CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4421
(619) 767-2370

W10c

Filed:	11/18/15
180th Day:	5/16/16
Staff:	S. Richmond-SD
Staff Report:	2/18/16
Hearing Date:	3/9/16

STAFF REPORT: REGULAR CALENDAR

Application No.:	**6-15-1186**
Applicant:	**City of Encinitas**
Agent:	Alison Evans
Location:	Cardiff State Beach parking lot west of Coast Highway 101, just south of the San Elijo Lagoon inlet/outlet, and Dublin Drive east of Coast Highway 101, Cardiff, Encinitas, San Diego County.
Project Description:	Rehabilitation of the Coast Highway 101 Sewer Pump Station, replacement of single 1,150-ft.-long 4-in. diameter sewer forcemain with dual 550 to 600-ft.-long 4-in. diameter sewer forcemains using horizontal directional drilling techniques, and removal of the existing section of forcemain on the Coast Highway 101 Bridge under-crossing.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The proposed project would increase the reliability and redundancy of wastewater pumping and transmission of the Coast Highway 101 Sewer Pump Station (CPS). The primary issues raised by this project relate to the site's exposure to sea level rise, potential impacts to water quality and biological resources during construction, and

temporary impacts to public access and recreation. Originally built in 1974 and rehabilitated in 1982, the CPS is old and the City has stated it could fail at any time. The CPS pumps wastewater through a single 1,150-foot-long, 4-inch diameter, ductile iron forcemain that is mostly underground, except for the section under the Coast Highway 101 Bridge across the San Elijo Lagoon inlet/outlet. This section is vulnerable to corrosion and vandalism, where accidental sewer discharge to the San Elijo Lagoon and the ocean could be significant. The proposed project would rehabilitate the wet well, replace the pump and valve vault, and bring up the station to recommended reliable electrical standards. In addition, the project involves replacing the existing forcemain with dual, 550 to 600-foot-long, 4-inch diameter, corrosion-resistant high density polyethylene (HPDE) material forcemains using horizontal direction drilling (HDD) methods from the CPS site under the San Elijo Lagoon to Dublin Drive due east. This path avoids impacts to sensitive habitat. The project incorporates adaptation strategies to withstand worst-case scenario sea level rise impacts anticipated during the CPS design life.

However, because the site is located on the shoreline, Special Condition #2 requires the applicant to remove the proposed development if and when it is threatened by future coastal hazards that would necessitate a response beyond ordinary repair and maintenance. Because there is a potential for accidental spill of drilling fluids during HDD, Special Condition #5 requires the Drilling Fluid Release Monitoring and Contingency Plan be implemented during construction to minimize the potential for inadvertent release of drilling fluid and ensure prompt clean-up and restoration. Finally, since the project will result in a temporary loss of parking in the highly utilized Cardiff State Beach parking lot during the 9-month construction period, Special Condition #8 prohibits development activity during the busy summer months between Memorial Day and Labor Day, and on weekends and holidays, with the exception of one weekend between Labor Day and Thanksgiving 2016 for a specific HDD operation, to alleviate impacts to public access and recreation. Other conditions include the submission of final plans, an assumption of risk, implementation of Best Management Practices in the Water Pollution Control Plan during construction, identification of where any exported spoils will be deposited, and compliance with mitigation, monitoring, and reporting described in the approved Mitigated Negative Declaration.

Commission staff recommends **approval** of coastal development permit application 6-15-1186 as conditioned.

TABLE OF CONTENTS

APPENDIX

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 6-15-1186 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit 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 coastal development permit 6-15-11861186 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

This permit is granted subject to the following 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 permittee 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 of 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 permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Final Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, final construction plans that are in substantial conformance with the Project Plans – Final Review Set submitted by Dudek and Associates and dated July 2015.

The applicant 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 an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. **Coastal Hazards Response.** By acceptance of this Coastal Development Permit (CDP), the applicant acknowledges and agrees, on behalf of itself and all successors and assigns, that:

(a) **Coastal Hazards.** The site is subject to coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal flooding, and their interaction.

(b) **Permit Intent.** The intent of this CDP is to allow for the approved project to be constructed and used consistently with the terms and conditions of this CDP for only as long as the development remains safe for use, without additional substantive measures or protective devices.

(c) **Future Removal of Development.** The applicant shall remove or relocate, in part or in whole, the development authorized by this CDP, including, but not limited to, pumping infrastructure and other development authorized under this CDP when the development becomes threatened by coastal hazards, such that the development is no longer functional or presents a risk to life and property.

Development associated with removal of authorized development shall require an amendment to this CDP, unless the Executive Director determines that no permit is required. In the event that portions of the development fall to the water or ground before they are removed, the applicant shall remove all recoverable debris associated with the development from the ocean, intertidal areas, and wetlands and lawfully dispose of the material in an approved disposal site.

