still result in polluted runoff and contamination of downstream waterbodies. This would be especially applicable if the on-site treatment facilities fail or are improperly maintained. Discharge of polluted runoff and contamination of downstream waterbodies could violate water quality standards or waste discharge requirements. Thus, project operational impacts would be potentially significant but mitigable.

### **Mitigation Measures**

The following mitigation measure is required to reduce potential phase two impacts on water quality and prevent violations of water quality standards.

#### *HWQ-1 Operations and Maintenance Agreement*

Prior to completion and issuance of the certificate of occupancy for the proposed project, an Operational and Maintenance Agreement with the County of Santa Cruz shall be prepared. This agreement shall be recorded against the property with the County Recorder's Office and shall be binding on all subsequent owners of the property. This Maintenance Agreement shall remain in place for the life of the project.

The maintenance agreement shall set forth a schedule of maintenance tasks, to be performed by the medical building maintenance staff, which are required for safe and efficient function of the on-site stormwater treatment and detention facilities. It shall also specify procedures for yearly inspections and record keeping of inspections, maintenance and repairs performed. Operation and Maintenance Agreement shall conform to all the requirements outlined in the County of Santa Cruz Design Criteria.

### **Significance After Mitigation**

With implementation of permit conditions and mitigation measures MM HWQ-1 potential impacts to water quality would be less than significant.

**Threshold 2:** Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

**Impact HWQ-2** THE PROPOSED PROJECT WOULD NOT INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE PROJECT MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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The proposed project would increase the amount of impervious surface by 106,654 square feet at the project site (Ifland Engineers 2019), which could in turn reduce the potential for groundwater recharge from infiltration of precipitation. However, according to County of Santa Cruz Online Geographic Information System, the site is not located in a groundwater recharge area. The proposed outfall would be located at Rodeo Creek Gulch, which is an identified groundwater recharge area. However, the outfall would not reduce the potential for infiltration.

As discussed in Section 4.17, *Utilities and Service Systems*, operation of the proposed project would generate approximately 3.8 million gallons per year of demand for water. Water would be provided by the City of Santa Cruz Water Department, which gets approximately 95 percent of its water supply from surface sources, such as creeks. Therefore, only a negligible amount of water supply would be from groundwater sources, as the City of Santa Cruz obtains only approximately 5 percent of its total supply from groundwater. Sufficient water is anticipated to be available to serve the project and the City of Santa Cruz Water Department has provided a will-serve letter to the project applicant. Cumulative development and growth in the Water Department service area could result in insufficient water supplies in future drought years. However, as described above, the Water Department obtains approximately 95 percent of its supply from surface water. Therefore, impacts related to the depletion of groundwater supplies would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 3a:** Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

**Threshold 3b:** Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

**Threshold 3c:** Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?

**Impact HWQ-3 DEVELOPMENT OF THE PROPOSED PROJECT WOULD ALTER DRAINAGE PATTERNS AND INCREASE RUNOFF IN THE PROJECT VICINITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.**

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Construction activities would involve stockpiling, grading, excavation, paving, and other earth-disturbing activities resulting in the alteration of existing drainage patterns. As described under Impact HWQ-1 above, compliance with SWRCB's NPDES Construction General Permit, NPDES MS4 General Permit, and the Santa Cruz County Code would reduce the risk of short-term erosion and increased runoff resulting from drainage alterations during construction. Therefore, project construction impacts would be less than significant.

Development of the proposed project would alter the existing drainage patterns at the site through introduction of new impervious surfaces and infrastructure. As stated above, the proposed project would result in a net increase of impervious surface of 106,654 square feet. In general, increasing impervious surface of an area alters the ability for stormwater to infiltrate soils in that area instead of flowing overland and discharging as stormwater runoff. Thus, an increase in impervious surface results in more runoff, which increases peak flows over a shorter period of time in stormwater drainage systems and surface waters down gradient of the area. The result is more flooding in receiving drainages and creeks and an increase in erosion and sediment transport.

Based on the site improvements and grading, on-site drainage would be divided into two separate Drainage Management Areas (DMAs). DMA 1 encompasses all of the on-site improvements. The Preliminary Post-Construction Stormwater Control Plan for Santa Cruz SMON found that the infiltration rates are far too low at the project site to retain stormwater on-site, therefore runoff from these DMAs would be detained in a detention vault as outlined above, to meet the above listed requirements. DMA 2 makes up the remainder of the site and would be left completely pervious. Any stormwater that drains into DMA 2 from pervious surfaces would be allowed to drain off-site, following the existing drainage patterns. Given the existing compacted dirt roads, buildings, and pavement currently on-site, runoff from DMA 2 would be reduced from pre- to post-construction by approximately 76 percent. The project also proposes to redirect stormwater runoff flowing under Highway 1 to the existing Soquel Avenue drainage ditch using a large pipe traveling east along Soquel Avenue to a new outfall at Rodeo Creek Gulch. These improvements would address existing deficiencies with the existing drainage channel and would be constructed to minimize disturbance to the maximum extent practicable, with oversight from Santa Cruz County

and other regulatory bodies. Because existing runoff is ultimately discharged into Rodeo Creek Gulch and runoff following implementation of the project would also discharge into Rodeo Creek Gulch at the proposed outfall, drainage patterns would not be substantially altered.

The proposed project would be required to incorporate the County Design Criteria, which is based upon the requirements put forth by the Central Coast Regional Water Quality Control Board in Resolution R3-2013-0032. Further, as stated above, because the project would result in a net increase of impervious area of 106,654 square feet, it is categorized as a Large Project by the County. Large Projects must incorporate LID and BMPs to reduce and treat pollution from the 85<sup>th</sup> percentile storm and to retain runoff produced from the 2-year, 2-hour storm on-site and maintain predevelopment discharge rates up to the 10-year, 15-minute design storm through the use of detention and metered release. Further, the project must include a number of source control measures, outlined in Table 4.9-2 above, to further address and reduce potential pollution sources created as a part of this project.

In addition to compliance with County Design Criteria and requirements of a Large Project as designated by the County, as described above the proposed project would be required to comply with the SWRCB's NPDES Construction General Permit, NPDES MS4 General Permit, and the Santa Cruz County Code. These regulations would require design, installation, and maintenance of post-construction stormwater controls as well as implementation of post-construction stormwater BMPs. Compliance with these applicable regulations would reduce the potential for stormwater runoff to cause flooding or contribute substantially to erosion and sedimentation because water would be sufficiently detained and managed on the project site.

Although the project has been designed to all applicable regulations as outlined above to the greatest extent feasible, the proposed project could still result in increased runoff, flooding, erosion, if the on-site stormwater and detention facilities are not properly maintained. This impact would be potentially significant but mitigable.

## **Mitigation Measures**

Implementation of mitigation measure HWQ-1, above, would be required.

## **Significance After Mitigation**

Impacts would be less than significant with implementation of mitigation measure HWQ-1. Mitigation measure HWQ-1 would ensure that the on-site stormwater and detention facilities are operated and maintained as designed, in accordance with an Operations and Maintenance manual, to provide on-site retention and peak flow management in compliance with the County of Santa Cruz Design Criteria and all other applicable regulations.

**Threshold 3d:** Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

**Threshold 4:** In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

**Impact HWQ-4** DEVELOPMENT UNDER THE PROPOSED PROJECT WOULD ALTER DRAINAGE PATTERNS AND INCREASE RUNOFF IN THE PROJECT AREA BUT WOULD NOT IMPEDE OR REDIRECT FLOOD FLOWS. THE PROJECT IS NOT WITHIN AN AREA AT RISK FROM INUNDATION BY FLOOD HAZARD, SEICHE, TSUNAMI, OR MUDFLOW. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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As stated in Section 4.9.1, *Setting*, the project site is not within a 100-year flood hazard area. Therefore, the proposed project would not impede or redirect flood flows. In addition, the proposed project would not be at risk of inundation due to flooding. Further, the proposed project is not located in a tsunami or seiche zone. Therefore, the proposed project would not risk release of pollutants due to project inundation. Although the project would alter drainage patterns, impacts related to flood flows and project inundation would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 5:** Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Impact HWQ-5** THE PROPOSED PROJECT WOULD AFFECT WATER QUALITY BUT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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### Sustainable Groundwater Management Plan

The proposed project would increase the demand for water. The project site is located within the service area of the City of Santa Cruz Water Department. Although the department supplies water from primarily local surface water sources, the remaining five percent of water supplies come from groundwater sources. The Department's groundwater wells are in the Santa Cruz Mid-County Basin. The Basin is not adjudicated, meaning that pumping rights have not been set by a court or Board decision. However, the Basin was determined by the California DWR in 2015 to be critically overdrafted due to seawater intrusion detected at the coastline (City of Santa Cruz 2016).

The Santa Cruz Mid-County Groundwater Sustainability Plan sets for management goals for the Basin, including, but not limited to:

- Ensure groundwater is available for beneficial uses
- Protect groundwater supply against seawater intrusion

- Prevent groundwater overdraft within the Basin and resolves problems resulting from prior overdraft
- Maintain or enhance groundwater levels where groundwater dependent ecosystems exist
- Support reliable groundwater supply and quality

The proposed project would not involve creating new groundwater wells or drawing additional water from existing groundwater wells. Although the project would generate new demand for water, the water would be provided by the City of Santa Cruz Water Department. The City has issued the project applicant a will-serve letter indicating that it will provide the necessary water service for the project. As described above, the Department obtains most of its water supply from surface water sources. The proposed project would not increase the amount of groundwater that the Department withdraws, as the proposed project does not include or require increases water rights or diversion amounts. In other words, the Department obtains approximately 5 percent of its supply from groundwater, and this rate would not change as a result of the project. The proposed project is not located within a groundwater recharge area. Accordingly, the proposed project would not interfere with sustainable groundwater management planning efforts. Impacts related to sustainable groundwater management would be less than significant.

### Water Quality Control Plan

The proposed project could affect water quality and groundwater supply through construction and operational activities. This analysis refers to the Basin Plan as the applicable water quality control plan for the proposed project. The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The identified beneficial uses and the water quality objectives to maintain or achieve those uses are together known as water quality standards. As discussed in detail under Impact HWQ-1, compliance with relevant water quality regulations, BMPs, and policies would reduce the risk of water degradation from soil erosion and other pollutants related to proposed project construction and operational activities.

Construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Consequently, the proposed project would not conflict with or obstruct implementation of the Basin Plan, and impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

## 4.9.4 Cumulative Impacts

The geographic extent for this hydrology and water quality cumulative impact analysis is the Big Basin HU, which includes the project site. The geographic extent of the Big Basin HU is described in more detail in Section 4.9.1.(b), *Surface Water*, above. This geographic extent is appropriate for the issue area of hydrology and water quality because the watershed is hydrologically connected, and



any surface water quality impacts in one part of the watershed could potentially affect surface water quality elsewhere downstream in the watershed.

Cumulative development would generally increase impermeable surface area in the southern portion of the Big Basin HU watershed. Development would potentially increase peak flood flows, alter drainage patterns, reduce groundwater recharge, and increase pollutants in the regional stormwater. However, cumulative development would also be required to adhere to all applicable state and local regulations designed to control erosion and protect water quality, including the Santa Cruz County Code, Capitola Municipal Code, and NPDES Construction General Permit. All construction sites larger than one acre in size would be required to prepare and submit a SWPPP, thereby reducing the risk of water degradation on- and off-site from soil erosion and other pollutants. In addition, the Central Coast RWQCB post-construction requirements for stormwater management encourage and require for certain projects, on-site treatment and infiltration of stormwater runoff.

In addition, implementation of NPDES and Santa Cruz County Code requirements would reduce the potential for increased pollutants in stormwater and groundwater. The NPDES Construction General Permit requires the implementation of BMPs on all construction sites to limit erosion and sedimentation, thereby minimizing water quality impacts. These requirements would also decrease operational effects of cumulative development because each development proposal would be required to reduce the on-site post-development peak discharges at or below pre-development peak discharge rates by implementing on-site LID features and other groundwater recharge design elements. In addition to compliance with mandatory Clean Water Act (NPDES Construction General Permit and MS4 General Permit) and Santa Cruz County Code requirements, implementation of County of Santa Cruz General Plan and Local Coastal Program goals and policies would further reduce the potential for water quality degradation and violations of water quality standards as a result of cumulative development within the unincorporated County. Therefore, cumulative impacts would be less than significant.

As discussed above under Impacts HWQ-1 and HWQ-3, implementation of the proposed project would increase impervious surface area in the County and alter drainage patterns. However, compliance with relevant water quality regulations, BMPs, and policies would reduce the risk of water degradation from soil erosion and other pollutants related to proposed project construction and operational activities. Construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. In addition, as discussed under Impacts HWQ-2 and HWQ-5, the proposed project would incrementally increase the amount of impervious surface by approximately 106,654 square feet. However, future impervious surfaces would represent a small percentage of the total basin area. The proposed project's water quality and groundwater recharge impacts would be less than significant. The measures outlined in the Preliminary Post-Construction Stormwater Control Plan ensure that the proposed project would comply with NPDES and County requirements related to stormwater runoff and water quality. Consequently, implementation of the proposed project would not contribute to cumulative impacts to peak runoff, flooding, or water quality. Therefore, the proposed project would not have a cumulatively considerable contribution to a significant cumulative impact related to water quality.

With the exception of the proposed outfall along Rodeo Creek Gulch, the proposed project is not within an identified groundwater recharge area. The outfall would not prohibit infiltration of precipitation and runoff. Therefore, the proposed project would not have a cumulatively considerable contribution to a significant cumulative impact related to groundwater recharge. The

project and other reasonably foreseeable future projects would increase demand for water. Some reasonably foreseeable future projects listed in Table 3-1, such as projects in the City of Santa Cruz, would also be served by the City of Santa Cruz Water Department. The Department obtains the majority (approximately 95 percent) of its water supply from surface water. Therefore, cumulative demand for groundwater withdrawal would be negligible, as most demand would be from established surface sources, such as creeks. However, the City of Santa Cruz is planning or developing various water supply projects that would potentially increase groundwater withdrawal to meet existing and future demand. However, the groundwater withdrawal would be offset by injection of surface water into the groundwater basin under the City's pending water plans and projects. The City is proposing to amend their water rights to be able to support the supply project but is not proposing to increase the overall amount of their allowed diversion amounts. Therefore, cumulative impacts on groundwater recharge and supply would not be significant.

As discussed under Impact HWQ-4, the project site is not within a 100-year flood hazard area, or a zone at risk of inundation by tsunami or seiche. Cumulative development in other areas in the watershed that are subject to inundation may have localized impacts. However, projects would be analyzed and mitigated on a case-by-case basis and would be designed to avoid or mitigate potential impacts related to flooding. Cumulative impact related to flooding, seiche, and tsunami would therefore be less than significant with mitigation. The proposed project would not impede or redirect flood flows or risk release of pollutants due to inundation. Impacts from implementation of the proposed project related to flood flows and project inundation would be less than significant. Because flooding is fairly localized and site-specific, the proposed project would not have a cumulatively considerable contribution to a significant cumulative impact related to flood hazard or inundation risks.

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## 4.10 Land Use and Planning

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This section addresses the potential land use impacts that could result from the proposed project.

### 4.10.1 Setting

#### a. Regional Setting

The project site is located in Santa Cruz County, which according to County GIS mapping, occupies approximately 446 square miles of both urban and rural land uses. The physical geography of Santa Cruz County is diverse, containing the forested Santa Cruz Mountains in the north and northeast, the mid-County coastal terraces where a large portion of the County's population is located, and the alluvial valleys of the south County which are predominantly in agricultural use (County of Santa Cruz 1994). Within Santa Cruz County, agriculture represents approximately 14 percent of the total land area (40,000 acres). Residential land is approximately 4 percent (11,428 acres) of the land area; developed non-residential uses comprise approximately 1.5% (4,285 acres). Parks, recreation and open space comprise 1.4% (4,000 acres); miscellaneous uses comprise 3.6 percent (10,286 acres) of the land area. The remaining land acreage is undeveloped (AMBAG 2017).

The project site is located in the unincorporated county between the cities of Santa Cruz and Capitola in the community of Live Oak (a census-designated place). Figure 2-3 shows the General Plan Land Use Designations within the local context, and Figure 2-4 shows the zoning designation within the local context.

#### b. Project Site Setting

The proposed medical office building project is located on a 5-acre site, south of Soquel Avenue between but not adjacent to Chanticleer Avenue and Mattison Lane, consisting of a single parcel containing storage, salvage, and salvage yard uses. A concrete contractor is also on-site. The surrounding area is developed with public facility and commercial development to the east and west, Highway 1 to the north, and a mobile home park to the south.

#### Project Site General Plan Land Use Designation

The project site is designated as Urban High-Density Residential (R-UH), which allows for residential development up to 20 units per developable acre within the Urban Services Line (USL). The project includes a General Plan Amendment to change the land use designation from R-UH to Professional and Administrative Office Designation (C-O).

#### Project Site Zoning

The project site is zoned Multi-Family Residential (RM-2-R), which is a zoning district intended to provide a housing density of 20 units per acre to meet the County's Regional Housing Need Allocation. The project includes a Rezone to change the land use designation from RM-2-R to Professional-Administrative Office (PA).

#### Sustainable Santa Cruz County Plan

The Sustainable Santa Cruz County Plan (SSCC Plan) is a planning strategy (accepted by the Board of Supervisors on October 28, 2014) that describes a vision, guiding principles, and strategies that can

lead to a more sustainable development pattern in the County unincorporated area (County of Santa Cruz 2014). Over time, implementation of the concepts and strategies reviewed in the study would lead to reduced greenhouse gas emissions and increased community quality of life through coordinated land use and transportation policies and investments. The Plan presents strategies at the “plan level” (the urbanized area), as well as at the “neighborhood activity center,” “corridor infill” and “village center infill” levels. The goals and strategies are organized around four main goals: vibrant centers, housing choice, livable community design, and increased transportation connections. Focus Areas were selected at the start of the project as vehicles for deeper study and illustration of planning concepts, and the Soquel Avenue area (which includes the project site) was one of those focus areas.

In the SSCC Plan, the project site is depicted in the West Soquel Drive Community Land Use Pattern on page 4-37 as a Multi-Family Residential area, reflecting its existing designation and zoning. In contrast, adjacent lands to the east of the site were depicted as an Employment area, and adjacent lands to the west were depicted as a Commercial area. Figure 7-6 of the SSCC Plan shows the Soquel Avenue Focus Area, with regard to possible future General Plan land use designations that could implement the goals and strategies of the SSCC Plan. Again, the project site is shown to retain its existing Urban High Residential designation; the areas of possible change include the above-described Employment center being designated with a new “Workplace Flex” designation. Figure 7-7 shows possible future new circulation improvements; with possible new streets illustrated along the site’s western and southern boundaries, and a possible new connection across Highway 1 near the project site. The SSCC Plan also included recommendations for increased heights for medical office buildings, hospitals, and other facilities due to the functional needs of those types of buildings. The SSCC Plan is a planning and feasibility study, and it has not been adopted as policy or a regulatory document at the time of preparation of this EIR. Therefore, consistency with the SSCC Plan is not further analyzed in the EIR.

## Proposed Land Use Designation

As detailed in Section 2, *Project Description*, the proposed project consists of a 157,611-square foot, 4-story medical office building and associated 730-space parking garage. As shown on Figure 2-3 in Section 2, *Project Description*, the project site is located adjacent to land the General Plan designates as Service Commercial and Light Industrial on the east and northwest sides, Urban Medium Density Residential to the south and southwest, and Public Facility to the west and north. The proposed project includes an amendment to the General Plan land use designation from Urban High-Density Residential (R-UH) to Professional and Administrative Office (C-O) land use designation. The proposed General Plan land use designation is described below.

1. **Professional and Administrative Office Designation (C-O)** designated lands provide professional and administrative office areas where there is a recognized need for office uses, such as medical center areas and adjacent to commercial centers, and to provide for lower impact, non-retail commercial uses as a buffer between residential areas and more intensive commercial and industrial activities.
  - a. **Policy 2.15.1. Location of Professional and Administrative Offices.** Designate on the General Plan and LCP [Local Coastal Program] Land Use Maps those areas suitable for Professional and Administrative Office uses which are:
    - i. located on a major arterial, and
    - ii. in an area where such uses will be a buffer between residential uses and major commercial centers or industrial uses, or

- iii. in an area where medical offices are appropriate due to proximity to a major hospital provided that such placement shall not conflict with agricultural or resource protection policies.
- b. **Policy 2.15.2. Allowed Uses.** Allow offices such as medical offices, business offices, branch banks, and real estate offices, as well as personal services, in areas designated for Professional and Administrative Offices. Allow restaurants of 500 square feet or less, intended to serve employees or clients of the office development, or restaurants with hours of operation that would allow parking to be shared with the office uses, subject to an approved parking plan. Restaurants are not allowed where the office designation is utilized as a buffer to residential areas. Allow retail sales associated with nearby medical facilities and also allow small schools and studios. Allow childcare facilities intended to serve the employees of the office development. Exclude other retail, wholesale, service commercial and industrial uses.
- c. **Policy 2.15.3. Compatibility with Adjacent Development.** Ensure the compatibility of Professional and Administrative uses with adjacent land uses through Commercial Development Permit procedure to regulate signage, landscaping, on-site circulation, parking, drainage, site and building design. and traffic patterns.

## Proposed Zoning

The project proposes to amend the existing zoning from Multi-Family Residential with the Regional Housing Need (R) Combining District (RM-2-R) to Professional-Administrative Office (PA). PA-zoned lands are intended to provide for professional and administrative office uses in areas where such use is designated on the General Plan, or in areas designated for neighborhood, community or service commercial use, particularly where an office use can provide a buffer use between residential areas and the more intensive commercial or industrial activities. Professional and administrative office uses are intended to be low impact, nonretail activities. The PA District is intended to allow a compatible collection of related services within a development and may include a variety of retail and service uses where they are ancillary and incidental to office uses on a site.

### 4.10.2 Regulatory Setting

Applicable plans, regulations and policies relevant to the proposed project are described below.

#### a. State Regulations

##### Planning and Zoning Law

State law requires each city and county in California to adopt a general plan for the physical development of the land within its planning area (Gov. Code Sections 65300-65404). The general plan must contain land use, housing, circulation, open space, conservation, noise, and safety elements, as well as any other elements that the city or county may wish to adopt. The circulation element of a local general plan must be correlated with the land use element.

Zoning authority originates from city and county police power and from the State's Planning and Zoning Law, which sets minimum requirements for local zoning ordinances. The city or county zoning code is the set of detailed requirements that implement the general plan policies at the level of the individual parcel. The zoning code presents standards for different uses and identifies which uses are allowed in the various zoning districts of the jurisdiction. Since 1971, State law has required the city or county zoning code to be consistent with the jurisdiction's general plan. The consistency

requirement does not apply to charter cities other than Los Angeles unless the charter city adopts a consistency rule.

## **Office of Planning and Research 2015 Environmental Goals and Policy Report**

Governor's Office of Planning and Research's Environmental Goals and Policy Report (Governor's Office of Planning and Research 2015) contains plans, research and objectives pertaining to land use, development, waste, natural resource conservation, water and air quality. The Environmental Goals and Policy Report works alongside State planning priorities to implement State environmental goals and guide land use decisions. More specifically, the Environmental Goals and Policy Report addresses State planning priorities including efficient infill development and adaptive reuse and mixed-use development.

### **b. Local Regulations**

#### **County of Santa Cruz General Plan and Local Coastal Program**

The General Plan and Local Coastal Program (LCP) was adopted by the County Board of Supervisors on May 24, 1994 and certified by the California Coastal Commission on December 15, 1994. It has been amended several times since original adoption (most recently in 2020). Since the project is outside of the local coastal zone, the General Plan/LCP will be referred to from this point forward as the General Plan. State law provides that a General Plan consists of seven mandatory elements. In certain circumstances, an environmental justice element is also required. The County has addressed state requirements by adopting a General Plan with the following elements:

1. Land Use (rev. 2020)
2. Circulation (rev. 2020)
3. Housing (rev. 2016)
4. Conservation and Open Space (rev. 2018)
5. Public Safety (rev. 2020)
6. Parks, Recreation, and Public Facilities (rev. 2020)
7. Community Design (rev. 2016)
8. Noise (rev. 2020)

Elements included in the General Plan that are applicable to the proposed project are described below.

#### *Land Use Element*

The Land Use Element guides the future physical development of the County of Santa Cruz and addresses the historic, current and future distribution, location, density and intensity of all land uses in the unincorporated portion of the County. The Land Use Element has the broadest scope of all seven General Plan elements required by state law and plays a central role in combining land use issues, constraints, and opportunities. The Land Use Element establishes a pattern of land utilization and sets out standards for both the density of population and the intensity of development for each of the land use classifications. Additionally, the Land Use Element:

1. Reflects the opportunities and constraints affecting land uses that have been identified in other elements

2. Fosters policies and programs to reduce loss of life, injuries, damage to property, and economic or social disruption that can result from physical hazards or natural disasters
3. Guides public and private investment
4. Promotes a balanced and functional mix of land uses consistent with community needs, desires, and values

### *Circulation Element*

The Circulation Element is intended to be the key policy statement of the County regarding transportation facilities and programs serving the unincorporated areas. It is an integral part of the General Plan that provides a basis for transportation related decisions and complements the other General Plan elements. Specifically, the Circulation Element clarifies transportation issues raised in other General Plan elements and offers guidance towards solutions. The Circulation Element represents a long-range guide for the maintenance and improvement of the circulation system in Santa Cruz County. The emphasis of the Circulation Element is to accommodate the expected increases in travel demand by development of alternative transportation modes that complement automobile travel and wherever possible improve the efficiency of the existing system.

### *Conservation and Open Space Element*

The Conservation and Open Space Element combines two closely related and state-required elements: the Conservation Element and the Open Space Element. The Conservation and Open Space Element establishes policies and programs to address protection of biological diversity and sensitive habitats, water resource protection, lands suitable for open space protection or resource production activities (i.e., timber, minerals, and agricultural lands), protection and enhancement of air quality, conservation of energy, and cultural resources (i.e., archaeological and historic).

### *Public Safety Element*

The Public Safety Element establishes policies and programs to protect the community from natural hazards, as well as hazards from the built environment. Examples of natural hazards in Santa Cruz County include wildfire, earthquakes, tsunami, and floods. Natural hazards can also lead to hazards within the built environment, such as structures that become unsafe following an earthquake.

### *Parks, Recreation, and Public Facilities*

The Parks, Recreation, and Public Facilities Element is an optional element under State Planning law. It combines numerous topics related to providing adequate community services and infrastructure to support the existing and planned development in the County in a manner that is supportable within the limits of the county's finite natural resources and within the constraints of community-wide goals for environmental quality; as well as coordinating the intensity, location, and timing of future development in the County.

### *Community Design*

The Community Design Element is an optional element under state planning law for the purpose of integrating high quality physical design in the natural setting of the County. The goal of the Element is to preserve and enhance the quality of life in Santa Cruz County through the guidance of development activity to protect open space for its aesthetic, recreational and environmental values, to foster high quality residential areas as pleasant and socially constructive areas in which to live, and to enhance the quality of residential, commercial, and industrial development to achieve an



aesthetic and functional community. Many of the policies addressing the design of residential uses supplement the Land Use Element; and are therefore essential to the General Plan.

### *Noise*

The Noise Element establishes policies to protect the public from harmful noise sources, including vehicular noise from highways and arterials and from stationary sources such as factories.

## **Planning and Zoning Ordinance, Title 13 of the County Code**

The purpose of the Planning and Zoning Ordinance (Title 13 of the County Code) is to: (a) implement the General Plan and LCP Land Use Plan by providing specific regulations as to the allowable uses of land and structures; (b) promote and protect the public health, safety, peace, morals, comfort, convenience, and general welfare; (c) protect the character, stability, and satisfactory interrelationships of residential, commercial, industrial, agricultural, recreational, and open space areas of the County; (d) protect the natural environment in compliance with the California Environmental Quality Act.

The project analyzed by this EIR would include a zone change of the project site parcel from the Multi-Family Residential with R Combining District (RM-2-R) to Professional-Administrative Office (PA) District. Furthermore, Santa Cruz County Code (SCCC) Section 13.10.333(A) states that the minimum net developable square feet per parcel is 10,000 square feet with a minimum parcel frontage of 60 feet. A maximum height of 3 stories and 35 feet is also specified.

### 4.10.3 Impact Analysis

#### **a. Methodology and Significance Thresholds**

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project would result in potentially significant land use impacts if it would:

1. Physically divide an established community
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

Compatibility between land uses typically pertains to whether a particular land use generates air pollution or noise pollution that adversely effects neighboring land uses. Compatibility between proposed on-site land uses and adjacent land uses during both construction and operations are described in Impacts AQ-3 and AQ-4 in Section 4.2, *Air Quality*, and in impacts N-1 through N-5 in Section 4.11, *Noise*.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project physically divide an established community?

**Impact LU-1** THE PROJECT WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. THE PROPOSED PROJECT WOULD HAVE NO IMPACT.

The proposed project would not physically divide an established community. The project site is bordered by Soquel Avenue to the north, and adjacent developed land to the east, west, and south. The site is in a commercial and light industrial/employment area along Soquel Avenue, with residential uses located south of this area. Additionally, the project site is currently fenced, prohibiting the public from accessing the property. The project would not physically divide established communities that neighbor the project site. The project proposes to provide frontage improvements and improvements along Soquel Avenue that would install sidewalks and improve Class II bicycle lanes, resulting in an improvement to pedestrian and bicycle facilities in this neighborhood helping to connect the area with nearby uses and to facilitate through travel for active mobility travelers. Furthermore, the proposed project would not create new roadways or otherwise create barriers between neighborhoods. The project would include an open space area that would be available to the community. The proposed project would have no impact.

### Mitigation Measures

No mitigation measures are required.

### Significance after Mitigation

The proposed project would have no impact.

**Threshold 2:** Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Impact LU-2** BASED ON THE CURRENT PROJECT, IF APPROVED BY THE COUNTY THE PROPOSED PROJECT WOULD BE SUBSTANTIALLY CONSISTENT WITH APPLICABLE LAND USE POLICIES OF THE COUNTY OF SANTA CRUZ 1994 GENERAL PLAN, AND WOULD NOT CONFLICT WITH LAND USE POLICIES THAT ARE IN EFFECT TO AVOID OR MITIGATE ENVIRONMENTAL EFFECTS ON ENVIRONMENT AND NATURAL RESOURCES. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The purpose of this analysis is to determine whether the proposed medical office building, including a General Plan Amendment from Urban High-Density Residential (R-UH) to Professional and Administrative Office Designation (C-O), and zoning designation change from Multi-Family Residential with R Combining District (RM-2-R) to Professional-Administrative Office (PA), would be substantially consistent with the County of Santa Cruz 1994 General Plan with respect to land use designations, policies or regulations that have been adopted to avoid or minimize environmental effects. Table 4.10-1 contains a discussion of the proposed project's consistency with applicable policies of the County of Santa Cruz 1994 General Plan. The following discussion in Table 4.10-1 focuses on those General Plan goals and policies that relate to avoiding or mitigating environmental effects, and an assessment of whether any inconsistency creates a significant physical impact on environmental and natural resources. Only policies relevant and applicable to the proposed project are included. Policies that are redundant between elements are not discussed here. In addition,

some policies have been truncated where the overall meaning of the policy would not be made unclear.

**Table 4.10-1 Project Consistency with County of Santa Cruz 1994 General Plan**

County of Santa Cruz General Plan Policy	Consistency Discussion
<b>Land Use Element</b>	
<p><b>Policy 2.15.1. Location of Professional and Administrative Offices.</b> Designate on the General Plan and LCP Land Use Maps those areas suitable for Professional and Administrative Office uses which are:</p> <ul style="list-style-type: none"> <li>i. located on a major arterial, and</li> <li>ii. in an area where such uses will be a buffer between residential uses and major commercial centers or industrial uses, or</li> <li>iii. in an area where medical offices are appropriate due to proximity to a major hospital. provided that such placement shall not conflict with agricultural or resource protection policies.</li> </ul>	<p><b>Consistent.</b> The project site is located on the southern frontage of Soquel Avenue, just south of Highway 1. Development of a medical office building at the site would buffer existing residential uses south of the site from Highway 1 and the associated noise and light pollution associated with the highway. Agricultural uses do not immediately surround the site or adjacent parcels.</p>
<p><b>Policy 2.15.2. Allowed Uses.</b> Allow offices such as medical offices, business offices, branch banks, and real estate offices, as well as personal services, in areas designated for Professional and Administrative Offices.</p>	<p><b>Consistent.</b> The proposed project would develop a medical office building, consistent with this policy.</p>
<p><b>Policy 2.15.3. Compatibility with Adjacent Development.</b> Ensure the compatibility of Professional and Administrative uses with adjacent land uses through Commercial Development Permit procedure to regulate signage, landscaping, on-site circulation, parking, drainage, site and building design. and traffic patterns.</p>	<p><b>Consistent.</b> As stated in Section 2.7, <i>Required Approvals</i>, the project would require a Commercial Development Permit, and the acquisition of this permit would ensure the project includes compatible signage, landscaping, circulation, parking, drainage, design, and traffic patterns, as determined by the County decision-makers.</p>
<b>Circulation Element</b>	
<p><b>Policy 3.1.1. Land Use Patterns (Jobs/Housing Balance).</b> Encourage concentrated commercial centers, mixed residential and commercial uses, and overall land use patterns which reduce urban sprawl and encourage the reduction of vehicle miles traveled per person.</p>	<p><b>Consistent.</b> The project is proposed in an urbanized area of the County and is considered infill development. It would replace existing storage, salvage, salvage yard, and concrete contractor operations on the site with a more formal commercial use. As described in Section 4.14, <i>Transportation</i>, the proposed project would reduce regional vehicle miles traveled (VMT).</p>
<p><b>Policy 3.2.2. Mode Split.</b> Encourage large employers to provide incentives to carpoolers, bicyclists, pedestrians and transit riders such as priority parking, company car use, bicycle lockers, bus passes etc. in conjunction with the Trip Reduction ordinance.</p>	<p><b>Consistent.</b> The project includes the provision of bicycle parking (both short-term and long-term) and 47 electric vehicle parking spaces. The proposed project also includes new pedestrian sidewalk and improved bicycle lanes on Soquel Avenue. While the project site is not accessible by a transit route, the bicycle and pedestrian facilities would encourage active transportation. Additionally, as described in the Transportation Impact and Operational Analysis, the proposed project would include transportation demand management strategies and programs (see Appendix D).</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 3.3.6. Americans with Disabilities Act.</b> Require parking facilities to meet the requirements of the Americans with Disabilities Act and require that pedestrian ways be designed into parking lots of all developments to enable pedestrians to get to their destinations in a safe manner.</p>	<p><b>Consistent.</b> The proposed parking garage would include 66 Americans with Disabilities Act (ADA) accessible parking spaces. As shown on Figure 2-6, <i>Conceptual Site Plan</i>, accessible pedestrian paths would be located central to the project site, between the parking garage and medical office building, and would be clearly marked. Therefore, the project would be consistent with this policy.</p>
<p><b>Policy 3.6.1 Transit-Friendly Design.</b> Locate and design public facilities and new developments to facilitate transit access, both within the development and outside it.</p>	<p><b>Potentially Inconsistent.</b> The project site is not on a transit route and there is not a transit stop within reasonable walking distance of the site. The nearest transit stop to the project site is approximately 0.75 mile away. The absence of transit would not result in physical changes to the current resources on the site, such as biological resources or aesthetic resources. However, due to a lack of transit, operation of the project could result in more personal vehicle trips that would have otherwise been made on transit. As described on page 38 of the Transportation Impacts and Operation Analysis (see Appendix D), approximately 3 percent of total daily workforce and visitors to the project would utilize transit if it were available. This represents approximately 18 passengers during the AM peak hour and 16 passengers during the PM peak hour. Therefore, transit use would be minimal even if it were available. Additionally, the METRO-operated ParaCruz service would provide transit to the project site for senior citizens and other people with disabilities needing assistance to travel. Further, the project is located within walking distance of the proposed Chanticleer Bicycle/Pedestrian Overcrossing over Highway 1, which is scheduled to start construction in late 2021 and will facilitate access to transit on Soquel Drive north of Highway 1.</p>
<p><b>Policy 3.10.2. Landscape.</b> Landscape and buffer pedestrian walkways wherever feasible.</p>	<p><b>Consistent.</b> The project would include on-site landscaping around all public outdoor areas and on-site pedestrian pathways, as well as the installation of street trees and landscaping along the proposed sidewalk fronting Soquel Avenue.</p>
<p><b>Policy 3.10.3. Lighting.</b> Require adequate lighting for pedestrian and transit patron's movement where appropriate.</p>	<p><b>Consistent.</b> The project would include lighting throughout the site, such as driveway and sidewalk pole-mounted luminaires, bollard lighting along sidewalks, and building-mounted lighting at entrances and within the parking garage.</p>
<p><b>Policy 3.10.4. Pedestrian Traffic.</b> Require dedication and construction of walkways for through pedestrian traffic and internal pedestrian circulation in new developments where appropriate.</p>	<p><b>Consistent.</b> The project includes on-site pedestrian features, including ADA-accessible walkways, as well as the construction of a new pedestrian sidewalk fronting Soquel Avenue.</p>
<p><b>Policy 3.10.7. Parking Lot Design.</b> Provide for pedestrian movement in the design of parking areas.</p>	<p><b>Consistent.</b> The parking garage has been designed to meet the requirements of the ADA. In addition, the proposed parking area has been designed with adequate driveway widths to accommodate both pedestrians and automobiles.</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 3.10.8. Americans with Disabilities Act (ADA) Requirements.</b> Incorporate ADA standards in design of new projects and reconstruction where applicable. Prohibit landscaping and all other obstacles, such as telephone poles and fire hydrants, which would prevent pedestrian movement within this walkway. Require the use of materials which will provide an all-weather surface for walking.</p>	<p><b>Consistent.</b> The project is designed in compliance with ADA standards. No proposed structures or landscaping would block pedestrian access routes between the garage and medical office building.</p>
<p><b>Policy 3.12.1. Level of Service (LOS) Policy.</b> In reviewing the traffic impacts of proposed development projects or proposed roadway improvements, LOS C should be considered the objective, but LOS D as the minimum acceptable (where costs, right-of-way requirements, or environmental impacts of maintaining LOS under this policy are excessive, capacity enhancement may be considered infeasible). Review development projects or proposed roadway improvements to the Congestion Management Program network for consistency with Congestion Management Plan goals. Proposed development projects that would cause LOS at an intersection or on an uninterrupted highway segment to fall below D during the weekday peak hour will be required to mitigate their traffic impacts. Proposed development projects that would add traffic at intersections or on highway segments already at LOS E or F shall also be required to mitigate any traffic volumes resulting in an increase in the volume/capacity ratio of the sum of all critical movements. Projects shall be denied until additional capacity is provided or where overriding finding of public necessity and or benefit is provided.</p>	<p><b>Consistent.</b> Pursuant to CEQA Guidelines Section 15064.3(a), a project's effect on automobile delay shall not constitute a significant environmental impact. LOS is a measurement of automobile delay. This EIR has been prepared to identify potentially significant impacts of the project and provide mitigation measures to reduce these impacts, as applicable. Because LOS is measurement of automobile delay, and effects on automobile delay shall not constitute a significant environmental impact, LOS is not discussed further in context to CEQA or CEQA impacts in this EIR. Therefore, regardless of potential consistency or inconsistency with Policy 3.12.1, there would be no significant environmental impacts because this policy does not pertain to reducing or avoiding environmental impacts. However, LOS resulting from the project is provided for informational purposes in Section 4.14, <i>Transportation</i>. As described in Section 4.14, unacceptable LOS would not result from implementation of the proposed project.</p>
<b>Conservation and Open Space Element</b>	
<p><b>Policy 5.4.14. Water Pollution from Urban Runoff.</b> Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Utilize erosion control measures, on-site detention and other appropriate storm water best management practices to reduce pollution from urban runoff.</p>	<p><b>Consistent.</b> A stormwater pollution prevention plan would be implemented during project construction to reduce erosion and siltation of surface waters. The proposed project would include on-site stormwater retention. Refer to Impact HWQ-1 in Section 4.9, <i>Hydrology and Water Quality</i>. As stated therein, the project would not violate water quality standards or degrade runoff water quality with implementation of Mitigation Measure HWQ-1, which requires an Operations and Maintenance Agreement to ensure adequate functioning of the proposed on-site stormwater systems.</p>
<p><b>Policy 5.7.1. Impacts from New Development on Water Quality.</b> Prohibit new development adjacent to marshes, streams and bodies of water if such development would cause adverse impacts on water quality which cannot be fully mitigated.</p>	<p><b>Consistent.</b> The project site is located within 1 mile of three major waterways with Rodeo Creek Gulch approximately 0.25-mile to the east, Leona Creek 0.6-mile southwest, and Arana Gulch 0.75-mile west. The project site is not adjacent to these streams. However, a proposed stormwater outfall would be located adjacent to Rodeo Creek Gulch. Implementation of construction-phase and post-construction best management practices, as required to comply with all applicable laws and regulations, would limit any adverse effects on water quality in Rodeo Gulch and other waterways.</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 5.7.4. Control Surface Runoff.</b> New development shall minimize the discharge of pollutants into surface water drainage by providing the following improvements of similar methods which provide equal or greater runoff control:</p> <ul style="list-style-type: none"> <li>(a) Include curbs and gutters on arterials, collectors and locals consistent with adopted urban street designs;</li> <li>(b) Oil, grease, and silt traps for parking lots, land divisions, or commercial and industrial development.</li> </ul>	<p><b>Consistent.</b> The proposed project would construct on-site and off-site stormwater facility improvements, including installing curb and gutter along Soquel Avenue. Proposed site features would detain stormwater on-site to control runoff volume and rates, and to treat runoff before discharging off-site. Runoff from impervious surfaces on the project site, such as the medical office building, parking garage, driveways, and sidewalks would be treated on-site before discharge at the proposed outfall along Rodeo Creek Gulch. Also see response to Policy 5.4.14.</p>
<p><b>Policy 5.17.1. Promote Alternative Energy Sources.</b> Promote the use of energy sources which are renewable, recyclable and less environmentally degrading than non-renewable fossil fuels.</p>	<p><b>Consistent.</b> The project includes the installation of solar panels on the parking garage rooftop, and the parking garage would include electric vehicle spaces to encourage the use of non-petroleum fuels.</p>
<p><b>Policy 5.18.1. New Development.</b> Ensure new development projects are consistent at a minimum with the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan and review such projects for potential impact on air quality.</p>	<p><b>Consistent.</b> Potential air quality impacts of the proposed project are evaluated in Section 4.2, <i>Air Quality</i>. As described in Section 4.2, the proposed project would be consistent with the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan.</p>
<p><b>Policy 5.19.2. Site Surveys.</b> Require an archeological site survey as part of the environmental review process for all projects with very high potential as determined by the inventory of archeological sites, within the Archeological Sensitive Areas, as designated on General Plan and LCP Resources and Constraint Map files in the Planning Department.</p>	<p><b>Consistent.</b> An archaeological survey of the project site was conducted by a Dudek archaeologist on September 5, 2018. An archaeological survey of the proposed stormwater outfall area along Rodeo Gulch Creek was conducted by a Dudek archaeologist on November 18, 2020. As described in Section 4.4, <i>Cultural Resources</i>, no historic or archaeological resources were found within the Area of Potential Effect (APE) during the 2018 or 2020 archaeological survey. The APE consists of the project site and proposed stormwater outfall area along Rodeo Gulch Creek.</p>
<p><b>Policy 5.19.3. Development Around Archeological Resources.</b> Protect archeological resources from development by restricting improvements and grading activities to portions of the property not containing these resources, where feasible, or by preservation of the site through project design and/or use restrictions, such as covering the site with earth fill to a depth that ensures the site will not be disturbed by development, as determined by a professional archeologist.</p>	<p><b>Consistent.</b> The cultural resource assessment did not identify known or observable cultural resources, prehistoric, or historic resources, within the APE. Mitigation Measure CUL-1a in Section 4.4, <i>Cultural Resources</i>, would require a qualified archaeologist to monitor project construction activities. Mitigation Measure CUL-1b would require construction or land disturbing activities to stop in the event cultural remains were found. The discovery or find shall be evaluated by the archaeologist to determine if the resource must be mitigated, pursuant to Mitigation Measure CUL-1b, whether Native American consultation is required, and whether and when construction can resume.</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 5.19.5. Native American Cultural Sites.</b> Prohibit any disturbance of Native American Cultural Sites without an archaeological permit which requires, but is not limited to, the following to (a) a statement of goals, methods, and techniques to be employed in the excavation and analysis of data, and the reasons why the excavation will be of value; (b) a plan to ensure that artifacts and records will be properly preserved for scholarly research and public education; (c) A plan for disposing of human remains in a manner satisfactory to local Native American Indian groups.</p>	<p><b>Consistent.</b> The cultural resource assessment did not identify known or observable cultural resources, prehistoric, or historic resources, within the APE. Tribal consultation also identified no known tribal cultural resources or Native American cultural sites within the APE. Project construction activities involving ground disturbance or excavation would have potential to encounter previously unknown or unidentified Native American cultural sites. Implementation of Mitigation Measure CUL-1a in Section 4.4, <i>Cultural Resources</i>, would require a qualified archaeologist to monitor project construction activities. Mitigation Measure CUL-1b would require construction or land disturbing activities to stop in the event cultural remains were found. The discovery or find shall be evaluated by the archaeologist to determine if the resource must be mitigated, pursuant to Mitigation Measure CUL-1b, whether Native American consultation is required, and whether and when construction can resume. Mandatory compliance with regulations pertaining to disturbance of human remains would prevent impacts to potential Native American burials or burial sites.</p>
<p><b>Policy 5.20.3. Development Activities.</b> For development activities on property containing historic resources, require protection, enhancement and/or preservation of the historic, cultural, architectural, engineering or aesthetic values of the resource as determined by the Historic Resources Commission. Immediate or substantial hardship to a project applicant shall be considered in establishing project requirements.</p>	<p><b>Consistent.</b> As described in Section 4.4, <i>Cultural Resources</i>, historic resources do not occur within the APE. The proposed project would have no impact on historic resources.</p>
<p><b>Public Safety Element<sup>1</sup></b></p>	
<p><b>Policy 6.1.1. Geologic Review for Development in Designated Fault Zones.</b> Require a review of geologic hazards for all discretionary development projects, including the creation of new lots, in designated fault zones. Fault zones designated for review include the Butano, Sargent, Zayante, and Corralitos complexes, as well as the State designated Seismic Review Zones. Required geologic reviews shall examine all potential seismic hazards and may consist of a Geologic Hazards Assessment and a more complete investigation where required. Such assessment shall be prepared by County staff under supervision of the County Geologist, or a certified engineering geologist may conduct this review at the applicant’s choice and expense.</p>	<p><b>Consistent.</b> As summarized in Section 4.6, <i>Geology and Soils</i>, a geotechnical investigation, dated September 2018, was prepared by Dees &amp; Associates, Inc. The project site is not located within the Alquist-Priolo Fault Zone or fault zone hazard area identified by the Santa Cruz County General Plan. Section 4.6, <i>Geology and Soils</i>, includes a review of geologic hazards, such as liquefaction, landslide potential, soil erosion, and liquefaction, and all potential impacts would be less than significant; no mitigation measures would be required. Therefore, the project is consistent with this policy.</p>
<p><b>Policy 6.2.2. Engineering Geology Report.</b> Require an engineering geology report by a certified engineering geologist and/or a soils engineering report when the hazards assessment identifies potentially unsafe geologic conditions in an area of proposed development.</p>	<p><b>Consistent.</b> As described in Section 4.6, <i>Geology and Soils</i>, implementation of Mitigation Measure GEO-2 requires an updated Geotechnical Investigation be provided to the County before the grading permit for the project is issued. All measures recommended in the Geotechnical Investigation shall be incorporated into the final plans for the proposed project and made conditions of approval</p>

<sup>1</sup> Recent amendments to the General Plan currently under consideration by the California Coastal Commission amended and renumbered several of these policies.

