CALIFORNIA COASTAL COMMISSION
SOUTH COAST DISTRICT OFFICE
301 E. OCEAN BLVD, SUITE 300
LONG BEACH, CA 90802-4325
VOICE (562) 590-5071

Th15b

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STAFF REPORT: REGULAR CALENDAR

Application No.: **5-23-0397**

Applicant: **City of San Clemente**

Location: Near the Cyprus Shore's Community Building west of the Avenida De Las Palmera and Calle Ariana intersection, San Clemente, Orange County (APN: 060-281-58)

Project Description: Construct a replacement sewer lift station in a 7-ft. diameter by 28-ft. deep circular wet well with a valve vault and a meter fault connecting to the existing force main, install a 10-in. diameter overflow pipe to convey sewage flows to the existing lift station's wet well, replace approximately 217 linear ft. of damaged storm drain within the existing alignment and easement, construct approximately 168 ft. of lateral storm drain pipelines with six catch basins, repair the motor control center and steps leading to the sewer lift station electrical room, replace approximately 1,100 linear ft. of 6-in. sewer force main pipe with new 6-in. PVC pipe, conduct minor maintenance of vehicular access road, and plant 2,071 sq. ft. of native vegetation in place of removed asphalt.

Staff Recommendation: Approval with conditions

SUMMARY OF STAFF RECOMMENDATION

The City of San Clemente provides potable water, wastewater collection and storm drainage conveyance to approximately 400 homes within the Cyprus Shore Community Association (Cyprus Shore). The City's proposed development would involve the construction of a new sewer lift station and would restore a storm drain pipeline (storm drain) and sewer force main pipe (force main) that were damaged due to coastal bluff movement that began in the fall of 2021. The proposed project would repair the motor control center and steps leading to the existing sewer lift station electrical room. The City is also proposing improvements to the conduit lines associated with the sewer lift station electrical room. Finally, the proposed project includes minor repairs to the vehicular access road, as well as removing asphalt from the portions of road that have dropped below grade and the planting of 2,071 sq. ft. native vegetation in its place (**Exhibit 2**). The project site is located near the Cyprus Shore Community Building West of the Avenida De Las Palmera and Calle Ariana intersection in the City of San Clemente (**Exhibit 1**).

CDP Application No. 5-23-0397 was originally scheduled for the Commission's November 2023 public hearing. The original proposal involved the installation of nine caissons to provide stability for the existing sewer lift station. A week prior to the scheduled Commission hearing, the City provided an alternative design, now proposed, that would eliminate the need for caissons and would relocate the sewer facilities further inland. Thus, the item was postponed in order to allow the City more time to flesh out the alternative design and for the Commission's technical staff to conduct its review. The City's Geotechnical Engineer has since confirmed that the proposed new lift station would be located outside of the active landslide area and would not require new caissons to support it; however, the new lift station would still rely on the railroad revetment and Orange County Transportation Authority's (OCTA) stabilization system immediately seaward of the site for protection and stabilization, and thus the project's inconsistency with the hazard policies of the Coastal Act would not be entirely eliminated.

The proposed project is not consistent with Coastal Act Section 30253, which requires that new development not require the construction of protective devices that would substantially alter natural landforms along bluffs. The new development under consideration of this CDP application is the sewer lift station, storm drain, and force main replacements, and since they are not "existing" structures per Section 30235, the requirement for the project to be consistent with Section 30253 cannot be overridden. The sewer and storm drain infrastructure onsite, including the new development, are afforded shoreline protection by the existing railroad revetment and the grade beam and tieback stabilization system recently completed by OCTA seaward of the site.[1] Even while the City made an effort to remove the caissons from its project proposal, the development still relies on other shoreline protection devices, which substantially alter

[1] Emergency Permit Nos. G-5-21-0039, G-5-21-0057, G-5-22-0034, and G-5-22-0035

the natural landforms along the bluff, and as a result, the project would be typically denied on the basis of inconsistency with one or more Coastal Act policies – which, in this case, is Section 30253.

However, denying the project could lead to threats to the existing sewer lift station either within one (or a couple) storm cycle(s) or from seasonal groundwater flow through the slope, which could subsequently result in a large sewage spill if the sewer lift station and force main were to fail. Due to the high potential for threats of unchecked wastewater discharge, marine organism contamination, and severe water quality impacts, denying the project would be inconsistent with Coastal Act Sections 30230 and 30231 because these sections affirmatively require that marine resources and water quality be protected. Because denying the project would be inconsistent with Coastal Act Sections 30230 and 30231, but approving the project would be inconsistent with Coastal Act Section 30253, this project presents a conflict among Coastal Act policies. Commission staff's ultimate recommendation of approval or denial for this project requires the resolution of this policy conflict because both approval and denial of the project would be inconsistent with the Coastal Act. Section 30007.5 serves as guidance when the Commission is presented with a policy conflict. Pursuant to that section, the Commission must determine the proper recommendation which, on balance, is most protective of significant coastal resources.

A major issue that has been evaluated is whether the proposed project (a repair of the storm drain in its current location – for the most part, and construction of a new sewer lift station further inland, but still within the area of the ancient landslide) is the best alternative, or if there exists a feasible alternative which would result in relocating the storm drain and sewer system outside of the ancient landslide area in order to minimize risks to life and property and eliminate the reliance on shoreline armoring. The City addressed this question in its application. The City identified and analyzed seven alternatives for the proposed project. Several of the identified alternatives would be infeasible at this time due to the substantial increase in project costs and the decrease in emergency storage capacity. Economically, it may be more feasible to relocate the City's sewer run (i.e., Beach Trunk Line) as a whole, rather than each lift station and associated force main pipes individually. However, to analyze this would be a fairly extensive study that the City did not have time to complete as a part of this CDP application. So, Commission staff found that the proposed project is the preferred alternative given the circumstances. While currently it is not feasible to relocate this particular sewer lift station further inland and outside of the ancient landslide area, in the future, alternatives that look at relocating the entire system should be evaluated. Coastal hazard risks at this site will be exacerbated by sea level rise (SLR) in the future, and will likely affect other portions of the City's sewer run along the coast as shown on **Exhibit 3.** Such an approach would be additionally consistent with the Commission's mandate under Section 30270 to "take into account the effects of sea level rise in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise."

Accordingly, staff recommends approval of the project through the Coastal Act's conflict resolution procedures, to allow adequate time for the City to develop a resilient sewer system that is more consistent with the Coastal Act in light of the coastal hazard risks and coastal resources endangered at this site. **Special Condition 1** limits the length of development authorization to a time frame of 20 years but requires that the City submit a relocation analysis in ten (10) years. As conditioned, the project is designed to provide the City a reasonable period of time to evaluate alternatives, engage in adaptation planning and implement a relocation plan that would minimize the perpetuation of infrastructure in hazardous areas. Prior to expiration of the permit, the City would need to analyze and consider a future alternative that removes the existing sewer infrastructure and sites the entire City sewer run (**Exhibit 3**) in an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices. Or, if it is not feasible to do so, the City can either modify the sewer system design to ensure consistency with the Coastal Act or relevant LCP provisions if the Commission certifies an LCP for the City by the time CDP application submittal is required under this condition, or extend authorization of the sewer system and demonstrate that modifications to ensure consistency are infeasible while remaining, on balance, most protective of significant coastal resources pursuant to Section 30007.5 or otherwise.

Similarly, **Special Condition 2** acknowledges that the existing revetment and grade beam and tieback stabilization system that currently protects the railroad at the bluff toe may not continue to provide such protection unless it can be retained, repaired, maintained, enhanced, or reinforced in the future; and therefore, the sewer system may not be able to rely on the protection currently provided by the existing revetment in the future. Should the railroad and/or revetment ever be relocated or removed, the City would be required to submit an application for a CDP amendment to either (a) relocate the sewer system to an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices; or (b) either modify its design as needed to ensure consistency with the Coastal Act or relevant LCP provisions if the Commission certifies an LCP for the City by the time CDP application submittal is required under this condition; or (c) extend the length of time the sewer system is authorized and demonstrate that modifications to ensure consistency are not feasible and the project continues to be, on balance, the most protective of significant coastal resources pursuant to Section 30007.5 or otherwise.

In summary, in order to address coastal resource issues raised by the project, including but not limited to, impacts to coastal bluffs, impacts to marine resources and water quality, archaeological and tribal cultural resources that may be uncovered during ground disturbing activities, and the need for construction best management practices due to the site's proximity to the Pacific Ocean, Commission staff recommends eight (8) special conditions: **1)** Length of Development Authorization, **2)** Reliance on Existing Shoreline Protection, **3)** Protection of Archaeological and Tribal Cultural Resources, **4)** Storage of Construction Materials, Mechanized Equipment, and Removal of Construction Debris, **5)** Landscaping, **6)** Conformance with Geotechnical Recommendations, **7)** Waiver of Right to Future Shoreline and Bluff Protective Devices, **8)** Assumption of Risk, Waiver of Liability and Indemnity.

The Commission certified the City's Land Use Plan (LUP) in 1988 and approved a comprehensive update most recently in 2018. However, the City does not yet have a certified Local Coastal Program (LCP). Therefore, the Chapter 3 policies of the Coastal Act constitute the standard of review for the project, with the certified LUP used as guidance.

Therefore, staff recommends that the Commission **APPROVE** the CDP with the conditions described above. The motion to carry out the staff recommendation is on page 7 of this report.

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EXHIBITS

I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit No. 5-23-0397 pursuant to the staff recommendation.

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the applicant or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the applicant to bind

all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Length of Development Authorization.

A. **The approved development is authorized for twenty (20) years from the date of approval [i.e., through February 8, 2044].** By acceptance of this CDP, the permittee acknowledges and agrees that the development authorized pursuant to this permit is thus interim and is permitted for the time frame identified in order to provide a reasonable period of time for the Permittee to evaluate future risk of coastal hazards as influenced by sea level rise (SLR) and landslides and to plan, develop, and implement any necessary responses to coastal hazards including adaptation or relocation alternatives to ensure minimization of risk in the long term.

B. **Prior to the expiration of the authorization period of the development (i.e., before February 8, 2044)**, the permittee or its successor(s) shall submit to the Coastal Commission an application for a CDP amendment to either: (a) relocate the sewer system (sewer lift station and associated pipes) to an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices; or (b) modify its design as needed to ensure consistency with the Coastal Act, or relevant LCP provisions if the Commission certifies an LCP for the City by the time CDP application submittal is required under this condition; or (c) extend the length of time the development is authorized and demonstrate that modifications to ensure consistency are not feasible and the project continues to be, on balance, the most protective of significant coastal resources pursuant to Section 30007.5 or otherwise. If a complete application is filed before the end of the authorization period, the authorization period shall be automatically extended until the time the Commission acts on the application. The required amendment application shall conform to the Commission's permit filing regulations at the time.

C. **Within ten (10) years from the date of approval of this CDP (i.e., before February 8, 2034)**, the Permittee or its successors shall submit to the Executive Director a Beach Trunk Line Relocation Analysis for the relocation of the City's sewer run (Beach Trunk Line) within the Coastal Zone, as shown on **Exhibit 3**, that provides long-term alternatives to continue providing sewer services that is consistent with the Coastal Act, or relevant LCP provisions if the Commission certifies an LCP for the City by that time, and does not rely on shoreline or bluff protective devices. The Permittee shall evaluate alternatives for the relocation of the wastewater collection infrastructure away from the toe of the coastal bluff to an area that is not susceptible to sea level rise and/or bluff erosion/failure. The analysis shall provide the condition of existing infrastructure, and potential

locations for sewer lift stations, force mains, gravity sewer lines, potential phasing options with timelines, project costs, feasibility analysis, potential funding options, and geotechnical considerations for necessary infrastructure to provide service to residents and commercial and public facilities within the Coastal Zone.