3. **Assumption of Risk, Waiver of Liability, and Indemnity Agreement.**

(a) By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from waves, storm waves, and flooding; (ii) to assume the risks to the applicant and the property that is 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 of 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.

(b) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

4. **Water Pollution Control Plan.** The applicant shall comply with and implement all of the Best Management Practices (BMPs) and other elements included in the Water Pollution Control Plan (WPCP) submitted by Dudek and Associates and dated February 17, 2016.

5. **Drilling Fluid Release Monitoring and Contingency Plan.** The applicant shall comply with and implement all of the preventative measures, drilling measures, monitoring, and other elements included in the Drilling Fluid Release Monitoring and Contingency Plan submitted by Dudek and Associates and dated November 30, 2015.

6. **Disposal of Spoils.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall identify the location for the disposal of residual bentonite and recovered spoils outside of the Coastal Zone.

7. **Biological Resources Mitigation and Monitoring Requirements.** The applicant shall comply with and implement all of the conditions, recommendations, and project features included in the Mitigated Negative Declaration (MND) dated June 26, 2015, approved by the City of Encinitas.

8. **Timing of Development**. The applicant shall comply with the Planning Schedule Updated February 1, 2016 submitted by Dudek and Associates, wherein construction is

prohibited between Memorial Day and Labor Day, and on weekends and holidays, with the exception of one weekend between Labor Day and Thanksgiving 2016 to minimize the risk of hydraulic lock of the drill string. Signage shall also be installed directing users to the Seaside parking lot to offset the temporary loss of parking in the Cardiff State Beach parking lot.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The proposed project involves improvements to the existing Coast Highway 101 Sewer Pump Station (CPS) and replacement of the existing forcemain with two 4-inch diameter forcemains, a duty forcemain and a stand-by forcemain, using trenchless horizontal direction drilling (HDD) methods, and removal of the existing forcemain on the Coast Highway 101 Bridge under-crossing (Exhibit 1). The existing pump station is located in the Cardiff State Beach parking lot west of Coast Highway 101, just south of the San Elijo Lagoon inlet/outlet, in the City of Encinitas, which is also within the Federal Emergency Management Agency (FEMA) 100-year floodplain. Proposed improvements to the pump station would generally be contained to the current CPS location and operation of the pump station would continue to be almost entirely subgrade, with the exception of the electrical control panel. Specific improvements to the CPS include:

- Rehabilitation of the wet well to eliminate water infiltration as well as addition of a nozzle cleaning system and replacement of the structural cover;
- Replacement of the existing wet well pump with a new, submersible chopper pump designed to minimize problems with clogging;
- Replacement of the existing valve vault with a new vault providing improved access to valves and piping; and
- Rehabilitation of the electrical systems to bring the station up to recommended reliable standards, including new Supervisory Control and Data Acquisition (SCADA) equipment.

The proposed project is intended increase the reliability and redundancy of wastewater pumping and transmission of the pump station. The CPS receives wastewater from both the east and west sides of Restaurant Row, south of the project site along Coast Highway 101 (Exhibit 2). Daily average dry weather wastewater flows range from 15 to 25 gallons per minute (gpm) and peak at 45 gpm. Peak wet weather flows can be as high as 112 gpm. The CPS pumps wastewater from its location through a single 1,150-foot-long, 4-inch diameter, ductile iron forcemain that discharges to the trunk sewer in San Elijo Avenue. The San Elijo Avenue trunk sewer flows to the Cardiff Pump Station, which in turn delivers wastewater to the San Elijo Water Reclamation Facility for treatment and irrigation reuse or ocean disposal. There is no projected change in service area or anticipated increase in influent wastewater flow to the CPS.

The CPS was originally built in 1974 and rehabilitated in 1982 (Exhibits 3 and 4). Most of the existing forcemain is underground, except the section under the Coast Highway 101 Bridge across the San Elijo Lagoon inlet/outlet (Exhibit 5). Because the pipe is old and exposed, the City has indicated that this section is vulnerable to corrosion and vandalism, and could fail at any time. Given its location above San Elijo Lagoon, damage to the pipe and accidental sewer discharge to the San Elijo Lagoon and the ocean could result in significant impacts.