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 6.3.4. Erosion Control Plan Approval Required for Development.</b> Require approval of an erosion control plan for all development, as specified in the Erosion Control ordinance. Vegetation removal shall be minimized and limited to that amount indicated on the approved development plans but shall be consistent with fire safety requirements.</p>	<p><b>Consistent.</b> County Code Section 16.22.060 requires the preparation of an erosion control plan. County Code Section 16.22.080 also requires vegetation removal to be limited to the amount necessary for building, access, and construction as shown on the erosion control plan.</p>
<p><b>Policy 6.3.5. Installation of Erosion Control Measures</b> Require the installation of erosion control measures consistent with the Erosion Control ordinance, by October 15, or the advent of significant rain, or project completion, whichever occurs first. Prior to October 15, require adequate erosion control to be provided to prevent erosion from early storms. For development activities, require protection of exposed soil from erosion between October 15 and April 15 and require vegetation and stabilization of disturbed areas prior to completion of the project.</p>	<p><b>Consistent.</b> County Code Section 16.22.060 requires erosion control plans to include, as a minimum, the measures required under SCCC 16.22.070, 16.22.080, 16.22.090, and 16.22.100. Additional measures or modification of proposed measures may be required by the Planning Director prior to project approval.</p>
<p><b>Policy 6.3.9. Site Design to Minimize Grading.</b> Require site design in all areas to minimize grading activities and reduce vegetation removal based on the following guidelines:</p> <ul style="list-style-type: none"> <li>(a) Structures to be clustered;</li> <li>(b) Access roads and driveways shall not cross slopes greater than 30 percent; cuts and fills should not exceed 10 feet unless they are wholly underneath the footprint and adequately retained;</li> <li>(c) Foundation designs should minimized excavation or fill;</li> <li>(d) Building and access envelopes should be designed on the basis of site inspection to avoid particularly erodible areas;</li> <li>(e) Require all fill and sidecast material to be recompacted to engineering standards, reseeded, and mulched and/or burlap covered.</li> </ul>	<p><b>Consistent.</b> Site design would be reviewed by the County prior to issuance of a grading permit. The project site is relatively flat in topography; and therefore, grading would be minimal. Therefore, the project is consistent with this policy.</p>
<p><b>Policy 6.4.7. New Construction to be Outside Flood Hazard Areas.</b> Restrict new construction to the area outside the 100-year floodplain and areas subject to coastal inundation, if a buildable portion of the parcel exists outside such areas.</p>	<p><b>Consistent.</b> As described in Section 4.9, <i>Hydrology and Water Quality</i>, the proposed project is located in proximity to Rodeo Creek Gulch; however, the project area is completely outside of the 100-year floodplain according to the FEMA flood map. Therefore, this project is consistent with this policy.</p>



County of Santa Cruz General Plan Policy	Consistency Discussion
<b>Parks, Recreation, and Public Facilities Element</b>	
<p><b>Policy 7.16.1. Reviewing New Development for Fire Protection.</b> Require review of all new developments, including building permits on existing parcels of record, by the County Fire Marshal or local fire agency, and require adequate access, water supply and location with respect to fire stations and Critical Fire Hazard Areas in order to ensure adequate fire protection.</p>	<p><b>Consistent.</b> The project will be served by the Central Fire Protection District. The fire district will review the proposed development for consistency with the Fire Code prior to issuance of the building permit for consistency with the Fire Code. Domestic water use, which would also be used for fire suppression would be provided via connection City of Santa Cruz Water Department. Section 4.17, <i>Utilities and Service Systems</i>, addresses this topic further.</p>
<p><b>Policy 7.16.2. Development to be Consistent with Fire Hazards Policies.</b> Allow development approvals only if adequate water supply, access, and response time for fire protection can be made available in accordance with the Fire Hazards policies found in section 6.5.</p>	<p><b>Consistent.</b> The project will be served by the Central Fire Protection District. The fire district will review the proposed development for consistency with the Fire Code prior to issuance of the building permit for consistency with the Fire Code. Domestic water use, which would also be used for fire suppression would be provided via connection City of Santa Cruz Water Department. Section 4.17, <i>Utilities and Service Systems</i>, addresses this topic further.</p>
<p><b>Policy 7.18.2. Written Commitments Confirming Water Serve Required for Permits.</b> Concurrent with project application, require a written commitment from the water purveyor that verifies the capability of the system to serve the proposed development. Projects shall not be approved in areas that do not have a proven, adequate water supply. A written commitment is a letter from the purveyor guaranteeing that the required level of service for the project will be available prior to the issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development project unless it determines that such project has an adequate water supply available.</p>	<p><b>Consistent.</b> A water will-serve letter from the City of Santa Cruz Water Department is required and has been obtained for the proposed project.</p>
<p><b>Policy 7.18.3. Impacts of New Development on Water Purveyors.</b> Review all new development proposals to assess impacts on municipal water systems, County water districts, or small water systems. Require that either adequate service is available or that the proposed development provide for mitigation of its impacts as a condition of project approval.</p>	<p><b>Potentially Inconsistent.</b> The City of Santa Cruz has issued a will-serve letter committing to supplying water to the project. However, as described in Section 4.16, <i>Utilities and Service Systems</i>, the City of Santa Cruz has insufficient water supply to meet future demand, especially during dry years and multiple dry years. The proposed project would incrementally increase demand for water. Because the demand would be only an incremental increase, and not the full amount of future growth and associated water demand forecasted by the City’s Water Department, there would be adequate supply for the proposed project, and the City Water Department has issued a will-serve letter for the project. However, in the future, as more projects are constructed in the City of Santa Cruz Water Department service area, there could be insufficient water supplies to meet the demand of all customers in the service area.</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 7.18.6. Water Conservation Requirements.</b> Utilize the best available methods for water conservation in new developments. Work with all water purveyors to implement demand management programs and water conservation measures. In areas where water shortage or groundwater overdraft has been substantiated by the water purveyor, require water conservation measures for new and existing uses. Require the use of water-saving devices such as ultra-low-flow fixtures and native drought-resistant planting in new development projects to promote ongoing water conservation.</p>	<p><b>Potentially Consistent.</b> The proposed project would be constructed to achieve a minimum LEED Gold standard rating, including measures to reduce water use. The project would also include native, drought-tolerant landscaping, which would require minimum to negligible irrigation.</p>
<p><b>Policy 7.19.1. Sewer Service to New Development.</b> Concurrent with project application, require a written commitment from the service district. A written commitment is a letter, with appropriate conditions, from the service district guaranteeing that the requiring level of service for the project will be available prior to issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development prior unless it determines that such project has adequate sewage treatment plant capacity.</p>	<p><b>Consistent.</b> Wastewater would be conveyed and treated by the Santa Cruz County Sanitation District. The County Sanitation District has issued a wastewater will-serve letter for the proposed project, stating that wastewater services would be provided by the District.</p>
<p><b>Policy 7.19.2. Development Linkage to Downstream Sewer System Improvements.</b> Require new development to pay its full fair share of downstream sewer system improvements needed. In areas where cumulative sewer capacity is a problem, as indicated by the Department of Public Works, require all development to make required downstream improvements or be appropriately limited until downstream improvements are made.</p>	<p><b>Consistent.</b> The proposed project would pay a sewer connection fee that would be used to maintain downstream infrastructure. In addition, the proposed project includes replacing the existing sanitary sewer pipe beneath Soquel Avenue, Chanticleer Avenue, and Rodriguez Street at a lower depth below ground surface, which satisfies this policy's requirement to identify and fund downstream sewer system improvements.</p>
<p><b>Policy 7.23.1. New Development.</b> Require new discretionary development projects to provide both on and off-site improvements to alleviate drainage problems before considering on-site detention of storm water. Require runoff levels to be maintained at predevelopment rates for a minimum design storm as determined by Public Works Design Criteria to reduce downstream flood hazards and analyze potential flood overflow problems, where applicable. Require on-site retention and percolation of increased runoff from new development in Water Supply Watersheds and Primary Groundwater Recharge Areas, and in other areas as feasible.</p>	<p><b>Consistent.</b> As discussed in Section 2.5.5.3, <i>Stormwater Management</i>, the project would maintain off-site drainage patterns, mediated by the construction of on-site swales and treatment chambers. The project would also install storm drain improvements within Soquel Avenue, a catch basin from the northwest corner of the neighboring landscape supply company property, and culvert improvements. Therefore, this project is consistent with this policy.</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<p><b>Policy 7.23.2. Minimizing Impervious Surfaces.</b> Require new development to limit coverage of lots by parking areas and other impervious surfaces, in order to minimize the amount of post-development surface runoff.</p>	<p><b>Consistent.</b> As discussed in Section 4.9, <i>Hydrology and Water Quality</i>, impervious surfaces on the site would be increased by 106,654 square feet greater than existing conditions. On-site impervious areas are associated with proposed buildings and paved areas. Portions of the project that are covered with impervious surfaces would result in potential increases in surface runoff. However, the runoff rate from the property would be controlled by constructing stormwater management facilities on-site. Pursuant to current laws and regulations, there would no net new amount of stormwater runoff volume from the project site.</p>
<p><b>Policy 7.24.9. Storage Requirement for Recyclable Materials.</b> Require all projects, except single family dwellings, to provide sufficient and accessible space for the storage and collection of recyclable materials separate from, and in addition to, space for refuse storage and collection. Encourage owners of existing buildings to provide such space, where feasible.</p>	<p><b>Consistent.</b> The project would be required to provide space for refuse storage and collection. Storage space for trash and recycling is provided on site within the medical office building near the back entry/service entrance along the eastern side of the building. This area is adjacent to a service vehicle parking area along the eastern site boundary.</p>
<p><b>Policy 7.25.1. Requiring Space for Refuse Collection.</b> Require all new projects, except single family dwellings, to provide sufficient and accessible space for the storage and collection of refuse separate from, and in addition to, space for recyclable materials collection.</p>	<p><b>Consistent.</b> The project would be required to provide space for refuse storage and collection. Storage space for trash and recycling is provided on site within the medical office building near the back entry/service entrance along the eastern side of the building. This area is adjacent to a service vehicle parking area along the eastern site boundary.</p>
<p><b>Policy 7.26.1. Undergrounding Lines.</b> Require all new power line distribution systems and all services to new development to be placed underground.</p>	<p><b>Consistent.</b> The project would be served by electricity, gas, and telecommunications lines connected through shallow dry utility trenches (refer to Section 2.5.5.4, <i>Dry Utilities</i>).</p>
<p><b>Community Design Element</b></p>	
<p><b>Policy 8.7.1. Landscape for Development.</b> When landscaping is required as a condition of permit approval, utilize the Zoning ordinance and the <i>Urban Forestry Master Plan</i> as a guide to require the landscape design to relate to the building and the site design; require plant materials appropriate to the site conditions with consideration for growth pattern, color, texture, solar access, maintenance, and water conservation; and require fencing, walls, site furniture and lighting to be designed to be integral and compatible elements of the building and landscape design.</p>	<p><b>Consistent.</b> The proposed landscaping plan, shown on Figure 2-15 in Section 2, <i>Project Description</i>, includes planting a mix of deciduous trees, evergreen trees, ornamental trees, shrubs and grasses, and perennial plants. Trees would be planted as street trees along the site frontage on Soquel Avenue. Proposed landscaping would be consistent with both the Zoning Ordinance and the <i>Urban Forestry Master Plan</i>.</p>
<p><b>Policy 8.7.3. Appropriate Plants in Urban Areas.</b> Require urban projects, as a condition of development permit approval, to comply with the street tree guidelines of the <i>Urban Forestry Master Plan</i>, and to utilize acceptable species listed within the plan.</p>	<p><b>Consistent.</b> The proposed landscaping plan, shown on Figure 2-15 in Section 2, <i>Project Description</i>, includes planting a mix of deciduous trees, evergreen trees, ornamental trees, shrubs and grasses, and perennial plants. Trees would be planted as street trees along the site frontage on Soquel Avenue. Proposed landscaping would be consistent with both the Zoning Ordinance and the <i>Urban Forestry Master Plan</i>.</p>

County of Santa Cruz General Plan Policy	Consistency Discussion
<b>Noise</b>	
<p><b>Policy 9.1.1.</b> Consider Table 9-2, Acceptable through Unacceptable Ranges of Exterior Noise Exposure by Land Use in the planning and permitting processes for new development to reduce noise exposure on future occupants of the new development to acceptable noise levels.</p>	<p><b>Consistent.</b> The proposed project is not expected to generate noise levels above the maximum allowable standards of the Land Use Compatibility Guidelines or the Maximum Allowable Noise Exposure; refer to Section 4.11, <i>Noise</i>. The existing ambient noise level in the project area ranges between 44 and 72 decibels (dB). Noise levels generated by the proposed project are not expected to exceed the ambient noise level of the project area.</p>
<p><b>Policy 9.1.2.</b> Where noise sensitive developments would be exposed to noise levels that exceed those considered “normally acceptable,” require the incorporation of noise reduction design elements as recommended by a site-specific acoustical study or using prescriptive or performance methods to reduce interior noise levels to the standards set forth in Title 24 of the California Code of Regulations for both residential and non-residential uses.</p>	<p><b>Consistent.</b> The proposed project is not expected to generate noise levels above the maximum allowable standards of the Land Use Compatibility Guidelines or the Maximum Allowable Noise Exposure; refer to Section 4.11, <i>Noise</i>. The existing ambient noise level in the project area ranges between 44 and 72 decibels (dB). Noise levels generated by the proposed project are not expected to exceed the ambient noise level of the project area; refer to Section 4.11, <i>Noise</i>.</p>
<p><b>Policy 9.2.6.</b> Require mitigation and/or best management practices to reduce construction noise as a condition of project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.</p>	<p><b>Consistent.</b> According to Section 4.11, <i>Noise</i>, construction and operation of the proposed project would not result in noise levels above 75 dB. Construction would last approximately 18 months but would occur on weekdays and during daytime hours when people are generally away at work or not asleep and most sensitive to noise.</p>

The determination of General Plan consistency is within the discretion of the County Board of Supervisors. In making this determination, the applicable law requires the decision makers to view the proposed project against the General Plan as a whole and does not permit the elevation of certain specific General Plan policies over others. Nonetheless, as shown in Table 4.10-1, the proposed project would be clearly consistent with most of the relevant policies of the County General Plan with the implementation of required mitigation measures.

The project would not be accessible to transit, with is potentially inconsistent with Policy 3.6.1, as described in Table 4.10-1. When a property is inaccessible by transit, such as the proposed project, people must instead use personal vehicles or other means to travel to and from the site. Increased personal vehicle use can result in increased emissions of air pollutants and GHGs. However, as described in Section 4.14, *Transportation*, implementation of the proposed project would reduce regional VMT. Therefore, the total miles vehicles are operated in the County would decrease, as would associated air pollutant and GHG emissions associated with vehicle travel. As described in Section 4.2, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*, the proposed project would generate no new mobile-source air pollutant or GHG emissions because it would reduce regional VMT.

While the proposed project would reduce VMT, increased personal vehicle use could change traffic patterns such that more vehicle trips occur on roadways near the project site. Increased traffic on roadways would have the potential to increase traffic-related noise. However, as described in Section 4.11, *Noise*, traffic-related noise impacts of the project would be less than significant. Accordingly, potential inconsistency with General Plan Policy 3.6.1 would result in less than significant environmental impacts.

The proposed project would also be potentially inconsistent with General Plan Policy 7.18.3, as described in Table 4.10-1. Policy 7.18.3 requires that adequate water supplies be available for new development. As described in Section 4.16, *Utilities and Service Systems*, water service would be provided to the proposed project by the City of Santa Cruz Water Department. As described further in Section 4.16, the City of Santa Cruz has insufficient water supply to meet future demand, especially during dry years and multiple dry years. The proposed project would incrementally increase demand for water. Because the demand would be only an incremental increase, and not the full amount of future growth and associated water demand forecasted by the City's Water Department, there would be sufficient supply for the proposed project without requiring the City to develop new or additional water supply or sources. However, as reasonably foreseeable future growth and development occurs within the water service area, including the proposed project, demand would increasingly exceed supply during drier years. Eventually the City would be required to obtain new or additional water supply to meet demand. The development of a new or additional water supply could result in environmental impacts, resulting in a potentially significant and cumulative impact, as described in Section 4.16, *Utilities and Service Systems*. However, the proposed project's potential inconsistency with Policy 7.18.3 would result in less than significant direct and indirect impacts, as detailed in Section 4.16, *Utilities and Service Systems*.

As noted previously, the above discussion is intended to guide policy interpretation, but is not intended to replace or supplant County decision makers. The final determination of consistency will be made by the County Board of Supervisors when it acts on the proposed project.

### Mitigation Measures

Implementation of all mitigation measures identified in Section 4.1, *Aesthetics*; Section 4.3, *Biological Resources*; Section 4.4, *Cultural Resources*; Section 4.6, *Geology and Soils*; Section 4.8, *Hazards and Hazardous Materials*; and Section 4.9, *Hydrology and Water Quality*, would be required.

### Significance after Mitigation

With implementation of all mitigation measures identified in this EIR, impacts would be less than significant.

#### 4.10.4 Cumulative Impacts

Land use impacts would be considered cumulatively considerable if a proposed project in conjunction with other past, present and reasonably foreseeable projects, would trigger the above-referenced significance thresholds.

Implementation of future projects would require discretionary approval, similar to the proposed project's review and approval process; therefore, it is reasonably assumed that these projects would be designed or otherwise conditioned to maximize consistency with adopted land use plans and ordinances. As such, cumulative land use impacts are anticipated to be less than significant.

As described in Table 4.10-1, the proposed project would be substantially consistent with applicable land use goals, policies, objectives, strategies of the General Plan and SSCC Plan. All feasible mitigation measures to address environmental impacts of the project have been required and are detailed in Sections 4.1, 4.3, 4.4, 4.6, 4.8, and 4.9 of this EIR, and a Statement of Overriding Considerations would be adopted in conjunction with project approval for any infeasible mitigation or impacts that cannot be mitigated. Given the project's general consistency as well as the potential

for other cumulative projects considered in the evaluation to be consistent with the land use policy framework, overall cumulative land use impacts are anticipated to be less than significant. The County promotes a balanced and functional mix of uses consistent with the community needs, desires, and values. Ongoing cumulative development in this area could be determined to be consistent with the overall vision and policy direction of the General Plan. Additionally, cumulative projects in the cities of Santa Cruz and Capitola could be determined consistent with overall vision and policy direction of the applicable General Plan for those cities. As a result, the project would not contribute to an identified significant cumulative land use impact.

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## 4.11 Noise

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This section presents existing noise conditions on the project site and analyzes the potential noise impacts, both temporary (i.e., construction) and long term (i.e., operational), from the construction and operation of the proposed project. Analysis in this section is based on the Environmental Noise and Vibration Assessment prepared by Dudek in April 2020 (Appendix P).

### 4.11.1 Setting

#### a. Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013a).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dBA; reducing the energy in half would result in a 3-dBA decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud ([10.5x the sound energy] Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receptor. The most obvious change is the decrease in level as the distance from the source increases. The manner in which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013a). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013a). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight provides at least a 5-dBA



reduction in source noise levels at the receptor (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (Leq); it considers both duration and sound power level. Leq is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically, Leq is summed over a one-hour period. Lmax is the highest root mean square (RMS) sound pressure level within the sampling period, and Lmin is the lowest RMS sound pressure level within the measuring period (Crocker 2007). RMS is defined as the average noise output over time.

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours; it is also measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013a). Noise levels described by Ldn and CNEL usually differ by about 1 dBA. The relationship between the peak-hour Leq value and the Ldn/CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60-plus CNEL range. Normal conversational levels are in the 60 to 65-dBA Leq range; ambient noise levels greater than 65 dBA Leq can interrupt conversations (Federal Transit Administration [FTA] 2018).

## **b. Vibration**

Groundborne vibration consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

### **c. Sensitive Receptors**

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The Santa Cruz County General Plan and Local Coastal Program defines noise sensitive uses as land use types that are particularly sensitive to noise at levels commonly found in the urban environment (Santa Cruz County 2020). Sensitive land uses include residential uses, schools, and hospitals. The General Plan identifies other uses that should consider careful planning and design related to noise to include churches, convalescent care facilities, and hotels.

Vibration sensitive receptors are similar to noise sensitive receptors, such as residences and institutional uses (e.g., schools, libraries, and religious facilities). However, vibration sensitive receptors also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance.

Existing sensitive land uses within the project vicinity include public education facilities and residential development. The noise sensitive receptors closest to the project site include single-family residences in the Beachcomber community immediately adjacent to the southern project boundary and an assisted living facility located approximately 100-feet west-southwest of the project site.

### **d. Existing Noise Conditions**

The most common source of noise in the project site vicinity is vehicular traffic from Highway 1 and Soquel Avenue. Ambient noise levels are generally highest during the daytime and rush hour. Light industrial and commercial areas to the east and west of the project site contribute to ambient noise levels in the area. To characterize ambient sound levels at and near the project site, three short term, 15-minute sound level measurements were conducted on September 10, 2019 using a Larson Davis Laboratories precision integrating sound level meter. Noise Measurement (NM) 1 was taken at the southern project boundary. Both NM2 and NM3 were taken at the northern project boundary along Soquel Avenue. See Figure 1 of Appendix P for noise measurement locations. Two measurements were taken at the same location on the northern property boundary to classify traffic counts in each direction of travel during each of the measurements. Table 4.11-1 summarizes the results of the noise measurements.

**Table 4.11-1 Project Vicinity Sound Level Monitoring Results**

Measurement Number	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	Leq (dBA)	L50 <sup>2</sup> (dBA)	Lmax (dBA)
1	Southern project boundary	12:22 – 12:37 p.m.	Approximately 680 feet to centerline of Soquel Avenue	44.0	42.5	57.2
2 <sup>1</sup>	Northern project boundary, adjacent to Soquel Avenue	1:00 – 1:15 p.m.	Approximately 30 feet to centerline of Soquel Avenue	72.0	71.5	79.2
3 <sup>1</sup>	Northern project boundary, adjacent to Soquel Avenue	12:23 – 12:38 p.m.	Approximately 30 feet to centerline of Soquel Avenue	72.0	71.5	85.3

<sup>1</sup> Noise measurements 2 and 3 were taken at the same location.

<sup>2</sup> L50 refers to the sound level exceeded for 50 percent of the time of the measurement period.

Detailed sound level measurement data are included in Appendix P.

## 4.11.2 Regulatory Setting

### a. Federal Regulations

FTA has recommended noise criteria related to traffic-generated noise. Recommendations contained in the September 2018 Transit Noise and Vibration Impact Assessment prepared by FTA can be used as guidance to determine whether or not a change in traffic would result in a substantial permanent increase in noise. Under the FTA standards, the allowable noise exposure increase is reduced with increasing ambient existing noise exposure, such that higher ambient noise levels have a lower allowable noise exposure increase. Table 4.11-2 shows the significance thresholds for increases in traffic-related noise levels. These standards are applicable to project impacts on existing sensitive receptors (as defined in Section 4.11.1(c)).

**Table 4.11-2 Significance of Changes in Operational Roadway Noise Exposure**

Existing Noise Exposure (dBA Leq or Ldn)	Allowable Noise Exposure Increase (dBA Leq or Ldn)
45-50	7
50-55	5
55-60	3
60-65	2
65-74	1
75+	0

Source: FTA 2018

### b. State Regulations

California Government Code Section 65302 encourages each local government entity to implement a noise element as part of its general plan. In addition, the California Governor’s Office of Planning and Research has developed Guidelines for the Preparation and Content of Noise Elements of the General Plan (2003). The guidelines include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure.

## c. Local Regulations

### *Santa Cruz County General Plan and Local Coastal Program*

The 1994 General Plan and Local Coastal Program included a Public Safety and Noise Element, which has recently been preempted by the adoption of a stand-alone Noise Element, Chapter 9 of the General Plan (Santa Cruz County 2020). The Noise Element contains updated goals, objectives and policies intended to protect citizens from exposure to excessive noise. The Noise Element establishes standards and policies to promote compatible noise environments for new development or redevelopment projects and to control excessive noise exposure of existing land uses. The following objectives, policies and standards listed below are applicable to the proposed project. Please note that the policies listed below are reproduced directly how they are stated in the Noise Element. The Noise Element policies utilize dBA but were incorrectly printed in the Noise Element as dB.

**Objective 9.2: Noise Exposure of Existing Sensitive Uses and Receptors.** Minimize exposure of existing noise-sensitive land use and receptors to excessive, unsafe, or disruptive noise that may be generated by new land uses and development projects.

**Policy 9.2.1.** Require acoustical studies for all new development projects that may affect the existing noise environment affecting sensitive land uses and receptors and that may not conform to the Normally Acceptable Noise Exposure in Table 9-2.

**Policy 9.2.2.** Require site-design and noise reduction measures for any project, including transportation projects that would cause significant degradation of the noise environment due to project effects that could:

- a) Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post-project CNEL or DNL will remain equal to or below 60 dB;
- b) Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post-project CNEL or DNL would exceed 60 dB.

This policy shall not be interpreted in a manner that would limit the ability of the County to require noise-related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.

**Policy 9.2.3.** Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.

**Policy 9.2.4.** For all new commercial and industrial developments which would increase noise levels above the normally acceptable standards in Table 9-2 or the maximum allowable standards in Table 9-3 (see Table 4.11-3), the best available control technologies shall be used to minimize noise levels. In no case shall the noise levels exceed the standards of Table 9-3 (see Table 4.11-3).

**Policy 9.2.5.** The following noise mitigation strategies are preferable to construction of conventional masonry noise barriers where these strategies are a feasible option to reduce impacts on sensitive uses:

- Avoid placement of noise sensitive uses in noisy areas
- Avoid placement of significant noise generators in noise sensitive areas

- Increase setbacks between noise generators and noise sensitive uses
- Orient buildings such that the noise sensitive portions of a project (e.g., bedrooms) are shielded from noise sources (such as through careful design of floor plan)
- Use sound attenuating architectural design and building features
- Employ technologies that reduce noise generation, such as alternate pavement materials on roadways, when appropriate
- Employ traffic calming measures where appropriate

**Policy 9.2.6.** Require mitigation and/or best management practices to reduce construction noise as a condition of project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.

**Table 4.11-3 Maximum Allowable Noise Exposure – Stationary Sources<sup>1</sup>**

	Daytime (7:00 a.m. to 10:00 p.m.) <sup>2</sup>	Nighttime (10:00 p.m. to 7:00 a.m.) <sup>2,3</sup>
Hourly Leq – average hourly noise level, dB <sup>4</sup>	50	45
Maximum noise level, dB <sup>4</sup>	70	65
Maximum noise level, dB – Impulsive Noise <sup>5</sup>	65	60

<sup>1</sup> As determined at the property line of the receiving land use. When determining effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

<sup>2</sup> Allowable levels shall be raised to the ambient noise level where the ambient level exceeds the allowable levels. Allowable levels shall be reduced by 5 dBA if the ambient hourly Leq is at least 10 dBA lower than the allowable level.

<sup>3</sup> Applies only where receiving land use operates or is occupied during nighttime hours.

<sup>4</sup> Sound level measurements shall be made with “slow” meter response.

<sup>5</sup> Sound level measurements shall be made with “fast” meter response.

Source: County of Santa Cruz 2020, Table 9-3

### *Santa Cruz County Code*

The Santa Cruz County Code contains additional guidance with the intent to control noise, to promote and maintain the health, safety and welfare of its citizens. Chapter 8.30 of the Santa Cruz County Code enumerates general standards, limitations and exemptions pertaining to noise within the County. Additionally, Chapter 13.15 institutes “Noise Planning,” which codifies General Plan policies and aids in regulating noise throughout the County through land use planning and permitting. The regulations presented below are considered potentially applicable to the proposed project.

#### **SECTION 8.30.10 OFFENSIVE NOISE**

- (A) No person shall make, cause, suffer, or permit to be made any offensive noise.
- (B) “Offensive noise” means any noise which is loud, boisterous, irritating, penetrating, or unusual, or that is unreasonably distracting in any other manner such that it is likely to disturb people of ordinary sensitivities in the vicinity of such noise, and includes, but is not limited to, noise made by an individual alone or by a group of people engaged in any business, activity, meeting, gathering, game, dance, or amusement, or by any appliance, contrivance, device, tool, structure, construction, vehicle, ride, machine, implement, or instrument.

- (C) The following factors shall be considered when determining whether a violation of the provisions of this section exists: loudness, night hours, pitch, duration of the sound, time of day or night, necessity of the noise, level of customary background noise, and proximity to any building regularly used for sleeping purposes.
- (D) Prior to issuing a citation for this section, the responsible person or persons will be warned by a law enforcement officer or other designated official that the noise at issue is offensive and constitutes a violation of this chapter. A citation may be issued if, after receiving the warning, the responsible person(s) continues to make or resumes making the same or similar offensive noise(s) within three months of the warning. Notwithstanding the provisions of subsection (C)(1) of this section, enforcement of violations under this chapter shall not require the use of a sound level meter.

#### **SECTION 13.15.040 EXEMPTIONS**

Section 13.15.040 of the Santa Cruz County Code exempts construction noise provided a permit has been obtained from the County, and provided that construction occurs between the hours of 8:00 a.m. and 5:00 p.m. on weekdays (unless the Building Official has in advance authorized construction to start at 7:00 a.m. and/or continue no later than 7:00 p.m.). Construction is not permitted on Saturdays unless authorized by the Building Official, and provided construction take place between 9:00 a.m. and 5:00 p.m. and on no more than three Saturdays per month. Construction shall not take place on Sunday or a federal holiday unless authorized in advance by the Building Official on a Sunday or federal holiday, or during earlier morning or later evening hours of a weekday or Saturday.

#### **SECTION 13.15.050 GENERAL NOISE REGULATIONS AND UNLAWFUL NOISE**

Section 13.15.050 of the Santa Cruz County Code prohibits any use, except a temporary construction operation, to create noise which is found by the Planning Commission not to conform to the noise parameters established by Table 9-3 (see Table 4.11-3) of the Santa Cruz County General Plan beyond the boundaries of the project site.

Backup emergency generators are exempt during power outages and for other temporary purposes. If a generator is located within 100 feet of one or more residential dwelling units, noise attenuation measures shall be included to reduce noise levels a maximum exterior noise level of 60 dBA at the property line and a maximum interior noise level of 45 dBA within nearby residences.

#### **SECTION 13.15.060 SPECIAL REQUIREMENTS FOR AIR CONDITIONING/MECHANICAL UNITS IN OR NEAR RESIDENTIAL USES**

Section 13.15.060 of the Santa Cruz County Code limits the noise level for air conditioning/mechanical units within 100 feet of buildings used for sleeping purposes to 60 dBA, as measured at the property line, for units installed before adoption of Section 13.15.060 of the Santa Cruz County Code and 55 dBA, as measured at the property line, for units installed after the adoption of Section 13.15.060 of the Santa Cruz County Code. Maximum interior noise level is limited to 45 dBA within nearby residences. The section also requires that air conditioning/mechanical units be located away from rooms used for sleeping purposes and incorporation of sound attenuation measures as feasible.

### 4.11.3 Impact Analysis

#### a. Methodology

The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with operation of the project. The potential for short-term construction and long-term operational noise impacts was assessed at noise-sensitive receptors closest to the project site (i.e., the residences adjacent to the project site to the south).

#### Construction Noise

Construction noise levels in the project vicinity would fluctuate depending on the particular type, number, and duration of usage for the various pieces of equipment. The effects of construction noise depend largely on the types of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the vicinity of the receptors. Construction generally occurs in several discrete stages, with each stage varying the equipment mix and equipment usage rates. These construction stages alter the characteristics of the noise environment generated on the project site and in the surrounding community for the duration of the construction stage. Construction stages for development of this project were assumed to include site preparation, grading, building construction, paving and painting (architectural coating). As the proposed project site is currently occupied primarily with temporary structures, vehicles and storage containers, traditional demolition would not be an element of the project construction.

For purposes of construction noise assessment, construction equipment can be considered to operate in two modes, stationary and mobile. As a general rule, stationary equipment operates in one location for one or more days at a time, with either a fixed-power operation, such as, pumps, generators, and compressors, or a variable noise operation, such as pile drivers, rock drills, and pavement breakers. Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts for mobile construction equipment are assessed from the center of the equipment activity area (i.e., construction site).

Although specific construction requirements for build-out of the proposed project are currently unknown, it is anticipated that typical construction sources such as backhoes, compressors, bulldozers, excavators, loaders and other related equipment would be utilized during project construction. Based on the reference noise levels, usage rates, fleet mixes and operational characteristics discussed above, overall hourly average noise levels attributable to project construction activities were calculated for the project. Construction noise levels were predicted using reference noise emission data and operational parameters contained in the FHWA Roadway Construction Noise Model and the FTA guidance manual.

#### Vibration

Construction activities on the project site may result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance.

Construction vibration levels were calculated at the receptors nearest to the project site, residences immediately to the south, to determine whether project construction would generate vibration levels that would cause human annoyance or physical damage to nearby structures. Vibration levels were estimated for construction equipment expected to be used during project construction and were based on the vibration source levels for construction equipment from the FTA Transit Noise and Vibration Assessment (2018). Construction vibration levels were modeled at distances of 15 feet (the distance between the location of on-site vibratory equipment, considering site constraints, and the nearest structures).

## On-Site Operational Noise

### *Mechanical Equipment*

Operational noise from the project may be periodically audible at adjacent properties. Facility mechanical equipment associated with the operation of commercial retail and office uses generally includes heating, ventilation, and air-conditioning (HVAC) equipment, backup generators, and various fans, pumps, and compressors that often can be significant noise sources. Mechanical equipment is often mounted on rooftops, partially enclosed at grade adjacent to buildings, or located within mechanical equipment rooms. Noise levels generated by the HVAC and other mechanical equipment vary significantly depending on unit size, efficiency, location, type of rotating or reciprocating components, and orientation of openings.

Mechanical schedules for a representative commercial use, similar to the project, were provided by the applicant for use as the basis of the mechanical noise calculations. The representative project utilized package rooftop mechanical systems with approximate refrigeration capacities ranging from 120 to 170 tons. These units are generally evenly distributed across the rooftops of the buildings and shielded by rooftop parapets. The proposed project's rooftop plans were used to determine the approximate locations for rooftop mechanical equipment within the rooftop mechanical screen and parapet.

Emissions from packaged rooftop units have sound power levels ranging from 86 to 102 dB LwA<sup>1</sup>, typically resulting in noise levels between 53 and 70 dBA at a distance of 50 feet. It was conservatively assumed that the mechanical equipment operates 80 percent of each hour between 7 a.m. and 10 p.m., and 20 percent of each hour between 10 p.m. and 7 a.m. Project-related operational noise levels generated by rooftop mechanical/HVAC equipment were modeled using the ISO 9613-2 noise propagation algorithms within the three-dimensional noise simulation modeling software.

### *Parking Garage*

Development of the proposed project would include the construction of a four-level parking structure in the southwestern portion of the project site. The parking garage would include approximately 730 parking stalls, with access points at two locations on the east-facing façade. The Traffic Impact Analysis (TIA) report prepared for the proposed project estimated that 590 gross vehicle trips would be generated during the AM peak hour (460 in / 130 out) and 525 gross vehicle trips would be generated during the p.m. peak hour (152 in / 373 out) (Kimley-Horn and Associates 2019). As the gross vehicle trips would provide a more conservative assessment of the proposed

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<sup>1</sup> LwA is sound power level, which is a measure of the amount of acoustic energy emitted by a machine.



project's effect on the nearby residential receptors, in comparison to the net vehicle trips associated with the project site, gross vehicle trips are used in this analysis.

Activities making up a single parking event included vehicle arrival, limited idling, occupants exiting the vehicle, door closures, conversations among passengers, occupants entering the vehicle, and vehicle startup and departure. These parking actions can be described based on the duration of an event, the average noise level, and the maximum noise level occurring with a discreet parking action, summarized through the single-event sound exposure level (SEL) metric. Parking activity noise occurs at varying times and locations throughout the parking structure. Thus, it is necessary to determine the acoustical center of the parking activity within the parking structure. Empirical sound level measurement data for parking lot activity indicate that the average SEL associated with a single parking event is approximately 71 dBA at a distance of 50 feet from the center of parking activity (Appendix P).

#### *Other Operational Sources*

Other operational noise sources on the project site include landscape maintenance activities, garbage compaction and waste collection services, children playing in the designated play area; and people congregating and talking at outdoor patio uses. Operational noise levels associated with the project at nearby sensitive noise receptors were calculated using the standard noise attenuation rate of 6 dBA per doubling of distance (line-of-sight method of sound attenuation for point sources of noise), accounting for distance to nearby receptors.

#### **Off-site Traffic Noise**

Long-term operation of the proposed project would generate an increase in traffic volumes on the local roadway network in the project vicinity. Consequently, noise levels from this vehicular traffic along affected roadway segments would have the potential to increase. To assess the effect of project-generated traffic increases, traffic noise levels were modeled for roadway segments in the project vicinity based on the FHWA Highway Traffic Noise Model (TNM) prediction methodologies (FHWA 1998). Potential off-site noise impacts resulting from the increase in vehicular traffic on the local roadway network, associated with long-term operations of the proposed project, were evaluated under Existing conditions, Existing plus Project conditions, and Cumulative (2040) conditions with and without implementation of the proposed project.

Traffic volumes and the distribution of those volumes were obtained from the TIA prepared for the proposed project (Kimley-Horn and Associates 2019), with the exception of existing Highway 1 volumes that were obtained from Caltrans data. Average daily trip (ADT) volumes were calculated by summing all traffic movements for both the a.m. and p.m. peak hours, existing on or turning on to a particular roadway segment during the peak-hour and multiplying the total peak-hour volume by a "k-factor" of 5. Average vehicle speeds on local area roadways were assumed to be consistent with posted speed limits and remain as such with or without implementation of the proposed project.

In order to ensure that modeled existing traffic noise levels correlate with measured traffic noise levels, observations and data collected during short-term noise monitoring was used to calibrate the traffic model. Modeled average traffic noise levels were found to be reasonably consistent with traffic noise measurements conducted at the project site, over predicting traffic noise levels by less than 1 dB. As this is within the tolerances of the traffic noise prediction model calibration offsets were not applied to the model.

## b. Significance Criteria

Impacts related to noise from implementation of the proposed project would be considered significant if they would exceed the following standards of significance, in accordance with Appendix G of the *CEQA Guidelines*:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards for other agencies
2. Generation of excessive groundborne vibration or groundborne noise levels
3. For a project located within the vicinity of a private airstrip or 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 expose people residing, or working in the project area to excessive noise levels

### Construction Noise

Santa Cruz County has not adopted specific quantitative standards or limits related to construction noise. However, Section 13.15.040(A) of the County Code exempts construction activities between the hours of 8:00 a.m. and 5:00 p.m. on weekdays unless extended hours are approved by the Building Official, and the Santa Cruz County General Plan and Local Coastal Program requires implementation noise reduction measures if construction noise levels exceed 75 dBA. Therefore, construction noise would be considered significant if it occurs outside of the hours specified in the Santa Cruz County Code and would require noise reduction measures if construction noise exceeds 75 dBA at the nearest property line.

### Vibration

Santa Cruz County has not adopted a significance threshold to assess vibration impacts during construction and operation. Therefore, the Caltrans guidelines set forth in the Caltrans Transportation and Construction Vibration Guidance Manual (2020), are used to evaluate potential impacts related to construction vibration for both potential building damage and human annoyance. Caltrans recommends that older residential structures not be exposed to continuous/frequent intermittent sources of vibration exceeding 0.3 in/sec PPV. Caltrans indicates that transient vibration, such as intermittent vibration from construction equipment, becomes strongly perceptible to most people at 0.9 in/sec PPV. In addition, Caltrans recommends a 0.2 in/sec PPV as the threshold of human annoyance for vibration from traffic. Because 0.2 in/sec PPV is more restrictive than 0.9 in/sec PPV, the traffic vibration threshold is used for the analysis of human annoyance impacts related to vibration. Project vibration would be considered significant if it exceeds either the structural damage or the human annoyance thresholds.

### On-Site Operational Noise

The County's maximum allowable noise exposure level for stationary noise sources is 50 dBA Leq during daytime hours and 45 dBA Leq during nighttime hours, as outlined in Section 13.15.050 the County Code. Santa Cruz County Code Section 13.15.060 states that air conditioning and mechanical units near residential units should not exceed a property line noise level of 55 dBA and a noise level not exceeding 45 dBA within the nearby residences. Therefore, operational noise would be significant if it exceeds any of these noise levels.

## Off-Site Traffic Noise

Traffic noise impacts would be potentially significant if project-generated traffic would result in the exposure of sensitive receptors to an unacceptable increase in noise levels during operation of the project. Per Policy 9.2.2 of the Santa Cruz County General Plan, a 3 dBA increase in traffic noise is considered a significant noise increase because noise levels on the project site exceed 60 Ldn, as shown in Table 4.11-3.

### c. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards for other agencies?

**Impact N-1** PROJECT CONSTRUCTION WOULD EXPOSE NEARBY RECEPTORS TO A TEMPORARY INCREASE IN NOISE. HOWEVER, CONSTRUCTION NOISE REDUCTION TECHNIQUES WOULD BE IMPLEMENTED DURING CONSTRUCTION AS PART OF A STANDARD CONDITION OF APPROVAL FOR THE PROJECT AND WOULD NOT EXCEED NOISE STANDARDS ESTABLISHED IN THE SANTA CRUZ COUNTY CODE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The project would generate temporary construction noise during site preparation, grading, building construction, paving, and architectural coating activities. The site preparation and grading stages would generate the most substantial noise levels due to clearing, grading, compacting, and excavating of the site, which utilizes the loudest mix of construction equipment. Heavy construction equipment utilized during site preparation and grading stages typically includes backhoes, dozers, loaders; excavation equipment such as, excavators, graders and scrapers; and compaction equipment. Erection of large structural elements and mechanical systems could require the use of a crane for placement and assembly tasks, which may also generate substantial noise levels. Table 4.11-4 lists the noise levels typically generated by various types of construction equipment. Impact pile-driving and blasting are not anticipated to be required for construction of the proposed project.

**Table 4.11-4 Construction Equipment Noise Levels**

Equipment Type	Noise Level (Lmax, dBA at 50 feet)
All other equipment > 5 horsepower	85
Backhoe	78
Compressor (air)	78
Concrete Saw	90
Crane	81
Dozer	82
Excavator	81
Front End Loader	79
Generator	72
Grader	85
Man Lift	75
Paver	77

Equipment Type	Noise Level (Lmax, dBA at 50 feet)
Roller	80
Scraper	84
Tractor	84
Welder/Torch	73

Source: FTA 2018. See Appendix P.

As shown in Table 4.11-4, noise levels for typical construction activities would generate maximum noise levels ranging from 72 to 90 dBA at a distance of 50 feet. Accounting for usage factors of individual pieces of equipment, and typical construction equipment fleet mix for grading activities, construction operations would have the potential to result in hourly average noise levels of approximately 88 dBA Leq, 50 feet from the center of construction activity areas (see Appendix P).

Noise from localized point sources (e.g., heavy construction equipment, mobile-source construction noise, stationary-source construction noise) typically decrease at a rate of 6 dBA to 7.5 dBA with each doubling of distance between the noise source and the receptor. An attenuation rate of 6 dBA per doubling of distance is conservatively assumed for this analysis.

The nearest noise-sensitive receptors are located immediately adjacent to the southern boundary of the proposed project, located approximately 325 feet south of the acoustical center of proposed construction operations. Therefore, construction activities would have the potential to generate noise levels of approximately 72 dBA Leq at the residential receptors to the south and would not exceed 75 dBA at the property line as required by the Santa Cruz County Code. Additionally, project construction would only be allowed between 8:00 a.m. to 5:00 p.m. (or 7 a.m. to 7 p.m. if allowed by the Building Official) consistent with the Santa Cruz County Code and would implement the following measures as a condition of project approval, consistent with Policy 9.2.6 of the Santa Cruz County General Plan:

- Construction equipment and vehicles shall be fitted with efficient, well-maintained mufflers that reduce equipment noise emission levels at the project site. Internal combustion powered equipment shall be equipped with properly operating noise suppression devices (e.g., mufflers, silencers, wraps) that meet or exceed manufacturer specifications. Mufflers and noise suppressors shall be properly maintained and tuned to ensure proper fit, function, and minimization of noise.
- Portable and stationary site support equipment (such as generators, compressors, rock crushers, and cement mixers) shall be located as far as possible from nearby noise-sensitive receptors.
- Impact tools shall have the working area/impact area shrouded or shielded, with intake and exhaust ports on power equipment muffled or suppressed. This may necessitate the use of temporary or portable, application specific noise shields or barriers.
- Construction equipment shall not be idled for extended periods (e.g., 15 minutes or longer) of time in the immediate vicinity of noise-sensitive receptors.
- A disturbance coordinator shall be designated by the general contractor, which shall post contact information in a conspicuous location near the entrance of the subject construction sites, prior to construction activities so that it is clearly visible to nearby receivers most likely to be disturbed. The coordinator shall manage complaints resulting from the construction

noise. Recurring disturbances shall be evaluated by a qualified acoustical consultant retained by the project proponent to ensure compliance with applicable standards.

Noise control techniques affecting and controlling the construction noise at the source (i.e., heavy equipment, pumps) can result in noise reductions of 3 to 6 dBA. Noise control techniques implemented along the path of the noise (i.e., temporary noise barriers, enclosures, relocation of equipment) can reduce construction noise levels between 2 to 7 dBA (Wu & Keller 2007). Therefore, the overall noise level reduction achieved through implementation of the noise control techniques as required as a standard condition of approval for the project would reduce construction noise between 5 to 13 dBA. Conservatively assuming a 5 dBA reduction in noise levels, construction noise would be approximately 67 dBA at the nearest noise-sensitive receptors. Construction noise impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 1:** Would the project result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards for other agencies?