2. Reliance on Existing Shoreline Protection. By acceptance of this permit, the permittee agrees, on behalf of itself and all successors and assigns, that the existing revetment and grade beam and tieback stabilization system that currently protects the railroad at the bluff toe might not continue to provide such protection unless they can be retained, repaired, maintained, enhanced, or reinforced in the future; and therefore, the sewer system may not be able to rely on the protection currently provided by the existing revetment and bluff stabilization in the future. Should the railroad and/or revetment and bluff stabilization system ever be relocated or removed, the permittee or its successors shall submit to the Coastal Commission an application for a CDP or CDP amendment to either (a) relocate the sewer system to an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices; or (b) modify its design as needed to ensure consistency with the Coastal Act, or relevant LCP provisions if the Commission certifies an LCP for the City by the time CDP application submittal is required under this condition; or (c) extend the length of time the sewer system is authorized and demonstrate that modifications to ensure consistency are not feasible and the project continues to be, on balance, the most protective of significant coastal resources pursuant to Section 30007.5 or otherwise.

3. Protection of Archaeological and Tribal Cultural Resources. The permittee shall undertake development in compliance with the following mitigation measures to protect archaeological, including tribal cultural resources:

A. AT LEAST ONE MONTH PRIOR TO COMMENCEMENT OF ANY GROUND-DISTURBING CONSTRUCTION ACTIVITIES, the permittee shall (i) notify the representatives of Native American Tribes listed on an updated Native American Heritage Commission (NAHC) contact list for the area; (ii) invite all Tribal representatives on that list to be present and to monitor ground-disturbing activities; and (iii) arrange for any invited Tribal representative that requests to monitor and a qualified archaeological monitor to be present to observe project activities with the potential to impact archaeological and/or tribal cultural resources. The monitor(s) shall have experience monitoring for archaeological resources of the local area during excavation projects, be competent to identify significant resource types, and be aware of recommended Tribal procedures for the inadvertent discovery of archaeological resources and human remains.

B. If an area of archaeological resources is discovered during ground-disturbing activities, all construction shall cease and shall not recommence except as provided in subsection (D) hereof, and the permittee shall retain an archaeologist and/or tribal cultural resource specialist qualified to analyze the

significance of the find in consultation with the Native American Tribes listed on the NAHC list. The specialist(s) shall immediately notify the Tribes on the NAHC list. An “exclusion zone” where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area that includes a reasonable buffer zone recommended by the monitor(s). Project activities may continue outside of the exclusion zone.

C. Should human remains be discovered on-site during the course of the project, immediately after such discovery, the on-site archaeologist and Native American monitor shall notify the County Coroner within 24 hours of such discovery, and all construction activities shall be temporarily halted until the remains can be identified. The Native American group/person deemed acceptable by the NAHC shall participate in the identification process, pursuant to Public Resources Code Section 5097.98. Should the human remains be determined to be that of a Native American, the permittee shall comply with the requirements of Section 5097.98. Within five (5) calendar days of such notification, the permittee shall notify the Executive Director of the discovery of human remains.

D. A permittee seeking to recommence construction within the exclusion zone following discovery of the archaeological resources shall submit a Supplementary Archaeological Plan (SAP) prepared by the project archaeologist in consultation with the Native American Tribes listed on the NAHC list for the review and written approval of the Executive Director. If the Executive Director approves the SAP and determines that the SAP’s recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after this determination is made by the Executive Director in writing. If the Executive Director approves the SAP but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission.

4. **Storage of Construction Materials, Mechanized Equipment, and Removal of Construction Debris.** The permittee shall comply with the following construction-related requirements:
   A. No demolition or construction materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion;
   B. All debris resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project;
   C. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters;
   D. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day;

E. The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction;
F. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the Coastal Zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required;
G. The applicant shall use plastic-free netting or no netting in a temporary erosion and sediment control BMPs.
H. The use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and heavy-duty silt fences) that incorporate plastic netting shall be prohibited, to minimize wildlife entanglement and plastic debris pollution. Only 100% biodegradable (not photodegradable) natural fiber netting shall be allowed.
I. All stockpiles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil;
J. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems;
K. The discharge of any hazardous materials into any receiving waters is prohibited;
L. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible;
M. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity; and
N. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

5. Landscaping – Drought Tolerant, Non-Invasive Plants.

PRIOR TO COMMENCEMENT OF BLUFFTOP ASPHALT REMOVAL, the permittee shall submit, for the review and written approval of the Executive Director, two (2) sets of landscaping plans, prepared by an appropriately licensed professional which shall include and be consistent with the following:

A. All blufftop areas where the removal of asphalt will occur shall be re-vegetated for habitat enhancement;

B. All landscaping adjacent to the coastal bluff shall consist of drought tolerant plants native to coastal Orange County and appropriate to the habitat type. Native plants shall be from local stock wherever possible;

C. No plant species listed as problematic and/or invasive by the California Native Plant Society (http://www.CNPS.org/), the California Invasive Plant Council (formerly the California Exotic Pest Plant Council) (http://www.cal-ipc.org/), or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a "noxious weed" by the State of California or the U.S. Federal Government shall be utilized within the property. All plants shall be low water use plants as identified by California Department of Water Resources (See: http://www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf).

D. No permanent in-ground irrigation systems shall be installed on the coastal bluff-facing portion of the site. Temporary above ground irrigation is allowed to establish plantings. Use of reclaimed water for irrigation is encouraged. If using potable water for irrigation, only drip or microspray irrigation systems may be used. Other water conservation measures shall be considered, such as weather based irrigation controllers.

E. All planting shall be completed within 60 days after completion of construction;

F. All vegetation shall be maintained in good growing condition throughout the life of the project, and whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the landscaping plan.

The permittee shall undertake development in accordance with the approved plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director provides a written determination that no amendment is required.

6. Conformance with Geotechnical Recommendations.

A. All final design and construction plans shall be consistent with all recommendations contained in the following geologic engineering investigations: Geotechnical Evaluation for the Proposed Cyprus Shore Sewer Lift Station Relocation, San Clemente, California, prepared by LGC Geotechnical, Inc., dated December 16, 2021.

B. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall submit, for the Executive Director's review and approval, evidence that an appropriately licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all the recommendations specified in the above-referenced geologic engineering report.

C. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment unless the Executive Director determines that no amendment is required.

7. Waiver of Right to Future Shoreline and Bluff Protective Devices.

By acceptance of this permit, the permittee acknowledges that the development authorized by this permit is not entitled to shoreline and/or bluff protective devices under Section 30235 of the Coastal Act. Thus, by acceptance of this permit, the permittee hereby waives, on behalf of itself and all successors and assigns, any rights to construct such shoreline and/or bluff protective devices to protect the development approved pursuant to CDP No. 5-23-0397.

8. Assumption of Risk, Waiver of Liability and Indemnity.

By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards from landslides, flooding, sea level rise, erosion and wave uprush; (ii) to assume the risks to the permittee and the property that are the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

IV. FINDINGS AND DECLARATIONS

A. Project Description and Location

The proposed development is located between the first public road and the sea in the gated, private Cyprus Shore Community Association (Cyprus Shore) residential neighborhood. The proposed project is near the Cyprus Shore Community Association (HOA) community building, West of the Avenida De Las Palmera and Calle Ariana intersection in the City of San Clemente, Orange County (**Exhibit 1**). The City of San

Clemente provides potable water, wastewater collection and storm drainage conveyance to approximately 400 homes within Cyprus Shore. The City's proposed development would involve the construction of a new sewer lift station and would restore a storm drain and sewer force main that were damaged due to coastal bluff movement that began in the fall of 2021. The existing force main would connect to the new sewer lift station, whereas the storm drain is a separate and independent system located adjacent to the existing sewer lift station on the bluff. The proposed project would also repair the motor control center and steps leading to the existing sewer lift station electrical room. The sewer lift station along with the gravity sewer and force main sewer pipes were constructed in 1961. The sewer lift station was relocated in 1980 and that same year the storm drain was constructed. Neither the City nor Commission were able to locate a permit for the 1980 sewer lift station relocation. In 2006 the lift station was replaced via Coastal Development Permit (CDP) No. 5-06-308-W.

The Cyprus Shore community has been impacted by coastal bluff landsliding that began in the fall of 2021. Landslides are common throughout the site area, generally existing within the Capistrano Formation. Landslides within the San Clemente area are mainly bedrock failures sliding along weakened planes within the Capistrano Formation. The landsliding in this area was deemed to be the reactivation of an ancient landslide. The initial movement of the coastal bluff landslide damaged the community clubhouse parking lot, connecting service road, and the City-owned storm drain and sewer lift station facilities (**Exhibit 1**). The clubhouse parking lot dropped between 18 to 24 inches along the headscarp on the western half of the parking lot. This affected direct and safe, vehicular access to the service road over the storm drain and to the sewer lift station electrical equipment. The area can be accessed by foot and a service vehicle can access the lift station from the lower portion of the access road, however, due to variability and opened cracks within the parking lot, a vehicle cannot access the sewer lift station electrical equipment effectively from Avenida De Las Palmera. Additionally, the storm drain was damaged within the landslide area and the force main has reached the end of its useful life. The force main pipe is made of asbestos cement pipe and is very brittle. It has failed three times and is exposed to pressure surges when the pump is turned on and off. As such, these impacts affected access and proper usage of the public storm drain and sewer lift station facilities.

To maintain service, the City established an emergency sewer pumping system by catching and pumping sewage further upstream, utilizing storage in two existing 48-inch manholes, installing two generators to power each of the pumps, and constructing above-ground piping. This system required 24/7 generators and personnel to watch the temporary system and avoid spills. In addition, k-rail, visqueen, sandbags, and above-ground piping were installed to provide temporary storm drain service.

On November 16, 2021, the City received a Permit Exemption (5-21-0351-X) to temporarily relocate the wastewater and storm drain facilities away from the location of the landslide. However, due to challenges the City faced with establishing a location and easement for the sewer lift station electrical equipment and generator, the City did

not undertake the temporary relocation of the sewer lift station. The City initially wanted to put the electrical and motor control equipment adjacent to the vacant lot, however the City received pushback from the property owner. Therefore, the City tried to work with the HOA to find an alternate location for the equipment. The City was in the process of negotiating an easement with the HOA to relocate the equipment on the inland side of the community clubhouse when further sliding at the site occurred.

In the fall of 2022, landslide movement re-commenced at the subject site. The City placed the relocation on hold while the Orange County Transportation Authority (OCTA) began installing a grade beam and tieback stabilization system within the coastal bluff directly seaward of the existing sewer and storm drain infrastructure.[2] The construction of the stabilization system was completed in spring of 2023, and as a result, the slope inclinometers on site have shown that movement of both the coastal bluff and larger ancient landslides has stopped.[3]

The City is proposing to use the existing sewer lift station as back-up storage during emergencies and to construct a new station approximately 80 ft. inland in a 7-ft. diameter by 28-ft. deep circular wet well with a valve vault and a meter fault, connecting to the existing force main **(Exhibit 2)**. All sewage that is tributary to the existing lift station will be diverted to the new lift station at the existing manhole at the intersection of Avenida de las Palmera and Calle Ariana through a 10-in. diameter diversion pipe. The flows to the existing lift station will be blocked at this manhole following completion of the new lift station. The new lift station will have two slide rail submersible pumps, each with a capacity of 300 gallons per minute (gpm). The electrical service will be provided from the motor control center located in the existing electrical building. The project will include a new 10-in. diameter overflow pipe from the new wet well to the existing 8-in. gravity sewer. The overflow pipe will convey sewage flows to the existing lift station's wet well in case of an emergency where the commercial power is out, and the standby generator fails to start concurrently with the power outage.