The path of the new forcemain has been designed to avoid crossing Coast Highway 101 Bridge by instead extending approximately 550 to 600 feet east from the CPS site under the San Elijo Lagoon and North County Transit District (NCTD) railroad ballasts to Dublin Drive (Exhibit 6). The new forcemains would be constructed of jointless, corrosion-resistant high density polyethylene (HPDE) material installed within a 14-inch diameter, HDPE casing. HDD is a widely used method of installing buried pipelines with a minimum of environmental impact and involves of pilot hole drilling, reaming, and pull back. The new forcemain would be installed a minimum of 15 to 25 feet below the San Elijo Lagoon inlet/outlet and 50 feet below the NCTD railroad ballasts, which is deep enough to avoid impacts to any potential future dredging of the San Elijo Lagoon and the San Diego Association of Governments (SANDAG) Double Track Project (Exhibit 7). To ensure the bridge abutment pilings located at the southeast corner of the Coast Highway 101 Bridge are avoided, the alignment of the new forcemain is proposed to be located a minimum of 20 feet away from the end of the nearest piling.

The City of Encinitas has a certified Local Coastal Program (LCP). The proposed project will be located seaward of the Mean High Tide Line (MHTL) within the Commission's original jurisdiction and landward of the MHTL within the City's CDP jurisdiction. Since a portion of the project lies within the City's jurisdiction (e.g., drilling and installation of the new forcemain along Dublin Drive), the City has requested that the subject application be consolidated to include all portions of the project within its jurisdiction so as to authorize the Commission to approve the project in its entirety. Therefore, Chapter 3 of the Coastal Act is the standard of review with the City's certified LCP used as guidance.

B. HAZARDS

Section 30253 of the Coastal Act states, in 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 protective devices that would substantially alter natural landforms along bluffs and cliffs…*

In addition, Section 30.34.040(B)(2) of the City of Encinitas's Implementation Plan (IP), used for guidance for this consolidated permit, states that within the 100-year floodplain, public improvements will only be allowed if the applicant can demonstrate the following:

> *a. The development is capable of withstanding periodic flooding, and does not require the construction of flood protective works, including but not limited to, artificial flood channels, revetments, and levees.*

The proposed project must minimize risk, assure structural integrity, and avoid the construction of shoreline protective devices that can result in a variety of negative impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics that ultimately lead to beach loss. Such devices are required to be approved only when necessary to protect existing structures or public beaches in danger from erosion, and only when designed to eliminate or mitigate adverse impacts on local sand supply. In addition, acceleration in the rate of sea level rise is expected along the coast of California, with the potential to threaten many coastal resources, including critical infrastructure.

Wastewater treatment and disposal systems are often located in areas that will be impacted by sea level rise. To avoid risks to property and the potential need for shoreline protection, new facilities should be located outside of hazardous areas when possible, and if avoidance is not possible, elements of the system that are in hazardous areas should be minimized and designed to withstand worst-case scenario sea level rise impacts.

The applicant conducted sea level rise analysis to determine the proposed project's vulnerability to coastal hazards within the CPS's design life, estimated at 30 to 50 years. Although a 30-year design life is anticipated, a design life of up to 50 years was considered as a conservative measure. Per the Commission's Sea Level Rise Policy Guidance, low and high sea level rise projections in combination with a 100-year wave event were used to evaluate the project's exposure to coastal flooding and erosion. The proposed project was found to be vulnerable under a high sea level rise projection toward the end of the 50-year design life of some pump station components (Exhibit 8). The City evaluated alternative locations for the CPS, but ultimately determined the CPS was necessary and optimal in its current location. For example, relocating the CPS inland would require extension of the gravity sewer to a new pump station location. However, extending the gravity sewer as an open channel sewer is not feasible due to its shallow elevation relative to the lagoon crossing. The City also considered the use of a gravity inverted siphon under the lagoon to serve a new pump station located northeast of the lagoon or to connect to the existing Cardiff Pump Station, but this design would necessitate an excessively deep wet well in a sensitive coastal area. Therefore, topographical and slope requirements to maintain adequate flow speeds within the gravity sewers, inverted sewer siphons, and sewer forcemains precluded moving the CPS outside of the hazardous area.

Therefore, the applicant included several adaptation strategies to allow the project to withstand worst-case scenario sea level rise impacts. The proposed project's sensitivity to sea level rise was determined to be primarily from flood-related damage to electrical components (i.e. electrical control panel). It is important to note that the existing transformers that power the CPS are owned and operated by SDG&E; improvements to these transformers are not part of the proposed project. Flooding of electrical components could result in a power outage to the pump station, which would result in suspension of pump out activities. In this scenario, the wet well would fill and eventually trip a high water alarm, which signals an on-call member from the San Elijo Joint Powers Authority (SEJPA) to respond. It is estimated that more than five hours of capacity exists at an average flow of 20 gpm, and up to one hour of capacity at peak wet weather flow of 112 gpm. Previous studies, topographic data, and as-built drawings were used to evaluate the accuracy of flooding potential along Highway 101 to ensure that emergency response equipment could access the CPS. Although timely response by SEJPA to wet well high water alarms would prevent wastewater spills in most circumstances, the adaptation strategies below will minimize dependence on the response system and future risk to public safety and environmental health:

- The proposed electrical control panel will increase water resistance by using a National Electrical Manufacturers Association 4X cabinet; and
- The City will develop an emergency response plan that includes procedures such as City and SEJPA preparation for predicted high tide and storm events, deployment of K-Rail or sand bags around the perimeter of electrical components to divert wave uprush and control flooding, notification to sewer service area customers that limited or no sewer service is available, and deployment of emergency equipment (vacuum trucks and trailer mounted pumps) to maintain service until power is restored.