**Impact N-2** PROJECT OPERATION WOULD EXPOSE NEARBY RECEPTORS TO A PERMANENT INCREASE IN NOISE. HOWEVER, NOISE LEVELS DURING OPERATION WOULD BE SIMILAR TO THOSE IN THE EXISTING URBAN SETTING, AND PARKING GARAGE AND MECHANICAL EQUIPMENT NOISE WOULD BE SHIELDED. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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### Mechanical Equipment

Mechanical equipment for the proposed project would be located within the rooftop parapet and behind rooftop mechanical equipment screens. The proposed rooftop units would result in noise levels between 53 and 70 dBA at a distance of 50 feet and were assumed to operate 80 percent of each hour between 7 a.m. and 10 p.m. (daytime), and 20 percent of each hour between 10 p.m. and 7 a.m. (nighttime). Therefore, noise levels generated by rooftop mechanical/HVAC equipment are predicted to be 46.4 dBA Leq during the daytime and 40.4 dB Leq during the nighttime at the nearest noise-sensitive receptors adjacent to the south of the project site (see Appendix P for full modeling results). Santa Cruz County Code Chapter 13.15.060 states that air conditioning and mechanical units near residential units should not exceed 55 dBA at the property line and 45 dBA inside residences. Because noise from mechanical equipment would be 46 dBA at the property line and standard building construction reduces exterior to interior noise by at least 20 dBA with windows closed, the project would comply with the Santa Cruz County Code regulations for mechanical equipment (FHWA 2011). Noise impacts from mechanical equipment would be less than significant.

## Parking Garage

A four-level parking garage would be located in the southwestern portion of the project site. Assuming 590 vehicle trips would occur during a peak hour, based on the TIA trip generation rates, and the average single-event SEL of 71 dBA, parking activities would generate a noise level of approximately 63 dBA at a distance of 50 feet during the peak hour of parking activities. The nearest noise-sensitive receptor to the parking garage, a single-family residence, is located approximately 50 feet south of the nearest parking activity. However, parking activities within the structure would take place throughout the parking structure. The acoustical center of the sound levels generated by the proposed parking structure would be located approximately 240 feet from the nearest noise-sensitive property boundary to the south. Assuming a standard attenuation rate of 6 dBA per doubling of distance, and accounting for shielding provided by the parking structure itself, noise levels generated by the proposed project parking garage would be approximately 44.5 dBA Leq at 240 feet during peak hour parking activities. Noise levels generated from parking activities during the p.m. peak hour or other off-peak hours would be lower because there would be reduced parking activities. Therefore, parking activity within the proposed project's parking garage would not exceed the County's maximum allowable noise exposure level for stationary noise sources of 50 dBA Leq during daytime hours and 45 dBA Leq during nighttime hours at nearby sensitive receptors.

Maximum sound levels generated by car doors closing, trunk closure, engine start up, car pass-by and tire squeal have been measured to produce sound levels of 63 to 69 dBA Lmax at a distance of 50 feet (Bayer 2007). The parking structure design includes partial height walls that would provide shielding of the parking activities at the nearby residential receptors, reducing the maximum sound levels by 5 to 7 dBA at lower to higher floors, respectively. Accounting for the shielding provided by the parking structure, instantaneous maximum parking activity sound levels would be below 64 dBA Lmax at the nearby residential property boundary. Ambient hourly Leq measured at the southern (residential) property boundary was 44 dBA (Table 4.11-1). According to Table 4.11-3 the maximum noise level standard of 70 dBA at the property line is reduced 5 dBA because the ambient hourly Leq is at least 10 dBA lower than the allowable level. Therefore, parking activities associated with the proposed project would not exceed the Santa Cruz County maximum noise level standard of 65 dBA Lmax at the nearest noise-sensitive receiving property lines to the south. Noise impacts from the parking garage would be less than significant.

## Other Operational Noise Levels

Additional intermittent stationary noise attributable to operation of the proposed project may include landscape maintenance activities; garbage compaction and waste collection services; children playing in the designated play area; and people congregating and talking at outdoor patio uses. Such noise generating activities would occur infrequently, are generally intermittent in nature and are consistent with other noise events occurring in a community's typical ambient noise environment. These sources are expected to be less intensive than other project-related operational contributions such as aforementioned sounds from parking activities and mechanical systems. Furthermore, due to the infrequent and intermittent in nature of these sources, noise levels generated by these sources are typically masked in the ambient environment. Therefore, impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 1:** Would the project result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards for other agencies?

**Impact N-3** PROJECT OPERATION WOULD ALTER TRAFFIC PATTERNS IN THE AREA, BUT THE PROJECT WOULD NOT RESULT IN A 3 DBA INCREASE IN TRAFFIC NOISE. TRAFFIC-RELATED NOISE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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The extent to which existing land uses in the project vicinity are affected by existing traffic noise depends on their respective proximity to the roadways and their individual sensitivity to noise. Modeled existing traffic noise levels are summarized in Table 2 of Appendix P, at a representative distance of 100 feet from the centerline of each major roadway in the project vicinity and distances from roadway centerlines to the 60-, 65-, and 70-dBA Ldn traffic noise level contours. As shown in Table 2 of Appendix P, the location of the 60-dBA Ldn traffic noise contour along the local roadway network ranges from within the right-of-way to approximately 1,800 feet from the centerline of the modeled roadways. Refer to Appendix P of this report for complete modeling inputs and results.

Long-term operation of the proposed project would generate an increase in traffic volumes on the local roadway network in the project vicinity. Consequently, noise levels from this vehicular traffic along affected roadway segments would have the potential to increase. Table 7 of Appendix P shows modeled existing and existing plus project traffic noise levels at a reference distance of 100 feet from the roadway centerline for affected roadway segments in the project vicinity. The table also presents relative traffic noise level increase (net change) resulting from implementation of the proposed project. Modeled traffic noise levels along roadway segments in the vicinity of the proposed project currently range from approximately 38 to 66 dBA Ldn, without the proposed project. Existing (2019) plus Project traffic noise levels are predicted to remain the same, i.e., ranging from approximately 36 to 66 dBA Ldn. Project development would result in a net change in traffic noise levels ranging from less than 1 dBA to approximately 2 dBA. Implementation of the project is not projected to result in an increase in traffic noise levels of 3 dBA Ldn or more at noise-sensitive receptors in the project vicinity or contribute significantly to further degradation of the ambient noise environment. Additionally, the proposed medical office building and parking garage would assist in attenuating existing noise from traffic on Highway 1 at the residences directly south of the project site. Impacts from off-site traffic noise would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 2:** Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

**Impact N-4** PROJECT CONSTRUCTION WOULD EXPOSE NEARBY SENSITIVE RECEPTORS TO A TEMPORARY INCREASE IN VIBRATION. VIBRATION LEVELS WOULD NOT EXCEED APPLICABLE STANDARDS AT NEARBY RESIDENCES OR STRUCTURES AND WOULD BE LESS THAN SIGNIFICANT.

Table 4.11-5 shows the anticipated vibration levels from construction equipment, based on FTA’s Transit Noise and Vibration Impact Assessment (2018). Pile driving and blasting would not occur during project construction. As shown in Table 4.11-5, heavier pieces of construction equipment, such as a bulldozer, have peak particle velocities of approximately 0.089 in/sec PPV or less at a reference distance of 25 feet. The nearest sensitive receptors are approximately 15 feet from construction activity. Vibration from a bulldozer would be approximately 0.19 in/sec PPV at 15 feet and may be noticeable to nearby residences but would be below the 0.2 in/sec PPV threshold for vibration-induced annoyance.

Construction vibration also has the potential to damage nearby buildings. However, anticipated construction vibration would result in a vibration level of 0.19 in/sec PPV, which would not exceed the threshold of 0.3 in/sec PPV for preventing damage to older residential structures exposed to continuous/frequent intermittent sources of vibration (Caltrans 2020). Therefore, construction vibration impacts would be less than significant.

**Table 4.11-5 Construction Related Vibration Levels**

Equipment	PPV at 25 feet (inches per second) <sup>1,2</sup>	Approximately Lv (VdB) at 25 feet <sup>3</sup>
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Heavy-duty Truck (loaded)	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

<sup>1</sup> PPV = peak particle velocity

<sup>2</sup> Vibration levels can be approximatled at other locations and distances uding the above reference levels and the following equation”  
 $PPV_{equip} = PPV_{ref}(25/D)^{1.5}$

<sup>3</sup> Lv = RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.

Source: FTA 2018

As a medical office, the proposed project would not generate significant stationary sources of vibration, such as heavy equipment operations. Therefore, operational vibration impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.



**Threshold 3:** For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?

**Impact N-5** THERE ARE NO PUBLIC USE AIRPORTS IN THE PROJECT VICINITY. THEREFORE, THERE WOULD BE NO IMPACT FROM AIRPORT NOISE EXPOSURE.

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There are no operational public use airports in the vicinity of the proposed project. The nearest airport, Watsonville Municipal Airport, is located approximately 10 miles east of the project site. The project site is thus is not located within any currently adopted 60 or 65 dB CNEL/Ldn airport noise contours. There would be no impact.

### Mitigation Measures

Mitigation measures are not required.

### Significance After Mitigation

There would be no impact.

#### 4.11.4 Cumulative Impacts

As discussed under Impact N-1, construction activities conducted for the proposed project would only be allowed to occur between the hours of 8:00 a.m. to 5:00 p.m. on weekdays, or between 7 a.m. and 7 p.m. if allowed by the Building Official, which would comply with the County's construction noise standards and would be a less than significant impact. It can be reasonably assumed that nearby cumulative projects would also comply with the County's construction noise hour limitations, and cumulative construction impacts would be less than significant. Furthermore, because construction noise is limited to the immediate vicinity of a construction site, and no other construction sites are within 150 feet of the project site, the proposed project would not contribute to a cumulatively considerable construction noise impact.

Cumulative operational noise impacts would consist of combined operational noise of the proposed project in conjunction with planned projects in the vicinity of the project site, which would result in potential increases in equipment noise, outdoor use area noise, and parking lot noise. As described under Impact N-2, the project's resulting mechanical equipment noise, outdoor use areas, and parking garage noise would generate noise similar to existing ambient noise levels and would result in a less than significant impact. Moreover, any noise generated by project operation would be limited to the immediate site vicinity. Therefore, the proposed project would not contribute considerably to cumulative operational noise increases.

Cumulative (2040) traffic noise was calculated based on cumulative and cumulative plus proposed project traffic volumes. As shown in Table 9 of Appendix P, cumulative traffic noise on area roadways would result in a net change of <1 to 1.8 dBA. Therefore, cumulative development is not projected to result in an increase in traffic noise levels of 3 dB Ldn or more at noise-sensitive receptors in the project area or contribute significantly to further degradation of the ambient noise environment. Cumulative traffic noise would have less than significant impacts.

## 4.12 Population and Housing

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This section describes the population, housing, and employment characteristics of Santa Cruz County and evaluates the project’s related impacts.

### 4.12.1 Setting

#### a. Current Population and Housing

Table 4.12-1 provides the most recent estimates of population and housing in Santa Cruz County, comparing data for all of Santa Cruz County and for the unincorporated portion. The California Department of Finance estimates that the unincorporated County currently has a population of 133,493, an average of 2.53 persons per household, and 57,662 housing units (California Department of Finance 2020).

**Table 4.12-1 Current Population and Housing Stock**

	<b>Santa Cruz County (Total)<sup>1</sup></b>	<b>Unincorporated Santa Cruz County</b>
Total County Population	271,233	133,493
Persons per Household	2.63	2.53
Housing Units	106,135	57,662

<sup>1</sup> The column for Santa Cruz County (Total) includes all four incorporated cities in the County’s geographic area (Santa Cruz, Watsonville, Scotts Valley, and Capitola), in addition to unincorporated areas.

Sources: California Department of Finance 2020

There are no permitted residences on the project site. However, given the presence of storage containers, recreational vehicles, and other miscellaneous vehicles and trailers, it is possible that people reside at the project site. Additionally, Planned Unit Development (PUD) No. 07-0414 (County Ordinance 5027) authorized 100 units of high density “by-right” housing development on the site. Construction of these units has not commenced.

#### b. Population, Housing, and Employment Projections

In 2018 the Association of Monterey Bay Area Governments (AMBAG) prepared a regional growth forecast for the Monterey Bay region. This forecast represents the most likely future growth scenario for the region based on information available when the forecast was prepared, with projections for 2040, accounting for a combination of recent and past trends and reasonable key technical assumptions (AMBAG 2018). AMBAG also seeks input from local cities to prepare the forecast. Historically, AMBAG’s traditional approach to forecasting population considered three factors: births, deaths, and migration. While birth and death data are readily available, and trends are relatively predictable over time, migration tends to be much more difficult to track and to forecast as it is heavily influenced by political and economic climates.

Table 4.12-2 shows AMBAG’s population, housing, and employment projections for unincorporated Santa Cruz County based on the latest growth forecasts. Between the years 2015 and 2040, it is projected that the unincorporated County will grow by 5 percent in population, 6 percent in housing units, and 18 percent in employment (AMBAG 2018).

**Table 4.12-2 Population, Housing, and Employment Projections for Unincorporated Santa Cruz County**

	2015	2040	2015-2040 Growth
Population	135,042	141,645	6,603 (5%)
Housing Units	57,327	60,841	3,514 (6%)
Employment	37,883	44,831	6,948 (18%)

Source: AMBAG 2018

## 4.12.2 Regulatory Setting

### a. State Regulations

#### *California Housing Law*

California Housing Element law (Government Code Sections 65580 to 65589.8) requires that local jurisdictions outline the housing needs of their community, the barriers or constraints to providing that housing, and actions proposed to address these concerns over an eight-year planning period. In addition, Housing Element law requires each city and county to accommodate its “fair share” of the region’s projected housing need over the Element planning period. Cities and counties must demonstrate that adequate sites are available to accommodate this need, and that the jurisdiction allows for development of a variety of housing types. This housing need requirement is known as the Regional Housing Needs Allocation (RHNA), and AMBAG apportions to each jurisdiction in the Monterey Bay region its portion of the projected need.

### b. Regional Regulations

#### *Association of Monterey Bay Area Governments*

Santa Cruz County is located within the AMBAG planning area. AMBAG functions as the Metropolitan Planning Organization for Monterey, Santa Cruz, and San Benito counties and the cities therein, and is responsible for implementing the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The most recent update of the MTP/SCS, the 2040 MTP/SCS, is a long-range integration transportation and land-use plan for the Monterey Bay area through 2040. AMBAG projections consider regional, state, and national economic trends and planning policies. With every update of the MTP/SCS, AMBAG also releases an updated regional growth forecast that helps inform other planning agencies in their local land use planning efforts. However, use of the forecast by local land-use planning agencies is elective (AMBAG 2019).

#### *Regional Housing Needs Assessment*

California’s Housing Element law requires that each county and city develop local housing programs to meet their “fair share” of future state-wide housing growth needs for all income groups, as determined by the California Department of Finance. The regional councils of government, including AMBAG, are then tasked with distributing the state-projected housing growth need for their region among their city and county jurisdictions by income category. This fair share allocation is referred to as the Regional Housing Needs Assessment (RHNA) process. The RHNA represents the minimum number of housing units each community is required to plan for through a combination of: 1) zoning “adequate sites” at suitable densities to provide affordability; and 2) housing programs to support

production of below-market rate units. Table 4.12-3 shows unincorporated Santa Cruz County’s allocation from the 2014-2023 RHNA, distributed among the four income categories.

**Table 4.12-3 Regional Housing Needs Assessment 2014-2023 for Unincorporated Santa Cruz County**

Income Group	Housing Allocation	Percent of Total
Very Low	317	24.1%
Low	207	15.7%
Moderate	239	18.2%
Above Moderate	551	42.0%
<b>Total</b>	<b>1,314</b>	<b>100%</b>

Source: AMBAG 2014

### c. Local Regulations

#### *2015 Santa Cruz County Housing Element*

The County’s Housing Element serves as its framework for housing goals, policies, and detailed programs for meeting existing and future housing needs and for increasing affordable housing opportunities. The current Housing Element addresses the planning period from 2016 to 2023, as required by the State Housing Element Law. The Housing Element guides decisions to facilitate the development, rehabilitation, and availability of housing in the County. It includes the following six primary goals:

1. Ensure land is available to accommodate an increased range of housing choices, particularly for multi-family units and smaller-sized units
2. Encourage and assist in the development of housing
3. Remove unnecessary governmental constraints to housing
4. Preserve and improve existing housing stock and expand and preserve the continued availability of the County’s existing affordable housing
5. Promote equal opportunity and production of special needs housing units
6. Promote energy efficiency in existing and new residential structures

### 4.12.3 Impact Analysis

#### a. Methodology and Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, the project would result in a significant impact on the environment related to population and housing if it would:

1. Induce substantial unplanned 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)
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

Population and housing trends in the County were evaluated by reviewing the most current data available from the U.S. Census Bureau, California Department of Finance, the current Housing Element, and AMBAG's regional growth forecast and RHNA. As discussed under *CEQA Guidelines* Section 15126.2(e), "[i]t must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." The purpose behind looking at population growth is to determine whether "[i]ncreases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects." To evaluate the project's impact on displacement of housing, this analysis relies on an April 2020 memorandum prepared by the Housing Division of the Santa Cruz County Planning Department, which is included in Appendix Q of the EIR.

Physical changes resulting from population growth relate to transportation, air quality, noise, and public services and utilities, as well as other environmental resource areas. These physical impacts are analyzed under the other environmental topics in this EIR.

## b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project induce substantial unplanned 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)?

**Impact PH-1** EMPLOYMENT GROWTH CAUSED BY THE PROJECT WOULD NOT EXCEED FORECASTS FOR SANTA CRUZ COUNTY, AND THE PROJECT WOULD NOT EXTEND INFRASTRUCTURE TO NEW AREAS. THE IMPACT FROM INDUCEMENT OF UNPLANNED POPULATION GROWTH WOULD BE LESS THAN SIGNIFICANT.

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The proposed project would replace existing commercial uses on the project site with new commercial office uses that would generate additional employment opportunities. As discussed in Section 2, *Project Description*, the project site is currently used for salvage and miscellaneous storage purposes, as well as a concrete contractor. Several vehicle towing and storage companies list the site as their address. After demolition of existing structures and removal of items associated with these uses, the project would add a medical office building with a gross floor area of approximately 160,000 square feet for outpatient services. The proposed facility would be open to the public from 8:00 a.m. to 8:00 p.m., but urgent care and ancillary functions would operate 24-hours per day. The expected number of on-site staff at peak function would be approximately 300 persons. Although it is uncertain how many people are employed by the existing uses on the project site, and whether displacement of those uses from the site would result in a loss of employees, this analysis makes a conservative assumption that all new employees on-site would be additional to existing conditions. Therefore, the project would result in a net increase of up to 300 employees in the County. This is a conservative estimate in net employment growth because it is likely that some people who currently work in the County would choose to leave their current jobs and become employed at the proposed medical office building.

If future employees at the proposed medical office building do not currently live in Santa Cruz County, the project could induce population growth in the County as they relocate to be closer to their workplace.

As shown in Table 4.12-2, AMBAG projects that the number of employees in the unincorporated County will increase by 6,948 people (or 18 percent) between 2015 and 2040 (AMBAG 2018). The estimated net gain of approximately 300 employees on the project site would account for approximately 5 percent of the projected increase in employment across the unincorporated

County. Job growth under the project would not exceed the planned level of countywide growth. Furthermore, the project would not directly introduce new housing or extend roadways.

The project also would not indirectly induce population growth by the extension of roads or utility infrastructure to new areas. As detailed in Section 4.14, *Transportation*, roadway modifications would be limited to the installation of traffic signals and other improvements at existing intersections and along Soquel Avenue, and to site frontage improvements including a new curb and gutter, sidewalk, and a striped Class II bicycle lane, also along Soquel Avenue. New utility infrastructure on the project site would connect to existing water and wastewater pipes beneath adjacent streets. Although the applicant would replace approximately 2,600 linear feet of existing sanitary sewer pipe under Soquel Avenue, Chanticleer Avenue and Rodriguez Street, utility lines would not be extended to service new areas. Therefore, the project would not induce substantial unplanned population growth. This impact would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

<b>Threshold 2:</b> Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?
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**Impact PH-2** THE PROJECT WOULD NOT DISPLACE EXISTING PEOPLE OR HOUSING BECAUSE THE PROJECT SITE IS NOT CURRENTLY DEVELOPED WITH RESIDENTIAL USES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

As discussed under Impact PH-1 above, the project would involve demolition of existing commercial uses on-site. No known or permitted housing units are present on the project site. Since the project site is not developed with residential uses, the project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, the impact related to displacement of existing people or housing would be less than significant.

While the project site is not developed with residential uses, and the project would not displace existing housing stock, the project would effectively eliminate the potential for future housing development on the site. Currently, the site's Multi-Family Residential with Regional Housing Need (R) Combining District (RM-2-R) zoning allows for housing development at a density of up to 20 units per acre (Appendix Q). At approximately 5 acres, County staff estimates that the project site can accommodate as many as 100 units. PUD No. 07-0414 (County Ordinance 5027) authorized 100 units of high density "by-right" housing development on the site. The project includes an application for a zoning change from RM-2-R to Professional-Administrative Office (PA) District at the project site. As a result, the proposed rezoning would eliminate the site's availability for future development of up to 100 housing units.

To demonstrate that the County could attain its RHNA allocation and provide sufficient housing, the 2015 Housing Element included for the project site among several RM-2-R properties. The loss of housing availability on the project site due to rezoning could therefore affect the County's ability to meet its RHNA allocation. Policy 1.2 in the Housing Element sets standards for rezoning to ensure the provision of adequate replacement housing on other properties. This policy requires that properties zoned RM-2-R "only be rezoned if substitute property is concurrently rezoned from lower

density to at least 20 DU/acre, or a mixed-use project that would supply the same number of rental dwelling units is concurrently approved” (Santa Cruz County 2015). The intention in Policy 1.2 is to prevent a net loss of housing production capacity.

Between 2014 and 2019, the County approved four mixed-use developments in the same planning area as the project site (Live Oak), which would collectively add 118 rental dwelling units (Appendix Q). Because these mixed-use projects were approved within the current RHNA allocation period (January 2, 2014, to December 31, 2023), County staff has determined that they qualify as concurrent projects under Policy 1.2. Furthermore, the 118 rental units provided by these projects would more than compensate for the loss of up to 100 potential units in housing capacity on the project site. Therefore, after accounting for concurrent projects in the same planning area, the proposed project would not necessitate the construction of additional replacement housing on other sites.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.

## **4.12.4 Cumulative Impacts**

This analysis assumes that the geographic scope for cumulative population and housing impacts is limited to the unincorporated County, City of Santa Cruz, City of Scotts Valley, City of Capitola, and City of Watsonville. This geographic scope is appropriate for population and housing because population and housing projections in this geographic area are used to estimate the need for public services and other government facilities and programs. Additionally, if cumulative projects would result in displacement of existing people or housing, the construction of replacement housing would likely occur nearby, within the same approximate geographic area.

As discussed under Impact PH-1 above, the proposed project would not involve housing development and would generate additional employment at a level consistent with AMBAG’s forecasts for the unincorporated County. Other cumulative projects would be required to adhere to applicable zoning and development regulations and general plan policies to mitigate environmental impacts where feasible and would undergo environmental review, including consideration of whether the projects would induce unplanned population growth. With these considerations prior to project approval, cumulative impacts related to growth inducement would be less than significant. Furthermore, the proposed project’s contribution to less than significant cumulative impacts for Impact PH-1 would be less than cumulatively considerable.

Other cumulative projects would be required to undergo environmental review, including consideration of whether the projects would displace people or residences. With these considerations prior to project approval, cumulative impacts related to the displacement of people or residences would be less than significant. Many of the reasonably foreseeable future residential projects listed in Table 3-1 in Section 3, Environmental Setting, consist of replacing existing residential units for higher density residential. Furthermore, the proposed project’s contribution to less than significant cumulative impacts related to the displacement of people and residences would be less than cumulatively considerable.

## 4.13 Public Services

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This section describes existing public services, as well as applicable regulations and policies, and assesses potential impacts to public services from the proposed project.

### 4.13.1 Setting

#### Fire Protection

The proposed project would be served by the Central Fire Protection District (CFPD). The CFPD serves 28 square miles and encompasses the communities of Capitola, Live Oak, and Soquel. The resident population is in excess of 55,000 with a seasonal influx during the summer. The CFPD responds to over 6,000 requests for service annually for fire, rescue, emergency medical services, hazardous materials calls, and assorted alarms. At the time of preparation of this EIR, the CFPD is staffed with 96 people, including 23 captains and 53 fire fighters (CFPD 2019).

The CFPD operates four fire stations: Fire Station 1, which also includes an Administrative Office, located at 930 17<sup>th</sup> Avenue in Santa Cruz, Fire Station 2 located at 3445 Thurber Lane in Santa Cruz, Fire Station 3 located at 4747 Soquel Drive in the community of Soquel, and Fire Station 4 located at 405 Capitola Avenue in Capitola. CFPD also operates a Community Risk Reduction Division and Fleet Services Facility. The CFPD has several robust program areas including Community Risk Reduction, Community Education, Emergency Medical Services, Water Rescue, Fire Investigation, Hazardous Materials, Urban Search and Rescue, and Training.

The Operations Division encompasses several program areas including Emergency Medical Services, Aquatic Rescue Response, Hazardous Materials, and Urban Search and Rescue. In 2019, the Operations Divisions for CFPD and Aptos/La Selva Fire Protection District joined under a shared services contract as the two districts move towards consolidation. Under this shared services model, the Aptos/La Selva Fire Division chiefs and the Central Fire battalion chiefs work under a shared services agreement for duty coverage and program oversight. The Operations Division, in addition to responding to calls for service, oversees several program management areas. In November 2020, the Santa Cruz County Local Agency Formation Commission approved consolidation of the two districts. The “Central Fire District of Santa Cruz County” was officially formed in February 2021.

#### Law Enforcement

The proposed project would be served by the Santa Cruz County Sheriff’s Office (SCSO) for law enforcement. The SCSO is divided into three bureaus: Administration, Corrections, and Operations. Each bureau is overseen by a chief deputy and is assigned a certain number of lieutenants, sergeants, deputies or correctional officers and civilian employees to meet the needs of each specific bureau. The Operations Bureau provides services to the unincorporated area of Santa Cruz County and consists of the Patrol, Investigation and Community Policing Divisions. The SCSO headquarters is located at 5200 Soquel Avenue.

According to its 2019 Annual Report, the SCSO employed 337 staff, including 158 peace officers, 109 correctional officers, and 70 professional staff (SCSO 2019). The Santa Cruz County General Plan requires a police officer to population ratio of one officer to 1,000 residents in order to maintain acceptable service levels and police response times. Based on the current estimated population in unincorporated Santa Cruz County of 133,493 (California Department of Finance [DOF] 2020), approximately 134 sworn officers are required to meet these standards.



## Schools

The Live Oak School District (LOSD) provides kindergarten through 8<sup>th</sup> grade public education to students in the Live Oak community of unincorporated Santa Cruz County. LOSD was established in 1872 and currently serves approximately 1,900 students in three elementary schools, one middle school, one K-8 independent charter school, and one alternative school (LOSD 2020). According to the California Department of Education (2020), enrollment in the LOSD has had a slight but steady decline from the 2014-2015 school year to the current 2019-2020 school year. In the 2014-2015 school year 2,108 students were enrolled in LOSD schools, whereas 1,814 students were enrolled during the 2019-2020 school year.

In 2016, Live Oak renewed a parcel tax providing approximately \$500,000 to schools to support school libraries, art, music, science, and physical activities. Also, in 2016, a new Boys and Girls club opened at Shoreline Middle School that is a result of a partnership between the Live Oak School District, Boys and Girls Club, and the County of Santa Cruz.

The Santa Cruz City Schools District provides 9<sup>th</sup> through 12<sup>th</sup> grade public education to students in the City of Santa Cruz and to students in portions of unincorporated Santa Cruz County, including the Live Oak area. Soquel High School is the nearest high school to the project site and is approximately 1 mile northeast of the project site. According to the Santa Cruz City Schools District, 1,173 students were enrolled at Soquel High School during the 2018-2019 school year (Santa Cruz City Schools District 2019).

## Libraries

The Santa Cruz Public Library system operates eight branches in the County, including the Live Oak Public Library located at 2380 Portola Drive. This public library primarily services residents of the Live Oak community. The Live Oak Public Library includes an adult reading room, a young adult room, a story time area, and a homework center--as well as significantly more space devoted to fiction, non-fiction, and media. This library branch also offers early literacy computers, laptop lending, public internet access, and teen self-help programs.

## Parks and Recreation

Santa Cruz County supports a wide variety of parks and recreational opportunities from the redwood forest parklands in the mountains to the beaches along the coast of Monterey Bay and the Pacific Ocean. The mild climate and abundance of open space and formal recreational areas, as well as unique natural resources in the county, provide an ideal environment for recreators including hikers, cyclists, surfers, and others.

Santa Cruz County has more state parks than any other county in California. The State of California owns and operates 14 parks throughout the County, ranging from those along the coast to those in the expansive forests in the mountains. The Santa Cruz County Parks, Open Space and Cultural Services Department maintains 38 neighborhood, community, regional, or rural parks; 27 coastal access points; and a regional swim center. There are approximately 223 miles of bicycle paths (Class I paths) and 196 miles of bicycle lanes (Class II paths) throughout the county. A sampling of the recreational opportunities in the county include hiking, cycling, surfing, sailing, equestrian use, and nature viewing. Chanticleer Avenue Park and Coffee Lane Park are the closest County parks to the project site. Chanticleer Avenue Park is approximately 0.25 mile southwest of the project site, and Coffee Lane Park is approximately 0.25 mile southeast of the site. Chanticleer Avenue Park currently features an inclusive playground, picnic area, community garden, dog park and bicycle

pump track, and the park master plan includes additional future features such as a sport court, skate feature, turf area, and covered picnic areas. Coffee Lane Park features picnic areas, playground equipment, and a basketball court.

### 4.13.2 Regulatory Setting

The following section summarizes the state and local policies and regulations applicable to the proposed project. There are no relevant federal regulations regarding public services applicable to the proposed project.

#### a. State Regulations

##### *Senate Bill 50 (1998)*

Senate Bill (SB) 50, which is funded by Proposition 1A, limits the power of cities and counties to require school impact mitigation from developers as a condition of approving new development and provides instead for a standardized fee. SB 50 generally provides for a 50/50 state and local school facilities match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available; whether the school district is eligible for State funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use.

California Government Code sections 65995-65998 sets forth provisions to implement SB 50. Specifically, in accordance with section 65995(h), the payment of statutory fees is “deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization...on the provision of adequate school facilities.” The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Pursuant to Government Code section 65995(i), “A state or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in section 56021 or 56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to section 65995.5 or 65995.7, as applicable.”

California Education Code section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.

#### b. Local Regulations

##### *Santa Cruz County General Plan and Local Coastal Program*

The County's General Plan provides a framework for development and growth in the county (Santa Cruz County 1994). The Parks, Recreation and Public Facilities Element includes objectives and policies for the adequate provision of public services to support existing and future populations. The following objectives and policies pertaining to public services are relevant to this analysis:

**Objective 7.1a: Parks and Recreation Opportunities.** To provide a full range of public and private opportunities for the access to, and enjoyment of park, recreation, and scenic areas, including the use of active recreation areas and passive natural open spaces by all ages, income groups and people with disabilities with the primary emphasis on needed recreation facilities and programs for the citizens of Santa Cruz County.

**Objective 7.1b: Park Distribution.** To establish and maintain, within the economic capabilities of the County, a geographical distribution of neighborhood, community, rural, and regional park and recreational facilities throughout the County based on the standards for acreage and population ratios contained in the Santa Cruz General Plan; and to preserve unique features of the natural landscape for public use and enjoyment.

**Objective 7.2 Neighborhood Parks.** To provide neighborhood parks, at a standard of 3 net useable acres per 1000 population, consisting of conveniently located, easily accessibly parks serving local residential neighborhoods in the urban portion of the County.

**Objective 7.3: Community Parks and Recreation Facilities.** To provide community recreation facilities as a standard of 2-3 net useable acres per 1,000 population, including parks, cultural centers, and community complexes, in the central locations in the urban areas which will serve as focuses for community social, organizational, cultural and/or recreational activities.

**Objective 7.12 School Facilities.** To ensure that adequate school facilities and services are provided as an essential public services prerequisite to any increase in residential development which would include school-age or potential school-age children and to alleviate current critical school shortages.

**Policy 7.12.1 Mitigating Impacts from New Development.** Prior to issuance of any building permit, require a written statement confirming payment in full of all applicable developer fees and other requirements lawfully imposed by each school district in which the project is located.

Prior to approval of any land division or other discretionary development permit application for a project which would authorize additional development, consider the impact of such action on each school district in which the project is located. Require feasible mitigation measures permitted by law to reduce any significant impacts on the school system or approve the project on the basis of a statement of overriding considerations.

Prior to approval of any General Plan and/or LCP Amendment, Rezoning, or other legislative action which would authorize additional development to occur as a matter of land use policies, consider the impact of such action on each school district within which the land is located. Either require feasible mitigation measures to reduce any significant impacts on each school district to a level of insignificance, deny the project if such mitigation measures are infeasible, or approve the project on the basis of a statement of overriding conditions. Mitigation measures may include, by way of example only, the reduction of residential densities or the controlled phasing of residential development within attendance areas of the school district having inadequate facilities or services.

**Objective 7.16 Fire Protection.** To provide the highest level of fire protection service feasible in the rural areas considering the difficult terrain, disperse settlement patterns, and limited road and water improvements and to provide an urban level of fire service in the urban areas.

**Policy 7.16.1. Reviewing New Development for Fire Protection.** Require review of all new developments, including building permits on existing parcels of record, by the County Fire Marshal or local fire agency, and require adequate access, water supply and location with

respect to fire stations and Critical Fire Hazard Areas in order to ensure adequate fire protection.

**Policy 7.16.2 Development to be Consistent with Fire Hazards Policies.** Allow development approvals only if adequate water supply, access, and response time for fire protection can be made available in accordance with the Fire Hazards policies found in section 6.5 (of the General Plan).

**Objective 7.17 Police Protection.** To provide the highest level of police protection services to County residents and property in the unincorporated areas of Santa Cruz County.

**Policy 7.17.2 Maintaining Adequate Levels of Service.** Provide adequate levels of police service to protect County residents and businesses.

#### *Santa Cruz Public Libraries Facilities Master Plan*

The *Santa Cruz Public Libraries Facilities Master Plan 2014-2023* (Santa Cruz Public Libraries 2013) was developed to create modern library facilities that provide updated library service for the entirety of the county. The library system throughout the county includes 10 branch libraries, a bookmobile, and a headquarters facility that work together as an integrated system, sharing resources, programs and administration. The plan includes three planning stages for each library facility; these include the Capital Maintenance, Gain, and Attain plans. These plans identify funding mechanisms and growth opportunities for each library facility, in addition to measures to provide overall general maintenance, improvements and eventual building and program replacement to provide modern library services at each location.

#### *Santa Cruz County Parks Department Strategic Plan*

The Santa Cruz County Parks Department Strategic Plan (Santa Cruz County 2018) provides a 10-year roadmap for the department that will assist in adapting and growing the support for a healthy, connected, and culturally vibrant Santa Cruz County. It also creates a resource for understanding what the department does and how the department serves the community. The plan provides guidance for partnering and collaborating with other relevant agencies, describes a collective vision for the County Parks Department, and establishes goals and objectives within the 10-year time frame. The goals of the plan include maintaining and enhancing the quality of parks facilities and improving access between existing parks and programs.

### 4.13.1 Impact Analysis

#### a. Methodology and Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project would result in potentially significant environmental effects on public services if it would:

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - a. Fire protection
  - b. Police protection

- c. Schools
- d. Parks and recreational facilities
- e. Other public facilities

## b. Project Impacts and Mitigation Measures

**Threshold 1a:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

**Impact PUB-1** THE PROPOSED PROJECT WOULD INCREMENTALLY INCREASE DEMAND FOR FIRE PROTECTION SERVICES. HOWEVER, THIS DEMAND WOULD NOT NECESSITATE THE CONSTRUCTION OF NEW FIRE DEPARTMENT OR FACILITIES OR ALTER THE EXISTING FIRE STATION OR FACILITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The proposed project would be served by Fire Station 1 or Station 2 of the CFPD. Fire Station 1 is located at 930 17<sup>th</sup> Avenue, approximately 1.3 miles south of the project site, and Fire Station 2 is located at 3445 Thurber Lane, approximately 1.5 miles north of the site. Because either station is approximately the same distance from the site, either may respond in the event of a call for fire protection. According to the 2019 CFPD Annual Report, average response times for Station 1 ranged from 6:05 minutes to 7:51 minutes, while average response times for Station 2 ranged from 5:13 minutes to 6:31 minutes throughout the year. Each of these fire stations are located within a five-minute drive to the project site, and therefore would have approximately the same response time as neighboring and adjacent development to the project site.

There are currently several small structures on-site that serve small business operations. The proposed project would redevelop the site with the proposed medical office building. Because existing businesses on-site could currently request fire protection services, the proposed project would not represent a new area to which the CFPD would be required to respond. However, as the proposed medical office building would be larger than existing on-site structures, the proposed project could incrementally increase demand for fire protection. The incremental increase in demand would not cause Station 1 or Station 2 to have an unacceptable response time due to its proximity to both stations. Furthermore, according to the CFPD Standards of Coverage and Management/Administrative Assessment, although annual fire service demand is projected to annually increase by approximately 5 percent through 2027, this increase can be accommodated within the CFPD's current service capacity (CFPD 2017).

The proposed project would be designed, constructed, and operated per the applicable standards outlined in the 2016 California Fire Code, as adopted in Section 7.92.010 of the Santa Cruz County Code. Such requirements include, but are not limited to, provisions for smoke alarms, sprinklers, building and emergency access, adequate emergency notification, and means of egress. Prior to project approval, CFPD would formally review all project plans to ensure compliance with applicable fire safety requirements, minimizing fire hazards on the site. The proposed project's design, construction and operation would be in accordance with County standards, thus reducing fire hazards and demand on fire protection services. With these provisions, the project would not require the construction of new firefighting facilities. Therefore, project impacts would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 1b:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

**Impact PUB-2** IMPLEMENTATION OF THE PROPOSED PROJECT WOULD INCREASE DEMAND FOR POLICE PROTECTION SERVICES. HOWEVER, THIS DEMAND WOULD NOT SIGNIFICANTLY INCREASE THE NEED FOR LAW ENFORCEMENT SERVICES SUCH THAT NEW FACILITIES OR PHYSICALLY ALTERED FACILITIES WOULD BE REQUIRED TO MAINTAIN ACCEPTABLE SERVICE RATIOS AND RESPONSE TIMES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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The proposed project would be served by the SCSO, with the main department offices located at 5200 Soquel Avenue, less than 0.2-mile west of the project site. The General Plan requires a ratio of one police officer to 1,000 people in order to maintain acceptable service levels and police response time. Based on this requirement, the SCSO currently has sufficient staffing to serve the proposed project. Additionally, the project site is surrounded by existing development that is served by police protection services, and the project would not decrease police service ratios or increase response times for the SCSO. Construction of the project would not interfere with ingress and egress at the main department headquarters, just west of the project site. Additionally, the medical office building would be staff with private security guards, which would deter crime and also serve as an initial response to crimes on the project site. As a result, no new construction or physical alteration of police protection facilities would be required, and this impact would be less than significant.

## Mitigation Measures

No mitigation measures are required.

## Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 1c:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

**Impact PUB-3** EMPLOYMENT GENERATED BY THE PROPOSED PROJECT COULD RESULT IN RELOCATION TO SANTA CRUZ COUNTY. SOME RELOCATION COULD BE HOUSEHOLDS WITH SCHOOL-AGED CHILDREN, RESULTING IN AN INCREMENTAL INCREASE IN SCHOOL ENROLLMENT. THE PROJECT APPLICANT MUST PAY DEVELOPMENT IMPACT FEES, WHICH PURSUANT TO SB 50, ARE CONSIDERED COMPLETE AND FULL MITIGATION OF IMPACTS ON SCHOOL CAPACITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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The proposed project would not involve the construction of new schools or school facilities. The proposed project has no residential component. Therefore, the proposed project would not be people, including school-aged children residing on the site. The proposed medical office would include employ professionals requiring specialized training and certifications, such as neurologists and obstetrician-gynecologists. While some employment at the medical office building would be filled by the local workforce, these types of specialized professions may be filled by people outside Santa Cruz County. For example, neurologists currently located in the San Francisco Bay area may relocate to Santa Cruz County to fill employment created by the proposed project. When relocating to the County, these specialists may have households with school-aged children. These children would incrementally increase enrollment at local schools. However, because only a portion of employment created by the proposed project would be from persons relocating to the area, and only some of those would be households with school-aged children, alterations to existing schools to accommodate increased enrollment would not be required. Additionally, the project applicant would be required to pay all applicable development impact fees. Because the Live Oak School District and the Santa Cruz City High School District share territory, development impact fees are split, with 65.5 percent of the fee going to the Live Oak School District and remaining portion to the Santa Cruz City High School District. At the time of preparation of this EIR, the SB 50 fee for commercial development is \$0.36 per square foot of structure. Pursuant to SB 50, payment of these fees is considered complete and full mitigation for impacts related to school capacity. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 1d:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

**Impact PUB-4** THE PROPOSED PROJECT WOULD NOT DIRECTLY LEAD TO A POPULATION INCREASE OR INTRODUCE A SUBSTANTIAL NUMBER OF NEW RESIDENTS TO SANTA CRUZ COUNTY. THEREFORE, THE PROPOSED PROJECT WOULD NOT CREATE A NEED FOR NEW OR EXPANDED PARK FACILITIES AND THERE WOULD BE NO IMPACT.

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The project would not directly lead to an increase in population. County Park classification standards are defined in the General Plan and are based on providing a certain number of park acres per 1,000 people in the vicinity of each classification of park. Because the project would not introduce a substantial number of new residents to the County, as described above for Impact PUB-3, it would not create a substantial increase in demand for park facilities requiring new or expanded park facilities. Therefore, the proposed project would not result in new physical impacts associated with park expansion or new park construction. The proposed project would also provide open space in the south area of the project site, which could be used for passive recreation activities, such as bird watching or picnicking. Additionally, a new bike lane would be constructed along the segment of Soquel Avenue at the project site. Because new or expanded park facilities would not be needed or constructed, the proposed project would have no impact in this regard.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

No impacts would occur.



**Threshold 1e:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

**Impact PUB-5** THE PROPOSED PROJECT WOULD NOT DIRECTLY LEAD TO A POPULATION INCREASE OR INTRODUCE A SUBSTANTIAL NUMBER OF NEW RESIDENTS TO SANTA CRUZ COUNTY. THEREFORE, THE PROPOSED PROJECT WOULD NOT CREATE A NEED FOR NEW OR EXPANDED PUBLIC FACILITIES. THERE WOULD BE NO ENVIRONMENTAL IMPACTS.

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As described above for Impact PUB-3, some employment generated by the proposed project could result in relocation to the County. However, population growth would be an incremental increase in County population. Therefore, the proposed project would not result in a substantial increase in the use of other governmental facilities that would lead to the physical deterioration of such facilities or require additional facilities. Because there would be no physical construction or expansion of governmental facilities, such as libraries, there would be no environmental impacts. The proposed project would have no impacts.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

No impacts would occur.

## **4.13.2 Cumulative Impacts**

Implementation of the proposed project in combination with reasonably foreseeable cumulative projects, as listed in Table 3-1 in Section 3.0, *Environmental Setting*, would result in the incremental increased demand for public services, which would result in the need for the provision of fire and police protection services. The increased need for funding of public services would be covered in whole or in part by development impact fees assessed on all reasonably foreseeable cumulative projects. Payment of development impact fees would ensure a less than significant cumulative impact, and the proposed project's contribution would not be significant.

## 4.14 Transportation

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This section is based, in part, on a Transportation Impact and Operational Analysis prepared by Kimley-Horn in May 2021. A copy of the Transportation Impact and Operational Analysis is provided as Appendix D to this EIR.

### 4.14.1 Setting

The discussion below summarizes the existing conditions for the major transportation facilities in the vicinity of the project site, including the roadway network, transit services, and bicycle and pedestrian facilities.

#### a. Roadway Network

Access to the project site is provided by Soquel Avenue. Access to Soquel Avenue is provided primarily by Soquel Drive, 41<sup>st</sup> Avenue, and Highway 1. Soquel Drive provides access to both the City of Santa Cruz to the west and the community of Aptos to the east. 41<sup>st</sup> Avenue provides access to the community of Soquel to the north and the City of Capitola to the south. Highway 1 is State roadway that roughly parallels much of the coast of California. These roadways and other principal roadways in the vicinity of the project site are discussed below.

**Highway 1** is a four-lane divided freeway near the project site and extends along the California coast connecting major cities including San Francisco, Santa Cruz, Monterey, and San Luis Obispo to coastal communities. In the vicinity of the project site, Highway 1 is a major commuter and tourist route and has a posted speed limit of 65 miles per hour.

**Soquel Avenue** is an east-west arterial roadway that begins in the downtown area of the City of Santa Cruz and extends eastward and continues to the Highway 1 ramps. It continues east of the Highway 1 ramps on the south side of Highway 1, where it becomes a two-lane collector roadway that terminates at Gross Road at 40<sup>th</sup> Avenue. In the vicinity of the project site, the roadway primarily provides access to industrial and retail land uses. Motorists use it as a cut-through route during the PM peak periods when southbound Highway 1 is congested. Residential collector roadways including Paul Minnie Avenue, 17<sup>th</sup> Avenue, Chanticleer Avenue, Mattison Lane, and South Rodeo Gulch Road intersect the collector segment of Soquel Avenue in the area. Soquel Avenue is primarily a two-lane undivided roadway with a 35 mile-per-hour posted speed limit, except for an approximately 1,700-foot segment near the Highway 1 southbound on- and off-ramps. Near the ramps it varies between three and four lanes of undivided roadway and has a 25 mile-per-hour posted speed limit.

**Soquel Drive** is an east-west arterial roadway that begins at the existing Highway 1 overcrossing and extends eastward to Aptos. Soquel Drive provides access to Highway 1 and connects residential, retail and commercial land uses throughout Santa Cruz County, Soquel, and Aptos. In the project vicinity, Soquel Drive has a 35 mile-per-hour posted speed limit, is a four-lane to two-lane, undivided arterial, and has a two-way left-turn lane between Thurber Lane and Paul Sweet Road.