The project also involves in-kind replacement of approximately 217 linear ft. of damaged storm drain pipeline within the existing alignment and easement, installation of approximately 168 ft. of new lateral storm drain pipelines with six catch basins, repair of the motor control center and steps leading to sewer lift station electrical room, replacement of approximately 1,100 linear ft. of 6-in. sewer force main pipe with a new 6-in. PVC pipe, and minor repairs to vehicular access road **(Exhibit 2)**. Other proposed road improvements include removing pavement from portions of the road that have dropped below grade and, in its place, planting approximately 2,071 sq. ft. of native vegetation. Removal of the pavement and the planting of native vegetation in its place will result in the loss of approximately eight private parking spaces in the community's clubhouse parking lot.

[2] Emergency Permit Nos. G-5-21-0039, G-5-21-0057, G-5-22-0034, and G-5-22-0035

[3] Staff communications with OCTA on November 1, 2023.

Finally, the City is proposing improvements to the conduit lines associated with the sewer lift station electrical room. This work will consist of the following: installation of a 4-inch diameter conduit from the pull box on the south side of Avenida de las Palmera and west of Calle Ariana to the sewer lift station's electrical building; installation of five (5) 2-inch diameter conduits from the existing pull box to the east side of the sewer lift station to the electrical building; installation of one (1) 2-inch diameter conduit from the existing pull box to the east side of the sewer lift station to the electrical building for future communication cables; and installation of one (1) 2-inch diameter spare conduit from the existing pull box to the east side of the sewer lift station to the electrical building for future use as needed. These improvements will allow the City to provide power and communications to the sewer lift station from the electrical building.

Given that the proposed development would occur within the property of the HOA and in accordance with Section 30601.5 of the Coastal Act, an invitation to join the subject application as a co-applicant was sent to the Cyprus Shore HOA. The Cyprus Shore HOA provided a written rejection of the invitation, and as such has declined to be a co-applicant for the subject project. Through the written rejection, the Cyprus Shore HOA has acknowledged that they must comply with the terms and conditions of any coastal development permit issued for the property if any development approved by this permit is undertaken.

Standard of Review

The Commission certified the City's Land Use Plan (LUP) in 1988, and approved a comprehensive update most recently in 2018. However, the City does not yet have a certified Local Coastal Program (LCP). Therefore, the Chapter 3 policies of the Coastal Act constitute the standard of review for the project, with the certified LUP used as guidance.

B. Hazards

Applicable Coastal Act Provisions

The Coastal Act requires that new development minimize risks to life and property, assure stability and structural integrity, not contribute to instability, and not rely on protective devices in order to be safe from hazards. Specifically:

Coastal Act Section 30253 states, in pertinent part:

> New Development shall do all of the following:
>
> (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
>
> (b) Assure stability and structural integrity, and neither create nor contribute

> significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protection devices that would substantially alter natural landforms along bluffs and cliffs.

Additional relevant Coastal Act policies include:

Coastal Act Section 30235 states:

> Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

Section 30270 of the Coastal Act states:

> The commission shall take into account the effects of sea level rise in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise.

Coastal Act Section 30604(h) states:

> When acting on a coastal development permit, the issuing agency, or the commission on appeal, may consider environmental justice, or the equitable distribution of environmental benefits throughout the state.

LUP Policy Guidance

The City of San Clemente LUP establishes similar requirements for new development to address coastal hazards, including that new development is required to minimize risks to life and property, assure stability and structural integrity, and maintain safety and stability over time without shoreline armoring. All certified LUP policies below are included, in relevant part, in **Appendix B** due to length, and can be summarized as follows:

> HAZ-8 Geotechnical Review.
>
> HAZ-9 Site-Specific Coastal Hazard and Erosion Study.
>
> HAZ-10 Applicant's Assumption of Risk.
>
> HAZ-16 Sea Level Rise and Development.

HAZ-30 Development and Uses in Hazard Areas.

HAZ-37 Removal of Non-conforming, Unpermitted and/or Obsolete Structures and Uses.

Analysis

Taken together, the Coastal Act and the certified LUP, used as guidance, require new development to minimize risks to life and property while ensuring stability and structural integrity without contributing significantly to erosion, geologic instability or destruction of the site or surrounding area (Coastal Act Section 30253, LUP Policy HAZ-30). Coastal Act Section 30253, and LUP Policy HAZ- 30 also provide that new development cannot rely on protective devices. In addition, Coastal Act Section 30270 and LUP Policy HAZ-16 require the Commission to take into account the effects of sea level rise (SLR) in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of SLR. In sum, the Coastal Act and LUP: (1) require that new development minimize risk to life and property in areas of coastal hazards, (2) prohibit development that would require a shoreline or bluff protective device to ensure safety and stability during its lifetime, and (3) require that new development minimize SLR hazards and consider the impact of development upon coastal resources over its full anticipated life, avoiding and mitigating those impacts as appropriate.

Here, the project is not consistent with Section 30253 of the Coastal Act because the new sewer and storm drain infrastructure would be reliant on shoreline protection provided by the existing railroad revetment and OCTA grade beam and tieback stabilization system seaward of the site. Additionally, as described above, the sewer lift station was originally constructed in 1961 and then relocated in 1980, at which time the storm drain infrastructure was constructed. The 1980 lift station was later replaced in 2006, well after passage of the Coastal Act in 1976 and its January 1, 1977, effective date. As a result, the sewer and storm drain infrastructure do not qualify as “existing” under Coastal Act Section 30235, and therefore are not entitled to the construction of any shoreline protective devices. Since Section 30235 is not applicable in this case, it cannot override the requirement for the project to be consistent with Section 30253.

Danger from Erosion and Sea Level Rise

The Commission has an obligation under Section 30253 to ensure that any risks are minimized, and stability is maintained when development is proposed, provided it is without armoring. The project location is the site of an ancient landslide that partially reactivated in the fall of 2021 and again in the fall of 2022 (**Exhibit 4**). The City’s initial geologic report indicates that there are likely voids or distressed soils within the recent landslide debris and adjacent to the existing sewer lift station created by the recent movement of the landslide with potential for future localized lateral and vertical

movement that could undermine or destabilize the existing lift station and sewer infrastructure. In addition, the City's geotechnical report prepared by LGC Geotechnical, Inc., dated July 28, 2023, states that the existing sewer lift station is currently located approximately five feet from the recent landslide headscarp.

In parallel, the pre-existing landslide started to mobilize in 2021, as a result of severe beach erosion and heavy rains, damaging the OCTA rail line directly seaward of the project site and posing serious threat to this critical rail corridor. A total of approximately 26,500 tons of riprap approved by Emergency Permits Nos. G-5-21-0039, G-5-21-0057, and G-5-22-0034 were placed on three separate occasions when monitoring data showed significant mobilization of the landslide material. Additionally, Emergency Permit No. G-5-22-0035 allowed for the installation of two rows of tiebacks approximately 133 feet into the bluff face immediately below the sewer lift station and force main, installation of 700 linear feet of buried grade beams, and removal and replacement of 1.6 acres of vegetation atop the slope in order to stabilize the landslide. While OCTA has undertaken extensive stabilization work offsite (such as the installation of the ground anchor and grade beam system, slope reconstruction, revetment, etc.) to stabilize the landslide and protect the railroad thereby also providing substantial protection and stabilization of the subject site, these measures were designed to restore the gross stability of the landslide and will not prevent more localized, surficial instability within the larger landslide complex where the existing (and some of the proposed) City sewer infrastructure are located.

In addition, SLR is expected to exacerbate existing coastal hazards by raising mean water levels, extending flood zones inland, and increasing the potential for marine erosion of bluffs and cliffs along the shoreline. SLR will have dramatic impacts on California's coast in the coming decades and is already impacting the coast today. In the past century, the average global temperature has increased by about 1.4°F (0.8°C), and global sea levels have increased by 7 to 8 inches (17 to 21 cm). In addition, SLR has been accelerating in recent decades, with the global rate of SLR tripling since 1971 (IPCC, 2021). There is strong scientific consensus that SLR will continue over the coming millennia regardless of future human actions, but the exact rate and amount will depend on the amount of future greenhouse gas emissions as well as the exact contribution from sources such as the Antarctic and Greenland ice sheets, which are areas of continuing research.

While planning coastal development under this uncertainty presents challenges, it is widely documented that underestimating SLR could result in costly damages and adverse outcomes to coastal resources. Planning and development decisions on the California coast must, therefore, be appropriately precautionary and made with the full understanding that SLR will change coastal landscapes and hazard conditions. Not only will siting and design decisions regarding proposed coastal development influence the future safety of the development and overall resiliency of the California coast, but such decisions will also affect the way that coastal resources protected under the Coastal Act respond to changing sea levels over time.

Currently, the best available science on SLR projections in California is provided in the State of California Sea-Level Rise Guidance (OPC 2018) and is reflected in the Coastal Commission Sea Level Rise Policy Guidance (CCC 2018).[4] These documents present probabilistic SLR projections as well as an extreme "H++" scenario for twelve locations (tide gauges) along the California coast, and provide recommendations for which projections to use in various planning contexts based on level of risk aversion and project type. For projects that would have limited consequences if impacted by SLR or a relatively high ability to adapt, the guidance recommends analyzing a set of SLR projections called the "low risk aversion scenario," which has an estimated 17% chance of being met or exceeded according to current science. The medium-high risk aversion scenario, which has an estimated 0.5% chance of being exceeded, should be analyzed for projects with greater consequences and/or a lower capacity to adapt, like residential and commercial development. Finally, the "H++" scenario (which has no calculated probability but is associated with research on potential extreme ice sheet melt) should be analyzed for critical infrastructure (such as sewer treatment plants and related infrastructure) and other projects that have little to no adaptive capacity, would be irreversibly destroyed or significantly costly to repair, and/or would have considerable public health, public safety, or environmental impacts if damaged or destroyed.

As mentioned above, the subject development would take place on a precarious blufftop site underlain by a landslide complex. Currently, the railroad and its accompanying revetment preclude the site from natural shoreline erosion caused by wave attack and SLR, and in turn would provide substantial protection to the new City lift station and storm drain system; however, the landslide may become reactivated should shoreline erosion resume at the toe of the bluff under certain future SLR scenarios where the railroad and its revetment are compromised. As such, the proposed development may be threatened by SLR at some point in the near to distant future. Given that the Coastal Commission Critical Infrastructure at Risk Guidance (CCC 2021) identifies sewage infrastructure as "critical," such as the sewer lift station and wider sewer run under consideration herein, the project should therefore be analyzed under the "H++" scenario for a minimum 75-year project lifespan,[5] which equates to 10.2 ft. of SLR by

[4] The Ocean Protection Council (OPC) is currently in the process of updating the State SLR Guidance and statewide SLR projection based on evolving science, including the recently released NOAA SLR projections. Among other details, the new NOAA report changes how the extreme SLR scenario (referred to as the H++ scenario) is discussed. The Commission continues to rely on the current statewide guidance while taking newer relevant studies under advisement in its decision-making, until such time that a new guidance update is adopted.

[5] Although many jurisdictions with Local Coastal Programs (LCPs) specify design lives for certain types of development, the City of San Clemente does not have a certified LCP, although the certified LUP may serve as guidance. Therefore, in this case, to determine an appropriate design life for purposes of evaluating hazards within the context of the Chapter 3 policies of the Coastal Act, the Commission's staff engineer and geologist have assessed that the design life for this critical infrastructure is relatively permanent, exceeding the typical 75- to 100-year anticipated design life for residential development. For

the year 2100 under current projections for the La Jolla Tidal Gauge (the closest tidal gauge to the project site).

The City did not rely on a site-specific wave runup or coastal hazards report to analyze the effects of SLR on the subject development. The City and its geotechnical consultant have communicated to Commission staff that they believe that the railroad and revetment will remain for the duration of the project's minimum lifespan of 75 years, which would provide the site with continued protection from SLR hazards. Therefore, as part of this permit application, the City did not estimate the position of the shoreline or the degree of bluff retreat by the year 2100, either with or without the railroad revetment.