Nonetheless, the coastal shoreline environment is dynamic and there are risks associated with development in such areas. Although no feasible alternative location exists at this time, a shoreline location at risk for flooding and erosion is not a preferred location for critical infrastructure, and the City should investigate alternatives locations or options for long-term infrastructure management siting. In the case of the proposed project, the design life of the improvements is 30 to 50 years. Thus, with the aforementioned adaptation strategies, the facility should be safe for its expected life. However, in order to ensure that no shoreline protection will be required to protect the structure in the future, Special Condition #2 requires the applicant to acknowledge that the site is subject to coastal hazards and agree to remove the proposed development when it is threatened in such a way that would require a response beyond ordinary repair and maintenance. Furthermore, Special Condition #3 requires the applicant to assume all risks for developing at this location.

Thus, although long-term stability cannot be assured, as conditioned, the proposed project minimizes risks to life and property in areas of high flood hazard risk and would not require additional, more substantial protective measures in the future because it would be removed when it is in danger, consistent with Coastal Act Section 30253.

C. WATER QUALITY AND BIOLOGICAL RESOURCES

The following Coastal Act policies are applicable and state, in part:

Section 30230

> *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...*

Section 30231

> *The biological productivity and the 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...*

Resource Management Policy 2.3 of the City's Land Use Plan (LUP) includes similar language:

> *To minimize harmful pollutants from entering the ocean environment from lagoons, streams, storm drains and other waterways containing potential contaminants, the City shall mandate the reduction or elimination of contaminants entering all such waterways...*

There are two major components to the proposed project: the construction work that would occur at the surface in the Cardiff State Beach parking lot and along Dublin Drive, and the horizontal direction drilling (HDD) connecting these two locations that will occur under the San Elijo Lagoon (Exhibit 9). The Cardiff State Beach parking lot and Dublin Drive sites are developed, paved areas, and no impacts to vegetation will occur. However, both sites are near or adjacent to sensitive areas, including the sandy beach and lagoon waters. Therefore, Special Condition #4 requires Best Management Practices (BMPs) detailed in the Water Pollution Control Plan (WPCP) be implemented during construction to prevent fuel leaks from sewer pumps, the drill rig or other equipment, and other pollutants from discharging onto adjacent streets, into the storm drain system, and into habitat beyond the project area. Since the proposed project would not change the amount of impervious area, no additional stormwater runoff would be generated.

With regard to the HDD, the purpose is to drill deep underground, well below the vegetation and waters of the lagoon, thereby avoiding impacts to the lagoon. Drilling under the lagoon is a feasible, less environmentally damaging alternative to having to rehang new pipe under the Coast Highway 101 Bridge, which would be vulnerable to corrosion, vandalism, and future coastal hazards. However, HDD can pose a risk to biological resources as a result of hydrofracture and returns ("frac-outs") of drilling fluid

and cuttings during construction. HDD utilizes a drilling fluid typically comprised of 97% water and 3% bentonite, a naturally occurring, non-toxic clay mineral approved by the National Sanitation Foundation for use in food products. This drilling fluid carries cuttings (drilled spoil) out of the hole, seals the formation, stabilizes the borehole, and acts as a lubricant for the downhole tools and product pipe. According to the Department of Fish and Wildlife, who have issued numerous Streambed Alteration Agreements for similar HDD projects within the San Elijo Lagoon (e.g., Solana Beach Forcemain Replacement, CDP 6-06-038), the discharge of bentonite during the HDD operation may produce a coating on aquatic invertebrates, aquatic plants, and other features of the lagoon, potentially smothering organisms (causing direct mortality), and embedding the interstitial spaces in gravel and filling potential rearing pools, both of which may decrease available habitat upon which fish depend.

The proposed project has been designed to prevent inadvertent returns and to quickly contain and clean up any frac-outs in the unlikely event that one might occur. First, the HDD drill rig bore entry pit will be set up in the Cardiff State Beach parking lot, and the exit pit will be located on Dublin Drive. The geometry of the drill path from the low elevation side to the high elevation side significantly minimizes the risk of hydrofracture by providing for pressure relief to the lower drill-rig side elevation of the crossing for the entire drilling process. Second, Special Condition #5 requires that the Drilling Fluid Release Monitoring and Contingency Plan prepared by the applicant be implemented to minimize the possibility of frac-out from the underground borehole into the lagoon, to minimize the possibility of drilling fluid seepage from the entry and exit sites, to provide for the timely detection of frac-outs, and to ensure an organized, minimum impact response in the event of a frac-out.