**41<sup>st</sup> Avenue** is a north-south arterial roadway that begins at Soquel Drive in Santa Cruz County and continues south to East Cliff Drive. 41<sup>st</sup> Avenue also provides access to Highway 1 and connects residential, retail, and commercial land uses. North of the Highway 1 ramps, 41<sup>st</sup> Avenue is a four-lane divided arterial with a 25 mile-per-hour posted speed limit. South of the Highway 1 ramps, 41<sup>st</sup> Avenue is a six-lane divided arterial with a 35 mile-per-hour posted speed limit.

**Capitola Road** is an approximately 2.5-mile east-west arterial roadway that extends from Soquel Avenue in the west to Wharf Road in the east. The roadway's primary function is to provide connections to the two major arterials of Soquel Avenue/Soquel Drive and 41<sup>st</sup> Avenue, as well as to provide access to residential land uses and Capitola Mall in the east. Capitola Road is a four-lane divided roadway from Soquel Avenue to 7<sup>th</sup> Avenue and from 30<sup>th</sup> Avenue to 41<sup>st</sup> Avenue. From 7<sup>th</sup> Avenue to 30<sup>th</sup> Avenue, Capitola Road varies between two-lane and four-lane undivided roadway, with some segments including a two-way left-turn lane. The posted speed limit on the roadway varies between 25 miles per hour and 35 miles per hour.

**Brommer Street** is an approximately 1.75-mile east-west collector roadway that extends from 7<sup>th</sup> Avenue in the west to 41<sup>st</sup> Avenue in the east. The roadway primarily provides access to residential land uses and some local businesses. Brommer Street is a two-lane undivided roadway with a 25 mile-per-hour posted speed limit.

**17<sup>th</sup> Avenue** is a north-south collector roadway that extends from Soquel Avenue in the north to Cliff Drive/Portola Drive in the south. The roadway provides access to residential and local business land uses, as well as parks and schools. A two-way left-turn lane exists along the Capitola Road-to-Kinsley Street segment of this roadway. 17<sup>th</sup> Avenue is a two-lane undivided roadway with a 30 mile-per-hour posted speed limit. When school children are present, the speed limit is reduced to 25 miles per hour.

**Mattison Lane** is a short collector roadway that intersects 17<sup>th</sup> Avenue and Soquel Avenue, south of Highway 1. North of Highway 1, Mattison Lane extends from the Good Shepherd School to Soquel Drive. The northern and southern roadway segments are separated by Highway 1 and do not connect. The southern segment primarily serves residential land uses and some local businesses. The northern segment provides access to residential land uses and the Good Shepherd School. Both segments are two-lane undivided roadways. The northern segment has a 25 mile-per-hour posted speed limit. The southern segment does not have a posted speed limit but is assumed to be 25 miles per hour as well.

**Chanticleer Avenue** is a north-south roadway that extends from Soquel Avenue in the north to Kinsley Street in the south. Residential land uses are located along the roadway, as well as Chanticleer Avenue Park, Live Oak Elementary School, and local businesses. It is a two-lane undivided roadway with a 25 mile-per-hour posted speed limit.

**Paul Minnie Road** is an approximately 1,500-foot-long north-south roadway that extends from Soquel Avenue in the north to Rodriguez Street in the south. Residential land uses are located along the roadway, as well as the Live Oak School District and Green Acres Elementary School. It is a two-lane undivided roadway with speed humps and a 25 mile-per-hour posted speed limit.

**Rodriguez Street** is an approximately 4,000-foot-long, east-west, local collector street that extends from the Capitola Road Extension in the west to Chanticleer Avenue in the east. The roadway provides access to the adjacent residential land uses and intersects Capitola Road Extension, 7<sup>th</sup> Avenue, Jose Avenue, Koopmans Avenue, Paul Minnie Avenue, 17<sup>th</sup> Avenue, and Chanticleer Avenue, as well as multiple cul-de-sacs. Three of the mid-segment intersections are all-way stop controlled. It is a two-lane undivided roadway with a 25 mile-per-hour posted speed limit.

## b. Transit Facilities

The Santa Cruz Metropolitan Transit District (METRO) provides transit services throughout Santa Cruz County and between the cities of Santa Cruz, Capitola, Watsonville, and Scotts Valley. The project site is in the general service area for METRO but is not on a METRO route. Good sidewalk

connectivity does not exist between the existing METRO bus stops and the project site, and the closest stops to the site are located approximately 0.75 mile away. Existing METRO routes and bus stops that are closest to the project site are summarized below:

The **Capitola Road/Watsonville Route (Route 69)** serves southern Santa Cruz County and provides public transit that connects the cities of Santa Cruz and Watsonville. It operates along Capitola Road, 41<sup>st</sup> Avenue, Soquel Drive, and Highway 1. The closest stop to the project site is located approximately 0.75 mile east of the site along 41<sup>st</sup> Avenue, south of the Gross Road intersection.

The **Santa Cruz/Watsonville Route (Route 71)** serves southern Santa Cruz County and provides public transit to the cities of Santa Cruz, Capitola and Watsonville. It operates along Soquel Drive as well as Soquel Avenue and the closest stop to the project site is located approximately 0.75 mile west of the site on Soquel Avenue, just east of the 7<sup>th</sup> Street intersection.

METRO also operates the ParaCruz service. ParaCruz is a transit service offered to senior citizens or people who have temporary or permanent physical, cognitive, or psychiatric disabilities. ParaCruz would be available for transit to and from the project site for people meeting these conditions.

### c. Bicycle and Pedestrian Facilities

The California Department of Transportation (Caltrans) has four classifications for bikeways:

- **Class I** bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right-of-way for bicyclists and pedestrians, away from roadways;
- **Class II** bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel;
- **Class III** bikeways, or bike routes, designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways; and
- **Class IV** separated bikeways, often referred to as cycle tracks or protected bike lanes, are for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature (Caltrans 2017).

There are no Class I or Class IV bikeways near the project site. Class II bikeways exist along Soquel Avenue in eastbound and westbound directions, adjacent to the project site. Class II bikeways also occur along both sides of Chanticleer Avenue, approximately 0.25 mile west of the project site, and 17th Avenue, approximately 0.5 mile west of the project site. A Class III bikeway occurs along Paul Minnie Road, approximately 0.5 mile west of the project site.

Pedestrian facilities include sidewalks and Class I bikeways. Sidewalks are discontinuous on Soquel Avenue near the project site. Soquel Avenue lacks a sidewalk adjacent to the project site's frontage. However, the southern side of the roadway has a sidewalk just east of the project site, in front of Kraft's Body Shop, and west of the project site in front of the Live Oak Business Park.

### d. Vehicle Miles Traveled

Vehicle miles traveled (VMT) is a measure used extensively in transportation planning for a variety of purposes. It measures the amount of travel for all vehicles in a geographic region over a given period of time, such as a 24-hour period or a one-year period. It is calculated as the sum of the number of miles traveled by each vehicle. Currently, the per capita average VMT per day for residents in Santa Cruz County is 10.5 miles. The per employee average for office and service-related land uses in the County is 8.7 miles per day (Santa Cruz County 2020).

## 4.14.2 Regulatory Setting

This section describes applicable state, regional, and local laws, ordinances, regulations, and standards governing transportation, which must be adhered to before and during project implementation.

### a. State Regulations

#### Senate Bill 743

Senate Bill (SB) 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA). SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.”

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. SB 743 requires OPR to identify new metrics for identifying and mitigating transportation impacts within CEQA. In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the CEQA Guidelines, which incorporated SB 743 modifications. As of July 1, 2020, localities are required to rely on vehicle miles traveled (VMT), instead of traffic delay, as the primary metric for evaluating transportation impacts in CEQA documents. Under SB 743, roadway congestion in itself may not be considered an environmental impact (Public Resource Code, § 21099 (b)(2)).

#### State CEQA Guidelines Section 15064.3

Originating from SB 743, Section 15064.3 of the State CEQA Guidelines establishes VMT as the most appropriate measure of transportation impacts, shifting away from the level of service (LOS) analysis that evaluated a project’s impacts on traffic conditions on nearby roadways and intersections. The primary components of new section 15064.3 include:

- Identifies VMT (amount and distance of automobile traffic attributable to a project) as the most appropriate measure of transportation impacts;
- Declares that a project’s effect on automobile delay shall not constitute a significant environmental impact (except for projects increasing roadway capacity);
- Creates a rebuttable presumption of no significant transportation impacts for (a) land use projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor, (b) land use projects that reduce VMT below existing conditions, and (c) transportation projects that reduce or have no impact on VMT;
- Allows a lead agency to qualitatively evaluate VMT if existing models are not available; and
- Gives lead agencies discretion to select a methodology to evaluate a project’s VMT but requires lead agencies to document that methodology in the environmental document prepared for the project.

In December 2018, OPR issued a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018). The technical advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The technical advisory suggests a significance threshold for VMT that is based on state mandated greenhouse gas (GHG) emission reduction targets. The technical advisory recommends a quantitative per capita or per employee VMT that is 15 percent below that of existing development as a possible threshold of significance that would comply with the state's long-term climate goals.

## California Building Code

California provides minimum standards for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The CBC is based on the 1997 Uniform Building Code with modifications specific for California conditions. The CBC provides fire and emergency equipment access standards for public roadways, which include specific width, grading, design and other specifications for roads which provide access for fire apparatus. Street modifications in the County are subject to these and other modified State standards. The County has adopted the 2019 edition of the CBC.

## b. Local Regulations

### County of Santa Cruz General Plan and Local Coastal Program

The Circulation Element of the County's General Plan, adopted in 1994 and revised in 2020, includes objectives and policies that address vehicle miles traveled, vehicle occupancy, the bikeway system, pedestrian travel, and roadway capacity/level of service (Santa Cruz County 1994). Key objectives and policies pertaining to transportation and circulation include:

- **Objective 3.1, Vehicle Miles.** To limit the increase in Vehicle Miles Traveled (VMT) to achieve as a minimum, compliance with the current Air Quality Management Plan.
  - **Policy 3.1.1, Land Use Patterns (Jobs/Housing Balance).** Encourage concentrated commercial centers, mixed residential and commercial uses, and overall land use patterns which reduce urban sprawl and encourage the reduction of vehicle miles traveled per person.
- **Objective 3.2, Vehicle Occupancy.** To increase the average number of persons per commute vehicle to 1.35 persons per vehicle while pursuing a goal of reducing automobile trips to a maximum of 60 percent of all trips through encouragement of alternative transportation by transit, bicycles, and walking.
  - **Policy 3.2.2, Mode Split.** Encourage large employers to provide incentives to carpoolers, bicyclists, pedestrians and transit riders such as priority parking, company car use, bicycle lockers, bus passes etc. in conjunction with the Trip Reduction ordinance.
  - **Policy 3.2.3, Employee Carpool Program.** Encourage large new developments to establish employee pool programs for car, van or bus pools.
- **Objective 3.8a, System Development.** To develop a bikeway network maximizing the safety and convenience of users of all levels of experience within that system. The network should be primarily for commuter travel designed to increase the potential of combining bicycle travel with other forms of transportation and also include the opportunity for recreational use.

- **Objective 3.8b, Bicycle Use.** To encourage bicycle travel as a major form of transportation in order to increase bicycle use to 20 percent of all work trips and to increase general bicycle trips to 5 percent of all trips by the year 2010.
  - **Policy 3.8.4, User Convenience.** Encourage the provision of bicycle racks, showers, lockers and other storage facilities at destinations, where practice and economically feasible, when reviewing discretionary permits for major activity centers and employer sites. These facilities should be provided at a level consistent with the County goal of 5% total bicycle travel.
  - **Policy 3.8.5, Regional Continuity.** Coordinate with other jurisdictions to adopt a system of bikeways that is functional throughout the County and region.
- **Objective 3.10, Pedestrian Travel.** To encourage pedestrian travel as a viable means of transportation, by itself and in combination with other modes to achieve at least 7% of all trips through walking, by increasing and improving pedestrian facilities, particularly in urban areas and reducing the conflicts between pedestrians and other modes of travel.
  - **Policy 3.10.4, Pedestrian Traffic.** Require dedication and construction of walkways for through pedestrian traffic and internal pedestrian circulation in new developments where appropriate.

## 2040 Santa Cruz County Regional Transportation Plan

The 2040 Regional Transportation Plan (RTP), adopted on June 14, 2018 by the Santa Cruz County Regional Transportation Commission, is intended to guide transportation planning decisions in Santa Cruz County (RTP 2018). The RTP includes broad transportation goals and policies, a program of short and long-range transportation projects, and a financial plan for funding the projects. Sustainability policies applicable to the project are listed below.

- **Policy 1.1.** Transportation Demand Management (TDM): Expand demand management programs that decrease the number of vehicle miles traveled and result in mode shift.
- **Policy 1.3.** Transportation Infrastructure: Improve multimodal access to and within key destinations.
- **Policy 1.4.** Transportation Infrastructure: Ensure network connectivity by closing gaps in the bicycle, pedestrian and transit networks.
- **Policy 2.2.** Safety: Encourage projects that improve safety for youth, vulnerable users and transportation disadvantaged.
- **Policy 2.3.** Emergency Services: Support projects that provide access to emergency services.
- **Policy 2.4.** System Design: Reduce the potential for conflict between bicyclists, pedestrians, and vehicles.

### 4.14.3 Impact Analysis

#### a. Methodology and Significance Thresholds

##### Methodology

The analysis presented herein is derived primarily from a Transportation Impact and Operational Analysis prepared by Kimley Horn for the proposed project, included as Appendix D to this EIR. The Transportation Impact and Operational Analysis, dated May 2021, assesses the transportation

impacts of the project, including impacts to transit and active transportation facilities and VMT. The Transportation Impact and Operational Analysis also discloses the LOS, or traffic delay, that would result from the project at nearby roadway intersections. Pursuant to Section 15064.3 of the State CEQA Guidelines, traffic delay resulting from a land use project shall not constitute a significant environmental impact for purposes of CEQA. Because this EIR is intended to identify and mitigate potentially significant impacts of the proposed project, LOS is not discussed in the impact analysis. However, a brief discussion of the results of the project on LOS at selected intersections in the project area is provided at the end of this section, separate from CEQA analysis.

The Transportation Impact and Operational Analysis utilizes the following listed terms in the impacts analysis, which are also defined:

- **Existing Members:** Current members of the potential tenant of the medical office building.<sup>1</sup>
- **Healthcare Consumer:** Consumer of healthcare services in the County, including Members and Other Healthcare Systems' patients.
- **Members:** The patients, visitors, and non-clinical affiliated members of the potential tenant of the medical office building. Collectively, as the context requires, the term "members" may refer to Existing Members, Population Growth Members, and Transferee Members.
- **Population Growth Members:** Member growth that would occur over time via population growth.
- **Other Healthcare Systems:** Sutter Health and Dignity Health.
- **Transferee Member:** Member growth attributed to patients switching from Other Healthcare Systems to the potential tenant of the medical office building.

The Transportation Impact and Operational Analysis evaluates potential VMT impacts for two separate project scenarios: "Scenario A" and "Scenario B." Scenario A considers the effect of the proposed project on the members of the medical office building tenant. Scenario A represents the building tenant's goal of providing nearly all medical services required by its Santa Cruz County members in the County itself. Scenario B provides a more conservative VMT analysis than Scenario A because it considers the potential for healthcare consumers from other healthcare systems to become transferee members that also receive healthcare services at the proposed medical office building in addition to existing members and population-growth members. Because Scenario B provides a more conservative analysis of potential VMT impacts, it was used for the impacts analysis presented in this section of the EIR. VMT impacts of Scenario A would be less than Scenario B and are detailed in the Transportation Impact and Operational Analysis, provided in Appendix D.

The Transportation Impact and Operational Analysis evaluates potential VMT impacts of the proposed project primarily using the Santa Cruz County Travel Demand Model (SCCTDM) data and modeling techniques. Travel demand models are broadly considered to be the most accurate of available tools to assess VMT. Based on data provided by the potential building tenant about the facilities its members in the County currently utilize, as well as limitations of the SCCTDM (i.e., it does not account for areas outside the County boundaries, including San José), a hybrid approach that relied on both the SCCTDM and other spatial analysis techniques was developed to meet the County's VMT analysis requirements. This approach accounted for the unique trip distribution and

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<sup>1</sup> The data used in this section and the Transportation Impact and Operational Analysis in Appendix D are based on the operations of the proposed tenant the applicant (PMB Santa Cruz) currently assumes will occupy the building.



trip generation characteristics of the project, as well as for the portion of VMT that would occur outside of the area covered by the SCCTDM.

The following assumptions and facts were incorporated into the VMT modeling for the project:

1. The trip distribution (i.e., trip length), used for the calculation of VMT and trip generation was developed based on the assumption that all patients travel to the closest facility that provides the medical services they require. Although, some individuals may select a less optimal choice based on personal preference, but the probability of many patients or a substantial number of patients traveling farther than needed for required services would be low. Given this and the fact that there is not a sufficient basis or data to undertake such analysis, the VMT analysis reflects the assumption that the most optimal medical facility location, based on distance, is always selected by a healthcare consumer. It is further assumed that existing facilities of both the potential tenant of the medical office building and other healthcare systems can accommodate the demand for basic services based on this approach to trip distribution.
2. In order to account for the effect of the proposed project on healthcare consumers, VMT from a variety sources were considered, including those for existing members, population growth members, transferee members and healthcare facilities in the County. As such, VMT estimates presented for no project and project conditions include VMT to existing healthcare facilities in the County and to the proposed medical office building.
3. There are three facilities within Santa Cruz County and one in the City of San José associated with the potential tenant of the medical office building. A single facility at 250 Hospital Way in San José was selected based on its size, the availability of advanced services, and proximity for members in the County. Within the County, three potential tenant facilities were selected as the basis for the analysis; one is in the City of Watsonville, one in the City of Santa Cruz, and one in the City of Scotts Valley. The selection of these facilities presents a reasonable distribution of trips for the analysis.
4. Based on information provided by the potential tenant, a total of 10.35 percent of member trips, representing a portion of advanced services for members, are estimated to be served by the San José area facility. Based on information provided by the potential tenant, if the proposed project becomes operational, it is assumed that advanced services trips to the San José area will be reduced to 1.15 percent of the total member trips. These trips are for highly specialized services that would not be available at the proposed medical office building, such as pediatric neurology or radiation therapy for cancers. With the proposed medical office building, it is assumed that other advanced services required by members would be provided.
5. Based on data provided by the potential tenant, on average, the project would employ approximately 300 individuals per day. For the purposes of the VMT analysis, employee trips were assumed to be only commute trips. This equates to 600 total trips (i.e., 2 times 300 one-way trips), as all employee trips were conservatively assumed to be single occupancy trips.
6. Employee trip generation is based on the proportion of employees (approximately 300) that matches the allocation of healthcare consumers to each healthcare facility, regardless of system. The origin of employees is based on the existing Longitudinal Employer-Household Dynamics (LEHD) data.
7. Other trips, such as deliveries, were assumed to be minor in number and are adequately represented in terms of VMT by healthcare consumer and/or employee trips included the analysis (the full trip generation, as used for this analysis, accounts for all project trips). It is assumed that other elements of the analysis are a reasonable proxy for minor differences in any trip lengths.

8. The potential tenant's membership trips are separated among 28 different health or medical services based on market data provided by the project applicant. The market data provided is based on a market analysis produced by Pivotal Analytics for specific medical services. Pivotal Analytics provided Kimley-Horn with industry standard data that shows Healthcare Consumer information for Santa Cruz County and facilities located outside of the County operated by the potential future tenant used by members located within the County. Pivotal Analytics is based on insurance claims data and together with the market data provided by the potential tenant provides a comprehensive analysis of all medical services provided to residents of the County, including those of the potential tenants and Healthcare Consumers served by other healthcare systems. The data provides current and future healthcare demand for services by service line using insurance claims information provided by healthcare insurance companies and demographic information provided by Geolytics.
9. The potential tenant's membership forecasts for its Santa Cruz County medical office buildings for 2019 through 2040 were used as the basis for determining what percentage of trips were distributed across each of the three sources of members: existing members, population growth members, and transferee members. Data on these member sources are provided in the Transportation Impacts and Operational Analysis (see Appendix D). The potential tenant's member growth was based on the population growth percentage between 2020 and 2040, as provided for in the SCCTDM.
10. In the absence of the proposed project, transferee members that are healthcare consumers of other healthcare systems in 2040 have 33 facilities to choose from, 18 for Sutter Health ("Healthcare System A") and 15 for Dignity Health ("Healthcare System B"). The location for all facilities and the specific services offered (basic or advanced) by the other healthcare systems are summarized in the Transportation Impacts and Operation Analysis (see Appendix D). Transferees from the two other healthcare systems, combined, were assumed to provide 55 percent of the members under proposed project conditions.

The number of existing members in 2020 and the potential tenant's projected membership in 2040 for Santa Cruz County, as provided by the potential tenant, was used as the basis for distributing members across each of the three member sources: existing members, population-growth members, and transferee members. The 2020 membership was estimated to be 35,071, while the 2040 membership is projected to be 87,729, for a 20-year growth of 52,658 members. The SCCTDM was used as the basis to determine the population growth over the same 20-year period. It was conservatively determined that the population would grow by approximately 12.5 percent. The SCCTDM population distribution is the basis for the determination of healthcare consumer origins.

To determine population-growth members, the 2020 membership was multiplied by the population growth percentage for the County, resulting in a membership growth of 4,394. The remaining growth of 48,264 is assumed to be the result of transferee members. As a result, the cumulative plus project conditions assume that membership is made up of 40 percent existing members, 5 percent population-growth members, and 55 percent transferee members. Under cumulative no project conditions, the transferee members are analyzed as participants in other healthcare systems.

The project applicant-provided market data were the basis of identifying the distribution of member visits by service type and by facility. The data shows that approximately 29 percent of existing members and population-growth members would travel out of the County, to the San José area, for advanced services under the cumulative no project condition. Approximately 2.4 percent of total

member trips would continue to travel out of the County, to the San José area, under the cumulative plus project condition for the purposes of obtaining highly specialized advanced services.

VMT for the cumulative no project and the cumulative plus project condition was calculated in the same manner as Scenario A. The primary difference being that the Cumulative No Project condition considers the VMT of transferee members as it relates to other healthcare systems. It is assumed that the transferee members belong to the other two healthcare systems under the cumulative no project conditions.

To determine the distance each member travels to the closest medical facility, the Geographical Information System (GIS) functions in the TransCAD software modeling package were used. TransCAD is the most used travel demand modeling/routing software package by Metropolitan Planning Organizations (MPO) in the United States. As part of the analysis, each Traffic Analysis Zone (“TAZ”) within the model was converted to a centroid, which was subsequently associated to the nearest point feature on the closest roadway as the basis of its start point. TAZs are the smallest spatial area that a Travel Demand Model represents and are used as the basis for aggregating localized household and employment data for analysis purposes.

Subsequently, this dataset was used as the basis for a multi-path analysis utilizing TransCAD to identify logical paths and estimate trip lengths for calculating VMT. It should be noted that the analysis considers only length as the basis of impedance (rather than time) so inherently it may not perfectly reflect actual route choices. However, given the size of the dataset and the limited number of major roadways that can be utilized for portions of the trip, it was determined that length was a reasonable proxy for route determination. Further it is recognized that many trips would not occur during the peak periods of daily travel within the region and, as a result, individual travel times on roadway segments would vary throughout the day, further complicating the use of time as the basis of route selection. The resultant shortest path to each facility from each TAZ was summarized in a database for use in subsequent analysis steps.

The total VMT for medical employees was developed based on the employee/member ratio established for the proposed project and followed a similar process for determining VMT to members, except that employee trip length data were determined based on origins established based on Longitudinal Employer-Household Dynamics (“LEHD”) data.

## Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project would result in potentially significant impacts related to transportation if it would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment); or
4. Result in inadequate emergency access.

Section 15064.3 of *State CEQA Guidelines*, referenced in significance threshold 3 above, pertains to VMT. Resolution 146-2020 was adopted by the County of Santa Cruz Board of Supervisors on June 16, 2020, establishing significance thresholds for VMT impacts in the unincorporated areas of the County. Significance thresholds were adopted for specific land use types, including residential, office

or service, retail, other employment, and other customer. The adopted VMT thresholds for each land use are presented in Table 4.14-1.

**Table 4.14-1 County VMT Thresholds of Significance**

Land Use	VMT Numeric Threshold	VMT Threshold Basis
Residential	8.9 VMT/capita	15 percent below countywide average VMT per capita
Office or Service	7.4 Work VMT/Employee	15 percent below countywide average work VMT per employee
Retail	-	No net increase in countywide average, using the County as the basis instead of the tri-county region (i.e., AMBAG region)
All Other Land Uses	-	No net increase in VMT

Based on County requirements, medical office buildings are classified under the heading of “All Other Land Uses,” which provides for a threshold of significance of “no net increase in VMT.” Accordingly, the project would have a significant transportation impact under CEQA if it results in a net increase in VMT. The basic concept behind this analysis approach is that medical office buildings are similar to local retail uses in that they primarily serve pre-existing needs (i.e., they do not generate new trips, instead they meet a demand that would exist with or without the project). Based on this, it can be presumed that the introduction of a new medical office building would result in existing trips being redistributed, potentially resulting in shorter trip lengths when the medical office building opens for service and is geographically located in between existing healthcare facilities. Given that the relative number of trips is constant, shorter trip lengths result in a VMT reduction.

## b. Project Impacts and Mitigation

**Threshold 1:** Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Impact T-1** THE PROJECT WOULD IMPROVE EXISTING MULTI-MODAL CONDITIONS BY IMPROVING VEHICLE TRAVEL LANES AND INTERSECTIONS, IMPROVING CLASS II BIKE LANES AND ADDING SIDEWALKS ON SOQUEL AVENUE, AS WELL AS ON-SITE BICYCLE PARKING AND PEDESTRIAN PATHWAYS. NEW EMPLOYEES AND PATIENTS ON THE PROJECT SITE WOULD NOT SUBSTANTIALLY INCREASE TRANSIT DEMAND. THEREFORE, THE PROJECT WOULD HAVE A LESS-THAN-SIGNIFICANT IMPACT RELATED TO CONSISTENCY WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM.

The proposed project includes construction of on-site and off-site improvements to vehicle lanes, intersection operations, and bicycle and pedestrian facilities, consistent with local and regional objectives and policies, and would not substantially increase transit demand. The proposed project would not impact existing transit facilities, such as bus stops, as they do not exist within or adjacent to the project site. Therefore, the project would have a less-than-significant impact related to consistency with a program, plan, ordinance, or policy addressing the circulation system, as detailed below.

### Transit Facilities

The project would add a medical office building in an area where transit use is not currently a convenient option for travel. The nearest bus stops are located approximately three-quarters of a

mile from the project site, which may be further than some people choose to walk, especially people seeking medical treatment. By comparison, a one-quarter mile walk to bus stops is typically considered the maximum acceptable distance for average transit riders. METRO does not have plans or funding to construct a bus stop and run a transit line on Soquel Avenue near the project site. However, if METRO were to expand transit service to Soquel Avenue in the future, employees and patients could use it to travel to work and medical appointments on-site. However, transit service directly to the project site is available for disabled persons via the METRO-operated ParaCruz service, despite the lack of nearby transit stops and routes.

The Transportation Impacts and Operational Analysis estimates that the project would generate 590 weekday AM peak-hour trips and 525 PM peak-hour trips. If transit facilities were improved on Soquel Avenue, a portion of these trips would take place by bus. According to 2006-2010 U.S. Census data cited by the 2040 RTP, approximately 3 percent of County residents use transit to travel to work. This typically represents the highest level of transit ridership during the day, with other periods being lower. If it is conservatively assumed that 3 percent of employees and patrons of the proposed medical office building use transit during the peak hours of the day, this would result in approximately 18 passengers ( $0.03 \times 590 = 18$ ) during the weekday AM peak period and 16 passengers ( $0.03 \times 525 = 16$ ) during the weekday PM peak period. This level of additional transit use would have a negligible adverse effect on the transit system's ability to serve riders near the project site. Therefore, the project would have a less-than-significant impact related to consistency with a program, plan, ordinance or policy addressing transit facilities.

## Roadway Facilities

The proposed project would improve the roadway and property frontage on Soquel Avenue and improve several intersections, as described in Section 2.5.7, *Roadway and Roadway Frontage Improvements*. Frontage improvements would include a signal at the project driveway, extension of the center turn lane, new curb and gutter, sidewalk, and a striped Class II bicycle lane. All curb, gutter, and sidewalks would be constructed to County standards.

The project site is currently used primarily for storage, salvage, and salvage yard purposes. Several vehicle towing businesses, storage companies, and a concrete contractor list the site as their address. These existing uses generate vehicle trips. According to the Transportation Impacts and Operational Analysis, provided as Appendix D to this EIR, existing on-site uses generate approximately 134 vehicle trips per day. The proposed project would demolish or remove existing uses from this site, eliminating vehicle trips associated with existing and current on-site uses.

The proposed medical office building would generate new vehicle trips. According to the Transportation Impacts and Operational Analysis, provided as Appendix D to this EIR, the proposed medical office building would generate approximately 6,106 vehicle trips per day. When the approximately 134 vehicle trips per day from existing uses is subtracted, net new daily vehicle trips would be approximately 5,972, as shown in Table 4.14-2.

Table 4.14-2 Project Trip Generation

Land Use	ITE Code	Project Size	Daily Trips	AM Peak-Hour Trips	PM Peak-Hour Trips
<b>Proposed</b>					
Clinic	630	160,000 sf	6,106	590	525
<b>Existing</b>					
Various commercial <sup>1</sup>	--	--	(134) <sup>2</sup>	(26) <sup>2</sup>	(13) <sup>2</sup>
<b>Net Change</b>					
--	--	--	<b>5,972</b>	<b>564</b>	<b>512</b>

<sup>1</sup> Existing land uses on the project site include several vehicle towing and storage companies, as well as a concrete contractor.

<sup>2</sup> Existing trip generation was based on a driveway count and reduced by 21 percent because the driveway serves approximately 6.63 acres of commercial uses but the project site is 21 percent smaller (approximately 5 acres).

Source: Kimley-Horn 2021

The trips generated from the project could cause congestion on area roadways, including at local intersections. For example, some people who currently travel from the project area to the San José area for advanced medical services may instead choose to drive to the proposed medical office building for advanced medical facilities. Rather than traveling on Highway 17 or Highway 152 to San José, these people would travel on Highway 1 and local roads, such as Soquel Avenue, to access the project site. These trips could increase congestion and traffic delays, conflicting with policies to maintain acceptable traffic flow and delay times at intersections. Pursuant to Section 15064.3 of the State CEQA Guidelines, however, traffic delay resulting from a land use project shall not constitute a significant environmental impact for purposes of CEQA. Therefore, potential traffic congestion and delay resulting from the proposed project, and potentially conflicting with policies and plans pertaining to traffic congestion and delay, would be less than significant.

### Bicycle Facilities

The proposed medical office building would cause a net increase in employment on the project site, resulting in greater demand for bicycle facilities in the site's vicinity. As part of the project, the applicant would accommodate demand and improve existing facilities on roadways. As shown on Figure 2-6 in Section 2, *Project Description*, the road frontage improvements would extend from approximately 270 feet west of the project site (where improvements would connect to existing curb, gutter, and sidewalk), and eastward to the intersection of Soquel Avenue and Mattison Lane. Frontage improvements would include new curb and gutter, and sidewalk. The project will also provide Class II bicycle lane striping along approximately 4,200 feet of Soquel Avenue from Soquel Drive to just east of Mattison Lane. The bicycle lane improvements would increase safety on the County's bicycle network, as well as provide bicycle access to the project site via Soquel Avenue.

As discussed in Section 4.14.5, *Non-CEQA Related Discussion*, the project would involve modifications to the intersection of 41<sup>st</sup> Avenue and Gross Road, including a physical barrier between the limit line and the divergence of the Highway 1 southbound on-ramp on 41<sup>st</sup> Avenue. Barrier installation would require Caltrans approval. If approved, the barrier would prevent motor vehicles from jumping the queue for southbound on-ramp traffic. Preventing queue jumping would improve safety for cyclists in the Class II bike lane at the Highway 1 southbound on-ramp at 41<sup>st</sup> Avenue.

In addition to improving offsite bicycle facilities, the project would provide 160 on-site bicycle parking stalls, including for both short-term and long-term bicycle parking. Short-term bicycle parking would be located adjacent to the parking garage north entrance and at the rear of the medical office building. Thirty-six long-term covered bicycle parking spaces would be provided on the ground floor of the parking garage. Bicycle parking would be a combination of bicycle storage lockers and bicycle racks.

Proposed bicycle facilities and bicycle lane improvements would be consistent with applicable local and regional objectives and policies. Consistent with Objective 3.8b (Bicycle Use) and Policy 3.8.5 (Regional Continuity) in the County of Santa Cruz General Plan, the improved Class II bike lanes would encourage bicycle travel for work trips and enhance regional bicycle connectivity. The proposed 160 on-site bicycle parking stalls also would be consistent with Policy 3.8.4 (User Convenience), which encourages the provision of bicycle racks, lockers, and other storage facilities at destinations. Similarly, the proposed bicycle improvements would implement policies 1.3, 1.4, and 2.2 in the 2040 RTP, which seek to improve multimodal access to key destinations, close gaps in bicycle networks, and improve safety. The project would provide increased connectivity to the upcoming Chanticleer Bicycle/Pedestrian Overcrossing of Highway 1, as well as to Soquel Drive and other areas north of Highway 1. Therefore, the project would improve existing conditions for cyclists, and it would have a less-than-significant impact related to consistency with a program, plan, ordinance or policy addressing bicycle facilities.

## **Pedestrian Facilities**

The project would add a medical office building in an area with discontinuous sidewalks on Soquel Avenue. To improve pedestrian circulation, the applicant would construct an American Disabilities Act (ADA)-compliant sidewalk and ramps along the site's frontage on the south side of Soquel Avenue. The new sidewalk would extend west and east beyond the site frontage, connecting to existing sidewalks along Soquel Avenue. These improvements would fill a gap in the County's pedestrian facility network. Within the project site, internal pedestrian connections would link the proposed site entrance with parking areas and with the proposed sidewalk extension on Soquel Avenue. Because of improvements to on-site and offsite pedestrian circulation, employees and patients that choose to walk to and from the site would have adequate mobility, accessibility, and safety.

As a result, the project would be consistent with Objective 3.10 (Pedestrian Travel) in the County's General Plan, which encourages improvements that make pedestrian travel a viable means of transportation. The proposed pedestrian features also would be consistent with Policy 3.10.4, which requires that new developments construct walkways where appropriate for internal and offsite pedestrian circulation. Therefore, the project would improve existing conditions for pedestrians, and it would have a less-than-significant impact related to consistency with a program, plan, ordinance or policy addressing pedestrian facilities.

## **Mitigation Measures**

No mitigation is required.

## **Significance After Mitigation**

Impacts would be less than significant without mitigation.

**Threshold 2:** Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

**Impact T-2** IMPLEMENTATION OF THE PROPOSED PROJECT WOULD REDUCE VMT IN THE COUNTY. THEREFORE, THE PROPOSED PROJECT WOULD NOT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B).

The proposed medical office building would provide a new facility in the Santa Cruz region where advanced medical services would be available. The identified potential tenant of the building currently has limited services in Santa Cruz County. Most members of the healthcare provider in the region currently travel north to the San José area or elsewhere in the San Francisco Bay Area for advanced medical services because the potential tenant has multiple facilities in the San Francisco Bay Area. Therefore, upon opening of the proposed medical office building, the residents of the Santa Cruz region who currently travel to San José or further in the San Francisco Bay Area for advanced medical services provided by the potential tenant would instead travel to the closer medical office building on the project site. Accordingly, upon opening and operation of the project, regional VMT would be reduced compared to existing conditions because healthcare provider members would drive to the project site rather than locations in the San Francisco Bay Area. Regional VMT would be reduced because the project site is closer to population centers in the county, such as cities of Santa Cruz, Capitola, and Watsonville, than these populations centers are to San Jose and the San Francisco Bay Area. Therefore, the proposed project would reduce VMT in the short term compared to existing VMT conditions because fewer people would have to make the lengthier trip to the San Francisco Bay Area for advanced medical services.

Over time, in the long term, as the project is operational and continues to provide advanced medical services in the Santa Cruz region, people currently enrolled in or members of other healthcare providers could transfer to membership under the potential tenant of the proposed medical office building. Other existing healthcare providers in the region may provide advanced healthcare services similar to those that would be available at the proposed medical office building. Therefore, the VMT associated with these people cannot be simply assumed a reduction resulting from fewer trips to the San Francisco Bay Area. Accordingly, the Transportation Impacts and Operational Analysis analyzed potential long-term VMT, in year 2040, using the methodology described above.

The long-term VMT results of the project, represented as year 2040, is presented in Table 4.14-3. Table 4.14-3 includes both detail for basic services and advanced services and the effect of transferee members leaving other healthcare providers to become members receiving care at the proposed medical office building instead. VMT was calculated for both member trips and employee trips.

**Table 4.14-3 Total Vehicle Miles Traveled by Medical Facility and Service Type**

Analysis Condition	Total VMT per Day
<b>Patient Vehicle Miles Traveled</b>	
2040 No Project	70,906
2040 Plus Project	51,736
<i>Net Change with Project<sup>1</sup></i>	<i>-19,169</i>
<b>Employee Vehicle Miles Traveled</b>	
2040 No Project	25,279
2040 Plus Project	24,126



Analysis Condition	Total VMT per Day
<i>Net Change with Project<sup>1</sup></i>	-1,152
<b>Patient + Employee Vehicle Miles Traveled</b>	
2040 No Project	96,184
2040 Plus Project	75,862
<b><i>Net Change with Project</i></b>	<b>-20,322</b>

<sup>1</sup> Net change may not equal 2040 No Project VMT minus 2040 Plus Project VMT due to decimal rounding. VMT values are rounded to the nearest whole number.

Source: Transportation Impacts and Operational Analysis by Kimley-Horn, 2021 (see Appendix D)

As shown in Table 4.14-3, the proposed project would result in a reduction of approximately 20,322 VMT by 2040. Most of the VMT reduction would come from patients transferring healthcare they receive from existing providers in the region to the potential tenant of the proposed medical office building. However, as shown in Table 4.14-3, employee VMT would also be reduced in 2040 as a result of the proposed project. Because the proposed project would not increase VMT in the County, and would instead reduce VMT, impacts would be less than significant.

### Mitigation Measures

No mitigation is required.

### Significance After Mitigation

Impacts would be less than significant without mitigation.

**Threshold 3:** Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

**Impact T-3** THE PROPOSED PROJECT WOULD REDUCE EXISTING TRAFFIC SAFETY HAZARDS AND WOULD NOT INTRODUCE INCOMPATIBLE USES TO THE CIRCULATION SYSTEM. THEREFORE, THE PROPOSED PROJECT WOULD HAVE A LESS-THAN-SIGNIFICANT IMPACT RELATED TO SUCH HAZARDS.

The proposed project would not introduce geometric design features such as sharp curves or dangerous intersections. Project elements and conditions of approval would actually reduce existing hazards on the roadway system. As discussed in Impact T-1, the applicant would install a signal at the project driveway and a physical barrier at the intersection of 41<sup>st</sup> Avenue and Gross Road, which would reduce hazards where motor vehicles cross the path of cyclists. The Transportation Impacts and Operational Analysis also estimates that the proposed striping improvements and green paint for Class II bike lanes on Soquel Avenue would reduce the risk of collisions with motor vehicles by 19 percent. In addition, the proposed sidewalk extension and ADA-accessible ramps on Soquel Avenue would reduce existing hazards for pedestrians near the project site. Lastly, the proposed medical office building would not introduce incompatible uses such as farm equipment to the circulation system. Therefore, the proposed project would have a less-than-significant impact related to traffic safety hazards.

### Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

<b>Threshold 4:</b> Would the project result in inadequate emergency access?
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**Impact T-4** THE PROPOSED MEDICAL OFFICE BUILDING WOULD IMPROVE EXISTING ACCESS TO MEDICAL CARE IN THE COUNTY. THE PROJECT ALSO WOULD NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON TRAVEL TIMES FOR EMERGENCY VEHICLES WITH THE REQUIRED IMPLEMENTATION OF MEASURES TO IMPROVE TRAFFIC FLOW. THEREFORE, THE PROJECT WOULD HAVE A LESS-THAN-SIGNIFICANT IMPACT RELATED TO EMERGENCY ACCESS.

Although the proposed medical office building would not include emergency services, it would improve existing access to medical care in the County. As discussed in Section 2, *Project Description*, services provided at the medical office building may include advanced medical and urgent care clinics, outpatient surgery facilities, support services for urgent care and outpatient surgery. Patients who live in the vicinity of Santa Cruz and would use medical services provided by the project could experience reduced travel times, compared with traveling to more distant medical facilities in the County.

The project would add vehicle trips to roadways in the vicinity, which would affect travel times for emergency vehicles. However, as discussed in Section 4.14.5, *Non-CEQA Related Discussion*, below, the proposed project includes roadway and intersection modifications to reduce traffic delay. Therefore, the project would not substantially increase travel times for emergency vehicles on Soquel Avenue and other roadways near the project site. The project would have a less-than-significant impact related to emergency access.

## Mitigation Measures

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

### 4.14.4 Cumulative Impacts

The cumulative impacts assessment area for transportation is the entire Santa Cruz County land area. This area is appropriate because some potential impacts under CEQA, such as the adequacy of emergency access are site specific and localized. Other CEQA transportation impacts, such as VMT, are evaluated using countywide thresholds, making the County the appropriate geographic extent for the cumulative impacts assessment.

As described above for Impact T-1, the proposed project would have no impact on existing transit facilities or operations because existing transit is not near the project site. Therefore, the proposed project would have no cumulative impact on transit facilities, operations, or programs. Because the project site is not accessible by transit, more people would utilize personal vehicles to travel to and from the project site. Generally, using personal vehicles results in more air quality pollutant and GHG emissions than transit use because more trips are made. For example, a bus may carry 10 people to location that would have otherwise required 10 separate vehicles. However, as described in Section 4.3, *Air Quality*, and Section 4.7, *Greenhouse Gas Emissions*, cumulative impacts of the proposed project on air pollution and GHG emissions would be less than significant. Additionally, as described above for Impact T-2, even without transit accessibility, the proposed project would result

in a reduction of VMT in the County, which corresponds to a reduction in mobile-source air quality and GHG emissions. Therefore, potential cumulative impacts on transit would be less than significant.

The proposed project would improve bicycle and pedestrian circulation in the County because it includes improved bicycle lanes and a new pedestrian sidewalk on Soquel Avenue. Additionally, bicycle parking would be provided on the project site. Other cumulative projects listed in Section 3, *Environmental Setting*, would also include improvements and modifications to pedestrian and bicycle facilities. Therefore, cumulative impacts to bicycle and pedestrian facilities would be less than significant.

Some cumulative projects listed in Section 3, *Environmental Setting*, such as residential projects, would increase residency in the County, and thus the number of vehicles that operate in the County. Increase vehicle use could result in increased VMT in the County, depending on the origin and destination of trips. Because reasonably foreseeable future projects would increase VMT, cumulative impacts could be potentially significant. As shown in Table 4.14-3, the proposed project would result in a reduction of approximately 20,322 VMT by 2040. Most of the VMT reduction would come from patients transferring healthcare they receive from existing providers in the region to the potential tenant of the proposed medical office building. However, as shown in Table 4.14-3, employee VMT would also be reduced in 2040 as a result of the proposed project. Because the proposed project would not increase VMT in the County, and would instead reduce VMT, the proposed project would not have a cumulatively considerable contribution to the cumulative impact.

Potential impacts related to design hazards and emergency access are generally site specific and do not rise to a cumulative impact unless multiple developments are proposed in the immediate area. As described above, impacts related to these topics resulting from the proposed project would be less than significant.

#### 4.14.5 Non-CEQA Related Discussion

This section of the EIR discusses potential traffic delay conditions before and after implementation of the proposed project. In December 2019, California's Third District Court of Appeal confirmed that under SB 743, automobile delay may no longer be treated as a significant impact in CEQA analysis (*Citizens for Positive Growth & Preservation v. City of Sacramento*). Therefore, the discussion presented in this section is separate from and does not pertain to an impact or impact analysis under CEQA. This section is presented in the EIR for informational purposes only, separate from CEQA.

As described in the Transportation Impact and Operational Analysis (see Appendix D), existing traffic conditions were evaluated at selected study intersections during both the AM and PM peak hours on a typical weekday. Intersection turning movement counts of vehicles were collected during the AM peak period (7:00-9:00 AM) and PM peak period (4:00-6:00 PM) on Tuesday, October 18, 2016; Tuesday, March 6, 2018; Thursday, May 17, 2018; and Wednesday, October 3, 2018. The following study intersections were selected by the project applicant's Traffic Engineer, in consultation with County staff based on the project location, size and nature of the project, and local travel patterns:

- 1) Soquel Avenue & Capitola Road
- 2) Soquel Avenue & 7<sup>th</sup> Avenue
- 3) Soquel Drive/Soquel Avenue & Soquel Avenue

- 4) Soquel Drive & Paul Sweet Road/Highway 1 On-Off Ramps
- 5) Soquel Avenue & Highway 1 Southbound On-Off Ramps
- 6) Soquel Avenue & 17<sup>th</sup> Avenue
- 7) Soquel Avenue & Chanticleer
- 8) Soquel Avenue & Medical Office Building Driveway
- 9) Soquel Avenue/40<sup>th</sup> Avenue & Gross Road
- 10) 40<sup>th</sup> Avenue & Deanes Lane
- 11) 40<sup>th</sup> Avenue & Clares Street
- 12) 41<sup>st</sup> Avenue & Soquel Drive
- 13) 41<sup>st</sup> Avenue & Highway 1 Northbound On-Off Ramps
- 14) 41<sup>st</sup> Avenue & Highway 1 Southbound On-Off Ramps
- 15) 41<sup>st</sup> Avenue & Gross Road
- 16) 41<sup>st</sup> Avenue & Clares Street
- 17) 41<sup>st</sup> Avenue & Capitola Road
- 18) 41<sup>st</sup> Avenue & Brommer Street/Jade Street
- 19) Capitola Road & 7<sup>th</sup> Avenue
- 20) Capitola Road & 17<sup>th</sup> Avenue
- 21) Capitola Road & Chanticleer Avenue
- 22) Capitola Road & 30<sup>th</sup> Avenue
- 23) Brommer Street & 17<sup>th</sup> Avenue
- 24) Brommer Street & 30<sup>th</sup> Avenue
- 25) 17<sup>th</sup> Avenue & Portola Drive

Traffic at the study intersections was quantified through the determination of LOS, which is a qualitative measure describing operational conditions within a traffic stream. LOS has letter designations ranging from A to F, representing progressively worsening traffic operations, typically measured in the number of seconds of delay at an intersection. Table 4.14-4 shows existing LOS at the study intersections during AM and PM peak hours, as well as the agency that maintains the intersection and the type of intersection. As shown in Table 4.14-4, study intersections 4, 9, 14, 15, and 24 operate unacceptably during either AM peak hour, PM peak hour, or both AM and PM peak hours.