Nevertheless, OCTA is already struggling with coastal hazards associated with SLR, including wave uprush, erosion, flooding, and storm damage affecting its rail line. Recent data show that the emergency riprap placement alone has not halted the recent landslide movement, and the pressing concern is that the entire ancient landslide may become active should the tieback system become compromised.[6] Future conditions under SLR and climate change, where the threats of shoreline erosion and storm intensification are anticipated to increase significantly, may also lead to sudden additional movement of the slope, leading to danger to the blufftop residences, utility infrastructure, beach goers, and railroad passenger and freight trains. These issues illustrate the need for projects in this area to be designed for safety against shoreline hazards in the present day, as well as with SLR anticipated in the near- and long-term future.

Both the City of San Clemente and OCTA have previously acknowledged that, generally, the railroad revetment may be threatened in the future, and that one of the long-term adaptation strategies that OCTA may wish to take is the removal of the existing rail line in this location and its realignment further inland, which would obviate the need for the revetment.[7] In its 2019 SLR Vulnerability Assessment, the City assumes that the removal-and-relocation scenario of the railroad and revetment would occur approximately at 4.9 ft. of SLR, which "would most likely occur in the 2130-2140 timeframe, but there is a very slight chance it could occur in the 2080-2090 timeframe." Likewise, in its 2021 Final Report, OCTA states that while it is not currently contemplating relocation, under the "H++" scenario, it might become advantageous to implement realignment of the railroad, the implementation of which will perhaps take several decades. As part of the follow-up CDP application(s) for the aforementioned emergency CDPs, and under the advisement of Commission staff, OCTA will undertake

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the purposes of this staff report, a *minimum* 75-year timeframe will be used to analyze the effects of SLR over the development's lifespan, in accordance with LUP Policies HAZ-8 and HAZ-9.

[6] Emergency CDP Application No. G-5-22-0035; Slope Inclinometer Data, received July 20, 2023 (GMU).

[7] City of San Clemente Sea Level Rise Vulnerability Assessment (October 2019); OCTA Rail Defense Against Climate Change, Final Report (January 2021)

further study of the relocation option, including analysis of multiple relocation alternatives and various triggers for SLR adaptation.

With the understanding that the railroad and revetment may be possibly relocated and removed during the project's minimum lifespan of 75 years (i.e., by the year 2100), and that the existing protection that the railroad and revetment would afford to the proposed sewer lift station and associated development may be reduced or eliminated in the future, it is crucial that the Commission contemplate such a scenario in its SLR planning (even while its probability and timing of such a scenario is uncertain), in accordance with Coastal Act Section 30270.

Without a site-specific study provided by the applicant, the Commission can utilize the U.S. Geologic Survey Coastal Storm Modeling System (CoSMoS), a regional SLR modeling tool, which includes projected changes to the average mean high water (MHW), shoreline position, bluff retreat, and groundwater levels that may occur under a variety of SLR and storm intensity scenarios to analyze the impacts that SLR would have on the project site over the development's anticipated lifespan under the "H++" scenario, both with and without the presence of the railroad and revetment.

With no SLR and no coastal storm event, CoSMoS shows a maximum wave runup and sandy beach width that appears generally consistent with onsite conditions that prevailed until recently (**Figure 1 of Exhibit 10**). In the past few years, however, chronic erosion in this stretch of beach around Cypress Cove and Cyprus Shore has resulted in extremely narrow beach widths. Recent observations during high tides and south swells show little to no dry beach at the project site, suggesting that current shoreline retreat is further landward than shown by the CoSMoS model under a scenario of no SLR and no storm event. In fact, CoSMoS generally underestimates the project site's vulnerability to SLR impacts because it is based on a model simulation that may change as more accurate data is compiled and input into the model, and it draws an artificial "stop" line for erosion wherever there is a slope or line of development, such as the railroad revetment. The tool also does not account for all variables that could impact the extent and depth of coastal hazards, including potential shoreline migration and beach loss that could occur with higher SLR projections. Moreover, coastal areas are dynamic environments, and it is difficult to predict with certainty how any project site will be impacted. Finally, the "H++" scenario corresponds to 10.2 feet of SLR, but CoSMoS currently only has projection data for 6.6 feet of SLR available in the project area, which is representative of the medium-high risk aversion scenario.

For this reason, the "Hold the Line" assumption of the CoSMoS tool, which assumes that the revetment will not be relocated and removed, limits the extent of coastal flooding predictions for nearly all SLR scenarios to the area seaward of the railroad, as shown in **Figures 2-7 of Exhibit 10**. This is a key limitation that reduces the utility of flood hazard projections; if relying on the "Hold the Line" assumption, the projections do not provide a worst-case scenario for potential hazards associated with each increment of SLR. On the other hand, a "No Hold-the-Line, No Beach Nourishment" management

scenario can be used to illustrate how the San Clemente shoreline will migrate landward under storm and non-storm conditions and different amounts of SLR, which would take into account the potential scenario in which the railroad and revetment are relocated and removed in the future.

Even with the inherent underestimations built into the CoSMoS tool, under the lower SLR projection ranges available on CoSMoS (e.g., 0.8 - 2.5 ft), the model shows some landward shifts in maximum wave runup, flooding, and mean high water (MHW) shoreline in the project area (**Figures 1 and 2 of Exhibit 11**). Under the higher SLR projection ranges available on CoSMoS (e.g., 3.3 – 6.6 ft), the potential inundation, shoreline retreat and beach loss in the project area is significant (**Figures 3 and 4 of Exhibit 11**). With 6.6 ft. of SLR, CoSMoS projects the shoreline would erode landward of the railroad corridor to the bluffs, and the bluffs would be subject to wave action exposing the blufftop development to erosion hazards (**Figures 5 and 6 of Exhibit 11**). Thus, the development may be in even greater danger given the impacts of SLR, which are to arise well before the worst-case ("H++") projected 10.2 ft. of SLR that may occur over the minimum 75-year lifespan of the proposed development, should the railroad revetment be relocated/removed at some point in the future.

Thus, in summary, the existing sewer lift station and force main can be considered "in danger from erosion" and that danger may be exacerbated by the effects of SLR and associated coastal hazards. Therefore, a project that minimizes the risks associated with those dangers is necessary.

Alternatives

As mentioned previously, the existing sewer lift station is in danger from bluff movement and raises Section 30253 and 30270 issues. The City prepared an alternatives analysis for the proposed project titled *Revised Alternatives Analysis for the Cyprus Shore Sewer Lift Station and Storm Drain Project*, prepared by rrm design group, dated 03/29/2023.

The Alternatives Analysis considered six possible alternatives including the no-project alternative and the original proposal, which was analyzed as two alternatives; in-kind restoration of the storm drain and existing sewer lift station rehabilitation. The other alternatives considered were: storm drain realignment; existing sewer lift station rehabilitation, sewer lift station and electrical room relocation; and sewer lift station relocation involving two sewer lift stations and new 4-inch and 6-inch force mains. As previously discussed, the City provided a seventh alternative prior to the November 2023 Commission hearing, which involved relocation of the sewer lift station while reusing the existing electrical room. The current proposal combines this relocation alternative (Alternative 7) and the in-kind restoration of the storm drain alternative (Alternative 2).

Six evaluation criteria were considered in the Alternatives Analysis: 1) public health and safety, 2) access, 3) rehabilitation costs, 4) community inconvenience, 5) natural

aesthetics, and 6) project site construction access. These criteria were applied for each alternative considered. Each of the possible alternatives evaluated is discussed briefly below.

1. No Project Alternative

This alternative involves no repair work to the storm drain system, no rehabilitation of the sewer lift station motor control center and stairs leading to the electrical room, and no restoration of the parking lot. This approach would maintain the existing conditions of storm drain alignment settlement and sewer lift station facilities, however, the lift station's motor control center and stairs to the electrical room would remain in its current state, including retaining the wastewater bypass system. The temporary system costs $130,000 per month which would create significant fiscal impacts. Additionally, the continued temporary operation of the sewer system with manholes increases the risk for a sewage spill, which is a concern for water quality, marine resources, and public health and safety. Therefore, the City determined that this alternative is infeasible.

2. Storm Drain In-Kind Restoration Alternative

The in-kind restoration alternative (the proposed project) involves the construction of a new section of 36-inch RCP storm drain within the existing alignment and easement (**Exhibit 5**). The landslide damaged approximately 217 linear feet of pipeline, resulting in the need for replacement. According to the analysis the storm drain has the proper slope and is located within the existing service road, so replacement of this 217 ft. section of pipe is feasible, and the pipe materials are readily available on-site. The City states that for this alternative the existing as built plan set can be used for bidding purposes without the need for a new plan design, this would help with the project costs constraints. This alternative would include the construction of approximately 168 ft. of lateral storm drain pipelines with six catch basins. This alternative would also involve minor surfacing and repair work to the vehicular access road to join pavements. However, with this alternative the City is not proposing to restore the parking lot to previous conditions, instead they are proposing to remove the asphalt from the portions of the parking lot that dropped below grade and to restore the dirt area with native vegetation. The City estimated that this alternative would cost between approximately $700,000 to $1 million. It was determined that this alternative addresses all of the project constraints and is therefore the preferred alternative for the storm drain restoration.

3. Storm Drain Realignment Alternative

This alternative involves the construction of a new storm drain system that would be diverted through the community park immediately north of the club house (**Exhibit 6**). As a part of this alternative the existing storm drain system would be abandoned in place within the eastern portion of the clubhouse parking lot. This realignment alternative would involve the installation of approximately ten catch basins along

Avenida De Las Palmera and within the intersection of Avenida De Las Palmera and Calle Ariana. The purpose of the catch basins would be to improve surface flow capture to minimize surface flows into the parking lot, which according to the analysis would have long term positive impacts on water seepage into the landslide area.

The analysis states that this alternative would require the City to obtain an easement from the Cyprus Shore HOA because the new system would traverse the park and private streets. The need to obtain easements would result in additional expenses. The total estimated cost for this alternative according to the analysis would be approximately $2.5 million. Additionally, the City states in their analysis that they would have to remove several mature Cypress trees in order to relocate the system through the park. Due to the high project costs, the community inconvenience, and the impacts on natural aesthetics of removing mature trees in the park, the City determined that this alternative would not address all of the project constraints and would be infeasible.

4. Existing Sewer Lift Station Rehabilitation Alternative

The existing sewer lift station rehabilitation alternative (the previously proposed project) involves leaving the existing sewer lift station in its current location and only rehabilitating the above-ground portion of the system. This alternative would only address straightforward surficial repairs to the motor control center and steps leading into the electrical room. The analysis states that the existing lift station's wet well and adjacent manholes provide 37 minutes of emergency storage with the average dry weather flows. The reason the current lift station is able to provide an ample amount of emergency storage is because when it was constructed the wet well was tied into the previous wet well structure to provide emergency storage, as a result this lift station provides almost double capacity. This alternative also involves leaving the service road with no grading. Some minor resurfacing and repair would be done within the vehicular access road to join pavements which will improve site access, however, the parking lot would not be restored to previous conditions (**Exhibit 7**). The analysis states that costs to repair the existing motor control center and repairing the service road for access are approximately $300,000. Due to the close proximity of the landslide headscarp to the existing sewer lift station, it was determined by the City that this alternative would require the construction of approximately nine caissons to help stabilize the sewer lift station. The construction of caissons would alter the natural landform along the bluff, and the overall project would represent new development that relies on a protective device, both in conflict with Coastal Act Section 30253(b). Additionally, the caisson stabilization system would be inconsistent with Coastal Act Section 30235 which only allows for construction of shoreline protective devices to protect existing development, which is not the case here. Therefore, it was determined that this is not the least environmentally damaging feasible alternative.