The Commission's water quality staff have reviewed the Drilling Fluid Release Monitoring and Contingency Plan and determined that the plan will adequately protect the surrounding resources. Moreover, Special Condition #6 specifies that residual bentonite and recovered spoils would be disposed of at a pre-approved legally permissible off-site location outside of the Coastal Zone after the installation of the new forcemain.

While no adverse impacts to environmentally sensitive areas are anticipated, breeding birds could be affected by temporary construction noise. Special Condition #7 requires the applicant to comply with and implement all of the conditions, recommendations, and project features included in the MND dated June 26, 2015, which includes a pre-construction survey to identify any active nesting and establishment of appropriate buffer areas if occupied nests are present within 500 feet of the construction area.

Implementation of construction BMPs, the Drilling Fluid Release Monitoring and Contingency Plan, and mitigation measures identified in the final MND minimize adverse impacts that may occur as a result of the accidental spills from construction equipment, inadvertent release of bentonite drilling fluid, and construction noise to the extent feasible. Therefore, the Commission finds the proposed development as conditioned is consistent with Sections 30230 and 30231 of the Coastal Act.

D. 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.*

In addition, the following Recreation Policies of the City's LUP relate to the proposed development:

> *5.1: The City recognizes Cardiff Beach State Park, San Elijo Beach State Park, South Carlsbad Beach State Park and Moonlight Beach (future City) State Park, as the major visitor destination beaches in the Encinitas area …*
>
> *5. 5: … the City shall assure that existing public parking lots for public beach access points are maintained and that no reduction in the number of existing public parking spaces shall be permitted.*

All or most of the construction work would be completed within existing Coast Highway 101 and Dublin Drive right-of-ways with temporary construction access through the Cardiff State Beach parking lot and cul-de-sac. Construction of the proposed project would occur in three phases over a 9-month period (Exhibit 10):

1. Phase 1A (Sept. 6 – Nov. 23, 2016)
    - HDD installation of new forcemain during which the existing pumps and forcemain would operate; and
    - Staging areas in Cardiff State Beach parking lot cul-de-sac and parking spots, and Dublin Drive,

    Phase 1B (Nov. 25, 2016 – mid-Jan. 2017)
    - Construction of new CPS valve vault and connection to the new forcemains; and
    - Staging areas in Cardiff State Beach parking lot parking spots.
2. Phase 2 (Mid-Jan. – mid-April 2017)
    - CPS improvements, temporary wastewater bypass through new valve vault and new forcemains, and testing of new pumping system; and
    - Staging areas in Cardiff State Beach parking lot parking spots.
3. Phase 3 (Mid-April – May 19, 2017)
    - Demolish existing CPS components, and abandon and remove sections of existing forcemain; and
    - Staging areas in Cardiff State Beach parking lot parking spots.

The Coastal Act emphasizes the need to protect and provide for public access to and along the coast. There are a total of 98 standard and 4 ADA-accessible parking spaces in the Cardiff State Beach parking lot. Construction will result in a temporary loss of parking in the highly utilized lot. Specifically, beachgoers will lose the following spaces over the 9-month construction period:

- Sept. 6 – Nov. 23, 2016: Cul-de-sac plus 6 parking spaces to the north for a staging area and an additional 22 parking spaces for a temporary turnaround area for the public and emergency vehicles; and
- Nov. 25, 2016 – May 19, 2017: 6 parking spaces near the pump station and 2 parking spaces just north of the public restrooms for a staging and work area.

As such, there will be 70 standard spaces and 4 ADA-accessible spaces available between Sept. 6 and Nov. 23, 2016, and 90 standard spaces and 4 ADA-accessible spaces between Nov. 25, 2016 and May 19, 2017. The staging areas have been limited to the smallest size possible to accommodate the required construction area. The project is a necessary improvement to critical infrastructure, and the impacts to the public will be short-term and temporary.

Although the project will impact beach parking, the schedule has been designed to reduce the impact on coastal access and public recreation. Special Condition #8 requires the applicant to comply with the proposed schedule, wherein construction is prohibited between the busy summer months between Memorial Day Weekend and Labor Day, and on weekends and holidays, with the exception of one weekend between Labor Day and Thanksgiving 2016 because continuous HDD minimizes the risk of hydraulic lock of the drill string while the casing/forcemain is being installed and during pull-back of the casing/forcemain main package. Finally, to help minimize the impacts of the temporary loss of parking in the Cardiff State Beach parking lot during construction, signage would be installed directing users to the Seaside parking lot located just less than 1-mi. south of the proposed project area along the Coast Highway 101.