**Table 4.14-4 Existing Conditions: Intersection Level of Service**

Intersection	Control Type <sup>1</sup>	Maintaining Agency	AM Peak Hour		PM Peak Hour		Acceptable Operations? <sup>3</sup>
			Delay <sup>2</sup>	LOS	Delay <sup>2</sup>	LOS	
1) Soquel Ave & Capitola Rd	Signal	City of Santa Cruz (CSC)	31.4	C	29.2	C	Yes
2) Soquel Ave & 7 <sup>th</sup> Ave	Signal	Santa Cruz County (SCC)	16.8	B	17.1	B	Yes
3) Soquel Dr/Ave & Soquel Ave	Signal	Caltrans	29.5	C	30.9	C	Yes
4) Soquel Dr & Paul Sweet Rd/Highway 1 On-Off Ramps	Signal	Caltrans	<b>51.6</b>	<b>D</b>	<b>36.7</b>	<b>D</b>	<b>No; AM &amp; PM Peak Hour</b>
5) Soquel Ave & Highway 1 SB On-Off Ramps	Signal	Caltrans	27.1	C	27.7	C	Yes
6) Soquel Ave & 17 <sup>th</sup> Ave	Signal	SCC	8.7	A	9.5	A	Yes
7) Soquel Ave & Chanticleer Ave	SSSC	SCC	5.4	A	2.7	A	Yes
			13.7	B	16.9	C	Yes <sup>4</sup>
8) Soquel Ave/Proposed Driveway	SSSC	SCC	0.4	A	0.2	A	Yes
			11.3	B	14.0	B	Yes <sup>4</sup>
9) Soquel Ave/40 <sup>th</sup> Ave & Gross Rd	AWSC	SCC	10.9	B	<b>36.5</b>	<b>E</b>	<b>No; PM Peak Hour</b>
10) 40 <sup>th</sup> Ave & Deanes Lane			Not Studied <sup>5</sup>				
11) 40 <sup>th</sup> Ave & Clares Street			Not Studied <sup>5</sup>				
12) 41 <sup>st</sup> Ave & Soquel Dr	Signal	SCC	23.7	C	38.0	D	Yes
13) 41 <sup>st</sup> Ave & Highway 1 NB Ramps	Signal	Caltrans	18.3	B	14.9	B	Yes
14) 41 <sup>st</sup> Ave & Highway 1 SB Ramps	Signal	Caltrans	<b>36.7</b>	<b>D</b>	7.5	A	<b>No; AM Peak Hour</b>
15) 41 <sup>st</sup> Ave & Gross Rd	Signal	Caltrans	<b>36.6</b>	<b>D</b>	<b>46.8</b>	<b>D</b>	<b>No; AM &amp; PM Peak Hour</b>
16) 41 <sup>st</sup> Ave & Clares St	Signal	Capitola	22.6	C	26.8	C	Yes
17) 41 <sup>st</sup> Ave & Capitola Rd	Signal	Capitola	24.2	C	35.0	D	Yes
18) 41 <sup>st</sup> Ave & Brommer St/Jade St	Signal	Capitola	18.6	B	27.6	C	Yes
19) Capitola Rd & 7 <sup>th</sup> Ave	Signal	SCC	18.5	B	21.0	C	Yes
20) Capitola Rd & 17 <sup>th</sup> Ave	Signal	SCC	19.9	B	27.1	C	Yes
21) Capitola Rd & Chanticleer Ave	Signal	SCC	15.8	B	23.0	C	Yes
22) Capitola Rd & 30 <sup>th</sup> Ave	Signal	City of Capitola	20.3	C	25.4	C	Yes
23) Brommer St & 17 <sup>th</sup> Ave	Signal	SCC	21.6	C	26.3	C	Yes

Intersection	Control Type <sup>1</sup>	Maintaining Agency	AM Peak Hour		PM Peak Hour		Acceptable Operations? <sup>3</sup>
			Delay <sup>2</sup>	LOS	Delay <sup>2</sup>	LOS	
24) Brommer St & 30 <sup>th</sup> Ave	AWSC	SCC	12.0	B	38.4	E	No; PM Peak Hour
25) 17 <sup>th</sup> Ave & Portola Dr	Signal	SCC	19.4	B	20.2	C	Yes

<sup>1</sup> Signal = Signal Control; AWSC = All-Way Stop Control; SSC = Side-Street Stop Control

<sup>2</sup> Delay indicated in seconds/vehicle.

<sup>3</sup> City of Santa Cruz LOS standard is D; Caltrans LOS standard is C; County LOS standard is D; Capitola does not have a LOS standard for 41st Avenue.

<sup>4</sup> LOS is for the side-street at this intersection, which must stop at stop sign before proceeding through the intersection.

<sup>5</sup> Intersections 10 and 11 were not analyzed because the project is not expected to distribute traffic to these intersections since a barrier exists at 40th Avenue and Deanes Lane.

To help analyze the project’s influence on automobile delay and LOS, vehicle trips generated by the project were estimated using applicable trip generation rates provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (2017) and existing driveway counts at the project site. A trip is defined in the Trip Generation Manual as a single or one-directional vehicle movement with either the origin or destination at the project site. In other words, a trip can be either “to” or “from” the site. In addition, a single customer visit to a site is counted as two trips (i.e., one to and one from the site).

For purposes of determining the worst-case traffic volume on the surrounding street network, project-generated trips are typically estimated between the AM peak hour of 7:00-9:00 AM and the PM peak hour of 4:00-6:00 PM on a weekday. While the project itself may generate more traffic during other times of the day, the peak of “adjacent street traffic” represents the time period when the uses contribute to the greatest amount of congestion, and consequently traffic delay.

Trip generation rates for the ITE Land Use Code 630 (Clinic) was used to estimate new vehicle trips that the proposed project would generate. This land use code was selected because it is representative of medical labs, supporting pharmacies, and a wide range of related services, which most closely matches the project description. Existing traffic counts were collected at the existing driveway to the project site from Soquel Avenue, and the volumes were subtracted as a credit in estimating net trip generation from the project.

As shown in Table 4.14-5, the project would generate an estimated net increase of 5,972 daily trips, including 564 trips during the AM peak hour and 512 trips during the PM peak hour. This would include patient trips, delivery, and staff trips. The trip generation estimates are conservative in that they do not account for potential transportation demand management (TDM) measures that the applicant could employ to reduce vehicular travel by employees at the project site.

**Table 4.14-5 Project Trip Generation**

Land Use	ITE Code	Project Size	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
<b>Proposed</b>					
Clinic	630	160,000 sf	6,106	590	525
<b>Existing</b>					
Various commercial <sup>1</sup>	--	--	(134) <sup>2</sup>	(26) <sup>2</sup>	(13) <sup>2</sup>
<b>Net Change</b>					
--	--	--	<b>5,972</b>	<b>564</b>	<b>512</b>

<sup>1</sup> Existing land uses on the project site include several vehicle towing and storage companies.

<sup>2</sup> Existing trip generation was based on a driveway count and reduced by 21 percent because the driveway serves approximately 6.63 acres of commercial uses but the project site is 21 percent smaller (approximately 5.22 acres).

Source: Kimley Horn 2019

Traffic data was collected at four existing medical office sites that provide services that are similar to those that would be provided by the proposed project. Traffic data collected at the driveways of these four sites was used to estimate trip generation rates, which were then compared to the trip generation rates obtained from ITE data. The trip generation rates of the four sites were observed to be less (ranging from 23 percent to 52 percent less) than the ITE trip generation rates for a clinic used in the Transportation Impact and Operational Analysis. Thus, the ITE trip generation rates used in the Transportation Impact and Operational Analysis are a conservative trip generation estimate and the actual project trip generation could be lower than what is used in the Transportation Impact and Operational Analysis.

Project trips would utilize regional roadways, major arterials, and local collector roads to access the project site. Trip distribution assumptions were developed based on consultation between Kimley-Horn and County staff, Santa Cruz County Regional Transportation Commission Average Daily Traffic volumes, Caltrans Average Annual Daily Traffic volumes, the local travel demand model, and knowledge of the study area. The following summarizes the project trip distribution assumptions used in the Transportation Impact and Operational Analysis:

- 19 percent north along Highway 1
- 10 percent south along Highway 1
- 16 percent west along Soquel Avenue
- 9 percent west along Capitola Road
- 11 percent west along Brommer Avenue
- 5 percent east along Soquel Drive
- 9 percent east along Capitola Road
- 5 percent east along Jade Street
- 5 percent east along Cliff Drive
- 11 percent distributed south throughout local neighborhoods

Based on the trip generation rates and trip distribution assumptions, listed above, project trips were added to existing vehicle trips at study intersections to determined “Existing Plus Project Conditions.” Existing Plus Project Conditions were evaluated using County or State standards to

determine if unacceptable LOS would result, depending on whether the study intersection is maintained by the County or State. Based on County standards, the following conditions would result in unacceptable LOS at a County intersection:

- If the intersection operates at an acceptable LOS (i.e., LOS A, B, C, or D) without the project during the weekday peak hour and degrades to an unacceptable LOS (i.e., LOS E or F) with the project during the weekday peak hour
- If the intersection operates at an unacceptable LOS (i.e., LOS E or F) without the project during the weekday peak hour, and the volume/capacity (v/c) ratio of the sum of all critical movements at the intersection increases by 1 percent or more.

In addition, the project would result in unacceptable LOS at intersections on Caltrans roadway facilities if it:

- Causes operations to deteriorate from an acceptable level (LOS C) to an unacceptable level (LOS D or worse).
- Causes the existing measure of effectiveness (average delay) to deteriorate at a State-operated intersection operating at worse than LOS C.

Table 4.14-6 presents Existing Plus Project Conditions at the study intersections. However, Existing Plus Project Conditions presented in Table 4.14-6 does not account for the proposed roadway modifications described in Section 2.5.7, *Roadway and Road Frontage Improvements*. A discussion of how the proposed roadway modifications would influence traffic and LOS is provided following Table 4.14-6.



Table 4.14-6 Existing Plus Project Conditions: Intersection Level of Service

Intersection	Control Type <sup>1</sup>	Movement	Existing Conditions				Existing Plus Project Conditions				Acceptable Delay Exceeded? <sup>3</sup>
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay <sup>2</sup>	LOS	Delay	LOS	Delay	LOS	Delay	LOS <sup>6</sup>	
Soquel Ave & Capitola Rd	Signal	--	31.4	C	29.2	C	31.9	C	30.5	C	No
Soquel Ave & 7 <sup>th</sup> Ave	Signal	--	16.8	B	17.1	B	17.7	B	17.1	B	No
Soquel Dr/Ave & Soquel Ave	Signal	--	29.5	C	30.9	C	30.3	C	33.3	C	No
Soquel Dr & Paul Sweet Rd/Highway 1 On-Off Ramps	Signal	--	51.6	D	36.7	D	51.6	D	36.6	D	Yes
Soquel Ave & Highway 1 SB On-Off Ramps	Signal	--	27.1	C	27.7	C	28.2	C	29.4	C	No
Soquel Ave & 17 <sup>th</sup> Ave	Signal	--	8.7	A	9.5	A	10.2	B	10.8	B	No
Soquel Ave & Chanticleer Ave	SSSC	--	5.4	A	2.7	A	7.1	A	4.3	A	No
<i>Worst Approach</i>		NB	13.7	B	16.9	C	21.3	C	29.7	D	No
Soquel Ave/Proposed Driveway	SSSC/ Signal	--	0.4	A	0.2	A	5.9	A	8.4	A	No
<i>Worst Approach</i>		NB	11.3	B	14.0	B					
Soquel Ave/40 <sup>th</sup> Ave & Gross Rd	AWSC	--	10.9	B	36.5	E	14.8	B	78.4	F	Yes
41 <sup>st</sup> Ave & Soquel Dr	Signal	--	23.7	C	38.0	D	24.4	C	39.1	D	No
41 <sup>st</sup> Ave & Highway 1 NB Ramps	Signal	--	18.3	B	14.9	B	18.4	B	15.0	B	No
41 <sup>st</sup> Ave & Highway 1 SB Ramps	Signal	--	36.7	D	7.5	A	41.6	D	8.1	A	No
41 <sup>st</sup> Ave & Gross Rd	Signal	--	36.6	D	46.8	D	43.1	D	51.7	D	Yes
41 <sup>st</sup> Ave & Clares St	Signal	--	22.6	C	26.8	C	22.9	C	27.0	C	No
41 <sup>st</sup> Ave & Capitola Rd	Signal	--	24.2	C	35.0	D	25.0	C	36.0	D	No
41 <sup>st</sup> Ave & Brommer St/Jade St	Signal	--	18.6	B	27.6	C	19.3	B	28.6	C	No
Capitola Rd & 7 <sup>th</sup> Ave	Signal	--	18.5	B	21.0	C	20.9	C	24.1	C	No
Capitola Rd & 17 <sup>th</sup> Ave	Signal	--	19.9	B	27.1	C	20.5	C	28.4	C	No
Capitola Rd & Chanticleer Ave	Signal	--	15.8	B	23.0	C	16.3	B	24.1	C	No

Intersection	Control Type <sup>1</sup>	Movement	Existing Conditions				Existing Plus Project Conditions				Acceptable Delay Exceeded? <sup>3</sup>
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay <sup>2</sup>	LOS	Delay	LOS	Delay	LOS	Delay	LOS <sup>6</sup>	
Capitola Rd & 30 <sup>th</sup> Ave	Signal	--	20.3	C	25.4	C	21.2	C	25.9	C	No
Brommer St & 17 <sup>th</sup> Ave	Signal	--	21.6	C	26.3	C	22.0	C	26.9	C	No
Brommer St & 30 <sup>th</sup> Ave	AWSC	--	12.0	B	38.4	E	12.1	B	39.1	E	Yes
17 <sup>th</sup> Ave & Portola Dr	Signal	--	19.4	B	20.2	C	19.5	B	20.4	C	No

<sup>1</sup> Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control

<sup>2</sup> Delay indicated in seconds/vehicle.

<sup>3</sup> City of Santa Cruz LOS standard is D; Caltrans LOS standard is C; County LOS standard is D; Capitola does not have a LOS standard for 41st Avenue.

No study intersections would degrade from acceptable LOS to unacceptable LOS under the Existing Plus Project conditions. However, as shown in Table 4.14-6, the following intersections would continue to operate at an unacceptable LOS based on applicable standards under Existing Plus Project conditions:

- Soquel Drive & Paul Sweet Road/Highway 1 On-Off Ramps (AM & PM Peaks)
- Soquel Avenue/40th Avenue & Gross Road (PM Peak)
- 41st Avenue & Gross Road (AM & PM Peaks)
- Brommer Street & 30th Avenue (PM Peak)

As previously noted, the Existing Plus Project conditions presented in Table 4.14-6 do not account for proposed roadway and intersection modifications. The conditions in Table 4.14-6 also do not account for other future planned roadway improvements and modifications that are separate and not associated with the proposed project.

As described in Section 2.5.7, *Roadway and Road Frontage Improvements*, the proposed project includes installing a diagonal diverter at the intersection of Soquel Avenue/40<sup>th</sup> Avenue & Gross Road. The diverter would extend from the northwest corner of the intersection to the southeast corner. The diverter would be designed to prevent cut-through traffic on Gross Road through the residential neighborhood to the east along Gross Road. The diverter would also eliminate the congestion caused by the four-way stop currently in place at the intersection. With the diverter, all movements at the intersection would be uncontrolled; therefore, no delay would be attributed to this intersection. According to the Transportation Impact and Operational Analysis, with the proposed intersection improvement, traffic deficiencies at the intersection resulting from the proposed project trips would be eliminated. Additionally, according to the Transportation Impact and Operational Analysis, with the proposed intersection improvement, the travel time from Soquel Drive and Rodeo Gulch Road to the southbound Highway 1 on-ramp would decrease by approximately 44 percent.

As described in Section 2.5.7, *Roadway and Road Frontage Improvements*, the proposed project includes installing overhead signs and roadway markings at the intersection of 41<sup>st</sup> Avenue & Gross Road. The signs and markings would improve lane selection and use on the eastbound approach of Gross Road. The lane selection would be for southbound Highway 1 and northbound Highway 1 movements. A physical barrier would be installed between the limit line, which is the white line that appears across the street before an intersection or crosswalk, and the divergence of the Highway 1 southbound on-ramp on 41<sup>st</sup> Avenue to prevent vehicles from jumping the queue for southbound on-ramp traffic. In addition, the City of Capitola received a grant to install an adaptive signal system along 41st Avenue and this intersection is included in its implementation plan. The adaptive signal system would provide better coordination of traffic flow along the corridor because it measures real time vehicular demand and proportions/adjusts signal timing.

## Improvement Fees and Fair Share Contributions

The County of Santa Cruz collects Transportation Improvement Area Fees for new development in the Live Oak area. This fee includes both a transportation improvement fee to fund improvements to transportation infrastructure and a roadside improvement fee to fund roadside-related improvements. Based on the trip generation for the project, the Transportation Impact and Operational Analysis estimates this combined fee payment to be \$3,583,200. The fees would be utilized to contribute toward needed roadway or roadside improvements as determined by the

Department of Public Works to maintain operations, safety, and bicycle/pedestrian connectivity based on County's Capital Improvement Program, corridor plans, and active transportation plans. The Department of Public Works may also require additional improvements to pedestrian and bicycle facilities in the nearby network and may apply the Transportation Improvement Area Fees toward these improvements.

The project applicant has also proposed a fair share contribution toward improvements at the intersection of Brommer Street and 30<sup>th</sup> Avenue to install traffic signal controls with permissive left-turn phasing. Installation of the signal would occur within the existing road right-of-way. Existing stop signs at the intersection would be removed. Installation of a signal control with permissive left-turn phasing would cause the intersection to operate at an acceptable LOS. The project applicant would pay a fair share of 14 percent toward the improvement.

In addition, the County, along with the City of Capitola, is planning for long-term future improvements along 41<sup>st</sup> Avenues between Clares Street and Cory Street to facilitate north-south vehicular, pedestrian and bicycle circulation. Proposed future improvements along the 41<sup>st</sup> Avenue roadway would be supported by additional improvements along Gross Road, 40<sup>th</sup> Avenue, and Clares Street; as well as at the intersections of Soquel Avenue and Gross Road, Gross Road and 41<sup>st</sup>, Auto Plaza Drive and 41<sup>st</sup>, Clares Street and 40<sup>th</sup> Avenue, and Clares Street and 41<sup>st</sup> Avenue. These improvements include signal modifications, intersection control changes, restriping, sidewalk and bicycle lane improvements, and installation of a cycle track on 41<sup>st</sup> Avenue between Gross Road and Cory Street on the Highway 1 overpass. Traffic generated by the proposed project is estimated to be responsible for a portion of future growth in traffic along the corridor and, as a Condition of Approval, would be required to contribute toward the cost of these long-term improvements.

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## 4.15 Tribal Cultural Resources

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This section evaluates potential effects on tribal cultural resources related to implementation of the proposed project. This section is based primarily on a Cultural Resources Assessment prepared for the project by Dudek in October 2018. The 2018 report is included as Appendix K to this EIR.

### 4.15.1 Setting

The project site and all of Santa Cruz County are within an area traditionally occupied by the Ohlone people. Section 4.4, *Cultural Resources*, provides a full description of the prehistoric and ethnographic setting of the region and project site.

Dudek conducted a background cultural resource records search at the California Historical Resource Information System Northwest Information Center (NWIC) located at Sonoma State University to identify previous cultural resources work and previously recorded cultural resources, including tribal cultural resources within a one-half mile radius of the project site. Due to the large quantity of previously conducted studies in the area, Dudek reduced the geographic search radius to one-fourth mile radius of the project site. The records search results were received on September 14, 2018 (NWIC File No. 18-0323) and revealed no previous archaeological studies have been conducted within the project site. However, nine studies had been conducted within a one-fourth mile radius of the project site. No resources are recorded within the project site and two resources are recorded within a one-fourth mile radius of the project site: Highway 1 (P-44-000406), which runs in an east-west trajectory north of the project site, and a prehistoric lithic isolate (P-44-000412).

Dudek archaeologist Sarah Brewer conducted an archaeological survey of the project site on September 5, 2018. A Dudek archaeologist conducted an archaeological survey of the proposed stormwater outfall along Rodeo Creek Gulch on November 18, 2020. Despite visibility challenges due to the project site's current use as a junkyard and miscellaneous storage space, enough ground surface was visible to conduct an adequate inspection for cultural resources. No archaeological resources, including tribal cultural resources, were identified during either survey.

### Native American Consultation

The County conducted consultation with California Native American Tribes pursuant to Senate Bill (SB) 18 and California Government Code Section 65352.3. Due to the proposed General Plan amendment, the County notified and consulted with five California Native American Tribes. Native American tribal contacts provided by the Native American Heritage Commission (NAHC) to comply with SB 18. Following the end of the specified 90-day consulting period, no comments were received. The consultation letters sent by the County identified the project site only, since proposed off-site improvements, such as the stormwater outfall along Rodeo Creek Gulch do not require a General Plan amendment, which is the trigger for SB 18 consultation.

Dudek sent a request to the Native American Heritage Commission (NAHC) on August 13, 2018 to check the project site against their Sacred Lands File and requested a list of Native American representatives who may have additional information about cultural resources in the project vicinity. NAHC responded on August 17, 2018 with a letter confirming a negative finding on the Sacred Lands File search and providing a list of Native American representatives. No Native American groups were contacted by Dudek regarding this study. However, the County conducted

Native American consultation pursuant to state regulations. Consultation resulted in no known tribal cultural resources within the project site or off-site disturbance areas.

In December 2020, Dudek sent letters to the California Native American Tribes that the County first contacted as part of its SB 18 consultation. The follow-up letter described the proposed stormwater outfall along Rodeo Creek Gulch, which was not described in the County's consultation letters. At the time of preparation of this EIR, no responses or comments were received.

## 4.15.2 Regulatory Setting

### a. State Regulations

#### *Assembly Bill 52*

Assembly Bill (AB) 52, effective July of 2015, established a new category of resources for consideration by public agencies when approving discretionary projects under CEQA, called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. As of this writing, no California Native American tribes traditionally and culturally affiliated with the Santa Cruz County region have formally requested a consultation with the County of Santa Cruz (as Lead Agency under CEQA) regarding Tribal Cultural Resources.

Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached. Under AB 52, a TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
  - Included or determined to be eligible for inclusion in the California Register of Historic Resources
  - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

#### *Senate Bill 18*

California Government Code Section 65352.3, adopted pursuant to the requirements of Senate Bill (SB) 18, requires local governments to contact, refer plans to, and consult with tribal organizations prior to deciding to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the NAHC. As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

#### *Regulations Pertaining to Human Remains*

Section 15064.5 of the *State CEQA Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. The disposition of human remains is governed by Health and Safety Code Section 7050.5 and Public Resource Code

Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the County Coroner must be notified within 48 hours, and there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the County Coroner has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Section 15064.5 of the *State CEQA Guidelines* directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

## b. Local Regulations

### *County of Santa Cruz General Plan and Local Coastal Program*

The Santa Cruz County General Plan and Local Coastal Program provides the following objectives and policies to protect Native American cultural sites and tribal cultural resources (Santa Cruz County 1994).

**Objective 5.19. Archaeological Resources.** To protect and preserve archaeological resources for their scientific, educational and cultural values, and for their value as local heritage.

**Policy 5.19.1. Evaluation of Native American Cultural Sites.** Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites without an appropriate permit. Maintain the Native American Cultural Sites ordinance.

**Policy 5.19.5. Native American Cultural Sites.** Prohibit any disturbance of Native American Cultural Sites without an archaeological permit which requires, but is not limited to, the following:

- A statement of the goals, methods, and techniques to be employed in the excavation and analysis of the data, and the reasons why the excavation will be of value.
- A plan to ensure that artifacts and records will be properly preserved for scholarly research and public education.
- A plan for disposing of human remains in a manner satisfactory to local Native American Indian groups.

### *Native American Cultural Sites Ordinance*

The County of Santa Cruz Native American Cultural Sites Ordinance (Santa Cruz County Code Chapter 16.40) establishes regulations for the protection, enhancement, and perpetuation of Native American cultural sites in order to promote the public welfare, and to implement the stated policies of the County's General Plan and the Land Use Plan of the Local Coastal Program. The ordinance defines a Native American cultural site as any mound, midden, cave, place of settlement, burial ground, ceremonial ground, mine, trail, rock art, or other feature or location containing either human remains or artifacts of Native Californians which are at least 100 years of age. The ordinance requires an archaeological survey for discretionary projects that result in ground disturbance and will be located within a mapped archaeological sensitive area.



Whenever a Native American cultural site is discovered during the review of a proposed project any permit subsequently issued must contain whatever conditions the decision-making body determines to promote the purposes of the ordinance. Conditions could include, but are not limited to:

- Preservation of the site through project design or restrictions on use and/or grading, such as restricting improvement and grading activities to portions of the property not containing the resource, or covering the site with fill to a depth where the site will not be disturbed by development as determined by a professional archaeologist; and/or
- Excavation of the site by a professional archaeologist in order to preserve a sample of the remains, artifacts, or other evidence. Such excavation may take place only as authorized by an archaeological excavation permit.

Pursuant to the Native American Cultural Sites ordinance, any property owner who, at any time in the preparation for or process of excavating or otherwise disturbing the ground, discovers any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age, must:

1. Cease and desist from all further excavations and disturbances within 200 feet of the discovery.
2. Arrange for staking completely around the area of discovery by visible stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery; provided, however, that such staking need not take place on adjoining property unless the owner of the adjoining property authorizes such staking.
3. Notify the Sheriff-Coroner of the discovery if human remains have been discovered. Notify the Planning Director if the discovery contains no human remains.
4. Grant all duly authorized representatives of the Coroner and the Planning Director permission to enter onto the property and to take all actions consistent with the ordinance.

If the Planning Director determines that the discovery is a site of cultural significance, the Director must notify the property owner that the site is of cultural significance and that an archaeological report must be prepared and no further excavation or development may take place except as authorized by an archaeological site development approval.

### 4.15.3 Impact Analysis

#### a. Methodology and Significance Thresholds

According to Appendix G of the *State CEQA Guidelines*, the proposed project would have a significant impact to Tribal Cultural Resources if the project would:

- 1) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public

Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

## b. Project Impacts and Mitigation Measures

**Threshold 1a:** Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

**Threshold 1b:** Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

**Impact TCR-1 GRADING AND EXCAVATION REQUIRED FOR PROJECT CONSTRUCTION WOULD HAVE THE POTENTIAL TO UNEARTH AND ADVERSELY CHANGE OR DAMAGE PREVIOUSLY UNIDENTIFIED TRIBAL CULTURAL RESOURCES. IMPACTS WOULD BE POTENTIALLY SIGNIFICANT BUT MITIGABLE.**

As described in Section 4.4, *Cultural Resources*, there are no cultural resources within either the project site or off-site improvement areas that are listed or eligible for listing in the California Register of Historical Resources or in a local register. As described above, the Sacred Lands File searches for the project site and off-site stormwater outfall area along Rodeo Creek Gulch failed to indicate the presence of Native American cultural resources. Consultation with tribes pursuant to SB 18 has also not indicated that there are known tribal cultural resources within the project site or off-site improvement areas. No tribes have requested consultation with the County under AB 52.

While there are no known tribal cultural resources in the project site or off-site improvement areas, there would be potential for unknown resources to be encountered during excavation and grading required for project construction. Grading and excavation activities could damage or destroy tribal cultural resources. This would be especially a possibility while constructing the off-site stormwater outfall next to Rodeo Creek Gulch because Native American populations often congregated along streams, lakes, coast, and other water bodies in California. However, Mitigation Measures CUL-1a and CUL-1b described in Section 4.4, *Cultural Resources*, require cultural resource monitoring and avoidance requirements for cultural resources, including tribal cultural resources. With implementation of these mitigation measures, impacts would be less than significant.

### Mitigation Measures

Mitigation measures CUL-1a and CUL-1b in Section 4.4, *Cultural Resources*, are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

#### 4.15.4 Cumulative Impacts

The cumulative impacts assessment area for tribal cultural resources consists of the project site and the off-site disturbance areas associated with the project, such as the outfall area next to Rodeo Gulch. This area was selected as appropriate because implementation of the proposed project would result in no ground disturbance or associated potential to impact buried tribal cultural resources beyond these areas. Therefore, the proposed project can have no impacts on buried tribal cultural resources outside of these areas.

There are no other ongoing or reasonably foreseeable future projects within the cumulative impacts assessment area other than the proposed project. Potential impacts to tribal cultural resources associated with implementation of the proposed project are described above. With implementation of mitigation measures CUL-1a and CUL-1b, impacts would be less than significant. Therefore, the proposed project would have less than significant cumulative impacts, as well.

## 4.16 Utilities and Service Systems

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This section analyzes the environmental effects related to utilities and service systems associated with implementation of the proposed project. It discusses water and wastewater infrastructure as well as solid waste facilities. Issues related to water quality, drainage and infiltration patterns, and flood hazards are discussed in Section 4.9, *Hydrology and Water Quality*.

### 4.16.1 Setting

#### a. Water Supply and Distribution

The project site is located within the service area of the City of Santa Cruz Water Department. The department currently provides water to about 24,534 connections, serving approximately 95,251 people, within a service area that includes the City of Santa Cruz, the unincorporated Live Oak community, portions of the City of Capitola, and limited service along Highway 1 north of Santa Cruz (City of Santa Cruz 2016). A potable water main is located beneath Soquel Avenue near the project site.

Although the department supplies water from primarily local surface water sources, the remaining five percent of water supplies come from groundwater sources. Surface waters sources include the North Coast sources, San Lorenzo River, and Loch Lomond Reservoir. The North Coast sources consist of diversions from three coastal streams and a natural spring (Laguna Creek, Reggiardo Creek, Majors Creek, and Liddell Spring). The San Lorenzo River provides approximately 55 percent of the Department's water supply. Loch Lomond Reservoir has a maximum capacity of 2,810 million gallons (MG) and is fed by the Newell Creek watershed (City of Santa Cruz 2016). The Graham Hill Water Treatment Plant can process up to 16 million gallons of water per day (MGD), with a year-round average of 10 MGD and summer peak of 15 MGD (City of Santa Cruz 2020a).

The groundwater well system drawn upon by the water department includes four production wells connected to two water treatment plants in the eastern portion of the water service area. These wells draw water from the Purisima Formation, the primary aquifer underlying the entire mid-county region. This formation is composed of sandstone interbedded with layers of siltstone and claystone. Recharge occurs from deep percolation of rainfall in the upper watersheds and along streambeds.

The Department's groundwater wells are in the Santa Cruz Mid-County Groundwater Basin (Basin). The Basin was recently renamed from the Soquel-Aptos to the Santa Cruz Mid-County Groundwater Basin. Additionally, the Basin's boundaries were redefined. The basin's northern boundary is the Zayante Fault. The eastern, basin boundary is the Pajaro Valley Basin and the southern boundary is the Pacific Ocean. The Basin is bounded to the west by the Scotts Valley Basin.

The Basin is not adjudicated, meaning that pumping rights have not been set by a court or Board decision. However, the Basin was determined by the California Department of Water Resources (DWR) in 2015 to be critically overdrafted due to seawater intrusion detected near the coastline (City of Santa Cruz 2016).

#### b. Wastewater Treatment

The Santa Cruz County Sanitation District (SCCSD) provides wastewater service to the project area. Wastewater is conveyed to the City of Santa Cruz's wastewater treatment facility (WWTF). The

SCCSD serves a population of approximately 72,200 people, with 36,000 service connections, 220 miles of gravity sewers, 14 miles of force mains, and 35 pump stations (County of Santa Cruz 2017). The City of Santa Cruz WWTF has a design capacity of 17 MGD, an average daily flow of less than 10 MGD, and a design for wet weather flow or 81 MGD (City of Santa Cruz 2020b). The wastewater is treated to a secondary biological treatment level for ocean discharge. The wastewater undergoes extensive monitoring and testing to ensure compliance with regulatory pollution prevention laws.

Existing wastewater collection mains are located within and beneath Chanticleer Avenue approximately 772 feet west of the project site; the collection system conveys wastewater flows to the WWTF.

A long-standing moratorium has been in place on new hookups to the SCCSD sewer system in the Rodeo Gulch sewer basin. The SCCSD is working on obtaining funding for a replacement project that would allow the moratorium to be lifted.

### **c. Stormwater Drainage**

The County is responsible for construction and maintenance of all public stormwater facilities in the unincorporated areas. Stormwater drainage infrastructure consists of mostly man-made systems discharging into the creeks and Monterey Bay and the Pacific Ocean. Stormwater collected from the vicinity of the project site flows into Rodeo Creek Gulch, east of the site, and then into Monterey Bay via the Corcoran Lagoon.

### **d. Solid Waste Management**

Santa Cruz County Recycling and Solid Waste Services (SCCRSWS) is responsible for the operation and administration of solid waste diversion and disposal in the unincorporated County. Two solid waste facilities, the Buena Vista Landfill and the Ben Lomond Transfer Station are operated by the SCCRSWS. The SCCRSWS accepts more than 450 tons per day of solid waste (350 tons at the Buena Vista Landfill and 100 tons at the Ben Lomond Transfer Station, which is then trucked to the Buena Vista Landfill or Monterey Regional Waste Management District Landfill). The Buena Vista Landfill is a Class III facility that accepts non-hazardous residential, commercial, and industrial waste; dewatered sewage sludge; and low-level petroleum contaminated soils (County of Santa Cruz 2020a).

The total remaining capacity of the landfill is estimated at approximately 2.2 million cubic yards, with a maximum permitted capacity of 7.5 million cubic yards. The landfill's maximum permitted throughput is 838 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2020a).

### **e. Electricity, Natural Gas, and Telecommunications**

Electrical and natural gas services are provided to the project site by Central Coast Community Energy (3CE) through Pacific Gas and Electric Company (PG&E) transmission system. PG&E provides natural gas service to the project site.

AT&T, Comcast, and other telecommunications companies provide telephone and internet service to the project site and surrounding areas. These companies are compensated for their operations, maintenance, and capital improvement costs by connection and user fees, which is collected from all new development. The California Public Utilities Commission (CPUC) regulates telephone service and PG&E.

## 4.16.2 Regulatory Setting

### a. Federal

#### Clean Water Act

The Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Clean Water Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. Environmental Protection Agency (USEPA) the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the USEPA and the U.S. Army Corps of Engineers (USACE). At the state and regional levels in California, the act is administered and enforced by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs).

The SCCSD Environmental Compliance Unit (ECU) implements the federal Pretreatment Program, which was designed to protect the municipal sewer system from industrial wastewater discharges that may harm the Publicly Owned Treatment Works and damage the environment. The ECU issues wastewater discharge permits, conducts commercial industrial inspections, and performs environmental sampling. The ECU has also developed a pollution prevention program that provides services to businesses, homeowners, and the public to help with issues pertaining to the sanitary sewer (County of Santa Cruz 2020b).

#### Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) regulates public water systems that supply drinking water. 42 U.S.C. Section 300(f) et seq.; 40 Code of Federal Regulations (CFR) Section 141 et seq. The principle objective of the federal SDWA is to ensure that water from the tap is potable, meaning safe and satisfactory for drinking, cooking, and hygiene. The main components of the SDWA are to:

- Ensure that water from the tap is potable
- Prevent contamination of groundwater aquifers that are the main source of drinking water for a community
- Regulate the discharge of wastes into underground injection wells pursuant to the Underground Injection Control program (see 40 CFR Section 144)
- Regulate distribution systems

#### Title 40 of the Code of Federal Regulations

Title 40 of the CFR, Part 258 (Resource Conservation and Recovery Act, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria.

## **b. State**

### **California Safe Drinking Water Act**

The California SDWA (Health & Safety Code Section 116270 et seq.; 22 Cal. Code Regs. Section 64400 et seq.) regulates drinking water more rigorously than federal law. Like the federal SDWA, California requires that primary and secondary maximum contaminant levels be established for pollutants in drinking water; however, some California maximum contaminant levels are more protective of health. The California SDWA also requires the SWRCB to issue domestic water supply permits to public water systems.

The SWRCB enforces the federal and State SDWAs and regulates more than 7,500 public water systems across the state. Implementation of the federal SDWA is delegated to the State of California. The SWRCB's Division of Drinking Water oversees the state's comprehensive Drinking Water Program. The Drinking Water Program is the agency authorized to issue public water system permits.

### **Urban Water Management Planning Act**

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610 - 10656). The Act requires that each urban water supplier, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet per year, shall prepare, update and adopt its urban water management plan (UWMP) at least once every five years on or before December 31, in years ending in five and zero. When a water agency has prepared and adopted an UWMP in compliance with DWR requirements, it may rely on that UWMP in various respects in preparing a water supply assessment for individual planning and development approvals.

### **Model Water Efficient Landscape Ordinance**

The Water Conservation in Landscaping Act, enacted in 2006, required DWR to update the Model Water Efficient Landscape Ordinance. The updated Model Water Efficient Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances. The County of Santa Cruz adopted 2015 State Model Water Efficient Landscape Ordinance in Section 13.13.010 of the Santa Cruz County Code.

### **The Water Conservation Act of 2009 (Senate Bill X7-7 [2009])**

Requirements per state law (Senate Bill [SB] X7-7) mandate reduction of per capita water use and agricultural water use in throughout the state by 20 percent by 2020.

### **Sustainable Groundwater Management Act**

In September 2014, the governor signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins, as defined by the DWR. The project site overlies the Santa Cruz Mid-County Basin. The Santa Cruz Mid-County Groundwater Agency was established for the Basin. The Santa Cruz Mid-County Groundwater Agency developed a groundwater sustainability plan for the Basin, which was adopted November 21, 2019 and approved by DWR February 19, 2020.

## Title 22 California Code of Regulations

The California Department of Public Health promulgates and enforces state regulations for drinking water treatment facilities and distribution systems. These state regulations are at least as strict as federal drinking water regulations, although not all federal regulations are currently incorporated into corresponding state regulations. These state drinking water regulations are codified in California Code of Regulations Title 22. The California Department of Public Health also regulates the distribution and use of recycled water through California Code of Regulations Title 22.

## California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures (SB 407 [2009] Civil Code Sections 1101.1 et seq.).

## Green Building Standards Code

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (hereafter the “CALGreen Code”) that requires the installation of water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. The CALGreen Code was incorporated as Part 11 into Title 24 of the California Code of Regulations. The CALGreen Code was revised in 2013 with the revisions taking effect on January 1, 2014; however, these revisions do not have substantial implications to the water use already contemplated by the 2010 CALGreen Code. The CALGreen Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. All new development must satisfy the indoor water use infrastructure standards necessary to meet the CALGreen Code.

The CALGreen Code requires residential and nonresidential water efficiency and conservation measures for new buildings and structures that will reduce the overall potable water use inside the building by 20 percent. The 20 percent water savings can be achieved in one of the following ways: (1) installation of plumbing fixtures and fittings that meet the 20 percent reduced flow rate specified in the CALGreen Code, or (2) by demonstrating a 20 percent reduction in water use from the building “water use baseline” (California Building Standards Commission 2016).

### c. Local

#### County of Santa Cruz General Plan and Local Coastal Program

The County General Plan Parks, Recreation, and Public Services Element includes the following objectives and policies aimed at protecting water supply resources and improving utility infrastructure:

**Objective 7.18b. Water Supply Limitations.** To ensure that the level of development permitted is supportable within the limits of the County's available water supplies and within the constraints of community-wide goals for environmental quality.

**Objective 7.18c. Water Conservation.** To maximize the County's water conservation potential through a coordinated program with water purveyors and water management agencies involving



public education, financial incentives to conserve, voluntary and mandatory conservation measures, retrofit programs, run-off management and water waste regulations and enforcement.

**Policy 7.18.2. Written Commitments Confirming Water Service Required for Permits.**

Concurrent with project application, require a written commitment from the water purveyor that verifies the capability of the system to serve the proposed development. Projects shall not be approved in areas that do not have a proven, adequate water supply. A written commitment is a letter from the purveyor guaranteeing that the required level of service for the project will be available prior to the issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development project unless it determines that such project has adequate water supply available.

**Policy 7.18.3. Impacts of New Development on Water Purveyors.** Review all new development proposals to assess impacts on municipal water systems, County water districts, or small water systems. Require that either adequate service is available or that the proposed development provide for mitigation of its impacts as a condition of project approval.

**Policy 7.18.4. Improvement of Water Systems.** Support water system improvement programs for storage, treatment and distribution facilities to meet necessary water supply and fire suppression requirements.

**Policy 7.18.5. Groundwater Management.** Promote water management in the Pajaro Valley and Santa Margarita groundwater basins and the Soquel-Aptos area to protect the long-term security of water supplies and to safeguard groundwater quality and maintain stream baseflows.

**Policy 7.18.6. Water Conservation Requirements.** Utilize the best available methods for water conservation in new developments. Work with all water purveyors to implement demand management programs and water conservation measures. In areas where shortage or groundwater overdraft has been substantiated by the water purveyor, require water conservation measures for new and existing uses. Require the use of water-saving devices such as ultra-low-flow fixtures and native drought-resistant planting in new development projects to promote ongoing water conservation.

**Policy 7.18.7. Water Reuse.** Encourage the reuse and recycling of water where feasible and where reuse will not have a negative impact on public health or the environment, including the use of greywater systems, and recycling of irrigation water for irrigation purposes as acceptable to Environmental Health Services, State Department of Health Services and Regional Water Quality Control Board.

### 4.16.3 Wastewater Regulatory Setting

#### a. State

Standards for wastewater treatment plant effluent are established using state and federal water quality regulations. After treatment, wastewater effluent is either disposed of or reused as recycled water. The RWQCBs set the specific requirements for community and individual wastewater treatment and disposal and reuse facilities through the issuance of Waste Discharge Requirements, required for wastewater treatment facilities under the California Water Code Section 13260.

The treated wastewater discharged into the Pacific Ocean from the City of Santa Cruz WWTF is regulated by the Central Coast RWQCB under the National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R3-2017-0030, NPDES Permit No. CA0048194). The NPDES Permit limits

average dry weather flow to 17 MGD and maximum daily effluent flow to 81 MGD. The permit also limits total suspended solids to no more than 30 milligrams per liter (mg/L; 30-day maximum) and 45 mg/L (7-day maximum), with a minimum monthly average removal of 85 percent. Total organic carbon is limited to 17 mg/L (30-day maximum), 23 mg/L (weekly maximum), and 85 percent monthly average removal (City of Santa Cruz 2019).

The California Code of Regulations Title 22, Division 4, Chapter 3, Sections 60301 through 60355 are used to regulate recycled wastewater and are administered by the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from un-disinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for milk animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

## b. Local

### County of Santa Cruz General Plan and Local Coastal Program

The County General Plan Parks, Recreation, and Public Services Element includes the following objectives and policies aimed to ensure that sewer service and facilities are provided and maintained adequately to meet the community's current and future need for sewer collection and treatment:

**Objective 7.19. Sanitation Facilities Within the Urban Services Line.** To provide necessary and adequate sanitation services to areas of urban development within the Urban Services Line based on a trunk-line sewage collection, treatment and disposal system.

**Policy 7.19.1. Sewer Service to New Development.** Concurrent with project application, require a written commitment from the service district. A written commitment is a letter, with appropriate conditions, from the service district guaranteeing that the required level of service for the project will be available prior to issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development project unless it determines that such project has adequate sewage treatment plant capacity.

**Policy 7.19.2. Development Linkage to Downstream Sewer System Improvements.** Require new development to pay its full fair share of downstream sewer system improvements needed. In areas where cumulative sewer capacity is a problem, as indicated by the Department of Public Works, require all development to make required downstream improvements or be appropriately limited until downstream improvements are made.

**Policy 7.19.3. Sizing Sewer Facilities.** Require developers, including public agencies, to locate and size new collection systems to best serve all areas inside the Urban Services Line.

**Policy 7.22.3. Use of Low Energy Gravity Transfer Systems.** Where feasible, encourage sewage disposal systems in new development to utilize natural gravity flows to the maximum extent, reducing the energy costs associated with pumping.

## 4.16.4 Stormwater Drainage Regulatory Setting

Regulations and policies pertaining to stormwater drainage are discussed in Section 4.9, *Hydrology and Water Quality*.

## 4.16.5 Solid Waste Regulatory Setting

### a. State

#### **California Solid Waste Reuse and Recycling Access Act of 1991**

The California Solid Waste Reuse and Recycling Access Act requires areas in development programs to be set aside for collecting and loading recyclable materials. The Act required CalRecycle to develop a model ordinance for adoption by any local agency relating to adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model, or an ordinance of their own, governing adequate areas in development programs for collection and loading of recyclable materials.

#### **CALGreen Code**

CALGreen Code Section 4.408, Construction Waste Reduction, Disposal and Recycling mandates that, in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. The Code also requires the applicant to have a waste management plan for onsite sorting of construction debris.

#### **Assembly Bill 341 and Senate Bill 1383**

The purpose of Assembly Bill (AB) 341 of 2011 (Chapter 476, Statutes of 2011) is to reduce greenhouse gas (GHG) emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

In addition, SB 1383 of 2016 (Chapter 395, Statutes of 2016) established the following goals: a 50-percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2020, and a 75-percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2025. This bill also authorized CalRecycle to adopt regulations, to take effect on or after January 1, 2022, to achieve these targets.

#### **Assembly Bill 939**

AB 939 (Public Resources Code 41780) requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare source reduction and recycling elements as part of the integrated waste management plans. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

#### **Assembly Bill 1826**

AB 1826 of 2014 (Chapter 727, Statutes of 2014) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and for jurisdictions to implement a recycling program to divert organic waste from businesses subject to the law, as well as report to CalRecycle on their progress in implementing an organic waste recycling program. As of January 1, 2020, businesses that generate two cubic yards or more of solid waste per week shall arrange for organic waste recycling services.

## Senate Bill 1016

SB 1016 of 2007 (Chapter 343, Statutes of 2007) requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the CalRecycle Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Beginning January 1, 2018, the Board will be required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

### b. Local

#### County of Santa Cruz General Plan and Local Coastal Program

The County General Plan Parks, Recreation, and Public Services Element includes the following objectives and policies aim to reduce per capita solid waste disposal:

**Objective 7.24a. Integrated Waste Management System.** To conserve natural resources and energy and extend the lifespan of local landfills by instituting an integrated waste management system that consists of source reduction, recycling, composting, selective transformation and landfill disposal and that promotes waste reduction and maximizes the recovery of materials from the waste stream.

**Objective 7.24c. Materials Recovery and Source Reduction.** To meet, and exceed where feasible, the 25 percent (by 1995) and the 50 percent (by 2000) landfill diversion mandates established by the State Integrated Waste Management Act of 1989 through source reduction, recycling and composting.