5. Sewer Lift Station and Electrical Room Relocation Alternative

This alternative would involve relocating the sewer lift station facility and associated pipelines near the intersection of Calle Ariana and Avenida De Las Palmera, which is approximately 150 ft. east of its current location (**Exhibit 8**). The relocation would involve modifications to an existing 4-foot diameter manhole at the intersection of Calle Ariana and Avenida De Las Palmera to divert sewage to the new lift station wet well, approximately 8.5 feet of 10-inch diameter gravity sewer, installation of one 7-foot diameter, 30 feet deep wet well with two 300 gpm capacity pumps, a valve vault, a flow meter vault, and connection to the existing 6-inch diameter force main. The electrical switchgear, motor control center, pump control panel, automatic transfer switch and a 100-kW diesel generator would be located to the east of the Homeowners Association's Community Center in a fenced area.

This alternative would require removal of some of the landscaping and a portion of the sidewalk on the east side of the Community Center (west side of Calle Ariana just north of Avenida de las Palmera). In addition, this alternative would require the City to obtain an easement from the Cyprus Shore HOA for the electrical equipment.

The analysis states that the new sewer lift station's wet well would include approximately nine minutes of emergency storage, compared to the 37 minutes of emergency storage provided by the existing sewer lift station. The reduction in emergency storage capacity increases the risk for sewage spills, which is a concern for public health and safety. The construction cost of this project is $2.7M. The analysis also states that the aesthetics of the neighborhood would be negatively impacted by the new location of the electrical cabinets due to loss of a landscaped area, and visibility of the electrical equipment and the generator from some of the residences along Calle Ariana. Therefore, due to the high project costs, the community inconvenience, the impacts on natural aesthetics of removing landscaped areas in the park, and concern for water quality, marine resources, and public health and safety resulting from the reduction in emergency storage, the City determined that this alternative would not address all of the project constraints and would be infeasible to implement.

6. Sewer Lift Station Relocation – Two Sewer Lift Stations and New 4-Inch and 6-Inch Force Mains Alternative

This alternative would involve relocating the sewer lift station outside of the ancient landslide (**Exhibit 9**). This relocation would consist of the construction of a new 8-inch diameter, 1,170-foot-long PVC gravity sewer pipe, which would be intended to divert sewer flows tributary to the intersection of Avenida De Las Palmera and Calle Ariana to the south end of Calle Ariana, this would include connecting the sewer laterals of 35 properties to the new sewer system. Additionally, this alternative would consist of construction of a subterranean sewer lift station at the intersection of Calle Ariana and Calle Alicia. This sewer lift station would provide approximately 24 minutes of emergency storage with average dry weather flows, which is much less than the existing lift station.

Another component of this alternative would be the construction of 2,070 feet of 4-inch diameter PVC force main in Calle Ariana, Calle Marlena, Avenida De Las Palmera, Calle Del Establo, and Avenida Vista del Oceano to a second new sewer lift station. This alternative also involves the construction of a new subterranean sewer lift station on Avenida Vista del Oceano near the Community Center. This sewer lift station would provide approximately 7.4 minutes of emergency storage with average dry weather flows, which is much less than the existing sewer lift station.

Another component would be the construction of 1,110 feet of 6-inch diameter PVC force main on Avenida Vista del Oceano and Vista Azul to its intersection with Vista Blanca. This alternative would also involve the connection of the new force main to the existing force main. The last component of this project would be the abandonment of the existing 6-inch diameter force main in Avenida De Las Pamera and Calle Ariana, and the requirement to obtain an easement to the intersection of Vista Azul and Vista Blanca, as the City does not currently have easements for sewer lift stations or force mains throughout the existing development.

According to the analysis, the 2021 construction cost estimate for this alternative was approximately $6.3M (adjusted by 20% for inflation and the typical increase in costs to $7.6M for 2023). This alternative would require obtaining easements for the two sewer lift stations in very constrained areas, including new electric service, switchgear, motor control center, pump control panel, automatic transfer switch, and a diesel standby generator at each site, which will be visible to several residences in the area. Additionally, this alternative would require construction in currently landscaped areas on privately owned and HOA properties. The new lift stations would not have the same emergency storage capacity as the existing lift station because of the space constraints for the installation of additional wet well storage. The reduction in storage capacity would increase the risk for sewage spills which is a potential concern for marine resources, water quality, and public health and safety. The aesthetics of the neighborhood would also be negatively impacted by the location of the electrical cabinets and the standby generators. Therefore, due to the high project costs, the community inconvenience, the impacts on aesthetics of removing landscaped areas in the park, and the concern for marine resources, water quality, and public health and safety resulting from the reduction in emergency storage, the City determined that this alternative would not address all the project constraints and would be infeasible to implement.

Economically, it may be more feasible to relocate the City’s sewer system as a whole, rather than each lift station and associated force main pipes individually, however to analyze this would be a fairly extensive study that the City did not have time to complete as a part of this CDP application. So, while currently it is not feasible to relocate this particular sewer lift station outside of the ancient landslide area, in the future, alternatives that look at relocating the entire system should be evaluated.

Acknowledging the extent of the system that is sited along vulnerable coastal bluffs, a study that considers the potential future repair, armoring, or other maintenance costs associated with the larger portion of the City's sewer system could lead to different conclusions about the costs and benefits of relocating parts of the network. Providing this bigger picture alternative would be consistent with the Commission's Sea Level Rise Guidance for Critical Infrastructure and would avoid a piecemeal review of the infrastructure in these hazardous areas.

7. Sewer Lift Station Relocation

This alternative would involve the construction of a replacement sewer lift station in a 7-ft. diameter by 28-ft. deep circular wet well with a valve vault and a meter fault, connecting to the existing force main. All sewage that is tributary to the existing lift station will be diverted to the new lift station at the existing manhole at the intersection of Avenida de las Palmera and Calle Ariana through a 10-in. diameter diversion pipe. The flows to the existing lift station will be blocked at this manhole following completion of the new lift station. The new lift station will have two slide rail submersible pumps, each with a capacity of 300 gpm. The electrical service will be provided from the motor control center located in the existing electrical building. The project will include a 10-in. diameter overflow pipe from the new wet well to the existing 8-in. gravity sewer. The overflow pipe will convey sewage flows to the existing lift station's wet well in case of an emergency where the commercial power is out, and the standby generator fails to start concurrently with the power outage.

The proposed lift station would have 8, 5, and 4 minutes of emergency storage with the average dry weather, peak dry weather, and peak wet weather flows, respectively. With the overflow pipe and the storage in the existing lift station wet well, these will increase to 23.5 minutes, 14.8 minutes, and 10.4 minutes. The estimated cost of the replacement lift station is $2.5 million. This alternative also involves leaving the service road in place with no grading. Some minor repair, including spot resurfacing, would be done within the vehicular access road to join pavements which will improve site access; however, the parking lot would not be restored to previous conditions.

This alternative is similar to alternative number 5. However, it would involve using the existing sewer lift station electrical room rather than relocating it by the community clubhouse, thereby eliminating the need to obtain easements from the Cyprus Shore HOA, which makes this a feasible alternative for the City. Additionally, the City is proposing to use the existing sewer lift station as a back-up during emergencies, allowing for a greater emergency storage capacity than other alternatives. Also, because this alternative involves constructing a new lift station outside of the active landslide area, it reduces the geologic hazard and eliminates the need for the caissons, making this the least environmentally damaging feasible alternative.

8. Alternatives – Conclusion

The City contends that the most feasible alternatives are Alternative 2 – In kind restoration of the storm drain pipe and Alternative 7 – sewer lift station relocation. These alternatives would rehabilitate the existing improvements within an enclosed area, using existing as built improvement plans including, but not limited to, pipe materials already staged on the project site. Equipment can be more effectively staged, and materials can be stored in a secure area that is void of community residential traffic and safe from public access. Also, the existing sewer lift station can be used as back-up during emergencies which increases this alternatives emergency storage capacity, making it the best alternative for avoiding potential impacts to marine resources, water quality, and public health and safety.

In summary, the sewer lift station is in near-term danger from bluff movement, and a project without such infrastructure in the bluff location would not be feasible at this time. However, while relocation of the sewer system outside of the ancient landslide area may be infeasible at this time, it is possible that in the future the system could be located further inland. This presents a Coastal Act consistency dilemma because approval of the project is inconsistent with Chapter 3 policies (e.g., Section 30253), while denial of the project would also be inconsistent with Chapter 3 policies, specifically, Sections 30230 and 30231 which protect marine resources and water quality, as is demonstrated from the discussion below. Specifically, denial of the project could lead to further damage to the sewer lift station and a potential sewage spill in the near-term (i.e., within one storm cycle, or from seasonal groundwater flow through the slope). This approach would be inconsistent with Coastal Act Sections 30230 and 30231 that affirmatively require that marine resources and water quality be protected.

Accordingly, the Commission believes that it is appropriate to approve a project that would not be fully consistent with Chapter 3 of the Coastal Act through the Coastal Act's conflict resolution procedures, to allow adequate time for the City to develop a more resilient and Coastal Act consistent sewer system in light of the coastal hazards risks and coastal resource issues endangered at this site.

Coastal Act Consistency

Pursuant to Coastal Act Sections 30007.5 and 30200(b), the Commission may identify and resolve conflicts that may occur between one or more policies of Chapter 3. In resolving conflicts between policies of the Coastal Act, the Commission balances Coastal Act policies to resolve the conflict in a way most protective of significant coastal resources. Additionally, the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

This project, as proposed, is inconsistent with Section 30253 in that the development would rely on a protective device. Yet, the development proposed by the project is mandated by Sections 30230 and 30231 to protect marine resources and water quality.

The current project, if developed onsite as proposed, presents inconsistencies with Section 30253, due to its reliance on shoreline or bluff protective devices located

seaward of the site. However, the potentially emergent instability due to landslide risk, subsequent threats to water quality and marine resources, and infeasibility of relocation of the project outside of the ancient landslide area in the short term require an immediate solution onsite. If a landslide or localized instability were to damage the existing infrastructure, the potential resulting sewage spill and runoff could have a deleterious effect on water quality and marine resources. Pursuant to Section 30231, the Commission shall act to minimize adverse effects of wastewater discharges. Pursuant to Section 30230, the Commission shall act to maintain marine resources, and carry out uses of the marine environment in a manner that will sustain the biological productivity of coastal waters and maintain healthy populations of all species of marine organisms.

Under normal circumstances, the project's inconsistency with Section 30253(b) would suggest the proposed development be denied. However, in this case, the policies related to water quality and marine resources are more protective of coastal resources than the applicable resource policy prohibiting reliance on shoreline protective devices. Since approval of the project cannot entirely eliminate inconsistency with Section 30253 in the short-term and long-term, the project should be conditioned to minimize the policy inconsistency to the greatest degree possible. By taking this approach, the City will be required to undertake longer term adaptation planning to address hazards onsite by providing a plan that looks at relocating the sewer system further inland to an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices; in the interim, marine resources and water quality would be protected from a potential sewer spill by allowing construction of the new sewer system onsite.

Thus, the approval of the sewer system and storm drain improvements can be found generally consistent with the Coastal Act in a conflict resolution context. In allowing both interim and longer-term solutions for the sewer infrastructure at this site, the Commission most closely addresses the requirements of Coastal Act Section 30253 and the requirements of Sections 30230 and 30231 because it authorizes the current project while simultaneously requiring the City to evaluate future risk of coastal hazards as influenced by SLR and landslides and to plan, develop, and implement any necessary future responses to coastal hazards including adaptation or relocation alternatives to ensure minimization of risk in the long-term.

This approach is also consistent with Coastal Act Section 30270, which requires the Commission to take into account the effects of SLR in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of SLR, as well as with Section 30604(h), which empowers the Commission to take environmental justice into consideration when acting on coastal development permits. With SLR, shoreline and coastal bluff development will experience increasingly hazardous conditions, including worsening storm flooding, inundation, and shoreline and bluff erosion. Coastal resources such as beaches and wetlands could disappear if they are squeezed between rising sea levels and a fixed line of development on the shoreline. Such losses

will impact public access, recreation, public views, and other coastal resources – all of which are protected under Chapter 3 of the Coastal Act. These broader effects may be compounded by the presence or installation of shoreline and bluff protection devices, including adverse changes to the recreational and beach use experience, impacts to beach and other coastal ecosystems, and impairment of the aesthetic and visual character of the coast. Further, loss of these public resources could have significant implications from an environmental justice standpoint, since coastal open spaces and habitats are an opportunity for all to visit and enjoy the California coast and would disproportionately burden those who cannot afford to live near the coast. Thus, by requiring the City to evaluate future SLR impacts and adaptation strategies to avoid these significant implications, the project can be found consistent with Coastal Act Section 30270 and the Commission's Environmental Justice Policy.