Following the completion of construction activities, Cardiff State Beach parking lot will be restored to its original condition. Therefore, since no permanent adverse impacts to public access will occur as a result of this project and adequate access currently exists along the shoreline, the proposed project as conditioned is consistent with the public access and recreation policies of the Coastal Act.

E. LOCAL COASTAL PLANNING

Section 30604(a) also requires that a CDP shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a LCP in conformity with the provisions of Chapter 3 of the Coastal Act. As conditioned, the proposed development is consistent with coastal hazards, water quality and biological resources, and public access and recreation policies in Chapter 3 of the Coastal Act and with the City's certified LCP. Therefore, approval of the proposed development will not prejudice the ability of the City of Encinitas to continue to implement its certified LCP.

F. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's Code of Regulations requires Commission approval of CDPs to be supported by a finding showing the permit, 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. In compliance with CEQA, the City approved a MND that avoids or mitigates potentially significant environmental effects on biological resources, cultural resources, and transportation and traffic.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing water pollution and biological resources, will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

(G:\San Diego\Reports\2015\6-15-1186 Encinitas CPS and Forcemain Stf Rpt.docx)

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- Mitigated Negative Declaration for Coast Highway 101 Sewer Pump Station and Forcemain dated June 2015 by Dudek and Associates, Inc.
- Geotechnical Evaluation Coast Highway 101 Sewer Pump Station, Encinitas, California dated February 13, 2015 by Ninyo & Moore
- National Research Council's Report, Sea Level Rise for the Coasts of California, Oregon and Washington: Past Present and Future dated 2012
- California Coastal Commission Sea Level Rise Policy Guidance, dated August 12, 2015
- Sea-Level Rise Analysis for the Coast Highway 101 Sewer Pump Station Project dated January 13, 2015 by Moffat & Nichol
- Roadway Access to Coast Highway 101 Sewer Pump Station During 100-year Event dated February 4, 2016 by Moffat & Nichol
- Coast Highway 101 Sewer Pump Station and Forcemain Planning Schedule Updated 2/1/16 by Dudek and Associates, Inc.