**Policy 7.24.6. Recycling Opportunities and Assistance for Businesses.** Provide recycling opportunities for all businesses and other non-residential uses of land in the unincorporated County through the establishment of collection systems and technical assistance to address on-site needs and conditions.

**Policy 7.24.9. Storage Requirement for Recyclable Materials.** Require all projects, except single family dwellings, to provide sufficient and accessible space for the storage and collection of recyclable materials separate from, and in addition to, space for refuse storage and collection. Encourage owners of existing buildings to provide such space, where feasible.

**Objective 7.25a. Refuse Collection.** To protect public health and safety through the provision of efficient and economically reasonable collection services for as many sources of waste generation as practical.

**Policy 7.25.1. Requiring Space for Refuse Collection.** Require all new projects, except single family dwellings, to provide sufficient and accessible space for the storage and collection of refuse separate from, and in addition to, space for recyclable materials collection.

**Policy 7.25.2. Recyclable vs. Refuse Contracts.** Ensure that solid waste collection contracts maintain a distinction between recyclable materials and refuse.

#### County of Santa Cruz Zero Waste Plan

The County's Zero Waste Plan is intended to guide the County's solid waste management programs and future waste management decisions. This plan incorporates the reductions required by AB 939, 341, and 1826. This plan aims to maintain 75 percent diversion, provides policies and practices that

would increase diversion rates, and identifies challenges specific to the County (County of Santa Cruz 2015).

#### 4.16.6 Electricity, Gas, and Telecommunications Regulatory Setting

##### a. Federal

Federal regulations pertaining to electric power are discussed in Section 4.5, *Energy*. There are no applicable federal regulations pertaining to natural gas and telecommunications.

##### b. State

As the state's primary energy policy and planning agency, the California Energy Commission collaborates with state and federal agencies, utilities, and other stakeholders to develop and implement state energy policies. Since 1975, the California Energy Commission has been responsible for reducing the state's electricity and natural gas demand, primarily by adopting new Building and Appliance Energy Efficiency Standards that have contributed to keeping California's per capita electricity consumption relatively low.

The CPUC regulates investor-owned electric and natural gas utilities operating in California. The energy work responsibilities of the CPUC are derived from the California State Constitution, specifically Article XII, Section 3 and other sections more generally, numerous state legislative enactments and various federal statutory and administrative requirements. The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from PG&E and other natural gas utilities across California (CPUC 2020a).

State regulations and policies pertaining to electric power are discussed in Section 4.5, *Energy*.

The CPUC develops and implements policies for the telecommunication industry. The Communications Division is responsible for licensing, registration, and the processing tariffs of local exchange carriers, competitive local carriers, and non-dominant interexchange carriers. It is also responsible for registration of wireless service providers and franchising of video service providers. The Division tracks compliance with Commission decisions and monitors consumer protection and service issues and Commission reliability standards for safe and adequate service. The Communications Division is responsible for oversight and implementation of the six public purpose Universal Service Programs (CPUC 2020b).

##### c. Local

#### County of Santa Cruz General Plan and Local Coastal Program

The County General Plan Parks, Recreation, and Public Services Element includes the following objectives and policies aimed at ensuring the safe and aesthetic installation of electrical utility infrastructure:

**Objective 7.26. Electrical Distribution System.** To improve the reliability and aesthetic quality of the electrical energy distribution system in order to promote public health and safety, environmental protection, and resource conservation in the operation of existing or new energy production or distribution systems.

**Policy 7.26.1. Undergrounding Lines.** Require all new power line distribution systems and all services to new development to be placed underground.

#### 4.16.7 Impact Analysis

##### a. Methodology and Significance Thresholds

In accordance with Appendix G of the *CEQA Guidelines*, the following thresholds are used to determine if significant impacts would result from construction and operation of the proposed project:

- 1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- 2) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- 3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- 4) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and/or
- 5) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

##### b. Project Impacts and Mitigation Measures

**Threshold 1:** Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**Impact UTIL-1** THE PROJECT WOULD REQUIRE NEW CONNECTIONS TO ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATION INFRASTRUCTURE, AS WELL AS WATER SUPPLY LINES. ADDITIONALLY, NEW WASTEWATER INFRASTRUCTURE AND STORMWATER TREATMENT FACILITIES WOULD BE CONSTRUCTED AS PART OF THE PROJECT. IMPACTS FROM UTILITY CONSTRUCTION AND RELOCATION WOULD BE LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF THE MITIGATION MEASURES IDENTIFIED THROUGHOUT THIS EIR.

The proposed project would require construction of new connections to existing utilities, including water, wastewater, electricity and natural gas, and telecommunications. The City of Santa Cruz Water Department would serve the proposed project with potable water service. The proposed project would connect to existing potable water lines located within Soquel Avenue, with 35 feet of pipeline installed off-site to connect to the existing water main. Off-site water main construction would occur within the roadway area of Soquel Avenue. A joint trench for gas, electric, and communication facilities already exists along the project site frontage with Soquel Avenue. Construction of electric power and natural gas transmission pipelines would only occur within the

project site in a shallow dry utility trench, co-located with proposed underground electric and telecommunication lines.

Implementation of the proposed project requires construction of additional wastewater conveyance infrastructure, including installing pipelines to connect to the existing sanitary sewer pipeline beneath 17th Avenue, approximately 1,300 feet west of the project site. Wastewater generated by the proposed project would be collected and conveyed through a conventional gravity system through 8-inch sanitary sewer pipes located both on-site and off-site. No pump stations are proposed. Approximately 2,600 linear feet of the new 8-inch sanitary sewer pipe would be located within and beneath Soquel Avenue, Chanticleer Avenue, and Rodriguez Street. The connection of proposed new pipe and existing pipe would occur within the intersection of 17<sup>th</sup> Avenue and Rodriguez Street. The proposed project would include abandoning the existing sanitary sewer pipe beneath both Chanticleer Avenue and Rodriguez Street and installing a new pipe at a lower depth below ground surface. Existing lateral connections within Chanticleer Avenue and Rodriguez Street along approximately 1,700 linear feet would be transferred from the existing pipe to the new pipe as directed by the SCCSD. Construction of wastewater main and infrastructure would occur either within the project site or beneath existing roadway surfaces, such as Soquel Avenue, Chanticleer Avenue, and Rodriguez Street.

The proposed sanitary sewer pipe replacement activities are a result of a current moratorium on sewer connections in the Rodeo Gulch Basin. If the SCCSD upgrades sanitary sewer pipelines in the Rodeo Gulch Basin prior to commencement of construction of the proposed project, the full extent of the proposed sanitary sewer pipe replacement activities would be unnecessary. In this event, the proposed project would connect to the newly installed pipeline at Chanticleer Avenue and no replacement of pipeline within Chanticleer Avenue or Rodriguez Street would be conducted.

Construction of new stormwater infrastructure would also be required for the project. New stormwater infrastructure would include underground detention vaults as pipeline within the project site, which would discharge to a new outfall at Rodeo Creek Gulch, east of the project site. The project also proposes to redirect stormwater runoff flowing under Highway 1 to the existing Soquel Avenue drainage ditch using a large pipe traveling east along Soquel Avenue to a new outfall at Rodeo Creek Gulch, consistent with a Condition of Approval for the project.

Construction on the project site is discussed throughout this EIR, which includes the on-site construction of the required utility trenches and underground stormwater detention vaults. Additionally, construction of off-site improvements and project components, such as the proposed outfall along Rodeo Creek Gulch are evaluated as part of the proposed project throughout this EIR. For example, as discussed in Impact BIO-2 in Section 4.3, *Biological Resources*, construction of the stormwater outfall would have potentially significant mitigable impacts on riparian habitat that occurs next to Rodeo Creek Gulch. Implementation of mitigation measure BIO-2 would reduce impacts to riparian habitat to less than significant. With implementation of all mitigation measures identified in this EIR, utilities construction and relocation required for the proposed project would result in less-than-significant impacts.

## Mitigation Measures

Implementation of mitigation measures applicable to utility construction identified in this EIR is required. Applicable mitigation measures include: BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-2a, BIO-2b, CUL-1a, CUL-1b, and GEO-7.

## Significance After Mitigation

Impacts would be reduced to less than significant with implementation of mitigation measures.

**Threshold 2:** Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Impact UTIL-2** THE PROPOSED PROJECT WOULD GENERATE DEMAND FOR WATER. WATER SUPPLIES ARE INADEQUATE DURING A SINGLE DRY YEAR AND MULTIPLE DRY YEARS FOR EXISTING CONDITIONS, AS WELL AS WITH DEMAND FROM THE PROJECT. THE DEMAND OF THE PROJECT WOULD BE AN INCREMENTAL INCREASE AND NOT NECESSITATE CONSTRUCTION OF A NEW WATER SUPPLY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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Operation of the proposed project would require use and consumption of water. For example, the proposed medical office building would contain numerous bathroom facilities with sinks and toilets, all of which require water to operate. Landscaping around the proposed medical office building and parking garage would also require water for irrigation. Before issuing building permits for the proposed project, the County would require the applicant to provide a will-serve letter from the City of Santa Cruz. The will-serve letter must indicate that the City will provide the necessary water service to the project. The project applicant has provided the City's will-serve letter for the project to the County.

Projected water demands for the proposed project were based on the water use rates at an existing medical office building at 1721 Technology Drive, San José. The existing medical office building in San José is similar in size as the proposed medical office building and provides many of the same medical services that would be provided at the proposed medical office building. In 2019, the existing medical office building in San José used approximately 3.6 million gallons per year (MGY). Based on this water rate and the approximate size of the existing building in San José, water use per square foot of building space was approximately 23.62 gallons per year. As described in Section 2, *Project Description*, the proposed medical office building would be approximately 160,000 square feet. Based on a water use rate of 23.63 gallons per square foot per year, the proposed total water demand of the project would be approximately 3.8 MGY, including indoor uses (medical office building) and outdoor uses (landscaping).<sup>1</sup>

The City of Santa Cruz's 2015 UWMP was adopted in August 2016. The 2015 UWMP included existing and projected water demands for existing and projected future land uses within the City of Santa Cruz Water Department's service area. Table 4.16-1 provides a summary of the existing and projected potable water supply and demand included in the 2015 UWMP for a normal water year. Table 4.16-2 and Table 4.16-3 summarize water supply and demand during a single dry year and multiple dry years, respectively.

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<sup>1</sup> 23.62 gallons/square foot/year \* 160,000 square feet = 3,779,200 gallons per year or approximately 3.8 MGY



**Table 4.16-1 UWMP Potable Water Supply and Demand Projections: Normal Water Year**

Water Parameter	2020 Water Year (MGY)	2025 Water Year (MGY)	2030 Water Year (MGY)	2035 Water Year (MGY)
Supply	3,252	3,164	3,167	3,180
Demand	3,327	3,225	3,205	3,220
Surplus	0	0	0	0
Deficiency	75	61	38	40

Notes: MGY = million gallons per year  
 Source: City of Santa Cruz 2016

**Table 4.16-2 UWMP Potable Water Supply and Demand Projections: Single Dry Water Year**

Water Parameter	2020 Water Year (MGY)	2025 Water Year (MGY)	2030 Water Year (MGY)	2035 Water Year (MGY)
Supply	2,619	2,658	2,692	2,692
Demand	3,327	3,225	3,205	3,220
Surplus	0	0	0	0
Deficiency	708	567	513	528

Notes: MGY = million gallons per year  
 Source: City of Santa Cruz 2016

**Table 4.16-3 UWMP Potable Water Supply and Demand Projections: Multiple Dry Water Years**

Water Parameter	2020 Water Year (MGY)	2025 Water Year (MGY)	2030 Water Year (MGY)	2035 Water Year (MGY)
Supply: 1 <sup>st</sup> Year	2,430	2,377	2,377	2,381
Demand: 1 <sup>st</sup> Year	3,327	3,225	3,205	3,220
<b>Deficiency: 1<sup>st</sup> Year</b>	<b>897</b>	<b>848</b>	<b>828</b>	<b>839</b>
Supply: 2 <sup>nd</sup> Year	1,918	1,942	1,968	1,969
Demand: 2 <sup>nd</sup> Year	3,327	3,225	3,205	3,220
<b>Deficiency: 2<sup>nd</sup> Year</b>	<b>1,409</b>	<b>1,283</b>	<b>1,237</b>	<b>1,251</b>
Supply: 3 <sup>rd</sup> Year	1,597	1,567	1,580	1,581
Demand: 3 <sup>rd</sup> Year	3,327	3,225	3,205	3,220
<b>Deficiency: 3<sup>rd</sup> Year</b>	<b>1,730</b>	<b>1,658</b>	<b>1,625</b>	<b>1,639</b>

Notes: MGY = million gallons per year  
 1<sup>st</sup> year deficiency does not match single dry year deficiency presented in Table 4.17-2 because deficiency amounts are based on historic drought conditions. The multiple-year drought occurred at a different time than the single year drought used in the UWMP, and therefore, the supply amount at the onset of the droughts varied.  
 Source: City of Santa Cruz 2016

As shown in Table 4.16-1, Table 4.16-2, and Table 4.16-3, there would be insufficient water supplies to meet demand through at least 2035 in a normal water year as well as during drier water years. The UWMP plan envisioned development of the project site with up to 100 residential units based on zoning in place at the time. With implementation of the proposed project, these units would not be constructed on the project site, but elsewhere in the County (see Section 4.12, Population and

Housing). The 2015 UWMP estimates that the water use rate for residential dwelling units is 1.69 MGY. Based on this rate, the 100 residential units approved for the project site would have used approximately 168.6 MGY. The approximately 168.6 MGY that would be used for residential development on the project site would be 164.8 MGY more than the approximately 3.8 MGY that would be used for the proposed project. Therefore, the proposed project would use less water than what was envisioned for the project site in the 2015 UWMP.

Although the proposed project would use less water than was planned for the project site in the 2015 UWMP, development of the project site would generate an additional demand on a water system that would have insufficient supplies now and in the future, especially during drier water years, as shown in Table 4.16-2 and Table 4.16-3. Accordingly, there would be insufficient water supplies to meet project demand and the demand from other reasonably foreseeable future development, despite suitable infrastructure in the area, such as water mains.

Under normal water years, the 2015 UWMP does not anticipate any difficulty in meeting projected water demands, even though a slight deficit exists in the modelled projections. In single dry years, supplies are somewhat inadequate to meet expected demands by 2020 and beyond. In multiple dry years, available supplies fall substantially short of system demands.

In single dry years, additional groundwater may be relied upon, and/or the water department may withdraw additional water from the Loch Lomond supply. To address the water deficit in multiple dry years, the water department is seeking to increase water storage to 3.0 billion gallons and/or increase the reliability of peak season supply. The department has developed a framework to expand community engagement opportunities, improve water conservation efforts, and improve the reliability of the water supply.

In 2009, the City of Santa Cruz completed a comprehensive update of its Water Shortage Contingency Plan. The City's Water Shortage Contingency Plan describes the conditions that constitute a water shortage and provides guidelines, actions, and procedures for managing water supply and demand during a declared water shortage. The primary focus of the plan is on measures that reduce customer demand for water, but it also covers actions that can be implemented to stretch or increase the water supply. However, because there is little the City of Santa Cruz can do in the short run to increase the supply of water, the focus of the Water Shortage Contingency Plan is primarily on measures that reduce demand. The water shortage regulations and restrictions in the Water Shortage Contingency Plan were updated in early 2015 to integrate some changes recognized as being needed during implementation of rationing in 2014, which was a dry year. Water demand reduction regulations are adopted as Chapter 16.01 of the City of Santa Cruz Municipal Code.

In 2018, the City of Santa Cruz investigated the feasibility of a recycled water program through a regional Recycled Water Facilities Planning Study, funded in part by a grant from the State Water Board Division of Financial Assistance, Water Recycling Funding Program (City of Santa Cruz 2018). The Water Supply Advisory Committee agreed to water conservation measures and water supply reliability studies or non-recycled water elements to be in the Water Supply Augmentation Strategy, which are being further studied. The Water Supply Augmentation Strategy includes four elements to address supply shortages: additional water conservation, passive recharge of regional aquifers, active recharge of regional aquifers, and recycled water. Recommended projects include continued coordination with the Soquel Creek Water District and other adjacent agencies on water transfer and exchange programs, wherein the City provides treated surface water to the agencies for recharge of groundwater basins with the potential of water provided back to the City during shortages. The City is also exploring aquifer storage and recovery (ASR) projects to actively recharge both the Mid-County Groundwater Basin and the Santa Margarita Groundwater Basin to enhance

sustainable water supplies, as well as the enhanced treatment of wastewater to develop new supplies in the event that groundwater storage strategies are not successful. Further, the City is also pursuing the Santa Cruz Water Rights Project, which is aimed at increasing the flexibility to use surface water within the City's existing allocations.

According to a study commissioned by the City comparing project water demand and actual water demand in 2018, actual water demand was below the projected water demand (M-Cubed 2019). While the City has been successful at reducing demand for water below original projections and continues to prepare plans and contingencies to address supply shortages during drier water years, it is uncertain when these plans and contingencies will be fully in effect or operational. The proposed project, as well as other reasonably foreseeable future development could be constructed and operational before additional water supplies are obtained or realized. In such a circumstance, there would be inadequate water supplies. However, the proposed project would be constructed and operational prior to development of many of the other uses envisioned in the 2015 UWMP. Therefore, operation of the proposed project would result in an incremental increase in water demand of approximately 3.8 MGY. An incremental increase of approximately 3.8 MGY would not justify construction of a new water supply or source, such as a new desalination plant, new groundwater well, or new reservoir.

The City has provided a will-serve letter for the project. Based on the marginal supply deficit that the project may induce during very dry years, and the City's confidence in supply delivery as evidenced by their issuance of a will-serve letter, there would be no significant environmental impacts resulting from water demand generated by the proposed project. Impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

**Threshold 3:** Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**Impact UTIL-3** THE EXISTING WASTEWATER TREATMENT PROVIDER WOULD HAVE ADEQUATE CAPACITY TO TREAT WASTEWATER GENERATED BY THE PROPOSED PROJECT AS WELL AS BY EXISTING LAND USES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

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Development of the proposed project would generate a new source of wastewater, which would flow through the existing SCCSD conveyance system to the City of Santa Cruz WWTF. The project is estimated to generate approximately 0.04 MGD of wastewater,<sup>2</sup> based on the proposed medical office building land use.

County General Plan Policy 7.19.1 requires a written commitment from SCCSD be provided prior to building permit approval, stating that the district can accommodate the project. Policy 7.19.2 requires the payment of a fair share fee for any required downstream sewer improvements needed, and Policy 7.22.3 requires the use of gravity for sewage conveyance, as possible. The proposed

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<sup>2</sup> Based on a wastewater generation rate of 250 gallons per day per 1,000 gross square feet of medical offices (City of Los Angeles 2006).

project would be required to demonstrate compliance with all applicable regulations. As indicated above, the proposed project would generate up to approximately 0.04 MGD of wastewater. The WWTF has an unused but permitted treatment capacity of approximately 7.0 MGD during dry weather and approximately 50.4 MGD during peak wet weather conditions.<sup>3</sup> The proposed project would therefore account for approximately 0.57 percent of the 7.0 MGD remaining dry weather capacity and approximately 0.08 percent of the plant’s 50.4 MGD remaining wet weather capacity.

The existing wastewater treatment capacity of the WWTF would be sufficient to accommodate the proposed project. Therefore, implementation of the proposed project would not result in the need to expand the capacity of the WWTF. The proposed project would have a less than significant impact on wastewater capacity.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are indicated.

<b>Threshold 4:</b>	Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
<b>Threshold 5:</b>	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**Impact UTIL-4** THE PROPOSED PROJECT WOULD NOT GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS, OR IN EXCESS OF THE CAPACITY OF LOCAL INFRASTRUCTURE, INCLUDING THE BUENA VISTA LANDFILL. THE PROPOSED PROJECT WOULD NOT IMPAIR THE ATTAINMENT OF SOLID WASTE REDUCTION GOALS AND WOULD COMPLY WITH FEDERAL, STATE, AND LOCAL STATUTES AND REGULATIONS RELATED TO SOLID WASTE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Implementation of the proposed project would result in the addition of a 160,000 square foot medical office building. As shown in Table 4.16-4, the proposed project would generate an estimated 1.1 tons, or 2.1 cubic yards, of solid waste per day associated with the project.

**Table 4.16-4 Proposed Project Projected Solid Waste Generation**

Land Use	Size	Generation Rate <sup>1</sup>	Solid Waste Generation				
			Pounds Per Year	Tons Per Year	Cubic Yards Per Year <sup>2</sup>	Pounds Per Day	Cubic Yards Per Day <sup>2</sup>
Medical Office	160,000 sf	4.8 lb/sf/year	768,000	384	768	2,104	2.1

<sup>1</sup> Source: City of Dublin 2016

<sup>2</sup> Conversion factor assumed to be 1,000 pounds per cubic yard.

Notes: sf = square feet; lb = pounds

According to CalRecycle, the remaining capacity of the Buena Vista Landfill in 2018 was 2,200,000 cubic yards, or 1,100,000 tons. CalRecycle projects that the landfill will reach its maximum capacity in year 2031 (CalRecycle 2020a). This equates to an average annual disposal capacity of

<sup>3</sup> Based on a maximum daily flow in 2019 of 30.6 MGD (City of Santa Cruz 2019).

approximately 169,230 cubic yards per year. The SCCRTS has a remaining daily throughput capacity of 388 tons per day (838 maximum tons per day minus 450 average tons per day).

The proposed project would yield an annual solid waste generation rate of approximately 768 cubic yards per year. This accounts for approximately 0.5 percent of the average annual disposal capacity of the Buena Vista Landfill. On a daily basis, the project would yield a daily solid waste generation rate of approximately 1.1 tons per day, which accounts for approximately 0.3 percent of the remaining daily throughput capacity of 388 tons per day.

Storage space for trash and recycling is provided on site within the medical office building near the back entry/service entrance along the eastern side of the building. This area is adjacent to a service vehicle parking area along the eastern site boundary. The provision of on-site recycling facilities is consistent with regulatory goals to divert waste from landfills through recycling services, and meets the General Plan Policy requirements for the provision of on-site recycling storage and access for refuse collection at new commercial projects.

In addition, the County is required by AB 939 to divert 50 percent of solid waste from landfills. The County's Zero Waste Plan aims to consistently achieve a 75 percent reduction in landfill disposal, which the county is currently meeting. Local infrastructure would have the capacity to accommodate solid waste generated by the proposed project. The proposed project would be required to demonstrate compliance with all applicable regulations. Projected rates of solid waste disposal from the proposed project would have a less-than-significant impact in regard to local solid waste infrastructure.

### **Mitigation Measures**

Mitigation measures are not required.

### **Significance After Mitigation**

Impacts would be less than significant, and no mitigation measures are indicated.

## **4.16.8 Cumulative Impacts**

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]).

### **Water**

The geographic scope for cumulative water supply impacts is the City of Santa Cruz Water Department service area, which includes the City of Santa Cruz, Live Oak area, portions of the City of Capitola, and limited service along Highway 1 in the County. The service area also notably includes the developed portion of the University of California (UC) Santa Cruz campus, an entity in the midst of updating its own Long-Range Development Plan. The UC Santa Cruz 2021 Long Range Development Plan envisions the addition 8,500 students through 2040, which would bring total student enrollment to 28,000. This would be a 43 percent increase in total student enrollment, which is currently approximately 19,500 students. The 2021 Long Range Development Plan also plans for corresponding increases in faculty and staff and physical space to accommodate this growth. The faculty and staff size would increase by 2,200 people, bring total employee number at UC Santa Cruz to 5,000 by 2040 (UC Santa Cruz 2021a). UC Santa Cruz has also prepared a Draft EIR,

which analyzes potential environmental impacts of adopting and implementing the 2021 Long Range Development Plan (UC Santa Cruz 2021b).

The Water Department is responsible for supplying potable water to all residential, commercial, industrial, and fire protection uses within its service area, including the project site. Water supply and demand within the area are described in the 2015 UWMP. The UWMP accounts for projected buildout and growth in the region, but does not include more recently planned growth, such as the 43 percent increase in student enrollment at the UC Santa Cruz campus, which would be approximately 8,500 additional students above the current enrollment of 19,500 students.

As described above in Impact UTIL-2, the Department currently has insufficient supply to meet demand during drought years and projects that supplies will remain insufficient through at least 2035, as shown in Table 4.16-2 and Table 4.16-3, above. Pursuant to the City of Santa Cruz Municipal Code Chapter 16.01, during dry years when the Department identifies a shortage of supply to meet demand, water demand reductions must be implemented. Water demand reductions allow the Department to provide the water necessary to allow residents and businesses to function during dry periods, but most land uses must reduce consumption during operations. However, as demand is projected to increase into the foreseeable future, there would be increasingly less water supply available, particularly during multiple years or continued drought. The aforementioned growth accommodated by the UC Santa Cruz 2021 LRDP would increase demand for water. Additional development in the service area would also increase water demand, including the proposed project. Collectively, reasonably foreseeable future development and growth in the water service area would generate demand that exceeds supply such that the City would need to develop new or additional water supplies. The development and timing of new or additional water supplies are unknown at this time. For example, it is unknown if the City would develop groundwater wells to meet future demand. Therefore, it is too speculative to assess what environmental impacts would result from future water supply projects. However, development of water supplies could result in significant environmental impacts. Accordingly, the cumulative impact would be potentially significant and unavoidable. The proposed project would contribute to total water demand, and thus potential water shortages in the future alongside other development and growth in the service area. Therefore, the proposed project would contribute to the significant and unavoidable cumulative impact.

**SIGNIFICANT AND UNAVOIDABLE CUMULATIVE IMPACT: REASONABLY FORESEEABLE FUTURE GROWTH AND DEVELOPMENT IN CITY OF SANTA CRUZ WATER DEPARTMENT SERVICE AREA WOULD GENERATE WATER DEMAND THAT EXCEEDS WATER SUPPLY DURING DRIER WATER YEARS. THE CITY WOULD NEED TO DEVELOP NEW OR ADDITIONAL WATER SUPPLIES, WHICH COULD HAVE SIGNIFICANT ENVIRONMENTAL IMPACTS. THEREFORE, THE CUMULATIVE IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE. THE PROPOSED PROJECT WOULD GENERATE DEMAND FOR WATER, AND THEREFORE WOULD CONTRIBUTE TO THE SIGNIFICANT AND UNAVOIDABLE CUMULATIVE IMPACT.**

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## Wastewater

The geographic scope for cumulative wastewater facilities impacts encompasses all areas that are served by SCCSD wastewater conveyance systems and the City of Santa Cruz WWTF. This geographic scope is appropriate because, as the local wastewater operator, SCCSD and the City of Santa Cruz are responsible for treating and discharging wastewater from all land uses within its service area, including the project site. Development that is considered part of the cumulative analysis includes buildout of local general plans. Impacts would be cumulatively significant if cumulative development in the service area would exceed the capacity of the WWTF.

The WWTF has an unused but permitted treatment capacity of approximately 7.0 MGD during dry weather and approximately 50.4 MGD during peak wet weather conditions (City of Santa Cruz 2019). Cumulative buildout within the service area will continue to increase demands on the existing wastewater treatment and conveyance facilities. As discussed above under Impact UTIL-1, the proposed project would generate approximately 0.04 MGD of wastewater. The proposed project would therefore account for approximately 0.57 percent of the plant's 7.0 MGD remaining dry weather capacity and approximately 0.08 percent of the plant's 50.4 MGD remaining wet weather capacity.

According to AMBAG's population projections, Santa Cruz County's population is anticipated to increase by approximately 12 percent between 2015 and 2040 (AMBAG 2018). Although SCCSD does not provide wastewater service to the entire County, this population increase projection was used to estimate growth within the SCCSD service area to provide a conservative analysis.<sup>4</sup> Consequently, population growth in Santa Cruz County would yield an increase of 1.2 MGD during dry weather (or approximately 17 percent of the plant's 7.0 MGD remaining dry weather capacity) and 3.7 MGD during peak wet weather conditions (or approximately 7.3 percent of the plant's 50.4 MGD remaining wet weather capacity). Combined with the proposed project, cumulative growth would not exceed the capacity of the WWTF. Cumulative impacts would therefore be less than significant.

## Electric Power and Natural Gas Transmission Facilities

The geographic scope for cumulative electricity and natural gas impacts is Santa Cruz County. This geographic scope is appropriate because, as the local providers, 3CE and PG&E are responsible for transmitting electricity and natural gas to most land uses within its the County, including the project site. Development that is considered part of the cumulative analysis includes buildout of local general plans.

3CE and PG&E are subject to the requirements set forth and/or enforced by the CPUC. The need for electric and natural gas infrastructure would be addressed on a case-by-case basis for each cumulative project. Generally, if new transmission facilities are needed, the impacts of construction and operation of the facilities would be evaluated and mitigated, as applicable, in project-specific environmental review. Therefore, cumulative impacts related to electric power and natural gas transmission facilities would be less than significant.

## Telecommunication

The geographic scope for cumulative telecommunications impacts is Santa Cruz County. This geographic scope is appropriate because, local providers within the county are responsible for providing adequate telecommunication infrastructure to all land uses within the county, including the project site. Development that is considered part of the cumulative analysis includes buildout of the County's General Plan.

As discussed above under Impact UTIL-1, implementation of the proposed project requires provision of new and upgraded utility infrastructure to meet the needs of the medical office building. Improvements include telephone and cable lines. Cumulative development would increase demand for telecommunications infrastructure in the county. However, cumulative projects would each be required to provide adequate telecommunications infrastructure on a project-by-project basis and

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<sup>4</sup> The SCCSD service area includes the communities of Aptos, Capitola, Soquel, and Live Oak, which do not have specific population projections within AMBAG 2018; therefore, the overall Santa Cruz County estimate of a 12 percent increase in population (and thus in wastewater generation) was used.

would be subject to the same requirements as the proposed project. Therefore, cumulative impacts related to telecommunications infrastructure would be less than significant.

## Solid Waste

The geographic scope for cumulative solid waste impacts encompasses all areas in the region that contribute solid waste to the Buena Vista Landfill. This geographic scope is appropriate because, as the local provider, the Buena Vista Landfill is responsible for accepting solid waste from all land uses within its service area, including the project site. Development that is considered part of the cumulative analysis includes buildout of the County General Plan and buildout of cities and unincorporated areas within the county that dispose of waste at the Buena Vista Landfill, which will continue to increase solid waste generation.

As discussed in detail under Impact UTIL-4, with cumulative development, CalRecycle data shows that the Buena Vista Landfill will reach its maximum capacity in year 2031 (CalRecycle 2020a). This equates to an average annual disposal capacity of approximately 169,230 cubic yards per year. In addition, compliance with applicable solid waste regulations and with General Plan and Zero Waste Plan goals, policies, and actions would maintain or improve upon diversion rates. Cumulative development in the county would be required to adhere to policies and regulations that aim to reduce solid waste sent to the landfill via increased recycling and waste diversion. In addition, jurisdictions in the region have implemented waste diversion programs and policies in order to meet state-mandated solid waste diversion rates. For example, AB 939 requires jurisdictions to divert 50 percent of solid waste from landfills. Thus, cumulative impacts to solid waste facilities would be less than significant.

The solid waste generated by the proposed project would account for approximately 0.5 percent of the average annual disposal capacity of the Buena Vista Landfill. Although the proposed project would increase development on the project site compared to existing conditions, the Buena Vista Landfill has sufficient capacity to accommodate the projected increase in solid waste generation from the proposed project as well as other cumulative projects. A transfer station is planned to replace the Buena Vista Landfill when it reaches maximum capacity, which as stated above, is anticipated in 2031. Refuse from the transfer station would be transported to the Monterey Regional Waste Management District Landfill, also known as Monterey Peninsula Landfill. The Monterey Peninsula Landfill has approximately 48.6 million tons of capacity remaining (CalRecycle 2020b). This would be more than sufficient for accommodating the proposed project. Therefore, the project would not have a cumulatively considerable contribution.



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## 5 Other CEQA Required Discussions

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This section discusses topics required to be addressed under the State *CEQA Guidelines* and Statute that are not covered in other parts of this Environmental Impact Report (EIR), including growth-inducing impacts, irreversible environmental impacts, and impacts found to be less than significant that would be caused by the proposed project.

### 5.1 Growth Inducement

State CEQA Statute and Section 15126(d) of the CEQA Guidelines require a discussion of a project's potential to foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment, including ways in which a project could remove an obstacle to growth, among others.

Growth inducement itself is not an environmental effect but has the potential to lead to environmental effects. These environmental effects may include increased demand on other community and public services and infrastructure. Depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The project's growth-inducing potential is therefore considered significant if it could result in significant physical effects in one or more environmental issue area.

A project can have the potential to induce direct and/or indirect growth. A project would directly induce growth by resulting in construction of new housing. It is important to note that direct forms of growth have secondary effects of expanding the size of local markets and attracting additional economic activity to the area. A project would indirectly induce growth by resulting in:

- Substantial new permanent employment opportunities (e.g., commercial or industrial);
- A construction effort with substantial short-term employment opportunities that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- Removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

#### 5.1.1 Population Growth

As discussed in Section 4.12, *Population and Housing*, the proposed project would not directly generate population growth because it does not include residential uses. However, the proposed medical facility development may indirectly increase the population if all new employees relocated near to the project area. As described in Section 2, *Project Description*, the proposed medical facility would employ up to approximately 300 people. Considering a worst-case scenario, if all projected

employees and their families were to relocate to Santa Cruz County, there would be a population growth of approximately 789 persons based on the average household size of 2.63 persons for Santa Cruz County (California Department of Finance 2020). As determined by the California Department of Finance and Association of Monterey Bay Area Governments (AMBAG), the current population of Santa Cruz County is 271,233 and the population forecast for 2040 is 306,881 in 2040 (California Department of Finance 2020; AMBAG 2018). Therefore, a population growth of 789 people could be accommodated within the growth projections for the County. It is assumed to be unlikely every future project employee would relocate to Santa Cruz County, but instead that many positions would be filled by people already residing in the County. Furthermore, it can be assumed that many positions would not be filled by primary household wage earners that would be motivated to relocate families to Santa Cruz County for the positions. Finally, it can be assumed that a portion of the medical services provided would be relocated from other providers already established in the County, and that no change in County residency or population would occur from this segment of the work force that would occupy the project.

### 5.1.2 Economic Growth

The proposed project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, construction of the project would not be growth-inducing from a temporary employment standpoint. However, the proposed project would also add long-term employment opportunities associated with operation of a medical facility. As described in Section 2, *Project Description*, the proposed medical facility would employ up to approximately 300 people.

The AMBAG forecasts that 16,504 jobs will be added in Santa Cruz County between 2020 and 2040 (AMBAG 2018). The approximately 300 jobs anticipated by the proposed project would be approximately 2 percent of job growth between 2020 and 2040 and well within the employment forecasts. The proposed project would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development subject to discretionary permits in or around Santa Cruz County would be addressed as part of the CEQA environmental review required for such development projects.

### 5.1.3 Removal of Obstacles to Growth

The proposed project is in an urbanized area that is well served by existing infrastructure. As discussed in Section 4.16, *Utilities and Service Systems*, existing infrastructure in the project area would be adequate to serve the project. Improvements to water, sanitary sewer, and drainage connection infrastructure would be needed, but would be sized to specifically serve the proposed project. As described in Section 2, *Project Description*, approximately 2,600 linear feet of the new sanitary sewer pipe would be located within and beneath Soquel Avenue, Chanticleer Avenue, and Rodriguez Street. However, Soquel Avenue, Chanticleer Avenue, and Rodriguez Street are already developed, and new sewer line would not remove an obstacle to growth. No new roads would be required. Because the project constitutes redevelopment within a developed area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

## 5.2 Irreversible Environmental Effects

Sections 15126.2 and 15127 of the CEQA Guidelines require that EIRs contain a discussion of significant irreversible environmental changes for certain actions and projects, including amendments to plans, such as General Plans. This section addresses irreversible environmental effects associated with the proposed project.

The proposed project would develop a medical office building and associated garage and infrastructure on a site currently used primarily for storage, salvage, and salvage yard purposes. Construction and operation of the project would involve an irreversible commitment of construction materials and non-renewable energy resources. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the medical building, parking garage, sidewalks and driveways, and other related infrastructure, such as water and sanitary sewer main. Consumption of these resources would occur with any development in the region and are not unique to the proposed project.

The proposed project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building design and rooftop solar panels on the proposed parking garage would offset this demand to some degree by reducing energy demands of the project. As discussed in Section 2.0, *Project Description*, the proposed project's design features would meet LEED Gold or equivalent standards, using less water and energy and reducing greenhouse gas emissions when compared to a commercial building that is not built to LEED standards. Solar panels and water conservation features would be incorporated into the project design to reduce the building's energy utilization and achieve LEED certification. In addition, the project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. Consequently, the project would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant, as discussed in Section 4.5, *Energy*. Again, consumption of these resources would occur with any development in the region and is not unique to the proposed project.

The project would also require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services, which are not necessarily environmental resources in themselves. Nonetheless, as discussed in Section 4.13, *Public Services*, and Section 4.16, *Utilities and Service Systems*, direct and indirect impacts to these service systems would not be significant. However, as discussed in Section 4.16, *Utilities and Service Systems*, reasonably foreseeable future growth in the water service area would result in significant and unavoidable cumulative impacts due to water supply shortages during drier water years.

## 5.3 Impacts Found to be Less than Significant

During evaluation of the proposed project, certain impact areas included in the CEQA Appendix G checklist were found to have a less than significant impact or no impact. As allowed under *CEQA Guidelines* Section 15128, this section discusses why impacts to these environmental topics were

determined to have a less-than-significant impact or no impact and therefore are not discussed in detail in the Draft Environmental Impact Report (EIR) as individual sections.

### 5.3.1 Agriculture and Forestry Resources

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the project 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 conversion of forest land to non-forest use?*

The project site is not zoned for agriculture or forest resource production. The project site is in the RM-2-R (Multi-Family Residential) zoning district. Farmland, as mapped by the Farmland Mapping and Monitoring Program, does not occur on the project site (California Department of Conservation 2020). The project site is used primarily for storage, salvage, and salvage yard purposes. Temporary storage containers are dispersed across much of the site, as are vehicles, boats, and campers which appear either no longer operational or rarely operated. In addition to temporary storage containers, the site contains an office trailer and attached workshop and three sheds. The project site is not used for agriculture or forestry. Agriculture and forestry resources are not present. Therefore, the proposed project would have no impacts regarding agriculture and forestry resources.

### 5.3.2 Mineral Resources

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project 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?*

The project site is used primarily for storage, salvage, and salvage yard purposes. The site is not used for mineral extraction. According to the 1994 General Plan and Local Coastal Program for the County of Santa Cruz, California, the nearest mineral resource area to the project site is in the Scotts Valley area, which is approximately 5 miles northwest of the project site (County of Santa Cruz 1994). Because mineral sources are not present in the project site or near the project site, the proposed project would have no impacts to mineral resources.

### 5.3.3 Recreation

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project is a medical office building with adjacent parking garage and would not increase residential population in the region, thus would not directly result in an increased demand for and use of existing recreational facilities. Although people may move to the region to work at the proposed medical office building, the number of new employees would be expected to be nominal and not result in deterioration of existing recreational facilities. New employees would be able to utilize existing recreational facilities in the region, such as Chanticleer Avenue Park and Coffee Lane Park near the project site. As described in Section 2, *Project Description*, the proposed project includes a new bicycle lane on Soquel Avenue. Bicycle lanes could be used for commute purposes, but also for recreational cycling. However, new recreational facilities, such as parks and playfields would not be necessary.

The project site does not contain any recreational facilities or opportunities that would be impacted by the project. The site is private property that is currently used as a junkyard and miscellaneous storage area. Although the project includes a path in a landscaped area behind the building, this area is intended to be an outdoor waiting area for patients and break area for medical staff. Therefore, impacts to recreational facilities would be less than significant.

#### 5.3.4 Wildfire

*If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is located approximately 1.5 miles south from lands classified as moderate fire severity zones and over two miles from lands classified as very high fire hazard severity zones (California Department of Forestry & Fire Protection 2007). The project site is developed as a junkyard and miscellaneous storage area and surrounded by urban and built up lands. Development of a medical office building and parking garage on the site would not substantially change the existing fire hazards in the area. The project would require standard infrastructure associated with office development, such as water and electricity. This would include installation of fire suppression infrastructure within the project, which would ameliorate conditions over their current status in terms of fire suppression at the site. The project site is not adjacent to wildland fuels, such as forest, chaparral, or annual grasslands. Therefore, impacts would be less than significant.

## 5.4 Significant Impacts Which Cannot be Avoid if the Proposed Project is Implemented

As described in Section 4.16, *Utilities and Service Systems*, reasonably foreseeable future development and growth with the service area of the City of Santa Cruz Water Department would generate demand for water that substantially exceeds supplies, especially during drier water years. Combined, future development and growth would require the City to develop a new or additional water supply to meet demand, which could result in physical environmental impacts. Therefore, there would be a significant and avoidable cumulative impact related to water supplies. The proposed project would generate demand for water, like other reasonably foreseeable future projects in the water service area. Therefore, the proposed project would contribute to the significant and unavoidable impact related to water supplies.

## 6 Alternatives

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### 6.1 Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this EIR chapter contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of an alternatives analysis under CEQA is to provide decision-makers and the public with a reasonable range of feasible alternatives to the proposed project that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects.

Analysis of four alternatives to the proposed project is provided for informational purposes and to allow decision-makers to consider the project in light of hypothetical alternative development scenarios, thereby promoting CEQA's purpose as an information disclosure statute. This analysis is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

### 6.2 Potentially Significant Impacts

The project was analyzed for potentially significant impacts related to each of the environmental issues discussed in Sections 4.1 through 4.16. The results of the analysis indicate that the proposed project would contribute to a significant and unavoidable cumulative impact to water supply. As discussed in Section 4.16, *Utilities and Service Systems*, the City of Santa Cruz Water Department would provide water to the proposed project. The City's water supply is insufficient to meet demand during droughts and drier water years and is expected to continue to be insufficient in the future, based on the 2015 Urban Water Management Plan (UWMP). In those years, conservation and other management measures are taken. As cumulative development and growth within the water service area continues, the demand for water would exceed supply such that the City would have to obtain more water supply, possibly from a new or additional water source. The development of a new water supply, such as a groundwater well site or reservoir could have potentially significant environmental impacts, depending upon where it is located. Therefore, the cumulative impact of the proposed project related to water supply would be significant and unavoidable at any level of water use, and the proposed project would contribute to the water shortage, and therefore result in a significant and unavoidable cumulative impact. This impact is the responsibility of another agency – the City of Santa Cruz Water Department – which is preparing an updated Urban Water Management Plan that is not yet completed and adopted.

Additionally, mitigation measures were identified for the following topics that would reduce the respective potentially significant impacts of the project to less than significant:



- Aesthetics, specifically effects of illuminated signage visible from Highway 1 (mitigated to less-than-significant impact level by Mitigation Measure AES-2)
- Biological Resources, specifically effects on wildlife species (western pond turtle, pallid bat, Townsend’s big-eared bat, California giant salamander, white-tailed kite, San Francisco dusky footed woodrat, and migratory nesting birds) identified as candidate, sensitive, or special status (mitigated to less-than-significant impact level by Mitigation Measures BIO-1a through 1d)
- Biological Resources, specifically effects on riparian habitat and jurisdictional waters of the State (mitigated to less-than-significant impact level by Mitigation Measure BIO-2)
- Cultural Resources, specifically effects on significance of previously undiscovered, subsurface historic or archeological resources (mitigated to less-than-significant impact level by Mitigation Measures CUL-1a and 1b)
- Geology and Soils, specifically effects on persons and structures due to seismic-related ground failure (liquefaction, landslides, lateral spreading, subsidence, unstable geologic units, and expansive soils) and shaking (mitigated to less-than-significant impact level by Mitigation Measure GEO-2)
- Geology and Soils, specifically effects on significance of previously undiscovered, subsurface, paleontological resources (marine vertebrate fossils) or unique geologic features (mitigated to less-than-significant impact level by Mitigation Measure GEO-7)
- Hazards and Hazardous Materials, specifically effects related to exposure of persons to hazardous materials (asbestos, lead, TPH, VOC, petroleum hydrocarbons, soil vapor) during construction (mitigated to less-than-significant impact level by Mitigation Measures HAZ-2a through 2c)
- Hydrology and Water Quality, specifically effects related to water quality and contamination of downstream waterbodies associated with the on-site stormwater treatment and detention facilities and altered drainage patterns and increased and/or polluted runoff (mitigated to less-than-significant impact level by Mitigation Measures HWQ-1)
- Tribal Cultural Resources, specifically effects on significance of previously undiscovered, subsurface tribal cultural resources (mitigated to less-than-significant impact level by Mitigation Measures CUL-1a and 1b)
- Utilities and Service Systems, specifically effects related to construction, undergrounding, and connection of utility infrastructure (mitigated to less-than-significant impact level by Mitigation Measures BIO-1a through 1d, CUL-1a and 1b, and GEO-7)

## 6.3 Project Objectives

As discussed in Chapter 2.0, *Project Description*, the objectives for the proposed project, are to:

- Develop a medical office building containing no less than approximately 160,000 square feet of medical office space that is capable of providing a diverse range of consolidated outpatient services-such as primary care, specialty care, ancillary healthcare, retail services, and educational programs.
- Locate the medical office building in a centralized location within the County on a key transportation corridor thereby reducing out of County health trips, encouraging virtual care where appropriate.
- Implement a voluntary transportation demand management plan that furthers County 511 programs, such as Ride Amigos, Emergency Ride Home, and bike-share programs.

- Provide an enclosed parking structure of approximately 730 parking spaces with convenient and safe pedestrian access to the medical office building to ensure that there is adequate, accessible on-site parking to serve both employees and members.
- Develop a medical office building with adequate square footage and a minimum of 46,000 gross square feet per floor to accommodate current and future technological advances, thereby allowing the building to be relevant today and into the future by providing the infrastructure for healthcare planning modules, adjacent complimentary programs, and the appropriate scale to allow for future adaptability while at the same time remaining operational.
- Redevelop a highly visible, underutilized site used for storage, salvage, and a concrete contractor with a modern, attractive, LEED Gold certified, energy efficient, community-serving healthcare use.

## 6.4 Alternatives to the Proposed Project

Included in this analysis are four alternatives, including the CEQA-required “no project” alternative that involve changes to the project that may reduce the project-related environmental impacts as identified in this EIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project.