Therefore, **Special Condition 1** limits the length of development authorization to a time frame of 20 years but requires that the City submit a relocation analysis in ten (10) years. As conditioned, the project is designed to provide the City a reasonable period of time to evaluate alternatives, engage in adaptation planning and implement a relocation plan that would minimize the perpetuation of infrastructure in hazardous areas. As noted previously, it would be more feasible to relocate or study the City's sewer system as a whole, rather than each lift station and associated force main pipes individually, and much of the rest of the existing City sewer run parallel to the shoreline would likely also be susceptible to the same SLR and coastal hazard issues. As such, in the future, the City must holistically analyze the costs and benefits of various alternatives, including those that evaluate relocation of the entire system. The analysis must include an evaluation of alternatives to the development approved in the subject permit that would minimize siting of infrastructure in hazardous areas, including but not limited, to an alternative removes the existing sewer infrastructure and sites the entire City Sewer Run shown in **Exhibit 3** to an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices. If it is determined that relocation is not feasible, **Special Condition 1** allows the City to either modify the sewer system design to ensure consistency with the Coastal Act or relevant LCP provisions if the Commission certifies an LCP for the City by the time CDP application submittal is required under this condition, or extend authorization of the sewer system and demonstrate that modifications to ensure consistency are infeasible while remaining, on balance, most protective of significant coastal resources pursuant to Section 30007.5 or otherwise.

Similarly, **Special Condition 2** acknowledges that the existing revetment and grade beam and tieback stabilization system that currently protects the railroad at the bluff toe may not continue to provide such protection unless it can be retained, repaired, maintained, enhanced, or reinforced in the future; and therefore, the sewer system may not be able to rely on the protection currently provided by the existing revetment in the future. Should the railroad and/or revetment ever be relocated or removed, the City would be required to submit an application for a CDP amendment to either (a) relocate the sewer system to an area that avoids or minimizes hazards and does not rely on

shoreline or bluff protective devices; or (b) modify its design as needed to ensure consistency with the Coastal Act or relevant LCP provisions if the Commission certifies an LCP for the City by the time CDP application submittal is required under this condition; or (c) extend the length of time the sewer system is authorized and demonstrate that modifications to ensure consistency are not feasible and the project continues to be, on balance, the most protective of significant coastal resources pursuant to Section 30007.5 or otherwise.

As conditioned, the subject CDP would allow the proposed development on a temporary basis for 20 years to allow for the continued operation and function of the sewer system. This will allow for the City to continue to provide essential utility services to the surrounding area during storm events in the near term, while simultaneously allowing time to plan for future coastal hazards and SLR risks.

Removal of Obsolete Structures

LUP Policy HAZ-37 requires the removal of all obsolete structures that are no longer being used and which are developed on bluffs. The City's proposal involves minor repair of the vehicular access road without grading the portions of the road that dropped as a result of the landslide. This means that portions of the road are being left unused and the abandoned asphalt is contributing to a heavy load on the landslide area. The City is proposing to remove the portions of asphalt that have dropped below grade and plant approximately 2,071 sq. ft. of native vegetation in its place. Thus, the proposed development may be found consistent with the requirements of LUP Policy HAZ-37.

Geotechnical Recommendations

The geologic consultant has found that the subject site is suitable for the proposed development provided the recommendations contained in the geotechnical investigation prepared by the consultant are implemented in design and construction of the project. Adherence to the recommendations contained in the geotechnical investigation is necessary to ensure that the proposed project neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or surrounding area. Therefore, **Special Condition 6** requires that the applicant conform to the geotechnical recommendations contained in the following report: Geotechnical Evaluation for the Proposed Cyprus Shore Sewer Lift Station Relocation, San Clemente, California, prepared by LGC Geotechnical, Inc., dated December 16, 2021.

Assumption of Risk and Waiver of Right to Future Shoreline Protective Devices

In terms of recognizing and assuming the hazards risks for shoreline development, the Commission's experience in evaluating proposed development in areas subject to hazards has been that permittees continue to pursue development despite periodic episodes of heavy storm damage and other such occurrences. Development in such dynamic environments is susceptible to damage due to such long-term and episodic

processes. Past occurrences statewide have resulted in public costs (through low-interest loans, grants, subsidies, direct assistance, etc.) in the multiple millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden for damages onto the people of the State of California, applicants are regularly required to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, consistent with LUP Policy HAZ-10, this approval is conditioned for the City to assume all risks and indemnify the Commission against all liability due to such hazards associated with developing at this location (see **Special Condition 8**).

Special Condition 7 would require the City to acknowledge and agree that the development approved by this CDP is not entitled to shoreline or bluff protection under section 30235 of the Coastal Act and to waive any rights to shoreline protection that may exist under applicable law. These two conditions would ensure that the City bears the risks of continuing to invest in infrastructure in a vulnerable area when it is not entitled to shoreline or bluff protection and the Commission may not authorize shoreline or bluff armoring to protect the development in the future. However, **Special Condition 7** would not preclude the Coastal Commission from approving shoreline or bluff protection in the future if allowed under the Coastal Act, and the Commission's review of any such future proposal for shoreline or bluff protection must contemplate Coastal Act consistency anew.

Conclusion

The new development is inconsistent with Section 30253 and therefore the project cannot be found consistent with the Coastal Act. However, given that the sewer lift station and force main are potentially within one storm cycle of being compromised, it is clear that the infrastructure is in danger from bluff movement and that a project that minimizes the risks associated with those dangers is necessary. As such, denial could lead to threats to the onsite sewer system components in the fairly short term (i.e., within one storm cycle, or from seasonal groundwater flow through the slope). This approach would be inconsistent with Coastal Act Sections 30230 and 30231 that affirmatively require that marine resources and water quality be protected (because the sewer lift station would be likely be damaged in the short term and lead to a sewage spill on to the beach and in the ocean). In other words, denial of the project would also be inconsistent with the Coastal Act.

Therefore, it is on balance to approve a project that is most protective of significant coastal resources through the Coastal Act's conflict resolution procedures to allow adequate time for the City to develop a more resilient and Coastal Act consistent sewer system, in light of the coastal hazards risks that apply here. The approved project would allow a limited term authorization of 20 years while the City develops and implements a longer-term plan that sites the sewer system in an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices. The Coastal Commission's coastal engineer, Jeremy Smith, and staff geologist, Dr. Joseph Street,

evaluated the relevant project materials and concur with the City's analysis regarding the threat to the infrastructure from localized instability. As discussed above, alternatives involving the relocation of the infrastructure outside of the ancient landslide were determined to be infeasible at this time primarily due to economic considerations. Thus, this CDP as conditioned is designed to plan for and address coastal hazards issues in the long run in a manner that meets Coastal Act coastal hazards requirements to the greatest extent feasible and is also one that is the most protective of natural shorelines and natural shoreline processes, and coastal resources more generally.

C. Archaeological and Tribal Cultural Resources

Section 30244 of the Coastal Act states:

> Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

All certified LUP policies below are included, in relevant part, in **Appendix B** due to length, and can be summarized as follows:

> CUL-1 Cultural Resources.
>
> CUL-4 Architectural, Historical, and Cultural Resource Preservation and Restoration.

The Commission recognizes that the entirety of the State's Coastal Zone was originally indigenous territory that continues to have cultural significance to Native American tribes. The Commission's Tribal Consultation Policy (adopted on August 8, 2018)[8] recognizes the importance of State efforts to protect Tribal Cultural Resources and improve communication and coordination with Tribes, and it sets out a tribal consultation process that is fully consistent with, and complementary to the nature of, the Commission's goals, policies (including Section 30244), and mission statement. Tribal Cultural Resources can be sites, features, cultural landscapes, sacred places, and objects with cultural value and can also qualify as archaeological, paleontological, visual, biological, or other resources that the Commission is tasked with protecting pursuant to the Coastal Act.

A majority of the proposed site is currently developed and has been disturbed in the past. Mass grading of the subdivision took place in the 1960's. The grading included massive cutting, filling, over-excavation, recontouring and compaction of the soils. However, there is no evidence that those grading activities were monitored by archaeological or Native American monitors, even disturbed soils have the potential to

[8] https://documents.coastal.ca.gov/assets/env-justice/tribal-consultation/Adopted-Tribal-ConsultationPolicy.pdf

contain such resources, and a significant amount of new ground disturbance is proposed in order to construct the replacement sewer lift station.

In order to better understand the cultural significance of the project site and the surrounding project area, Commission staff engaged in tribal consultation, consistent with the Coastal Commission's Tribal Consultation Policy. Staff reached out to Native American tribal representatives with ancestral ties to the area via email on July 6, 2023 to request consultation. The Juaneño Band of Mission Indians, Acjachemen Nation, responded to staff on July 17, 2023 to consult on the project. Through email communication with the Acjachemen Nation, the tribe indicated that the project site is located within a known culturally sensitive area.

According to the Acjachemen Nation, the project is located within the core of their Ancestral territory and is extremely sensitive. According to the ethnographic evidence, this area of San Clemente was inhabited by the Acjachemen for hundreds of years. Also, according to the ethnographic evidence, the native nation consisted of permanent villages concentrated near watercourses, and the coast. Particularly because this site is on a coastal bluff, monitoring during ground disturbance is critical for the preservation of any discovered deposits. After reviewing the proposed project and extent of ground disturbance, the tribal representative recommended that Native American and archaeological monitors be present during ground-disturbing activities.

As evidenced by the concerns raised by the Acjachemen Nation, there is a potential for ground disturbance activities to impact tribal cultural resources that may still be present within the soil. In past permit actions near or adjacent to known tribal cultural resource sites, the Commission has required the applicants to monitor all grading and construction activities with both archeologists and monitors from affected Native American tribes onsite. If cultural resources are discovered, as conditioned, the appropriate Native American representative(s) will decide as to the appropriate treatment method; preservation in-situ is the preferred mitigation method as stated in the certified LUP.

To ensure that the project minimizes and mitigates potential impacts to archaeological and/or tribal cultural resources and is consistent with past Commission action, the Commission imposes **Special Condition 3**, requiring the City to notify the representatives of Native American Tribes listed on an updated Native American Heritage Commission (NAHC) contact list for the area; invite all Tribal representatives on that list to monitor ground-disturbing activities; and arrange for a representative of any invited Tribe that requests to monitor and a qualified archaeological monitor to be present to observe project activities with the potential to impact archaeological and/or tribal cultural resources. The monitor(s) shall have experience monitoring for archaeological resources of the local area during excavation projects, be competent to identify significant resource types, and be aware of recommended Tribal procedures for the inadvertent discovery of archaeological resources and human remains. The Commission finds, therefore, that as conditioned, the proposed project is consistent with

Section 30244 of the Coastal Act and the cultural resource protection policies of the certified LUP.

D. Water Quality and Marine Resources

Section 30230 of the Coastal Act states:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

> The biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

All certified LUP policies below are included, in relevant part, in **Appendix B** due to length, and can be summarized as follows:

> HAZ-45 Blufftop/Coastal Canyon Lot Drainage and Erosion.

The above policies of the Coastal Act and the LUP require protection of marine resources, including the protection of coastal waters by controlling runoff and preventing spillage of hazardous materials.