SITE

EXHIBIT NO. 1

APPLICATION NO.
6-15-1186

Vicinity Map

California Coastal Commission

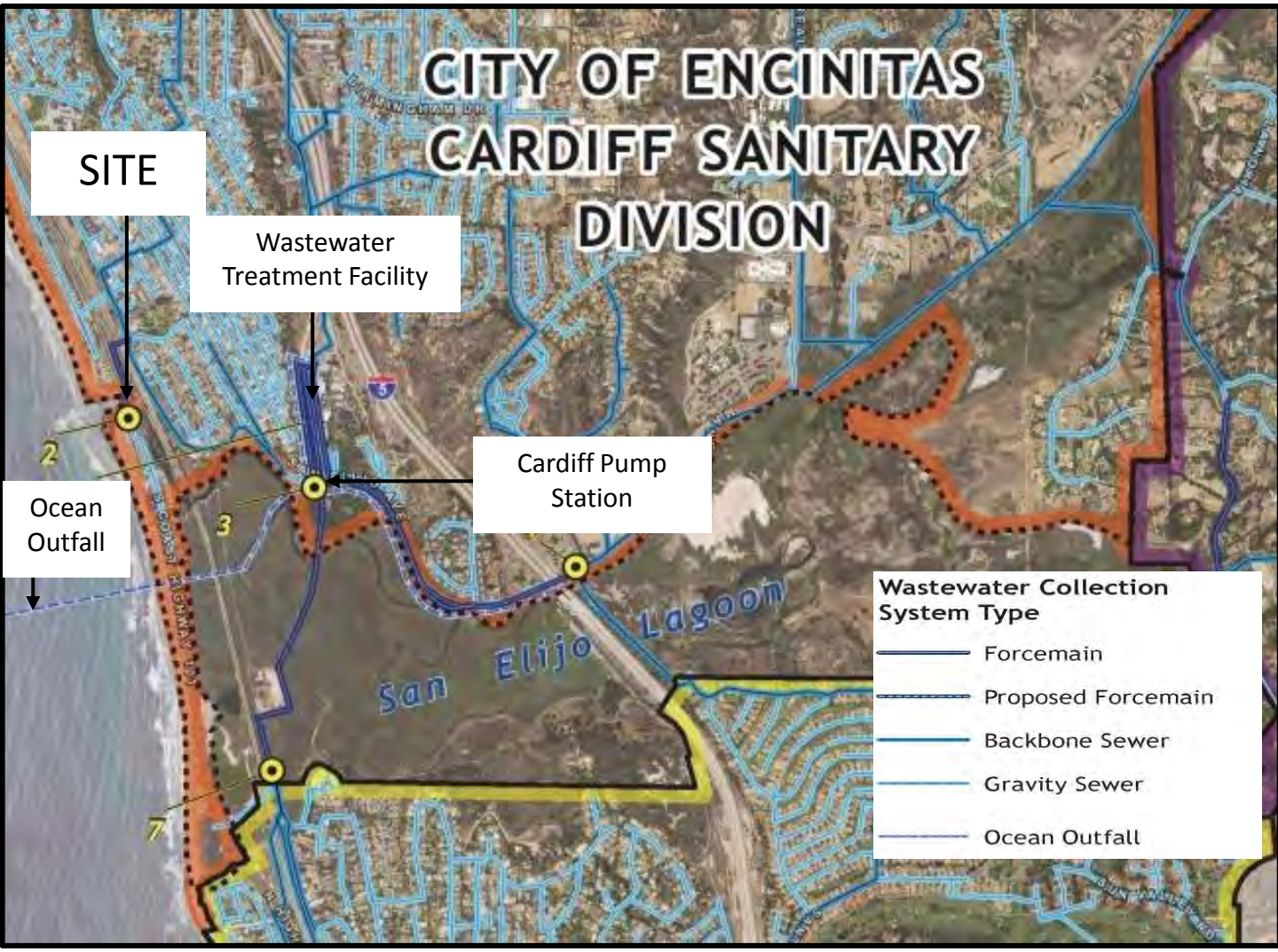


EXHIBIT NO. 2

APPLICATION NO.
6-15-1186

SEJPA Wastewater Service Areas

California Coastal Commission