The following alternatives are evaluated in this EIR:

- **Alternative 1 (No Project):** Under the No Project Alternative, the proposed project would not be constructed. Rather, the existing site would remain operational for storage, vehicle towing, and salvage yard purposes, consistent with current conditions. In addition, the on-site office trailer and attached workshop measuring approximately 2,300 square feet and three sheds ranging from 215 to 1,300 square feet would remain operational. No roadway, landscaping, utility, vehicle parking, or bicycle parking improvements would occur.
- **Alternative 2 (Approved Land Use):** Under the Approved Land Use Alternative, the proposed project would not be constructed. Rather, the existing site would be redeveloped with 100 residential multi-family units, which is the approved land use for the site. It is assumed that the residential buildings could be up to 35 feet in height, which is the maximum allowable height for structures in the Regional Housing Need (R) Combining District, with driveways for ingress and egress from Soquel Avenue, as well as internal roadways for circulation within in the project site. Similar to the proposed project, it is also assumed that this alternative would include active open space area, require connection to existing utility infrastructure, include replacement of the sanitary sewer main beneath Soquel Avenue, Chanticleer Avenue and Rodriguez Street, and require construction of a new stormwater outfall at Rodeo Creek Gulch. These assumptions are based on the fact that residential units would require wastewater treatment and other utilities, and that residential development would increase impervious surface requiring development of stormwater management.
- **Alternative 3 (Reduced Project):** Under the Reduced Project Alternative, the proposed project would not be constructed. Rather, the existing site would be redeveloped with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project. As such, the top floor of both the medical office building and parking garage included under the proposed project would be eliminated. In addition, the occupant load would be reduced by 25 percent, for a total occupant load of 1,334 persons. Roadway, landscaping, and utility improvements similar

in scope and location to the proposed project would occur. Vehicle parking would occur but reduced by approximately 25 percent in provision amount compared to the proposed project.

- **Alternative 4 (Alternate Location - Thurber):** Under the Alternate Location - Thurber Alternative, the proposed medical office building and parking garage would be built on an alternate property within the County known locally as the “Thurber” property. The Thurber property is located on the northeast corner of Thurber Lane and Soquel Drive, which is approximately 0.32 mile to the northwest of the project site. The Thurber property is approximately 6.2 acres in size and identified as APN 025-351-19. This alternative assumes that the medical office building and parking garage would be approximately the same size and design as the proposed project, only located on the Thurber site instead of the project site. The Alternative Location – Thurber analysis includes two variations: Scenario 4-A assumes that the stream on the site remains daylighted, and Scenario 4-B assumes that the stream on the site is piped, connecting to existing pipes at both the north and south ends of the Thurber property. The square footage of the proposed buildings would remain the same, and so this means that building(s) in Scenario 4-A, which would have fewer acres of developable area than the proposed project, would potentially be taller, in order to shift building footprint off the ground and onto higher floor(s). Under this alternative, the parking garage could also be designed with a subterranean level. Additionally, this alternative assumes that the existing storage/salvage uses and trailer offices/workshop at the proposed project site would persist into the reasonably foreseeable future.

## 6.5 Alternative 1 (No Project)

### 6.5.1 Description

*CEQA Guidelines* Section 15126.6(e) requires Environmental Impact Reports (EIRs) to evaluate a “No Project Alternative,” which is defined as the “circumstance under which the project does not proceed.” Under Alternative 1 (No Project), the proposed project would not be constructed, and the existing site would remain operational for storage, vehicle towing, and salvage yard purposes. In addition, the on-site office trailer and attached workshop measuring approximately 2,300 square feet and three sheds ranging from 215 to 1,300 square feet would remain operational. No roadway, landscaping, utility, vehicle parking, or bicycle parking improvements would occur.

### 6.5.2 Impact Analysis

#### a. Aesthetics

Under the No Project Alternative, the project site would not be redeveloped, the on-site storage, vehicle tow, and storage uses would remain operational, the approximately 12-foot-tall office trailer offices, workshop, and sheds would remain, and roadways/landscaping/utilities would remain the same. The new medical office building and associated parking structure would not be constructed and operated on the project site, nor would the various utility, landscape, and roadway improvements occur. There would be no change in visual character, views, nighttime lighting, daytime glare, or shadow, as there would be no change to the existing on-site buildings, parking area, streets, utility lines, topography, or vegetation/landscaping. Thus, there would be no aesthetics impacts under this alternative.

The proposed project impacts related to aesthetics would be less than significant with mitigation (see Section 4.1, *Aesthetics*). The No Project Alternative would result in no change to the visual

environment, whereas the proposed project would completely transform the visual character of the site. However, this alternative would also not have the potentially beneficial changes to the aesthetics of the site that would result from the proposed project, such as removing dilapidated vehicles and miscellaneous debris from the existing visually unappealing site.

### **b. Air Quality**

Under the No Project Alternative, there would be no change related to criteria pollutant and toxic air contaminant emissions, as there would be no change to the existing on-site structures and associated operations or daily vehicle trips. Thus, there would be no impacts to existing air quality under this alternative.

The proposed project impacts related to air quality would be less than significant (see Section 4.2, *Air Quality*). The No Project Alternative would result in lower levels of criteria pollutant and toxic air contaminant emissions from on-site uses compared to the proposed project. However, this alternative would not reduce regional vehicle miles traveled (VMT) because people in the region would continue to travel to the San Francisco Bay Area for some medical services rather than to the project site, which would reduce out-of-area travel. Therefore, the pollutant emissions from mobile sources, such as vehicles, would be greater when compared with the proposed project emissions, but site emissions would be no different from existing conditions.

### **c. Biological Resources**

Under the No Project Alternative, the new medical office building would not be constructed and operated on the project site, nor would the various utility, landscape, and street improvements occur. There would be no change related to wildlife, habitat, and waters of the United States on the project site or within off-site improvement areas, such as along Rodeo Creek Gulch. The No Project Alternative would also not include cleanup activities to remove on-site debris or new tree plantings, nor would there be potential impacts to nesting birds, bats, and turtles. Thus, there would be no biological resources impacted or enhanced under this alternative compared with existing conditions.

The proposed project impacts related to biological resources would be less than significant with mitigation (see Section 4.3, *Biological Resources*). Because the No Project Alternative would have no impact, biological resources impacts would be lesser compared to the proposed project.

### **d. Cultural Resources**

Under the No Project Alternative, the existing conditions on-site and in off-site improvement areas would remain unchanged. As such, there would be no change in archeological resources, as there would be no construction-related ground disturbance or associated potential disturbance to buried cultural resources. No historic resources occur within the project site or off-site improvement areas. Thus, there would be no cultural resources impacts under this alternative.

The proposed project impacts related to cultural resources would be less than significant with mitigation (see Section 4.4, *Cultural Resources*). Therefore, the No Project Alternative would have a lesser level of cultural resources impact compared to the proposed project.

### **e. Energy**

Under the No Project Alternative, there would be no change related to energy consumption, as there would be no change to the existing on-site structures or associated operations or daily vehicle trips. Thus, there would be no impact related to existing energy consumption under this alternative.

The proposed project impacts to energy would be less than significant (see Section 4.5, *Energy*). Therefore, the No Project Alternative would result in lesser energy impacts compared to the proposed project. However, this alternative would not reduce regional VMT because people in the region would continue to travel to the San Francisco Bay Area for some medical services rather than to the project site. Therefore, the reduction in energy consumption from vehicle travel that would result from reduced VMT would not occur under this alternative, unlike the proposed project. However, compared to existing conditions, the No Project Alternative would have no impact on existing conditions.

#### **f. Geology and Soils**

The No Project Alternative would not involve any site preparation or construction. Thus, there would be no disturbance to soils or the underlying geology on the project site or in off-site improvement areas, such as next to Rodeo Creek Gulch. No new structures or infrastructure would be constructed that would otherwise be subject to risk of damage from seismicity or ground failure. Additionally, there would be no potential to encounter or damage buried paleontological resources under the No Project Alternative. Existing structures on-site may not meet current seismic safety code and would remain on-site under this alternative. However, this could be consistent with existing conditions. The No Project Alternative would have no impact on geology and soils.

The proposed project impacts related to geology and soils would be less than significant with mitigation (see Section 4.5, *Geology and Soils*). Therefore, the No Project Alternative would have a lesser level of geology and soils impacts compared to the proposed project.

#### **g. Greenhouse Gas Emissions**

There would be no change related to greenhouse gas (GHG) emission generation, as there would be no change to the existing on-site structures or associated operations or daily vehicle trips. Thus, there would be no impact related to existing GHG emissions under this alternative. However, unlike the proposed project, the No Project Alternative would not reduce regional VMT because people in the region would continue to travel to the San Francisco Bay Area for some medical services rather than to the project site. Therefore, the GHG emissions from vehicles would be greater when compared with the proposed project emissions, but no different from existing conditions.

#### **h. Hazards and Hazardous Materials**

The proposed project would have potential to release lead-based paint, asbestos-containing materials, TPH, VOC, pesticides, or petroleum hydrocarbons and solvents during demolition of existing structures on-site and project construction. Since there would be no demolition of the existing on-site structures and no new construction, no impacts related to potential exposure to lead-based paint, asbestos-containing materials, TPH, VOC, pesticides, or petroleum hydrocarbons and solvents would occur from the No Project Alternative. Therefore, this alternative would have no impact to existing hazards and hazardous materials conditions. Impacts would be lesser compared to the proposed project.

#### **i. Hydrology and Water Quality**

The No Project Alternative would require no construction or ground disturbance. Thus, there would be no potential to remove vegetation and expose and loosen topsoil. Therefore, there would be no potential for increased soil erosion and resultant adverse sedimentation and siltation impacts to surface waters. Because existing conditions would remain unchanged under the No Project

Alternative, drainage patterns and stormwater treatment infrastructure would not be modified from current conditions. Precipitation would continue to flow overland on the project site. Thus, the No Project Alternative would have no hydrology and water quality impacts. Impacts would be lesser than the proposed project, which would have less than significant impacts with implementation of mitigation measures (see Section 4.9, *Hydrology and Water Quality*).

## **j. Land Use and Planning**

Under the No Project Alternative, the project site would not be redeveloped, and the on-site storage/salvage uses and trailer offices/workshop would not be removed. Because existing conditions would persist, there would be no increased potential for existing communities to be divided, there would be no development of residential units under this alternative, either. Additionally, there would be no new conflicts with policies, plans, or regulations that were adopted for the purpose of avoiding or mitigating environmental effects because current conditions would not change. However, the No Project Alternative would be less consistent with some policies and regulations than the proposed project. For example, the state and County both have policies to reduce GHG emissions in order to lessen the adverse impacts of climate change. The proposed project would reduce VMT by providing a new medical office building in the Live Oak area. However, unlike the proposed project, the No Project Alternative would not reduce regional VMT because Santa Cruz area patrons would continue to travel to the San Francisco Bay Area for some medical services rather than to the project site in Live Oak. Therefore, the GHG emissions from vehicles would be greater when compared with the proposed project emissions. Although the No Project Alternative would be less consistent with some specific policies than the proposed project, it would be consistent with and have no change on existing conditions. Therefore, the No Project Alternative would have no impacts on land use and planning, and impacts would be lesser compared to the proposed project.

## **k. Noise**

Under the No Project Alternative, the project site would not be redeveloped, and the on-site storage/salvage uses and trailer offices/workshop would not be removed. There would be no change in groundborne vibration and noise sources (including from traffic noise), as there would be no change to the existing on-site buildings, parking lots, generators, and mechanical ventilation equipment operation. Thus, there would be no impacts to existing noise conditions under this alternative. The proposed project's noise impacts with regard to increase in ambient noise would be less than significant (see Section 4.11, *Noise*). Because the No Project Alternative would have no impacts, compared to the proposed project, impacts would be lesser.

## **l. Population and Housing**

Under the No Project Alternative, the project site would not be redeveloped, and the on-site storage/salvage uses and trailer offices/workshop would not be removed, and landscaping/trees would remain the same. The new medical office building would not be constructed and operated on the project site, nor would the various utility, landscape, and roadway improvements occur. There would be no change related to housing and jobs. The existing site's conflict with regional population growth projections would remain, as there would be no change to the existing on-site buildings, and the 100 units projected to occur on this site under the existing zoning would not occur. Similar to the proposed project, the No Project Alternative would not promote development of the site with residential units, which was envisioned in the County's Regional Housing Needs Assessment.

However, as described in Section 4.12, *Population and Housing*, the County approved four mixed-use developments in the same planning area as the project site (Live Oak) between 2014 and 2019. These four mixed-use developments would collectively add 118 dwelling units, which would more than compensate for the loss of the up to 100 potential units that would be developed on the project site. Therefore, impact of the No Project Alternative on housing supply would be less than significant, and because no increase in population growth would be induced, lesser compared to the proposed project.

#### **m. Public Services**

Under the No Project Alternative, there would be no change related to fire, police, school, or library services, as there would be no change to the existing buildings or conditions on the project site. Police and fire protection would continue to be provided to the project site, as needed, consistent with current conditions. There are no known existing uses on the site that generate demand for school or library services. Therefore, there would be no impact related to public services under this alternative. The No Project Alternative would therefore have a lesser level of impact compared to the proposed project.

#### **n. Transportation**

The No Project Alternative would not result in changes to the existing circulation system. No new additional vehicle trips would be generated, and roadways would continue to operate consistent with current conditions. Additionally, the absence of bicycle and pedestrian facilities fronting the site would remain unchanged under this alternative, as the proposed bicycle lane and pedestrian sidewalk would not be constructed on Soquel Avenue as part of the proposed project. Therefore, the No Project Alternative would not achieve some of the benefits of the project related to expansion and balancing of the circulation system – particularly the addition of new active transportation facilities. However, compared with existing conditions, there would be no impact to the circulation system in terms of vehicular trip assignment on local roadways.

Because existing conditions and uses on the project site would not change under this alternative, no new additional vehicle trips would be generated. Accordingly, there would be no change to existing VMT under the No Project Alternative. However, the proposed project would reduce overall VMT because it would provide medical services in the Live Oak area of the County, which would reduce trips to the San Francisco Bay Area for these medical services. Because no new medical office building would be constructed under this alternative, trips to the Bay Area for medical services would continue, resulting in no decrease of associated VMT. However, VMT generated from trips to the San Francisco Bay Area for medical services is one component of overall VMT in the region. The No Project Alternative would have no impact on current VMT totals, and overall transportation impacts would be lesser compared to the proposed project, which would have less than significant impacts.

#### **o. Tribal Cultural Resources**

Under the No Project Alternative, there would be no construction activity or associated ground disturbance. Therefore, there would be no potential for impacts to tribal cultural resources as a result of the No Project Alternative. As described in Section 4.15, *Tribal Cultural Resources*, the proposed project would have potentially significant but mitigable impacts to tribal cultural resources. Because the No Project Alternative would have no impacts, impacts would be substantially lesser compared to the proposed project.

## p. Utilities and Service Systems

Under the No Project Alternative, the on-site storage/salvage/contractor uses and trailer offices/workshop would not be removed, and vegetation/trees would remain the same. The new medical office building would not be constructed and operated on the project site, nor would the various utility improvements occur. As such, there would be no change related to water supply utility and wastewater, stormwater, and solid waste collection service systems, as there would be no change to the existing on-site structures or associated utilities demand and infrastructure facilities. Thus, there would be no impact related to utility and service systems under this alternative. The proposed project would contribute to a potentially significant and unavoidable cumulative impact related to water supply. Therefore, because the No Project Alternative would result in no impacts, when compared to the proposed project, impacts would be substantially lesser. Additionally, the No Project Alternative would not contribute to the potentially significant and unavoidable cumulative impact related to water supply.

## 6.6 Alternative 2 (Approved Land Use)

### 6.6.1 Description

Under this Approved Land Use Alternative, the project, as currently proposed, would not be constructed. Since the project's site is approximately 5 acres and currently zoned Multi-Family Residential with R Combining District (RM-2-R), which allows for 20 units per acre of housing, under Alternative 2 (Approved Land Use) the site would instead be redeveloped with 100 multi-family residential units. Although the potential alternative residential development has not been designed, it is assumed the buildings would be up to 35 feet in height, which is the maximum allowable height in the RM-2-R zoning district. Additionally, it is assumed residential development would include driveways for ingress and egress from Soquel Avenue, as well as internal roadways for circulation within the development. It is also assumed that the development would include active open space area for on-site residents. Similar to the proposed project, Alternative 2 would include connection to existing utility infrastructure (water, sanitary sewer, electricity, natural gas, and telecommunications), replacement of the sanitary sewer main beneath Chanticleer Avenue and Rodriguez Street, and construction of a new stormwater outfall at Rodeo Creek Gulch.

An Initial Study-Mitigated Negative Declaration was prepared and adopted for the approved land use in 2008. The impact analysis presented for this alternative below, in Section 6.6.2, assumes all mitigation measures indicated in the Initial Study-Mitigated Negative Declaration would be required if Alternative 2 were implemented.

### 6.6.2 Impact Analysis

#### a. Aesthetics

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units contained within buildings that would be up to 35 feet in height, which is the maximum allowable height for the structures under the approved land use. The existing on-site storage/salvage uses and trailer offices/workshop would be removed, and the project site would include landscaping, trees, and signage per County Code. Alternative 2 would include supporting ingress/egress from Soquel Avenue, internal roadway and pedestrian circulation, utility infrastructure and connections, and active open space areas. There would be changes in visual



character, public views, nighttime lighting, and daytime glare, as there would be an addition of residential uses on site that do not currently exist. However, due to existing structures and vegetation south of Highway 1 proximate to the project site, views of the Monterey Bay or other scenic resources are not accessible, and thus development under Alternative 2 would not obstruct scenic views or vistas from Highway 1. In addition, this alternative would meet the General Plan policy to improve degraded areas and adhere to lighting ordinance regulations. Thus, there would be a less-than-significant aesthetics impact with adherence to County ordinances under this alternative.

The proposed project impacts related to aesthetics would be less than significant with mitigation pertaining to signage lighting (see Section 4.1, *Aesthetics*). The Approved Land Use Alternative would have a lesser level of aesthetics impact compared to the proposed project due to the shorter height of the structures compared to the proposed project and the absence of large structural signage that would affect nighttime views.

### **b. Air Quality**

Under the Approved Land Use Alternative, the construction and operational emissions of the proposed medical office building would be avoided. However, there would be changes related to criteria pollutant and toxic air contaminant emissions, as new residential buildings would be constructed and new daily vehicle trips would be added. Additionally, because a new medical office building would not be constructed, people in the region would continue to drive to the San Francisco Bay Area for medical services and treatment. Therefore, the reduced vehicle emissions from fewer VMT to the Bay Area that would result from the proposed project would not occur under Alternative 2. However, the addition of new housing in proximity to downtown Santa Cruz and the University of California (UC) Santa Cruz campus may reduce commute distance if people relocate to the new residential units from locations in the southern part of the County. This would reduce VMT from shorter commutes.

The impact related to criteria pollutant emissions under this alternative would be greater than compared to the proposed project and could be potentially significant. However, mitigation measures identified in the prior Initial Study-Mitigated Negative Declaration prepared for the approved land use would be required. These mitigation measures would reduce impacts to less than significant. Therefore, impacts of Alternative 2 would be less than significant, and compared with the proposed project, impacts would be similar.

### **c. Biological Resources**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units, and the existing on-site storage/salvage uses and trailer offices/workshop would be removed. Development of the site with residential uses would increase impervious surface area and require stormwater runoff treatment. Therefore, it is assumed a new stormwater outfall would be required along Rodeo Creek Gulch, similar to the proposed project. Because the Approved Land Use Alternative would include the same activities in proximity to the creek, it would result in the same potential impacts to special-status wildlife species (western pond turtle, pallid bat, Townsend's big-eared bat, California giant salamander, white-tailed kite, San Francisco dusky footed woodrat, and migratory nesting birds). In addition, similar to the proposed project, construction of the off-site stormwater outfall would permanently displace some portions of riparian oak woodland and remove some trees and, thus, affect riparian habitat and jurisdictional waters of the State. The

mitigation applied to the proposed project would not be applied to this alternative because the residential development under this alternative is already approved. However, mitigation measures identified in the Initial Study-Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (MMRP) prepared for the approved land use would be required. Additionally, applicable state permits for impacts to riparian habitat would be required, which typically requires mitigating the loss of riparian vegetation. In addition, development under the approved land use would be required to meet applicable state law with respect to migratory birds, and other permit conditions related to pre-construction surveys and protection of sensitive species would also be imposed as conditions of approval. Therefore, impacts would be less than significant. The proposed project impacts related to biological resources would be less than significant with mitigation (see Section 3.3, *Biological Resources*). Therefore, the Approved Land Use Alternative would have a similar level of biological resources impacts compared to the proposed project.

#### **d. Cultural Resources**

Under Alternative 2, there would no direct change in historic resources, as there are no historic resources on the project site. Under this alternative, construction of the new residential buildings and underground utility infrastructure, including earth-moving activities, could result in direct impacts to currently unknown archaeological resources, and such impacts would be potentially significant. Mitigation required for the proposed project requiring construction monitoring would not be required for this alternative. However, development under Alternative 2 would be subject to mitigation measures and existing regulations pertaining to human remains and Native American artifacts, which would reduce impacts to these resources, if encountered. Thus, overall, there would be a less-than-significant impact on cultural resources under this alternative, similar to those associated with the proposed project.

#### **e. Energy**

The 100 multi-family units developed under Alternative 2 would consume energy for lighting, cooking, heating and air conditioning, and other similar household uses of electricity and natural gas. These units would be constructed compliant with CalGreen for energy efficiency. According to Appendix D of the CalEEMod Manual Users Guide, low-rise apartment buildings constructed to CalGreen standards in Santa Cruz County use approximately 233.06 KWhr per dwelling unit of electricity per year, plus an additional 810.36 KWhr for lighting. Approximately 17,735 kBtu of natural gas is used per unit each year (Trinity Consultants 2017). Based on these rates, 100 units would use 104,342 KWhr of electricity and 1,773,500 kBtu of natural gas, annually. Additionally, the residential land use would generate new vehicle trips, which would consume fuel and use energy. As described in Section 4.5, *Energy*, the proposed project would consume approximately 3,484,240 KWhr of electricity and 3,046,620 kBtu of natural gas, annually. Therefore, Alternative 2 would consume more energy compared to the proposed project. Impacts of Alternative 2 would be less than significant, and impacts would be greater than those of the proposed project.

#### **f. Geology and Soils**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units, and the existing on-site storage/salvage uses and trailer offices/workshop would be removed. The new development on site under this alternative would be less than the amount of square footage under the proposed project. In addition, new buildings on the project site would meet latest building codes related to current energy, safety, fire provisions. However, during a

seismic event, adverse impacts related to seismic-related ground failure and shaking could still occur. In addition, excavation and ground disturbance during construction could potentially reach previously undisturbed strata with high paleontological sensitivity. The mitigation applied to the proposed project would not be applied to this alternative, because residential development is already approved for the project site without these mitigation requirements. However, mitigation measures identified in the Initial Study-Mitigated Negative Declaration prepared for the approved land use would be required. These mitigation measures would require the residential development to be stable during seismic events, reducing impacts to less than significant. However, the Initial-Study-Mitigated Negative Declaration for the approved land use provides no mitigation measures to reduce or avoid impacts to paleontological resources. Therefore, construction of Alternative 2 would have the potential to damage previously undiscovered, subsurface, paleontological resources or unique geologic features, and impacts could be potentially significant if paleontological resources exist on the site. The proposed project impacts with regard to geology and soil resources would be less than significant with mitigation (see Section 4.6, *Geology and Soils*). The Approved Land Use Alternative could have the potential for a slightly greater level of geology and soils impact compared to the proposed project due to potential for damage or loss of paleontological resources, although such a project would be subject to permit conditions related to protection of paleontological resources imposed as conditions of approval, mitigation measures as provided in the Initial Study-Mitigated Negative Declaration, as well as the provisions of the California Building Code that protect buildings. Lastly, the project would need to meet current standards of County Code Title 16 regulations that protect geological resources. With these measures, impacts related to geology and soils would be similar to the proposed project. However, due to some risk that the County would not be able to impose and/or a future developer would not accept conditions of approval to implement mitigation measures, the impacts of this alternative are slightly greater.

#### **g. Greenhouse Gas Emissions**

The 100 multi-family residential units developed under the Approved Land Use Alternative would generate construction and operational GHG emissions. While demolition and removal of existing uses would occur, and green building standards would be the same, overall square footage of construction and operation of 100 multi-family units would be less than the proposed project. Therefore, GHG emissions impacts from project construction would be less than under the proposed project.

As described in Section 4.14, *Transportation*, the proposed project would reduce VMT because it would provide medical services to area residents that currently commute to the San Francisco Bay for these services. Under the Approved Land Use Alternative, a new medical office building would not be constructed in the Live Oak area of the County, and residents that currently commute to the San Francisco Bay Area for medical services would continue to do so. While operation of both the medical office building, which would not be constructed, and the multi-family units would generate GHG emissions, this alternative would not eliminate or reduce GHG emissions from VMT. The multi-family units would generate new VMT and associated mobile-source GHG emissions. Because Alternative 2 would generate slightly lower operational emissions, but not reduce mobile source emissions, and likely increase mobile source emissions than the proposed project, impacts would be potentially significant and require mitigation; impacts would be greater than those of the proposed project.

## **h. Hazards and Hazardous Materials**

Under the Approved Land Use Alternative, the existing on-site storage/salvage uses and trailer offices/workshop would be removed prior to the construction of multi-family units. Demolition and construction activities could result in the release of and potential exposure to asbestos-containing materials, lead-based paint, TPH, VOC, petroleum hydrocarbons, soil vapor. The proposed project would result in the same potential for release of these hazardous materials.

The Initial Study-Mitigated Negative Declaration prepared for the approved land use includes mitigation requiring the identification and remediation of potentially hazardous materials prior to construction and exposure. The mitigation measures in the adopted Initial Study-Mitigated Negative Declaration would reduce impacts of Alternative 2 to less than significant. The proposed project also includes mitigation measures that require abatement of potential hazardous materials exposure to a less-than-significant level. Therefore, the potential construction impacts of Alternative 2 would be less than significant and similar to the impacts of the proposed project.

## **i. Hydrology and Water Quality**

Construction of the Approved Land Use Alternative would require excavation, grading, and other similar ground disturbance. Ground disturbance would expose and loosen soils, increasing the potential for soil erosion and associated adverse water quality impacts, such as siltation of surface water. However, construction of Alternative 2 would disturb more than one acre, which requires implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP includes BMPs that must be implemented during construction to prevent erosion and sedimentation of surface waters. The proposed project would also require implementation of a construction SWPPP, as described in Section 4.9, *Hydrology and Water Quality*. With implementation of a SWPPP, both Alternative 2 and the proposed project would have similar construction impacts, and impacts would be less than significant.

Under Alternative 2, the multi-family residential structures and associated parking, driveway, and sidewalk areas would increase the impervious surface area on the project site. Increased impervious surface would increase stormwater runoff. Runoff from parking surfaces would contain pollutants associated with automobiles, such as heavy metals. However, pursuant to the County Code, stormwater runoff must be contained and treated on-site, prior to discharge. Mandatory compliance with the County Code would ensure stormwater treatment and no increase in off-site stormwater flow. Impacts would be less than significant and similar to the proposed project.

## **j. Land Use and Planning**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units as set forth for the project site in the General Plan and zoning code. This would result in a density of approximately 20 units per acre on the project site. The County General Plan and zoning code designate the project site for housing. Under this alternative, the project would be compliant with the existing General Plan and zoning code, as well as the Regional Housing Needs Allocation in that it would provide housing units on an underutilized parcel. (According to the Regional Housing Needs Allocation, the County's projected housing needs from 2014 to 2023 is 1,314 residential units.) Therefore, this alternative would not reduce acreage zoned for, displace existing housing, or eliminate identified housing supply sites, and would increase the amount of housing supply in the County.

As described in Section 4.10, *Land Use and Planning*, the proposed project would be consistent with General Plan policies that were adopted to or intended to mitigate or avoid significant environmental impacts. However, potential consistency is based on implementation of mitigation measures and conditions of approval in some instances, such as consistency with policies to avoid adverse impacts to special-status species. Because Alternative 2 is an approved land use, the mitigation measures indicated in this EIR would not be required. However, the Initial Study-Mitigated Negative Declaration and MMRP prepared for the approved land use does indicate mitigation measures. With implementation of those mitigation measures, impacts of Alternative 2 would be less than significant. Therefore, Alternative 2 would result in no potential inconsistencies with policies and plans that were adopted to mitigate or avoid significant environmental impacts. In addition, unlike the approved land use, the proposed project requires an amendment to the General Plan land use designation and rezoning. Therefore, when compared to the proposed project, impacts of the approved land use would be of slightly lesser intensity.

#### **k. Noise**

Under the Approved Land Use Alternative, with provision of residential units, there would be fewer new stationary noise sources than associated with healthcare facilities under the proposed project. For example, residential units would not require industrial-scale HVAC units. The Approved Land Use Alternative would result in a greater amount of overall VMT because people in the County would continue to commute to the San Francisco Bay Area for medical services. However, commute traffic is dispersed on County roads and would not substantially impact specific receptors. Additionally, traffic noise associated with trips to the San Francisco Bay Area for medical services are the existing condition, and therefore would not represent a new noise impact. Similar to the proposed project, temporary or periodic impacts of groundborne vibration and noise sources from construction activities under this alternative would occur, which would represent an adjacent noise-sensitive receptor (residential uses to the south) being subjected to construction-related groundborne vibration and noise sources. However, it was determined that such potential noise impacts would be less than significant for the proposed project; thus, noise and vibration impacts would be also less than significant under this alternative. The proposed project impacts related to noise would be less than significant (see Section 3.10, *Noise*). The Approved Land Use Alternative would have an overall similar level of noise impact compared to the proposed project, and impacts would be less than significant.

#### **l. Population and Housing**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units as set forth in the General Plan and zoning code and approved for the project site. This would result in a population increase of 263 residents on the project site, based on the average household size of 2.63 persons for Santa Cruz County (California Department of Finance 2020). As determined by the California Department of Finance and Association of Monterey Bay Area Governments (AMBAG), the current population of Santa Cruz County is 271,233 and the population forecast for 2040 is 306,881 in 2040 (California Department of Finance 2020; AMBAG 2018). Therefore, a population growth of 263 people could be accommodated within the growth projections for the County and would be less growth than the 789 people that would potentially relocate to the County for employment generated by the proposed project. As part of this alternative, no new medical office building would be constructed or operated. There would be no change related to employment under this alternative compared to the proposed project; however,

there would be greater amount of housing supplied under this alternative compared to the proposed project.

The Approved Land Use Alternative would have less than significant impacts on population and housing. The Approved Land Use Alternative would have a lesser level of impact related to housing provision compared to the proposed project, as even though the proposed project would be required to pay the Affordable Housing Impact Fee of approximately \$3 per square foot, under Alternative 2, a greater number of housing units would be provided, in compliance with RHNA goals and the goals of the Housing Element.

### **m. Public Services**

Residential occupancy of the project site would increase the demand for fire protection, law enforcement, schools, and library services because the project site is not known to currently have residents. The multi-family units would be constructed to meeting current building codes, including codes pertaining to fire safety. This would reduce the severity of structure fires and potentially the demand for fire protection services in the event of a structure fire. Proper exterior lighting, designed to County Code, would discourage crime and decrease the demand for law enforcement. Nonetheless, because the project site is surrounded by existing development that is served by fire and police protection services, Alternative 2 would not decrease fire and police service ratios or increase response times.

Unlike the proposed project, school-aged children would reside on the project site and attend local schools, affecting school capacity. Alternative 2 would increase County population by approximately 263 residents, based on the average household size of 2.63 persons for Santa Cruz County (California Department of Finance 2020). Not all residents would be school aged children, and children that would reside on the project site would vary in age and attend elementary, middle, and high school. Given that only a portion of the residents would be children, and that they would vary in age and school grade, alterations to existing schools to accommodate increased enrollment would not be required. The developer who constructs the multi-family units would be required to pay all applicable development impact fees Pursuant to SB 50, payment of these fees is considered complete and full mitigation for impacts related to school capacity.

Alternative 2 would result in less than significant impacts on public services. Compared with the proposed project, Alternative 2 would result in slightly greater impacts on public services.

### **n. Transportation**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units. Because this alternative would construct habitable structures, this alternative would also be designed to include adequate ingress/egress and emergency vehicle access from Soquel Avenue. The proposed project includes a new bicycle lane and pedestrian improvements on Soquel Avenue. However, the new bicycle lane and pedestrian improvements would not likely be constructed under Alternative 2. Therefore, Alternative 2 would potentially conflict with programs, plans, ordinances or policies addressing the circulation system. Similar to the proposed project, Alternative 2 would also have no transit service.

As described in Section 4.14, *Transportation*, the proposed project would reduce VMT in the County because it would provide medical services to a portion of the population that currently commutes to the San Francisco Bay Area for medical services. As part of Alternative 2, no new medical office building would be constructed or operated. Therefore, under this alternative, some residents in the

County would continue to commute to the San Francisco Bay Area, and there would be no reduction in VMT. Additionally, the new multi-family units would generate VMT as residents commute to jobs, shopping, and other activities in the area. Because Alternative 2 would increase VMT compared to existing conditions, impacts would be potentially significant and require mitigation. Compared to the proposed project, Alternative 2 would result in greater impacts to transportation.

#### **o. Tribal Cultural Resources**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units and a new stormwater outfall at Rodeo Creek Gulch would be constructed. Under this alternative, construction of the new residential buildings and underground utility infrastructure, including earth-moving activities, could result in direct impacts to currently unknown tribal cultural resources. However, Alternative 2 would be subject to the County's Native American Cultural Sites Ordinance (Santa Cruz County Code Section 16.40). As described in Section 4.15, *Tribal Cultural Resources*, pursuant to the ordinance, if human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered during construction, the construction must cease and desist from all further excavations and disturbances within 200 feet of the discovery. Work in the area cannot commence until the discovery is evaluated and protected from damage, as applicable. Thus, overall, there would be a less than significant impact on tribal cultural resources impact under this alternative. The proposed project tribal cultural resources impact would be less than significant with mitigation (see Section 4.15, *Tribal Cultural Resources*). The Approved Land Use Alternative would have a similar level of tribal cultural resources impact compared to the proposed project.

#### **p. Utilities and Service Systems**

Under the Approved Land Use Alternative, the project site would be developed with a total of 100 multi-family units, and the existing on-site storage/salvage uses and trailer offices/workshop would be removed. Various stormwater and sewer improvements, including a pump station and potential upgrades to existing sewer lines due the long-standing moratorium on new development in the Rodeo Gulch sewer basin, as well as connection to existing utility infrastructure (water, sanitary sewer, electricity, natural gas, and telecommunications) would occur with some variation from the proposed project in order to accommodate the new residential units under this alternative. Furthermore, the undergrounding of utility lines would still occur under this alternative.

The addition of housing on the project site under this alternative would result in a change related to water supply demand and distribution services as well as wastewater, stormwater, and solid waste generation and collection services compared to existing conditions. Similar to the proposed project, potable water would be supplied by the City of Santa Cruz Water Department. The City of Santa Cruz's 2015 UWMP accounted for development of the project site in accordance with the current zoning, which allows for up to 100 multi-family residential units. Based on the potable water demand for residential uses and the anticipated number of new residential units through 2023 (1,149 for the entire service area), the UWMP estimates 1.69 MGY per unit, or 168.6 MGY for the project site, assuming development of 100 units per the existing zoning. As described in Section 4.16, *Utilities and Service Systems*, the proposed project would generate approximately 3.8 MGY of water demand. Therefore, Alternative 2 would generate approximately 164.8 MGY more demand for water compared to the proposed project. In the near-term, potential shortages are managed by imposing restrictions on water use during low rainfall and drought years. However, the 2015 UWMP forecasts water shortages in the future dry-year and multiple dry-year conditions, particularly during

droughts, as shown in tables 4.16-1 through 4.16-3 in Section 4.16, *Utilities and Service Systems*. Therefore, as with the proposed project, cumulative impacts on water supply would be potentially significant and unavoidable. This impact cannot be mitigated by the County or developer because there are no other sources of water available; increasing supply is the responsibility of a Responsible Agency – the City of Santa Cruz Water Department. Because Alternative 2 would generate more demand for water than the proposed project, impacts would be greater than the proposed project.

## 6.7 Alternative 3 (Reduced Project)

### 6.7.1 Description

Under the Reduced Project Alternative, a 25-percent-reduction in size of the proposed project would be constructed and operated. Under Alternative 3 (Reduced Project), the existing site would be redeveloped with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size (i.e., 118,208 gsf) compared to the proposed project. As such, the top floor of both the medical office building and parking garage included under the proposed project would be eliminated. In addition, the occupant load would be reduced by 25 percent, for a total occupant load of 1,334 persons. Roadway, landscaping, and utility improvements similar in scope and location to the proposed project would occur. Vehicle parking and bicycle parking improvements would occur but reduced by approximately 25 percent in provision amount compared to the proposed project.

### 6.7.2 Impact Analysis

#### a. Aesthetics

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project. As such, the top floor of both the medical office building and parking garage included under the proposed project would be eliminated resulting in a total height of 55 feet. The existing on-site storage/salvage uses and trailer offices/workshop would be removed, and the project site would include landscaping, trees, and signage per County Code. Alternative 3 would include supporting ingress/egress from Soquel Avenue, internal roadway and pedestrian circulation, utility infrastructure and connections, and active open space areas. There would be changes in visual character, public views, nighttime lighting, and daytime glare, as there would be an addition of healthcare uses on site that do not currently exist. However, due to existing structures and vegetation south of Highway 1 proximate to the project site, views of the Monterey Bay or other scenic resources are not accessible, and, thus development under Alternative 3 would not obstruct scenic views or vistas from Highway 1. In addition, this Alternative would meet the General Plan policy to improve blighted areas and adhere to lighting ordinance regulations. Thus, there would be a less-than-significant aesthetics impact with adherence to County ordinances and design review processes under this alternative.

The proposed project impacts related to aesthetics would be less than significant (see Section 4.1, Aesthetics). The Reduced Project Alternative would have a lesser level of aesthetics impact compared to the proposed project due to shorter height of the structures compared to the proposed project and the fleeting and partially obstructed public views from Highway 1 and Soquel Avenue in the project vicinity.



## **b. Air Quality**

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project, and the existing on-site storage/salvage uses and trailer offices/workshop would be removed. While demolition and removal of existing uses would still occur and green building standards would be the same (LEED Gold), overall square footage of construction and operation would be less as under the proposed project; therefore, construction and operational air quality impacts under this alternative would be less than under the proposed project. Impacts of Alternative 3 would be less than significant with the same mitigation implemented as required for the proposed project.

Because the building would be smaller under Alternative 3, it would accommodate fewer medical services than the proposed project. Therefore, a portion of the County population would continue to commute to the San Francisco Bay Area for medical services that are not available in the proposed medical office building under this Alternative. The trips to the San Francisco Bay Area would generate mobile-source emissions, which would otherwise be eliminated under the proposed project. Therefore, compared with the proposed project, Alternative 3 would result in a similar level of air quality impacts, which stationary sources being reduced but with more mobile-source emissions.

## **c. Biological Resources**

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project, and the existing on-site storage/salvage uses and trailer offices/workshop would be removed. The various landscaping/trees and stormwater/creek improvements related to Rodeo Creek Gulch would occur similar in scope and location compared to the proposed project. The creek and stormwater improvements generally include enhanced capacity and undergrounding of storm drain system and a new off-site outfall area to improve conveyance and reduce potential for erosion. Because the Reduced Project Alternative would include the same activities within and in proximity to the creek, it would result in the same potential impacts to wildlife species (western pond turtle, pallid bat, Townsend's big-eared bat, California giant salamander, white-tailed kite, San Francisco dusky footed woodrat, and migratory nesting birds) identified as candidate, sensitive, or special status at the project site and within the creek corridor. In addition, similar to the proposed project, construction of the off-site stormwater outfall would permanently displace approximately 0.06 acre of riparian oak woodland and remove some trees and, thus, affect riparian habitat and jurisdictional waters of the State. The same mitigation applied to the proposed project would be applied to this alternative. Thus, this alternative's impacts related to biological resources would be less than significant with mitigation via avoiding active migratory bird nests, bat roosts, and turtle dens during construction as well as implementing a habitat mitigation and monitoring plan related to revegetation of the oak woodland riparian areas the along the creek corridor.

The proposed project impacts related to biological resources would be less than significant with mitigation (see Section 4.3, Biological Resources). The Reduced Project Alternative would have a similar level of biological resources impact compared to the proposed project.

#### d. Cultural Resources

Under this alternative, there would no direct change in historic resources, as there are no historic resources on the project site. Under this alternative, construction of the new medical office building and parking structure and underground utility infrastructure, including earth-moving activities, could result in direct impacts to currently unknown archeological resources, and such impacts would be mitigatable, similar as under the proposed project, by conducting construction archeological resources monitoring and stopping construction in the event that human remains or other cultural resources are encountered. Thus, overall, there would be a less than significant with mitigation cultural resources impact under this alternative. The proposed project cultural resources impact would be less than significant with mitigation (see Section 4.4, *Cultural Resources*). The Reduced Project Alternative would have a similar level of cultural resources impact compared to the proposed project.

#### e. Energy

The medical office building and parking garage constructed under this alternative would consume energy for lighting, heating and cooling, and other activities, similar to the proposed project. However, Alternative 3 would result in less on-site energy consumption compared to the proposed project because the medical office building and parking garage would be reduced in size by approximately 25 percent, reducing the area that must be lighted, heated, cooled, etc. Similar to the proposed project, the medical office building would be constructed to achieve LEED Gold certification, which would prevent the excessive or wasteful consumption of energy under this alternative. However, because the building would be smaller, fewer medical services could be accommodated on-site compared to the proposed project. Therefore, a portion of the County population would continue to commute to the San Francisco Bay Area for some medical services. The trips to the Bay Area would consume fuel. Overall, given that the building would be constructed to LEED Gold certification, Alternative 3 would result in less than significant impacts on energy. Alternative 3 would have a similar level of impact as the proposed project, with on-site energy consumption reduced but greater fuel consumption.

#### f. Geology and Soils

Alternative 3 would construct a medical office building and parking garage on the project site. Therefore, there would be no increased or differing seismic hazards associated with this alternative than with the proposed project. The new development on site under this alternative would be less than amount of square footage as under the proposed project. In addition, new buildings on the project site would meet latest building codes related to current energy, safety, fire provisions. However, during a seismic event, adverse impacts related to seismic-related ground failure and shaking could still occur. In addition, excavation and ground disturbance during construction could potentially reach previously undisturbed strata with high paleontological sensitivity. The same mitigation applied to the proposed project could be applied to this alternative, which would require the project to implement feasible mitigation measures to reduce potential exposure of persons and property to seismic-related hazards as well as effects on significance of previously undiscovered, subsurface, paleontological resources or unique geologic features to a less-than-significant level via implementation of site-specific geotechnical recommendations and paleontological resource protections. Thus, the impact related to geology and soils would be less than significant with mitigation under this alternative. The proposed project impacts with regard to geology and soil resources would be less than significant with mitigation (see Section 4.6, *Geology and Soils*). The

Reduced Project Alternative would have a similar level of geology and soils impact compared to the proposed project.

### **g. Greenhouse Gas Emissions**

Alternative 3 would result in GHG emissions from the consumption of energy to operate the medical office building and parking garage. Additionally, vehicle trips generated by the medical office building would result in mobile-source GHG emissions. The medical office building would be constructed to achieve LEED Gold certification, which would reduce energy consumption and associated GHG emissions. Compared to the proposed project, GHG emissions from stationary sources on the project site would be reduced because both the medical office building and parking garage would be reduced by approximately 25 percent in size under Alternative 3. However, mobile-source emissions would be greater under Alternative 3 because more people would continue to commute to the San Francisco Bay Area for some medical services under this alternative compared to the proposed project. However, because the medical office building would provide some medical services in the County, fewer people would commute to the San Francisco Bay Area than compared to existing conditions. Thus, Alternative 3 would decrease mobile-source GHG emissions compared to existing conditions. Overall, GHG impacts of Alternative 3 would be less than significant. Alternative 3 would have a similar level of impact as the proposed project, with less stationary-source emissions but greater mobile-source emissions.

### **h. Hazards and Hazardous Materials**

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project. Since there would be demolition and removal of the existing on-site pavement materials, debris, vehicles, and buildings, construction impacts related to potential exposure to asbestos-containing materials, lead-based paint, TPH, VOC, petroleum hydrocarbons, soil vapor could occur. However, the same mitigation applied to the proposed project could be applied to this alternative, which would require the project to implement feasible mitigation measures to abate such potential hazardous materials exposure to a less-than-significant level. In addition, with the undergrounding of natural gas and electricity utility line extensions to the project site and provision of more than one vehicle access point to the project site, hazard impacts related to wildfire and emergency access would be less than significant, similar to the proposed project. Thus, the overall impact related to hazards and hazardous materials under this alternative would be less than significant with mitigation. The proposed project impacts to hazards and hazardous materials would be less than significant with mitigation (see Section 4.8, *Hazards and Hazardous Materials*). The Reduced Project Alternative would have a similar level of hazards and hazardous materials impact during construction as under the proposed project.

### **i. Hydrology and Water Quality**

Under the Reduced Project Alternative, the stormwater improvements (including a new stormwater outfall at Rodeo Creek Gulch) included under the proposed project would occur in the same manner of scope and location. The Reduced Project Alternative would also develop a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project, adding a lesser amount of overall square footage to the project site compared the proposed project. However, since this alternative would result in the same structural footprint on the project site as the proposed project,

there would be a similar proportion of impervious surface area on the project site resulting in stormwater impacts. The same mitigation applied to the proposed project would be applied to this alternative, and the associated C.3 requirements would ensure that stormwater runoff would be retained to ensure no net increase in off-site stormwater flow. Thus, this alternative's impact related to hydrology and water quality would be less than significant with mitigation requiring that a schedule of maintenance tasks be followed by property owners for the safe and efficient function of the on-site stormwater treatment and detention facilities and regularly inspected by the County. The proposed project impacts related to hydrology and water quality would be less than significant with mitigation (see Section 4.9, *Hydrology and Water Quality*). The Reduced Project Alternative would have a similar level of hydrology and water quality impact compared to the proposed project.

#### **j. Land Use and Planning**

The Reduced Project Alternative would be constructed on the same site as the proposed project. Therefore, like the proposed project, the Reduced Project Alternative would not physically divide an established community.

Generally, because this alternative and the proposed project would have the same structural footprint, on the same site, this alternative would be consistent with the same land use plans and policies as the proposed project. However, because the size of the medical office building and parking garage would be reduced, decreasing the height of both structures, Alternative 3 would be more consistent with policies pertaining to aesthetics because the structures would be less visible from public vantage points, such as Highway 1. Impact to land use and planning resulting from Alternative 3 would be less than significant. The Reduced Project Alternative would have a similar overall level of land use and planning impact compared to the proposed project.