Storage or placement of construction materials, debris, or waste in a location subject to erosion and dispersion or which may be discharged into coastal water via rain or wind would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. Sediment discharged into coastal waters may cause turbidity, which can shade and reduce the productivity of foraging avian and marine species' ability to see food in the water column. To ensure that construction material, debris, or other waste associated with the project activities does not enter the water, **Special Condition 4** outlines construction-related requirements to provide for the safe storage of construction materials and removal of debris from the area.

The City's proposed development would involve the construction of a new sewer lift station and would restore a storm drain and force main that were damaged due to coastal bluff movement that began in the fall of 2021. Construction of the replacement storm drain would allow for proper conveyance of stormwater in the community. The City is also proposing to install new catch basins on Avenida de Las Palmera and Calle Ariana to capture the surface flows which previously flowed towards the parking lot and access road. These new catch basins will significantly reduce the existing surface flows reaching the impacted slope failure.

The proposed project also includes minor surfacing and repairs to the vehicular access road, as well as removing asphalt from the portions of road that have dropped below grade and the planting of 2,071 square feet native vegetation in its place.

Sources of polluted runoff could include runoff from over-watering, which sometimes occurs from installation of landscaping with a high-water demand. Plants with a high-water demand are typically not well-suited to the Mediterranean climate of southern California, and therefore often require intense fertilization and application of pesticides/herbicides as a maintenance regime, in addition to regular irrigation. Thus, this type of landscaping can add pollutants to both dry weather and stormwater runoff. Therefore, the use of drought tolerant plants or low-maintenance landscaping is a preferred alternative.

Thus, the Commission requires through **Special Condition 5** submittal of a landscaping plan that ensures landscaped areas within the bluff area shall be planted and maintained for habitat enhancement. To minimize the need for irrigation and minimize encroachment of non-native plant species into adjacent or nearby native plant areas, all landscaping shall only consist of drought tolerant and non-invasive plants native to coastal Orange County and appropriate to the habitat type. Furthermore, native, drought tolerant plants are required because they require little to no watering once they are established (1-3 years), they have deep root systems that tend to stabilize the soil, and are spreading plants that tend to minimize erosion impacts of rain and water run-off, thus continuing to maintain the natural plant communities. The Commission finds that the proposed project, as conditioned, is consistent with Coastal Act and LUP policies related to protection and enhancement of water quality and marine resources.

E. Visual Resources

Section 30251 of the Coastal Act states, in part:

> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas…

All certified LUP policies below are included, in relevant part, in **Appendix B** due to length, and can be summarized as follows:

> VIS-1 Visual Character and Aesthetic Resources Preservation.

Section 30251 of the Coastal Act and the LUP Policy cited above require that visual resources in scenic areas be protected, and where feasible, enhanced. The LUP includes a number of policies regarding protection of scenic views. LUP Policy VIS-1 echoes Section 30251, including more specifically, that scenic and visual qualities of coastal bluffs be preserved and, where feasible, restored and enhanced.

The LUP also identifies a number of scenic gateways, scenic corridors, and public view corridors. The subject site is not visible from any of these designated public view areas. The nearest designated view area is along South Ola Vista which is designated as a Minor Recreation Scenic Corridor. In addition, the nearest public accessway, located at San Clemente State Beach, is designated as a Public Access View Corridor. However, the site is not visible from either South Ola Vista or San Clemente State Beach. However, the coastal bluff at the site is visible from the public beach. Although the LUP designates specific view corridors to be protected, it also requires protection, and enhancement where feasible, of all scenic and visual qualities within the coastal zone. More specifically, the LUP requires preservation and enhancement of the scenic qualities of coastal bluffs.

The proposed project will be completely contained within the limits of the private community and the majority of the storm drain and sewer system will be underground and not result in any visual impacts once construction is completed. Therefore, the proposed development is consistent with the visual resource protection policies of the Coastal Act and the City's certified LUP.

F. Public Access and Recreation

Section 30210 of the Coastal Act states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Coastal Act states:

> Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

All certified LUP policies below are included, in relevant part, in **Appendix B** due to length, and can be summarized as follows:

PUB-36 Coastal Public Access.

One of the basic goals stated in the Coastal Act is to maximize public access and recreation along the coast. The proposed project conforms with the Coastal Act and LUP policies which protect and encourage public access and recreational use of coastal areas.

Cyprus Shore is a gated community with no public access through the site, located on the bluff and bluff top in San Clemente. This community was subdivided pursuant to Coastal Development Permit (CDP) No. A-491-78, with several additional CDPs for build out. The sewer lift station, force main and storm drain to be replaced are located entirely within the boundaries of the gated community.

There is no public beach access available in the community, however there is an existing private beach accessway which consists of a designated walkway from Avenida De Las Palmera. The private accessway has a designated underpass that allows the residents of the community to reach the beach. Historically, the area seaward of Cypress Shore has had sandy beach area used by the public. The nearest vertical public access points are at San Clemente State Beach and Trestles Beach, located approximately ½ mile north and south, respectively, of the project site. However, the recent placement of significant quantities of rock on the beach by OCTA in response to the landslides has eliminated a large portion of the public beach and made lateral access along the beach impassable at all but the lowest tides (**Exhibit 1**). It should be noted that without the proposed project there would be a greater risk of a sewage spill resulting in possible impacts to public access along the sandy beach below the project site.

In summary, the Commission finds the proposed development will not result in adverse impacts to coastal access. There is no public access across the project site and the only parking that will be impacted is private parking for the Cyprus Shore community. Therefore, the Commission finds that as proposed the project does not conflict with the public access policies of the Certified LUP and Chapter 3 of the Coastal Act.

G. Conflict Resolution

Section 30200(b) of the Coastal Act states:

> Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

Section 30007.5 of the Coastal Act provides for the Commission to resolve conflicts between Coastal Act policies as follows:

> The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner that on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

As noted previously in this report, the proposed project is inconsistent with Coastal Act Section 30253, which directs its denial.

However, as previously described, and as further explained below, denying, or modifying the proposed project to eliminate these inconsistencies would lead to nonconformity with other Coastal Act policies, namely Sections 30230 and 30231 (protecting marine resources and biological productivity). In such a situation, when a proposed project is inconsistent with a Chapter 3 policy, and denial or modification of the project would cause inconsistency with another policy, Section 30007.5 of the Coastal Act provides for resolution of such a policy conflict.

Applying Section 30007.5

The standard of review for the Commission's decision on a coastal development permit in the Commission's retained jurisdiction is whether the proposed project is consistent with the Chapter 3 policies of the Coastal Act. In general, a proposal must be consistent with all relevant policies in order to be approved. If a proposal is inconsistent with one or more policies, it must normally be denied or conditioned to make it consistent with all relevant policies.

However, the Legislature recognized through Sections 30007.5 and 30200(b) that conflicts can occur among those policies. It therefore declared that when the Commission identifies a conflict among the policies of Chapter 3, the conflict is to be resolved "in a manner which on balance is the most protective of significant coastal resources," pursuant to Coastal Act Section 30007.5.

The Commission has traditionally resolved conflicts via Section 30007.5 by analyzing the project according to the following seven steps, each of which is explained in greater detail below and reaffirmed by the Commission through this action:

1) The project, as proposed, is inconsistent with at least one Chapter 3 policy;

2) The project, if denied or modified to eliminate the inconsistency, would affect coastal resources in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources;

3) The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement;

4) The project, if approved, would result in tangible resource enhancement over existing conditions;

5) The benefits of the project are not independently required by some other body of law;

6) The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to "create a conflict;" and,

7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

1) The project, as proposed, is inconsistent with at least one Chapter 3 policy.

For the Commission to apply Section 30007.5, a proposed project must be inconsistent with an applicable Chapter 3 policy. Approval of the proposed development would be inconsistent with Coastal Act Section 30253, as the new development relies on protection devices to ensure its stability.

2) The project, if denied or modified to eliminate the inconsistency, would affect coastal resources in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources.

A true conflict between Chapter 3 policies results from a proposed project that is inconsistent with one or more policies, and for which denial or modification of the project would be inconsistent with at least one other Chapter 3 policy. Further, the policy inconsistency that would be caused by denial or modification of a project must be with a policy that affirmatively mandates protection or enhancement of certain coastal resources.

The only way to modify this project to eliminate the inconsistency identified above would be to condition it to preclude some of the development, since it relies on armoring to establish its safety. However, without that development, the system would not function, and that would lead to water quality impacts.

Coastal Act Sections 30230 and 30231 affirmatively require the Commission to act to maintain and restore marine resources productivity and the quality of coastal waters where feasible. Without approval of the development, or by conditioning it as described above, there would be significant risk of bluff failure or localized instability leading to problems from the sewer lift station and force main being compromised. Specifically,

such bluff movement could potentially undermine the stability and functionality of the sewer lift station and force main, posing a risk of a sewage spill discharging to the beach and ocean below, resulting in impacts to marine resources and water quality. Thus, the proposed project, as conditioned, would relocate the sewer lift station to a more stable location for a limited term while a longer-term plan is developed to avoid such bluff area development over the long run and, as such, approval of the project would protect water quality, marine resources, and natural landforms over the longer term, consistent with the provisions of the Coastal Act. This limited-term approval of the system is necessary so that the City can have adequate time to develop and implement the requisite longer-term plan that will relocate vulnerable infrastructure.

In most cases, denying a proposed project will not cause adverse effects on coastal resources for which the Coastal Act mandates protection or enhancement, but will simply maintain the status quo. However, in this case, denial of the proposed project would potentially result in significant impacts to marine resources and coastal water quality. Thus, this project, if denied, would affect coastal resources in a manner inconsistent with Sections 30230 and 30231, leading to the conclusion that a conflict between or among two or more Coastal Act policies is present.

3) The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement.

For denial of a project to be inconsistent with a Chapter 3 policy, the proposed project would have to protect or enhance the resource values for which the applicable Coastal Act policy includes an affirmative mandate. That is, if denial of a project would conflict with an affirmatively mandated Coastal Act policy, approval of the project would have to conform to that policy. If the Commission were to interpret this conflict resolution provision otherwise, then any proposal, no matter how inconsistent with Chapter 3, that offered a slight incremental improvement over existing conditions could result in a conflict that would allow the use of Section 30007.5. The Commission concludes that the conflict resolution provisions were not intended to apply to such minor incremental improvements.

In this case, if the project were denied, a potentially imminent geologic event could result in significant adverse impacts to water quality and biological productivity. Thus, the approved project, as conditioned, would maintain the quality of marine resources and coastal waters by allowing for the threatened infrastructure to be reconstructed in the same general vicinity, using the same system of pipelines, while a plan is developed to move it out of harm’s way. As conditioned, the City would be required, within 20 years, to apply to relocate the threatened infrastructure to an area that avoids or minimizes hazards and does not rely on shoreline or bluff protective devices to be safe from hazards. Thus, the project as conditioned is fully consistent with the Coastal Act marine resources and water quality policies.

4) The project, if approved, would result in tangible resource enhancement over existing conditions.

The fourth step requires that the project, if approved, would result in tangible resource enhancement over existing conditions, which is the case here. As discussed throughout this report, allowing for construction of a new sewer lift station outside of the active landslide area will protect marine resources and water quality (Sections 30230 and 30231) from significant adverse impacts. Thus, the proposed project can be found consistent with other resource policies of the Coastal Act, as conditioned, and will result in tangible resource enhancement over existing conditions.

5) The benefits of the project are not independently required by some other body of law.

The benefits that would cause denial of the project to be inconsistent with a Chapter 3 policy cannot be those that an applicant is already being required to provide pursuant to another agency's directive under another body of law. In other words, if the benefits would be provided regardless of the Commission's action on the proposed project, an applicant cannot seek approval of an otherwise un-approvable project on the basis that the project would produce those benefits. In other words, the applicant does not get credit for resource enhancements that it is already being compelled to provide by other mandates. In this case, the proposed project's benefits are not required by another agency under another body of law.

6) The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to "create a conflict."