#### **k. Noise**

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project. Similar to the proposed project, temporary or periodic impacts of groundborne vibration and noise sources from construction activities under this alternative would occur, which would represent an adjacent noise-sensitive receptor (residential uses to the south) being subjected to construction-related groundborne vibration and noise sources. However, it was determined that such potential noise impacts would be less than significant for the proposed project; thus, noise and vibration impacts would be also less than significant under this alternative. Additionally, construction duration would be shorter under Alternative 3 than the proposed project because the medical office building and parking garage would be reduced in size by approximately 25 percent.

Operational noise resulting from Alternative 3 would be similar to operational noise of the proposed project. Daily operations would not generate especially loud noises originating from inside the medical office building. Therefore, a reduction in size would have no impact on noises generated from within the building. However, because the medical office building would be smaller, rooftop HVAC equipment would be at a lower elevation and closer to sensitive receptors to the south. The HVAC equipment would be smaller or operate less frequently, or both, because the medical office building would be smaller and contain less area needing air conditioning or heating. This would reduce operational noise of the medical office building. Additionally, fewer cars would be on-site during operation, resulting in slightly less vehicle noises from the parking garage, such as tires

squealing and car horns. Overall, the Reduced Project Alternative would have a lesser level of noise impact than the proposed project, and impacts would be less than significant.

## **I. Population and Housing**

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project. This would result in no additional permanent population but increased employment on the project site. There would be lesser employment under this alternative compared to the proposed project, given the reduced medical office building size. Therefore, this alternative would result in less project population and employment growth than the proposed project and would not exceed forecasted projections for the County. Impacts would be less than significant. The Reduced Project Alternative would have a similar level of impact related to housing provision compared to the proposed project, as it would also not provide housing units on project site (although the level of Affordable Housing Impact Fee paid would be 25 percent less).

## **m. Public Services**

Under the Reduced Project Alternative, there would be a decreased change related to fire, police, school, and library services, as under the Reduced Project Alternative there would be less temporary daytime population associated with employment on the project site compared to the proposed project. Similar to the proposed project, this alternative would develop new healthcare and parking uses that meet current building codes related to current energy, safety, and fire provisions. Impacts would be less than significant. The proposed project impacts to public services would be less than significant (see Section 4.13, *Public Services*). The Reduced Project Alternative would have a slightly lesser level of public services impact compared to the proposed project.

## **n. Transportation**

Similar to the proposed project, Alternative 3 would be designed to include adequate ingress/egress and emergency vehicle access from Soquel Avenue. As part of this alternative, on-site and off-site transit, bicycle, and pedestrian circulation improvements would also occur, consistent with local and regional objectives and policies. As such, transit, bicycle, pedestrian system, and emergency access impacts are expected to be similar to the proposed project, and less than significant.

Construction-period VMT impacts would be slightly less than under the proposed project due to the smaller total amount of building space to be constructed under this alternative. Similar to the proposed project, Alternative 3 would reduce existing VMT in the County because it would provide medical services in the area that residents currently commute to the San Francisco Bay Area to receive. Once the medical office building is operational, these residents would travel to the project site for services instead of the San Francisco Bay Area, substantially reducing total trip length. However, because the size of the medical office building would be reduced under this alternative, fewer medical services would be offered compared to the proposed project. Therefore, under this alternative, people would still need to commute to the San Francisco Bay Area for some medical services, and the Reduced Project Alternative would not result in as a substantial reduction of existing VMT as the proposed project. However, the Reduced Project Alternative would reduce existing VMT, regardless. Impacts would be less than significant. Compared to the proposed project, Alternative 3 would result in slightly greater impacts due to a slightly less reduction in existing VMT compared to the proposed project.

### o. Tribal Cultural Resources

Under this alternative, construction of the new medical office building, parking garage, and underground utility infrastructure, including earth-moving activities, could result in direct impacts to currently unknown tribal cultural resources, and such impacts would be mitigatable, similar as under the proposed project, by conducting construction monitoring and stopping construction in the event that human remains or other tribal cultural resources are encountered. Thus, overall, there would be a less than significant with mitigation cultural resources impact under this alternative. The Reduced Project Alternative would have a similar level of tribal cultural resources impact compared to the proposed project because it would occur within the same geographic footprints, result in the same ground disturbance, and require the same mitigation measures.

### p. Utilities and Service Systems

Under the Reduced Project Alternative, the project site would be developed with a proposed medical office building and associated parking garage that has the same structural footprint but is reduced by approximately 25 percent in size compared to the proposed project. The various stormwater and sewer improvements as well as connection to existing utility infrastructure (water, sanitary sewer, electricity, natural gas, and telecommunications) would occur similar in scope and location as under the proposed project in order to accommodate the new medical office building under this alternative. This alternative would include replacement of the sanitary sewer main beneath Chanticleer Avenue and Rodriguez Street, similar to the proposed project. Furthermore, the undergrounding of utility lines would still occur under this alternative.

The addition of a smaller medical office building and parking garage under this alternative would result in a smaller change related to water supply demand and distribution services as well as wastewater, stormwater, and solid waste generation and collection services compared to existing conditions. The same mitigation related to construction of the proposed project would be applied to this alternative. Specifically, under this alternative, the utility and service impacts related to construction of waste, wastewater, stormwater, and telecommunication facilities would be less than significant with the implementation of the biological resources, cultural resources, and geology/soils mitigation measures identified for the proposed project.

As described in Section 4.16, *Utilities and Service Systems*, the proposed project would generate water demand of up to 3.8 MGY, based on water use rates from a similar existing facility in San José. Alternative 3 would have the same landscaping as the proposed project, and therefore also require approximately the same amount of landscape water. However, because the medical office building would be approximately 25 percent smaller, it would use approximately 25 percent less water for indoor uses than the proposed project. As described in Section 4.16, *Utilities and Service Systems*, the water use rate for the existing facility in San José is approximately 23.62 gallons per year per square foot of building space. Therefore, water demand for Alternative 3 would be approximately 2.8 MGY.<sup>1</sup> However, the City's 2015 UWMP forecasts cumulative water supply shortages in the future, especially during dry and drought years, as shown in tables 4.16-1 through 4.16-3 in Section 4.16, *Utilities and Service Systems*. Therefore, as with the proposed project there would be a cumulative significant and unavoidable impact of insufficient water supply to meet long-term water demands. Nonetheless, an incremental increase of 2.8 MGY would not require the City to construct a new or additional water supply source, such as a new reservoir or groundwater well site.

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<sup>1</sup> 23.62 gallons/square foot/year \* 118,208 square feet = 2,792,073 gallons per year or approximately 2.8 MGY

Therefore, direct and indirect impacts of Alternative 3 on water supply would be less than significant, as with the proposed project.

As future projects and growth within the water service area continue in the future, water demand would increasingly exceed water supply during drier and drought years and eventually require the City to develop a new or additional water supply. The construction of a new or additional supply could result in significant environmental impacts, depending on approach and location. Therefore, there would be a potentially significant and unavoidable cumulative impact related to water supply. Alternative 3 would generate demand for water and could contribute to the future demand requiring a new or additional water supply. Therefore, Alternative 3 would contribute to a potentially significant and unavoidable impact related to water supply. However, because Alternative 3 would generate less demand for water than the proposed project, the contribution toward the cumulative impact would be slightly less than the proposed project.

## 6.8 Alternative 4 (Alternate Location – Thurber Site)

### 6.8.1 Description

Under the Alternate Location - Thurber Site (Alternative 4), the same size (157,611 gsf) proposed medical office building and parking garage would be built on an alternate property within the County known locally as the “Thurber” site. The Thurber property is located on the northeast corner of Thurber Lane and Soquel Drive, which is approximately 0.32 mile to the northwest of the project site. The Thurber property is approximately 6.2 acres in size and identified as APN 025-351-19. This alternative basically assumes that the medical office building and parking garage would be approximately the same size and design as the proposed project, only located on the Thurber property instead of the project site. Additionally, this alternative assumes that the existing storage/salvage uses and trailer offices/workshop at the project site would persist into the reasonably foreseeable future.

The Thurber site currently has a stream running from the north end to the south end of the site, and that stream is piped to the north and south of this property. Therefore, this Alternative 4 is analyzed under two potential scenarios: "Scenario 4-A" assumes that the stream remains daylighted as it currently exists and the riparian corridor remains, and that the medical office building and parking structure would be the same total square footages, but taller as required to ensure that the footprint of the office building and/or parking structure stay out of the riparian corridor. A previously prepared assessment of the stream and buffer area by County staff indicated that it was of the type that would require a 10-foot riparian setback from the top of the arroyo that surrounds the stream on both sides. Under the other scenario, "4-B," the stream would be placed in a pipe and undergrounded, joining the current pipes that exist off-site at the north and south ends of the Thurber property, and the footprints and heights of the medical office building and parking structure would be the same as for the proposed project.

The impact analysis that follows for this Alternative 4 will discuss impacts of the alternative as compared to the proposed project, and will only add information as relevant for Scenario 4-A and/or Scenario 4-B if there are differences between 4-A and 4-B in the impact area being discussed.

## 6.8.2 Impact Analysis

### a. Aesthetics

Under the Alternate Location - Thurber Site Alternative, the medical office building and parking garage structures would be the same square footage as the proposed project. Under Scenario 4-A, it is assumed that one or both structures are taller than the proposed project, due to reduction of the footprint in order to respect the existing location of the stream and riparian corridor on the Thurber site. It is assumed in Scenario 4-B that the structures are identical to the proposed structures, because the stream would be placed underground and the riparian corridor eliminated. As such, Alternative 4 would involve a total height of 74 feet under Scenario 4-B, and potentially one or more floors or approximately 86 feet or higher under Scenario 4-A, which could have a greater visual impact than either the proposed project or Scenario 4-B. The Alternate Location - Thurber Alternative would include landscaping, trees, and signage per County Code, similar to the proposed project. Alternative 4 would include supporting ingress/egress from Soquel Drive and Thurber Lane, internal roadway and pedestrian circulation, utility infrastructure and connections, and active open space areas. There would be changes in visual character, public views, nighttime lighting, and daytime glare, as there would be an addition of a medical office building and parking garage on a site that do not currently exist. However, the Thurber property is farther from Highway 1 than the project site, and due to existing structures and vegetation north of Highway 1, views of the Thurber property are not visible. Thus, development under Alternative 4 would not obstruct scenic views or vistas from Highway 1.

The medical office building and parking garage would be visible from other local public roads, such as Soquel Drive and Thurber Lane. The building would be seen in context with other commercial and office structures in the area, such as an existing two-story bank building at the northwest corner of Soquel Drive and Thurber Lane. However, the massing of the medical office building and parking garage, particularly the 74-foot height of the medical office building under Scenario 4-B and the potentially taller building(s) under Scenario 4-A, would be a change in the visual character of the area. Additionally, unlike the proposed project, the Thurber property is vacant and characterized largely by vegetation rather than miscellaneous debris, vehicles, and storage containers. Development of the property would require removal of several acres of vegetation. Therefore, development of the Thurber property with Alternative 4 would result in a somewhat more substantial conversion of existing visual character than the proposed project, which would convert a property characterized by a visually disorganized storage yard. However, because the Thurber property is surrounded by development and landscaping would be provided, impacts on visual quality and character would be less than significant. Compared with the proposed project, the aesthetic impacts of Alternative 4 would be greater because development would occur within vegetation and in a slightly less urbanized area than the project site. Furthermore, there are residential neighborhoods to the north that look down over the Thurber property, and therefore the change in visual character would be greater for those neighborhoods than would the proposed project site. That change in visual character would be somewhat greater for Scenario 4-A than Scenario 4-B given the likelihood that one or both buildings would be taller under Scenario 4-A in order to retain the daylighted stream and riparian corridor, while the footprint of the structures under Scenario 4-B (piped stream) would be the same as with the proposed project. Impacts would be less than significant. Compared to the proposed project, Scenario 4A would have greater impacts, and Scenario 4-B would have similar impacts.



## b. Air Quality

Under the Alternate Location - Thurber Site Alternative, the primarily vacant Thurber property located on the northeast corner of Thurber Lane and Soquel Drive (approximately 0.32 mile northwest of the project site) would be developed with a proposed medical office building and associated parking garage that has the same total size as the proposed project, and the existing on-site storage/salvage uses and trailer offices/workshop at the project site would not be removed. The various circulation and utility improvements would occur similar in scope compared to the proposed project, and this alternative would be consistent with the Monterey Bay Unified Air Pollution Control District Air Quality Management Plan. There would be changes related to criteria pollutant and toxic air contaminant emissions, as there would be new on-site healthcare and parking structures as well as new daily vehicle trips. The Alternate Location - Thurber Site Alternative would have similar levels of overall traffic-related emissions because it would provide the same medical services within the same area of the County as the proposed project. However, the Thurber property is accessible by transit, while the project site is not at this time. Therefore, some people may choose to travel to the medical office building by transit rather than personal vehicles, resulting in a corresponding slight decrease in traffic-related emissions. In addition, green building standards (LEED Gold) and overall square footage of construction and operation would be the same as under the proposed project; therefore, construction and operational air quality impacts under this alternative would be similar as under the proposed project. The same mitigation applied to the proposed project would be applied to this alternative. Thus, the impact related to criteria pollutant and toxic air contaminant emissions under this alternative would be less than significant with mitigation.

The Alternate Location - Thurber Site Alternative would have a slightly lesser air quality impact compared to the proposed project, because it would be accessible from transit and potentially reduce vehicle trips.

## c. Biological Resources

A portion of the Thurber property contains a riparian corridor and habitat associated with a stream located in the eastern portion of the property that bisects the property. The riparian corridor is dominated by non-native, invasive vegetation and is characterized as "otherwise disturbed," per County Code Title 16. The portion of the property that is not riparian habitat or stream consists of approximately 5 acres, which is approximately the same amount of available land area as for the proposed project site. However, the location of the stream and riparian corridor could be determined to have a greater physical extent upon a more detailed analysis. Currently adopted County policies support retaining streams "daylighted" and that is analyzed as Scenario 4-A herein. If the project applicant were to propose placing the stream in a pipe (similar to its existence to the north and to the south of the property lines), then Scenario 4-B would require permanent removal of most of the riparian habitat, and permanent impacts to waters of the United States (i.e., stream) and riparian habitat would be potentially significant. As described in Section 4.3, *Biological Resources*, the proposed project would temporarily impact 0.06 acre and permanently impact 0.01 acre of riparian habitat. Alternative 4-A would presumably require similar outfall improvements, and impacts would be mitigable, similar to the proposed project. Scenario 4-B would result in greater impacts to the stream and riparian habitat than the proposed project. Under Scenario 4-A the impacts would be similar but mitigable, as the stream and riparian corridor would be retained. Under Scenario 4-B the impacts would be potentially significant and unavoidable.

Because the Alternate Location - Thurber Site under Scenario 4-A would include the same activities within and in proximity to a stream and associated riparian habitat, it would result similar potential impacts to wildlife species (western pond turtle, pallid bat, Townsend's big-eared bat, California giant salamander, white-tailed kite, San Francisco dusky-footed woodrat, and migratory nesting birds) identified as candidate, sensitive, or special-status at the Thurber property and within the stream and riparian corridor. Similar mitigation applied to the proposed project would be applied to development under Scenario 4-A. Thus, this alternative's impacts related to special-status species would be less than significant with mitigation that avoids active migratory bird nests, bat roosts, and turtle dens during construction for Scenario 4-A, but potentially significant and unavoidable for Scenario 4-B as the stream is piped and riparian corridor eliminated.

The proposed project impacts related to biological resources would be less than significant with mitigation (see Section 3.3, *Biological Resources*). The Alternate Location - Thurber Site under Scenario 4-A would have less than significant impacts with mitigation and a similar level of biological resources impact compared to the proposed project. Scenario 4-B, which places the stream in a pipe, would have a greater impact compared to the proposed project, and impacts would be potentially significant and unavoidable.

#### **d. Cultural Resources**

Under the Alternate Location - Thurber Site, the proposed medical office building and associated parking garage would have the same total size as under the proposed project. Stormwater and sewer improvements similar in size to that proposed under the proposed project would also be constructed at the Thurber property. Similar mitigation and code requirements for construction on the Thurber site to address encountering unanticipated cultural resources during construction would be applied, and less-than-significant impacts would be similar to the proposed project. There are no structures on the Thurber property, and therefore no potential for impacts to historic buildings. Therefore, overall, there would be less-than-significant impacts, and impacts to cultural resources would be similar to the proposed project.

#### **e. Energy**

The proposed medical office building and parking garage would be the same size under both Alternative 4 and the proposed project. Therefore, construction of the structures and infrastructure would require approximately the same equipment and duration, resulting in comparable energy consumption during construction. Because the medical office building and parking garage would be the same size under this Alternative 4 and the proposed project, energy consumption during operation would be the same.

The proposed project energy impact would be less than significant, as described in Section 4.5, *Energy*. Therefore, the Alternate Location - Thurber Site Alternative would have a similar level of impact compared with the proposed project.

#### **f. Geology and Soils**

Under the Alternate Location - Thurber Site Alternative, the new development on the Thurber property would be the same square footage as under the proposed project. Under Scenario 4-A with the stream and riparian corridor retained in their current daylighted configuration, the footprint of the buildings would be reduced in favor of taller building(s), but the foundations for the taller building(s) may be deeper. New buildings on the project site would meet latest building codes related to current energy, safety, fire provisions. However, during a seismic event, similar adverse

impacts related to seismic-related ground failure and shaking could still occur, because the Thurber property is approximately 0.32 mile from the project site and still within proximity to the same faults and seismicity. Additionally, excavation and ground disturbance during construction could potentially reach previously undisturbed strata with high potentially paleontological sensitivity. Scenario 4-A could include a subterranean parking level, which reach deeper strata and more previously undisturbed strata compared to either Scenario 4-B or the proposed project. The same mitigation applied to the proposed project could be applied to this alternative, which would require the project to implement feasible mitigation measures to reduce potential exposure of persons and property to seismic-related hazards as well as effects on significance of previously undiscovered, subsurface, paleontological resources or unique geologic features to a less-than-significant level via implementation of site-specific geotechnical recommendations and paleontological resource protections. Thus, the impact related to geology and soils would be less than significant with mitigation under this alternative and similar to those in the proposed project location. The Alternate Location - Thurber Site Alternative would have a similar level of geology and soils impact compared to the proposed project, as the new medical office building and parking structures under this alternative would also be built to latest seismic standards.

#### **g. Greenhouse Gas Emissions**

Under the Alternate Location - Thurber Site Alternative, the new development on the Thurber property would be the same square footage as under the proposed project. Because the medical office building and parking garage would be the same size under Alternative 4 and the proposed project, construction equipment and duration would be the same, resulting in the same construction GHG emissions. Additionally, operation of the medical office building and parking garage would result in the same level of GHG emissions as the proposed project because the buildings and uses would be the same size. However, mobile-source emissions of Alternative 4 would be reduced compared to proposed project. Mobile-source emissions would be reduced because the Thurber property is accessible by transit, which could encourage and accommodate some people to travel to the site using transit rather than personal vehicles. Additionally, existing uses on the proposed project site would continue under this alternative, resulting in associated ongoing and existing GHG emissions. Overall, GHG impacts of Alternative 4 would be less than significant and slightly lesser compared to the proposed project.

#### **h. Hazards and Hazardous Materials**

According the California Department of Toxic Substances Control (DTSC), the Thurber property is not a hazardous materials site (DTSC 2020). Likewise, the State Water Resources Control Board (SWRCB) has not mapped the property as a hazardous materials site or identified hazardous material contamination on the property (SWRCB 2020). Therefore, construction of the medical office building and parking garage on the Thurber property would have no impact on hazardous material sites, similar to the proposed project.

Because the Thurber property is primarily vacant, there would be no demolition or removal of pavement materials, debris, vehicles, and buildings. As such, there would be no construction impacts related to potential exposure to hazardous materials. The mitigation applied to the proposed project related to existing site cleanup and abatement would not need to be applied to this alternative. In addition, with the undergrounding of natural gas and electricity utility line extensions to the Thurber property and provision of more than one vehicle access point to the project site, hazard impacts related to wildfire and emergency access would be less than significant, similar to the proposed

project. Thus, the overall impact related to hazards and hazardous materials under this alternative would be less than significant, and this alternative would have a lesser level of hazards and hazardous materials impact during construction than the proposed project.

### **i. Hydrology and Water Quality**

Under the Alternate Location - Thurber Alternative, the primarily vacant Thurber property would be developed with a proposed medical office building and associated parking garage that has the same total size as under the proposed project. Under Scenario 4-A, which retains the stream "daylighted" and the riparian corridor, it is assumed that there would be a reduced structural footprint on the property and the building(s) would be taller to achieve the same amount of square footage and parking spaces. Under Scenario 4-A, it is expected that impervious surfaces would be less than the proposed project, and that the corresponding lesser amount of stormwater runoff could potentially use the stream and riparian area as a beneficial component of the stormwater management strategy for the site.

Under Scenario 4-B, there would be the same size structural footprint on the Thurber property as the proposed project, and there would be a similar proportion of impervious surfaces resulting in stormwater runoff. The same mitigation applied to the proposed project would be applied to this Scenario 4-B alternative, and the associated stormwater runoff requirements would ensure that stormwater runoff would be retained to ensure no net increase in off-site stormwater flow. Thus, for both Scenarios 4-A and 4-B, the impact related to hydrology and water quality would be less than significant with mitigation requiring that a schedule of maintenance tasks be followed by property owners for the safe and efficient function of the on-site stormwater treatment and detention facilities and regularly inspected by the County.

However, under Scenario 4-B it is assumed that the stream is "piped" and placed underground. This could possibly be considered changes to the course of a waterbody. Piping the stream could potentially increase flow velocity and volume downstream of the Thurber property, which, with enough flow, could potentially result in localized flooding, depending on design and then-existing capacity of off-site facilities. Mitigation would be required for Scenario 4-B to ensure the pipe is properly sized and inlets and outlets are properly maintained to reduce potential impacts to less than significant. Overall, impacts related to hydrology and water quality resulting from Scenario 4-A would be less than significant with mitigation; however, impacts related to hydrology and water quality resulting from Scenario 4-B may require mitigation and could be potentially significant and unavoidable if no mitigation measures are available. Compared to the proposed project, impacts of Alternative 4 would be greater because this alternative under Scenario 4-B involves a greater level of impacts to a greater extent of riparian resources, and could involve proposed substantial modification to the channel of existing drainage course.

### **j. Land Use and Planning**

Under the Alternate Location - Thurber Site Alternative, the primarily vacant Thurber property would be developed with a proposed medical office building and associated parking garage that has the same total size as the proposed project. The County General Plan and zoning code designate the Thurber property as a potential office/neighborhood commercial site, with some urban open space over the general location of the stream and riparian feature. Under Alternative 4, the project would develop an underutilized parcel with appropriate medical office uses and, thus, encourage a reduction in urban sprawl. Additionally, the Thurber property is located at the intersection of two

major roads (an arterial and a major collector) in an urbanized area, and development of the Thurber property under this alternative would not physically divide an established community.

Generally, because the medical office building and parking garage would be the same structures under Alternative 4 and the proposed project, consistency with many of the general plan policies would be the same for both Alternative 4 and the proposed project. However, both structures would be taller than the current zoning development standards that apply to the site, and it is assumed that building(s) under Scenario 4-A would be taller than under Scenario 4-B in order to accommodate the same level of square footage within a smaller footprint. Alternative 4 would result in more impacts to biological resources, such as riparian habitat under Scenario 4-B, which involves significant and unavoidable impacts due to the undergrounding of the stream and elimination of the riparian corridor. Mitigation would be required to reduce impacts, but nonetheless, Scenario 4-B would be less consistent with policies to protect biological resources than the proposed project. While these are essentially biological and hydrological impacts, they are related to Land Use because it is assumed that under Scenario 4-B the General Plan "Open Space" land use designation that currently exists over the general location of the stream and riparian corridor would be removed, and an alternate urban land use designation such as Professional Office would replace the Open Space designation. A Planned Unit Development or alternate zoning mechanism would also be anticipated, in order to accommodate the proposed heights of the medical office and parking structure buildings.

Overall, the Alternate Location - Thurber Site Alternative would have a less-than-significant impact on land use and planning, because it is not considered a significant physical environmental impact to amend the land use designation of a property. Compared to the proposed project, impacts would be greater due to the potential for Scenario 4-B to be inconsistent with existing land use and environmental policies, which could result in environmental impacts.

#### **k. Noise**

Under the Alternate Location - Thurber Site Alternative, the primarily vacant Thurber property would be developed with a proposed medical office building and associated parking garage that has the same total size as under the proposed project. Similar to the proposed project, temporary or periodic impacts of groundborne vibration and noise sources from construction activities under this alternative would occur. Additionally, operational noise, such as HVAC equipment on the medical office building and vehicle noises in the garage would also occur, similar to the proposed project. Like the proposed project, the Thurber property is adjacent to existing residences, which are located approximately the same distance from the property boundary as the residences nearest the proposed project site. However, there are more residences located within this approximate proximity to the Thurber property compared to the proposed project. Therefore, Alternative 4 would impact more sensitive receptors than the proposed project. Since it was determined that potential noise impacts from the same size proposed medical office building on proximate sensitive receptors would be less than significant for the proposed project; noise and vibration impacts would be also less than significant under this alternative. Thurber Lane would buffer receptors from the Thurber property. However, because the Alternate Location - Thurber Site Alternative would result in similar levels of noise as the proposed project, and receptors would be buffered by Thurber Lane, impacts would be similar compared to the proposed project.

## I. Population and Housing

Under the Alternate Location - Thurber Site Alternative, the proposed medical office building and associated parking garage would have the same total size as the proposed project. This would result in no additional permanent population but increased employment on the Thurber property. There would be similar employment under this alternative compared to the proposed project, given the similar medical office building size and exact same medical services and uses proposed. However, because the proposed project site would not be developed with a medical office building under this alternative, the possibility for the proposed project site to be developed with residential uses in the future would not be precluded. The Alternate Location - Thurber Site Alternative would have less-than-significant impacts on population and housing, and impacts would be lesser compared to the proposed project.

### m. Public Services

The Thurber property is approximately the same distance from fire stations as the project site. The medical office building and parking garage would be the same size with the same uses. Therefore, the demand for fire protection service, response times, and service ratios would be approximately the same as the proposed project, and impacts would be less than significant. It is possible that the projected taller building(s) under Scenario 4-A would require different fire apparatus/ equipment than for the proposed project and Scenario 4-B, but that could be mitigated. Similarly, law enforcement demand would be the same as the proposed project and less than significant. While the Thurber property is approximately 0.3 mile further from the Sheriff's office than the proposed project, that is not considered to affect response times because that is more influenced by where patrol cars happen to be rather than where the office is located. Therefore, response time to the Thurber property are expected to be similar.

There would be a similar change related to school and library services under the Alternate Location - Thurber Alternative as the proposed project because there would be a similar temporary daytime population associated with employment at the Thurber property as compared to the proposed project. The project site and the Thurber property are approximately 0.32 mile apart, and people relocating to the area for employment at the medical office building would likely choose to reside in the same area regardless of whether Alternative 4 or the proposed project were implemented. Therefore, the same school districts and library facilities would be utilized. The project applicant would be required to pay all applicable development impact fees pursuant to SB 50 under Alternative 4. Payment of these fees is considered complete and full mitigation for impacts related to school capacity. Overall, Alternative 4 would result in less-than-significant impacts on public services, and impacts would be at a similar level to the proposed project.

### n. Transportation

The Thurber property is located on Soquel Drive and Thurber Lane. Both Soquel Drive and Thurber Lane currently have a bicycle lane, which could be used to access the medical office building under this alternative. Additionally, Soquel Drive has a pedestrian sidewalk that could be used to access the medical office building. Therefore, construction of a new bicycle lane or pedestrian facilities would not be necessary under Alternative 4. The Thurber property, unlike the project site at this time, is accessible by transit. Accordingly, people could choose to utilize public transit to travel to the medical office building under Alternative 4, which would not be an option, at least for the near-term, with implementation of the proposed project. Therefore, Alternative 4 would be more consistent with local and regional objectives and policies pertaining to the circulation system.

Similar to the proposed project, Alternative 4 would be designed to include adequate ingress/egress and emergency vehicle access from Soquel Drive and Thurber Lane. As such, emergency access impacts would be similar to the proposed project and less than significant.

As described in Section 4.14, *Transportation*, the proposed project would reduce VMT in the County because it would provide medical services in the area that residents currently travel to the San Francisco Bay Area to receive. Once the medical office building is operational, residents would be able to travel to the project site for medical services rather than to the San Francisco Bay Area, substantially reducing trip length and VMT. Alternative 4 would provide the same medical services as the proposed project within the same Live Oak area of the County. Therefore, Alternative 4 would result in a comparable reduction of VMT as the proposed project. However, Alternative 4 may result in further reduction of VMT because the Thurber property is accessible by transit, and people may choose to travel by transit for medical services. However, transit use for medical services would be minimal. The availability of transit may also reduce delay at intersections that would otherwise occur from project-generated trips.

Overall, the Alternate Location – Thurber Alternative would have less than significant impacts on transportation. Compared to the proposed project, Alternative 4 impacts would be slightly lesser because there are existing bicycle, pedestrian, and transit facilities available for accessing the Thurber property, providing more transportation options for project patrons.

#### **o. Tribal Cultural Resources**

Under the Alternate Location - Thurber Alternative, the proposed medical office building and associated parking garage would have the same total size as under the proposed project, although it is assumed that the ground footprint would be reduced under Scenario 4-A along with taller building(s), as compared to the proposed project and Scenario 4-B footprints. Stormwater, water, and sewer improvements similar in size to that proposed under the proposed project would also be constructed at the Thurber property. Construction-related impacts on archaeological resources would be mitigatable, similar as under the proposed project, by conducting archaeological resources monitoring during construction and stopping construction in the event that human remains or other cultural resources, including tribal cultural resources, are encountered. Therefore, overall, impacts of Alternative 4 on tribal cultural resources would be less than significant with mitigation. Compared to the proposed project, Alternative 4 would result in similar impacts.

#### **p. Utilities and Service Systems**

The various wastewater main improvements as well as connection to existing utility infrastructure (water, sanitary sewer, electricity, natural gas, and telecommunications) would occur similar in scope as under the proposed project in order to accommodate the new medical office building and parking garage under this alternative. Furthermore, the undergrounding of utility lines would still occur under this alternative. However, this alternative would not involve improvements and modifications to stormwater drainage on Soquel Avenue that would occur with implementation of the proposed project. Under this alternative, the utility and service impacts related to construction of waste, wastewater, stormwater, and telecommunication facilities would be less than significant with the implementation of the biological resources, cultural resources, and geology/soils mitigation measures identified for the proposed project.

Because the medical office building and parking garage would be the same size and contain the same uses under Alternative 4 and the proposed project, the demand for wastewater treatment, water, and solid waste disposal would be the same. Like the project site, the Thurber property is

within the service area of the County's wastewater treatment facility (WWTF) and the City of Santa Cruz Water Department. As described in Section 4.16, *Utility and Service Systems*, the WWTF facility would have sufficient capacity for the proposed project. Therefore, the WWTF would also have sufficient capacity for wastewater generated by Alternative 4.

The Thurber property is zoned commercial (C-1) and office (PA). The City's UWMP assumed water demand would be consistent with these zoning districts. The proposed project would be consistent with the assumptions in the UWMP. However, the UWMP identifies water shortages during dry and multiple dry years. Although water supply is insufficient during dry years and multiple dry years, the incremental increase in demand of the project under Alternative 4 would not require the City of Santa Cruz to develop a new or additional water supply. Therefore, the direct and indirect impacts of Alternative 4 would be less than significant, similar to the proposed project. However, similar to the proposed project, Alternative 4 would contribute to a significant and unavoidable cumulative impact on water supplies, as detailed in Section 4.16, *Utilities and Service Systems*. Solid waste would be disposed of at the Buena Vista Landfill, which has capacity for the proposed project, and therefore for Alternative 4.

Overall, Alternative 4 would result contribute to a potentially significant and unavoidable impact on water supply. Alternative 4 and the proposed project would have a similar level of impact.

## 6.9 Alternatives Considered but Rejected

Section 15126.6 of the State *CEQA Guidelines* states that:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

The California Supreme Court, in *Citizens of Goleta Valley v. Board of Supervisors* (1990), indicated that a discussion of alternative sites is needed if the project "may be feasibly accomplished in a successful manner considering the economic, environmental, social, and technological factors



involved” at another site. Several criteria form the basis of whether alternative sites need to be considered in detail. These criteria take the form of the following questions:

1. Could the size and other characteristics of another site physically accommodate the project?
2. Is another site reasonably available for acquisition?
3. Is the timing of carrying out development on an alternative site reasonable for the applicant?
4. Is the project economically feasible on another site?
5. What are the land use designation(s) of alternative sites?
6. Does the lead agency have jurisdiction over alternative sites? and
7. Are there any social, technological, or other factors which may make the consideration of alternative sites infeasible?

Site characteristics that could support a project that meets the project objectives include: appropriate size to accommodate an economically viable medical office project; proximity of a parking garage to the medical office building; and availability of appropriate urban services and characteristics, including available utilities, and location in Santa Cruz County. In order to accommodate the needed medical services, the medical office building must be located on a property or properties measuring approximately 5 acres or larger. Additionally, adequate parking must be available within approximately no farther than 200 feet from the medical office building.

The following alternative sites were initially considered. However, for reasons discussed below, they were dismissed from further consideration.

### 6.9.1 Alternate Par 3 Site Alternative

Under this alternate site alternative, the project would be constructed at a property known as “Par 3” at Mar Vista Drive and Highway 1 in the unincorporated community of Aptos in the County. The approximately 13.7-acre property, identified as APN 039-201-36 and APN 039-201-37, is approximately 4 miles from the proposed project site. The Par 3 site is zoned Parks, Recreation, and Open Space (PR) and designated as Open Space-Recreation (O-R) in the County’s General Plan, and therefore would require rezoning and modification of the land use designation to accommodate the alternative. This alternative site is adequately sized to accommodate an approximately 160,000 square-foot medical office building and a four-story parking garage. However, the property is at the dead end of Mar Vista Drive, which would prevent efficient vehicle circulation to and from the site. Vehicles traveling to the medical office building would have to travel through an existing residential neighborhood on Mar Vista Drive. In addition to the increased traffic volume on residential streets, the vehicle noise would be in proximity to residential receptors. Given that the medical office building would be a new type of use (i.e., not residential), the increased traffic noise on Mar Vista Drive could be substantial at surrounding receptors.

Because the Par 3 property is a former golf course, it contains vegetation cover, including trees and grasses. Development of the Par 3 property would, therefore, result in greater biological impacts than development on the proposed project site, as the Par 3 property contains more trees and vegetation. Development on the Par 3 site would also result in greater aesthetic impacts due to the conversion of vegetation cover to structure and asphalt paving. In addition, this project site would be served by Soquel Creek Water District, which requires new development to offset water usage using their Water Demand Offset Program. This program allows project developers to purchase offset credits for their water usage and/or propose other methods of offsetting their water usage. The district allows purchase of offset credits up to 10 acre feet, a fee of approximately \$500,000 for

an office building of the project's size, but the project would also be required to find other means of offsetting the remaining approximately 31 acre feet of water usage, which would be a strong deterrent to locating within the water district, potentially to a degree that the project would become economically infeasible at such a location.

As described above, noise impacts would also be greater. Because the Par 3 Alternative would result in potentially greater impacts compared to the proposed project, would require development of land designated for open space and recreation, and may be economically infeasible, it was dismissed from further consideration.

### 6.9.2 Alternate Bay One Site Alternative

Under this alternate site alternative, the project would be constructed at a property known as "Bay One" at the corner of Highway 1 and Bay Avenue in the City of Capitola. The approximately 4.8-acre property, identified as APN 035-381-01 and APN 035-011-03, is approximately 1.5 miles east of the proposed project site. At approximately 4.8 acres in size, the Bay One site could be sufficiently sized to accommodate an approximately 160,000 square-foot medical office building and parking garage. However, the Bay One site contains the Soquel Creek riparian area that precludes development on approximately 1.4 acres of the northern portion of the Bay One site. The reduced usable acreage of approximately 3.4 acres is less than the 5 acres needed for an approximately 160,000 square-foot medical office building and parking garage. In addition, similar to the Par 3 site, this site is located within the Soquel Creek Water District boundaries, and would have similar water offset requirements and fees, affecting the economic feasibility of the project at this location. Therefore, the Bay One Site Alternative was dismissed from further consideration.

### 6.9.3 Alternate Inner Light Ministries Site Alternative

Under this alternate site alternative, the project would be constructed at a property currently occupied by Inner Light Ministries at 5630 Soquel Avenue. The approximately 3.4-acre property, identified as APN 037-191-14, is approximately 1.8 miles east of the proposed project site. This site contains a riparian area and intermittent stream on its eastern boundary on the south half of the property, which would further reduce its developable area. Therefore, this property would not be adequately sized for development of the medical office building and garage, which require 5 acres. In addition, this site was approved for an assisted living facility in 2020 and was not available at the time of alternative site selection for this EIR. Further, similar to the Par 3 and Bay One site, this site is located within the Soquel Creek Water District boundaries, and would have similar water offset requirements and fees, affecting the economic feasibility of the project at this location. Therefore, the Inner Light Ministries Site Alternative was dismissed from further consideration.

## 6.10 Environmentally Superior Alternative

Table 6-1 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied.

**Table 6-1 Impact Determinations Comparison of Alternatives**

<b>Issue</b>	<b>Proposed Project<sup>1</sup></b>	<b>Alternative 1 (No Project)<sup>2</sup></b>	<b>Alternative 2 (Approved Land Use)<sup>2</sup></b>	<b>Alternative 3 (Reduced Project)<sup>2</sup></b>	<b>Alternative 4 (Alternate Location—Thurber)<sup>2</sup></b>
Aesthetics	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant (lesser)	Less Than Significant (lesser)	4-A Less Than Significant (greater); 4-B Less than Significant (similar)
Air Quality	Less Than Significant	No Impact (lesser)	Less Than Significant with Mitigation (similar)	Less Than Significant with Mitigation (similar)	4-A & 4-B Less Than Significant with Mitigation (slightly lesser)
Biological Resources	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant with Mitigation (similar)	Less Than Significant with Mitigation (similar)	4-A Less Than Significant with Mitigation (similar); 4-B Significant and Unavoidable (greater)
Cultural Resources	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant with Mitigation (similar)	Less Than Significant with Mitigation (similar)	4-A & 4-B Less Than Significant (similar)
Energy	Less Than Significant	No Impact (lesser)	Less Than Significant (greater)	Less Than Significant (similar)	4-A & 4-B Less Than Significant (similar)
Geology and Soils	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant with Mitigation (slightly greater)	Less Than Significant with Mitigation (similar)	4-A & 4-B Less Than Significant with Mitigation (similar)
GHG Emissions	Less Than Significant	No Impact (lesser)	Significant, requiring mitigation (greater)	Less Than Significant (similar)	4-A & 4-B Less Than Significant (slightly lesser)
Hazards and Hazardous Materials	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant with Mitigation (similar)	Less Than Significant with Mitigation (similar)	4-A & 4-B Less Than Significant (lesser)
Hydrology and Water Quality	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant (similar)	Less Than Significant with Mitigation (similar)	4-A Less Than Significant with Mitigation (lesser); 4-B Significant and Unavoidable (greater)
Land Use and Planning	Less Than Significant	No Impact (lesser)	Less Than Significant (slightly lesser)	Less Than Significant (similar)	4-A Less Than Significant (similar); 4-B Less Than Significant (greater)
Noise	Less Than Significant	No Impact (lesser)	Less Than Significant (similar)	Less Than Significant (lesser)	4-A & 4-B Less Than Significant (similar)
Population and Housing	Less Than Significant	Less Than Significant (lesser)	Less Than Significant (lesser)	Less Than Significant (similar)	4-A & 4-B Less Than Significant (lesser)

Issue	Proposed Project <sup>1</sup>	Alternative 1 (No Project) <sup>2</sup>	Alternative 2 (Approved Land Use) <sup>2</sup>	Alternative 3 (Reduced Project) <sup>2</sup>	Alternative 4 (Alternate Location—Thurber) <sup>2</sup>
Public Services	Less Than Significant	No Impact (lesser)	Less Than Significant (slightly greater)	Less Than Significant (slightly lesser)	4-A & 4-B Less Than Significant (similar)
Transportation	Less Than Significant	No Impact (lesser)	Significant, requiring mitigation (greater)	Less Than Significant (slightly greater)	4-A & 4-B Less Than Significant (slightly lesser)
Tribal Cultural Resources	Less Than Significant with Mitigation	No Impact (lesser)	Less Than Significant (similar)	Less Than Significant with Mitigation (similar)	4-A & 4-B Less Than Significant with Mitigation (similar)
Utilities and Service Systems	Significant and Unavoidable Cumulative	No Impact (lesser)	Significant and Unavoidable Cumulative (greater)	Significant and Unavoidable Cumulative (slightly lesser)	4-A & 4-B Significant and Unavoidable Cumulative (similar)

1 Impact is the most severe level of impact identified on the resource or issue area.

2 Comparison of impacts is based on the overall impact of the alternative on the resource or issue area.

Results of Table 6-1 are summarized as follows:

**Alternative 1 (No Project).** As shown in Table 6-1, Alternative 1 would have no impacts on all resources or issue areas except for population and housing. This alternative would have no impacts on all but one resource because there would be no change or effects to existing conditions. In order for an impact to occur, there must be an effect or change to existing conditions. Impacts on population and housing would be less than significant and slightly less than the proposed project because the project site would remain undeveloped and not used for residential development. Although this alternative would have no impacts on most resources, which would be lesser impacts compared to the proposed project, beneficial effects of the project would not occur under Alternative 1. For example, the proposed project would reduce existing VMT in the County, which in turn would reduce mobile-source GHG emissions and air pollutant emissions. Alternative 1 would not reduce existing VMT because it would have no impact on existing conditions. Therefore, Alternative 1 would also not reduce GHG emissions or air pollutant emissions associated with mobile sources.

**Alternative 2 (Approved Land Use).** Compared to the proposed project, Alternative 2 would have slightly greater to greater impacts on energy, geology and soils, greenhouse gas emissions, public services, transportation, and utilities and service systems. However, Alternative 2 would have lesser impacts on aesthetics, land use and planning, and population and housing. Impacts on air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources would be similar under both Alternative 2 and the proposed project.

**Alternative 3 (Reduced Project).** Compared to the proposed project, Alternative 3 would result in slightly greater impacts on transportation due to increased VMT associated with patients continuing to travel over the hill for services. Other than transportation, Alternative 3 would have similar or lesser impacts on all resources and issue areas than the proposed project. Impacts that would be lesser include aesthetics impacts, noise impacts, public services impacts, and utilities and service systems impacts.

**Alternative 4 (Alternate Location - Thurber Site)**. As described above in Section 6.8.1, Alternative 4 is analyzed as Scenario 4-A and Scenario 4-B, for applicable resources. Regardless of the potential implementation of Scenario 4-A or Scenario 4-B, Alternative 4 would result in similar impacts of the proposed project on cultural resources, energy, geology and soils, noise, public services, tribal cultural resources, and utilities and service systems. Compared to the proposed project, Scenario 4-A would result in greater impacts on aesthetics, due to the increased heights of the building(s). Scenario 4-A would result in slightly lesser to lesser impacts on air quality, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, population and housing, and transportation. Scenario 4-A would result in similar impacts to biological resources and land use and planning. Compared to the proposed project, Scenario 4-B would result in greater impacts on biological resources, hydrology and water quality, and land use and planning. Scenario 4-B would result in slightly lesser to lesser impacts on air quality, greenhouse gas emissions, hazards and hazardous materials, population and housing, and transportation.

Based on the alternatives' comparison analysis provided above, Alternative 1 would be the environmentally superior alternative. Alternative 1 would result in no impacts to all but one of the resources or issue areas studied. As described above, while this alternative would have no impacts on most resources, which would be lesser impacts compared to the proposed project, beneficial effects of the project would not occur under Alternative 1. For example, the proposed project would reduce existing VMT in the County, which in turn would reduce mobile-source GHG emissions and air pollutant emissions. Alternative 1 would not reduce existing VMT because it would have no impact on existing conditions. Therefore, Alternative 1 would also not reduce GHG emissions or air pollutant emissions associated with mobile sources.

*CEQA Guidelines* Section 15126.6(d)(2) states that if the No Project Alternative is identified as the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives analyzed. Because Alternative 1 is the No Project Alternative, either Alternative 2, Alternative 3, or Alternative 4 must be identified as the environmentally superior alternative. Based on the impacts comparison in Table 6-1, Alternative 3 Reduced Project Size would have the greatest net amount of lesser impacts compared to the proposed project. Alternative 4, Scenario 4-A would result in the same number of lesser impacts compared to the proposed project as Alternative 3, but more would be slightly lesser as opposed to lesser. Therefore, Alternative 3 would be the environmentally superior alternative.

While Alternative 3 would result in lesser impacts to more resources compared to other studied alternatives and would be environmentally superior, it would fail to meet most of the project objectives. The medical office building would be reduced in size by approximately 25 percent and would be incapable of accommodating the full range of consolidated outpatient services-such as primary care, specialty care, ancillary healthcare, retail services, and educational programs.

Alternative 2 would fail to meet all project objectives because a new medical office building would not be constructed within the County. Instead, the project site would be developed with residential uses and people would continue to travel to the San Francisco Bay Area for medical services.

Alternative 4 would meet all project objectives except for the objective to redevelop a highly visible, underutilized storage and salvage yard with a medical office building. Instead, a vacant parcel that is largely vegetated would be developed with a medical office building and parking structure. While this alternative would meet most of the project objectives, depending on Scenario 4-A or Scenario 4-B, it would result in slightly greater to greater impacts than the proposed project on certain

resources or issues areas, including aesthetics, biological resources, hydrology and water quality, and land use and planning.

**Alternative 3 is the environmentally superior alternative.**

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This EIR was prepared by the County of Santa Cruz, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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# Appendix A

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Notice of Preparation and Comments Received

# Appendix B

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Photometric Study

# Appendix C

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CalEEMod Air Quality Worksheets



# Appendix D

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Transportation Impact and Operational Analysis

# Appendix E

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Biological Resources Evaluation

# Appendix F

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Arborist Report

# Appendix G

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Biological Resources Assessment

# Appendix H

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Jurisdictional Delineation Report

# Appendix I

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Habitat Assessment

# Appendix J

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Special-Status Plant Survey

# Appendix K

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Cultural Resources Assessment (Confidential and On-file at County Planning Department)



# Appendix L

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Project Geotechnical Investigation

# Appendix M

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Preliminary Post-Construction Stormwater Control Plan

# Appendix N

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Phase I Environmental Site Assessment

# Appendix O

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Phase II Environmental Site Assessment

# Appendix P

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Environmental Noise and Vibration Assessment

# Appendix Q

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Housing Division of the Santa Cruz County Planning Department Memorandum