A project's benefits to coastal resources must be integral to the project purpose. If the project is inconsistent with a Chapter 3 policy, and the main elements of the project do not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, an applicant cannot "create a conflict" by adding to the project an independent component to remedy the resource degradation. The benefits of a project must be inherent in the purpose of the project. If this provision allowed otherwise, applicants could regularly "create conflicts" and then request that the Commission use Section 30007.5 to approve otherwise un-approvable projects. The conflict resolution provisions of the Coastal Act were not intended to foster such an artificial and easily manipulated process and were not designed to barter amenities in exchange for project approval.

In this case, the benefits of the approved project (i.e., protection of marine resources and water quality) result from its primary purpose, namely replacing the sewer lift station, force main, and storm drain, and will provide for the continued recreational use and public access outside of the hazard areas, and longer-term protection, and in some cases enhancement, of marine resources and water quality.

7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

As explained in the Alternatives Analysis in Section B. Hazards, the City conducted a full alternatives analysis for the proposed project. The Coastal Commission's coastal engineer, Jeremy Smith, and staff geologist, Dr. Joseph Street, evaluated the relevant project materials and concur with the City's technical analysis. As discussed previously, alternatives involving the relocation of the infrastructure outside of the ancient landslide area were determined to be infeasible at this time primarily due to economic considerations. In conclusion, while alternatives exist, none of the identified alternatives would be feasible at this time.

Conflict Resolution Conclusion

Based on the above, the Commission finds that the proposed project presents a conflict between Section 30253, on the one hand, and Sections 30230 and 30231 on the other, which must be resolved through the application of Section 30007.5. With the conflict among Coastal Act policies established, the Commission must resolve the conflict in a manner which on balance is the most protective of significant coastal resources. In reaching this decision, the Commission evaluates the project's tangible, necessary resource enhancements over the current state and whether they are consistent with resource enhancements mandated in the Coastal Act. In the end, the Commission must determine whether its decision to either deny or approve a project is the decision that is most protective of significant coastal resources.

In this case, the Commission finds that the impacts on coastal resources from not constructing the project, as conditioned, would be more significant than the project's potential adverse effects from allowing development, as conditioned. It is able to make this finding in this case based on the limited term nature of this approval – the adverse coastal resource impacts of the proposed project will be eliminated when the development is relocated in 20 years.

Finally, the test for conflict resolution approval under Section 30007.5 is not for the project to be more protective of coastal resources, rather it must be most protective of significant coastal resources. In order for that finding to be made, the adverse coastal resource impacts caused by the project have to be avoided, minimized, and mitigated to the maximum feasible extent. As such, and only in a conflict resolution context, this approval allows for the development to remain for 20 years (until February 8, 2044) in order to allow the City time to evaluate alternatives, engage in adaptation planning and implement a relocation plan for the site, including installation of a more resilient sewer system. Specifically, the approval includes a longer-term redesign of the sewer system to be safe from hazards without protection devices for its ultimate remaining lifetime. This will ensure ongoing viability of the development, without the need for and impacts associated with armoring, consistent with the Coastal Act policies.

Thus, the project as conditioned is most protective of significant coastal resources.

H. Local Coastal Program

Coastal Act Section 30604(a) states that, prior to certification of a local coastal program ("LCP"), a coastal development permit can only be issued upon a finding that the proposed development is in conformity with Chapter 3 of the Act and that the permitted development will not prejudice the ability of the local government to prepare an LCP that is in conformity with Chapter 3. The Commission certified the Land Use Plan (LUP) for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998, the Commission certified with suggested modifications the Implementation Plan (IP) portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. The City re-submitted an IP on June 3, 1999, but withdrew the submittal on October 5, 2000. Most recently in 2018, the City certified an LUP amendment for a comprehensive update of the LUP. The City is currently also working on resubmittal of an IP, however, there is no certified LCP at this time.

As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and with the certified LUP for the area. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare an LCP that is in conformity with the provisions of Chapter 3 of the Coastal Act.

I. California Environmental Quality Act (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by findings showing the approval, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. The Commission's regulatory program for reviewing and granting CDPs has been certified by the Resources Secretary to be the functional equivalent of CEQA. (14 CCR § 15251(c).)

In this case, the City of San Clemente is the lead agency and the Commission is a responsible agency for the purposes of CEQA. The City of San Clemente determined that the proposed development is exempt under Section 15301, Class 2, which exempts from CEQA requirements the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. As conditioned, there are no feasible alternatives or additional feasible mitigation measures available that would substantially lessen any significant adverse effect that the activity may have on the environment, either individually or cumulatively

with other past, present, or reasonably foreseeable probable future projects. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- Coastal Development Permit Application Number 5-23-0397 and associated file documents
- Coastal Development Permit No. 5-06-308-W
- Emergency Permits Nos. G-5-22-0034, G-5-22-0035, G-5-21-0039, G-5-21-0057 and associated file documents
- Coastal Commission (CCC). 2018. California Coastal Commission Sea Level Rise Policy Guidance: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits. https://documents.coastal.ca.gov/assets/slr/guidance/2018/0_Full_2018AdoptedSLRGuidanceUpdate.pdf
- IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press.
- Ocean Protection Council (OPC). 2018. State of California Sea-Level Rise Guidance: 2018 Update. https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf
- Griggs, G, Árvai, J, Cayan, D, DeConto, R, Fox, J, Fricker, HA, Kopp, RE, Tebaldi, C, Whiteman, EA (California Ocean Protection Council Science Advisory Team Working Group). Rising Seas in California: An Update on Sea-Level Rise Science. California Ocean Science Trust, April 2017. https://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf

APPENDIX B – RELEVANT CERTIFIED LUP POLICIES

HAZ-8 Geotechnical Review. A geotechnical review is required for all shoreline/coastal bluff or canyon parcels where new development or major remodel is proposed. If, as a result of geotechnical review, a greater setback is recommended than is required in the policies herein, the greater of the setbacks shall apply. For shoreline/coastal bluff or canyon parcels, geotechnical review shall identify the bluff or canyon edge, provide a slope stability analysis, and a bluff/slope retreat rate analysis. Consideration of the expected long-term average coastal bluff retreat rates over the expected life of the structure (minimum of 75 years unless otherwise specified in the LCP), shall include retreat rates due to expected sea level rise and a scenario that assumes that any existing shoreline or bluff protective device is not in place. The anticipated retreat over the expected life of the structure shall be added to the setback necessary to assure that the development will maintain a minimum factor of safety against land sliding of 1.5 (static) and 1.1 (pseudo static) for the life of the structure. The analysis for shoreline/coastal bluff parcels shall use the best available science on sea level rise and consider a range of scenarios including the high scenario of sea level rise expected to occur over the life of the structure and its effect on long term bluff retreat rates. The City may issue building permits for structures that maintain a different minimum factor of safety against landslides under certain circumstances and conditions, pursuant to the Geotechnical Review specifications in the IP and where alternative stability requirements are approved by the City Engineer.

HAZ-9 Site-Specific Coastal Hazard and Erosion Study. A site-specific coastal hazard and erosion study is required for all new shoreline and coastal bluff development that could be threatened by coastal hazards such as inundation, flooding, wave run-up and overtopping, erosion, etc. including an analysis of the changes to these hazards due to sea level rise within the anticipated life assuming no reliance upon existing or future shoreline protective devices. This study shall be prepared by a qualified professional, and shall use the best available science, and a scenario-based analysis to assess the potential coastal impacts (inundation, flooding, wave run-up and overtopping, erosion, etc.), taking into consideration the effects of sea level rise over the lifetime of the development (minimum of 75 years unless otherwise specified) considering, at a minimum, a high sea level rise scenario. If the new development cannot fully minimize hazards risks by avoiding all geologic and coastal hazards for the anticipated life of the development without reliance upon existing or future shoreline protection, the study should discuss possible adaptation responses to the hazards to reduce risk as feasible and mitigate impacts to coastal resources. The study should also include an evaluation to determine whether any grading (permitted or unpermitted) has occurred and whether the grading, if any, has had an effect on potential inundation hazard.

HAZ-10 Applicant's Assumption of Risk. A Coastal Development Permit (CDP) for development in a hazardous area shall be conditioned when consistent with Policy GEN-8 to require the property owner to record a document (i.e., deed restriction) that

waives and indemnifies the approving entity from liability for any personal or property damage caused by geologic, coastal or other hazards on such properties in relation to any development approved by the CDP and acknowledging that future shoreline protective devices to protect structures authorized by such a CDP are prohibited as outlined in HAZ-18.

HAZ-16 Sea Level Rise and Development. Consistent with the policies herein, site development to avoid the need for future shoreline or bluff protective devices and to avoid and minimize risks from geologic, coastal, and fire hazards as exacerbated by sea level rise over the life of the proposed development. Design development to account for projected sea level rise using the best available science. Assess projects for their vulnerability to impacts from coastal hazards and sea level rise and, if vulnerable, require an adaptation strategy for new development and major remodels that does not rely on shoreline or bluff protective devices. Analyze options for removal or relocation of structures that become threatened by coastal hazards.

HAZ-30 Development and Uses in Hazard Areas. New development or re-development and land uses shall: a. Minimize risks to life and property in areas of high geologic, coastal, and fire hazard. b. Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

HAZ-37 Removal of Non-conforming, Unpermitted and/or Obsolete Structures and Uses. When a principal structure is removed, all non-conforming accessory development and/or uses shall be removed. Development on the shoreline, canyon, and/or bluff sites must identify and remove all unpermitted and/or obsolete structures that are no longer being used, including but not limited to protective devices, fences, walkways, stairways, etc. which encroach into canyons or bluffs or shoreline or onto public property.

HAZ-45 Blufftop/Coastal Canyon Lot Drainage and Erosion. New development and redevelopment on a blufftop or coastal canyon lot shall provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner away from the bluff/canyon edge to minimize hazards, site instability, and erosion. Drainage devices extending over or down the bluff face will not be permitted if the property can be drained away from the bluff face. Drainpipes will be allowed only where no other less environmentally damaging drain system is feasible, and the drainpipes are designed and placed to minimize impacts to the bluff face, toe, and beach.

CUL-1 Cultural Resources. Protect cultural resources, including historical, archaeological, and paleontological features in the Coastal Zone. Where necessary to protect cultural resources, new development shall include an appropriate pre-development investigation to determine, in the least destructive manner, whether cultural resources are present. The pre-development investigation shall include recommendations as to how the site can be developed and designed to avoid or

minimize significant impacts to cultural resources. In situ preservation and avoidance are the preferred alternative over recovery and/or relocation in the protection of paleontological and archaeological resources. When in situ preservation or site capping is not feasible, recovery and/or relocation may be considered. Native American tribal groups with cultural affiliation to the project site area as identified by the Native American Heritage Commission shall have the opportunity to review and comment on the predevelopment plan as required by AB52 (2014). Archaeologists and representatives from Native American tribal groups shall provide monitoring during grading/excavation and construction activities of any approved development that has the potential to adversely impact any on-site significant cultural resources.

CUL-4 Architectural, Historical, and Cultural Resource Preservation and Restoration. Provide for the identification, preservation and restoration of the sites, structures, districts and cultural landscapes which have architectural, historical, and/or cultural significance.

VIS-1 Visual Character and Aesthetic Resources Preservation. New development shall be designed to preserve the visual character and aesthetic resources of the City's coastal zone including preservation of the physical features of coastal bluffs and canyons, and where feasible, enhance and restore scenic and visual qualities of the coastal zone, including to and along the ocean and coastal bluffs, visually significant ridgelines, and coastal canyons, open spaces, prominent, mature trees on public lands, and designated significant public views (as identified on Figure 6-1 Scenic Gateways and Corridors, Figure 6-2-A Public View Corridors and Figure 6-2-B Public View Corridors). Where protection of visual character and aesthetic resources is not feasible, impacts should be mitigated.

PUB-36 Coastal Public Access. Establish, protect, maintain, and, where feasible, expand and enhance a system of public coastal access to the shoreline, beaches, tidelands, and recreational facilities…