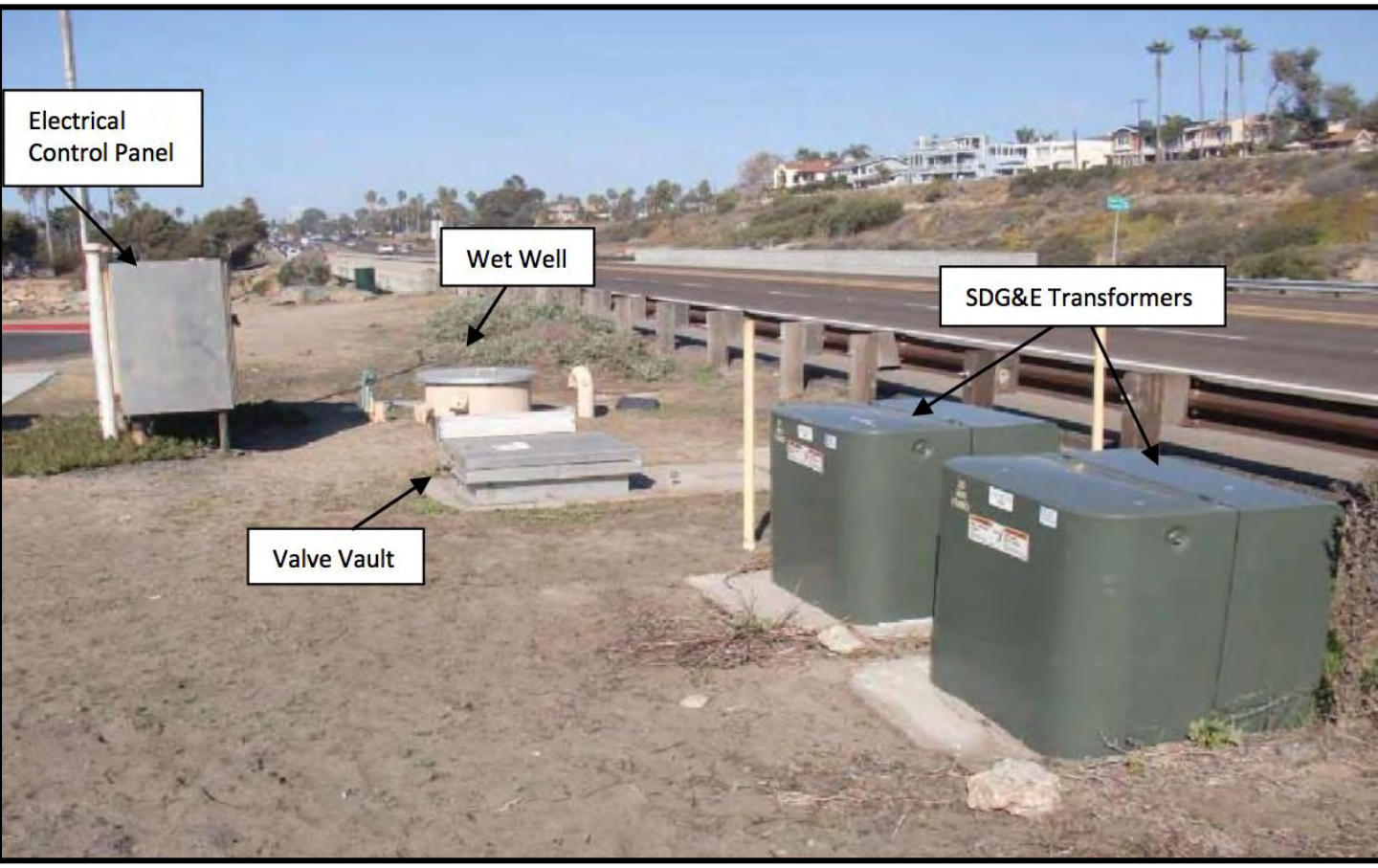


EXHIBIT NO. 3

APPLICATION NO.
6-15-1186

Existing Pump Station

California Coastal Commission

Pump Station Wet Well

Pump Station Valve Vault

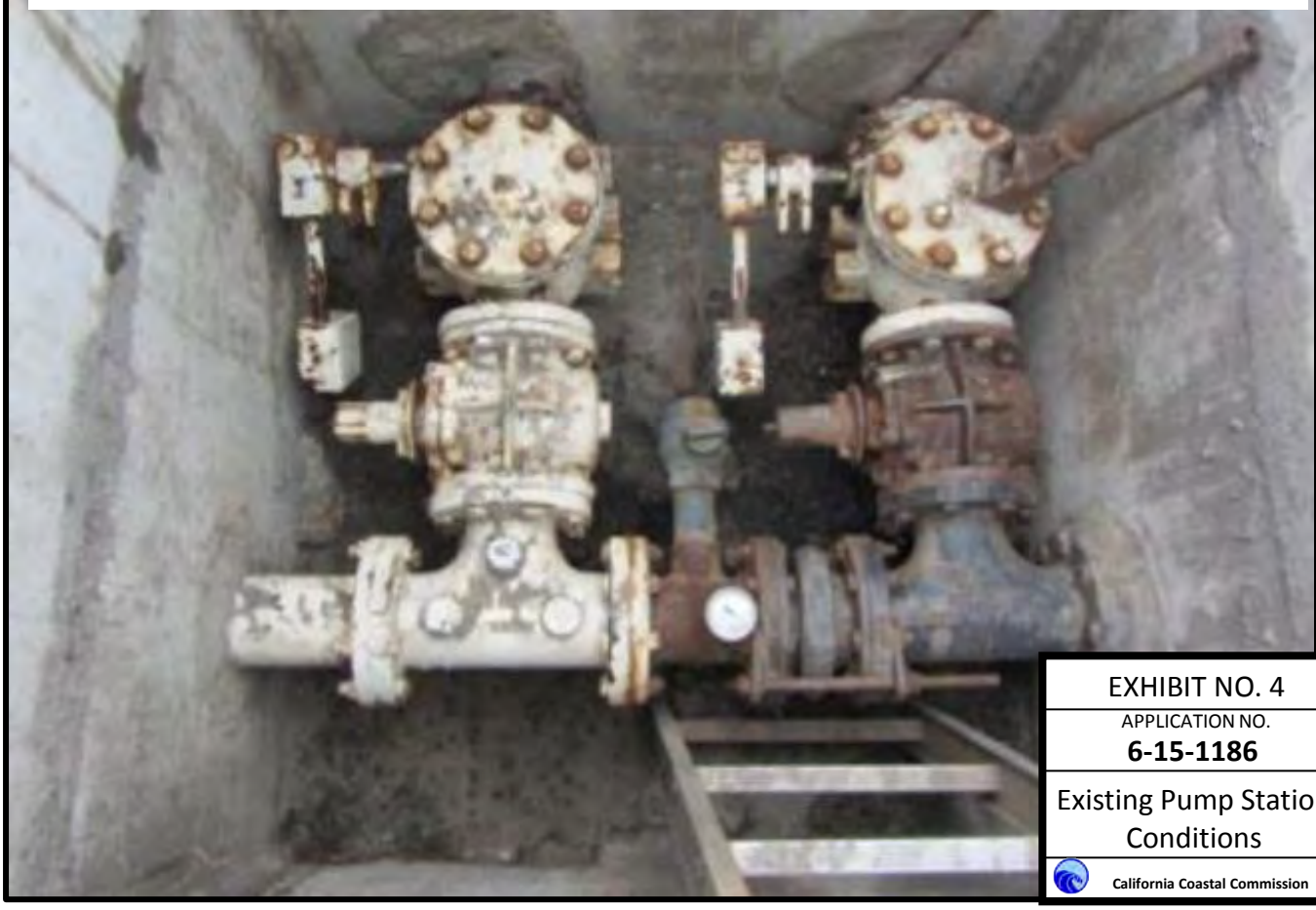
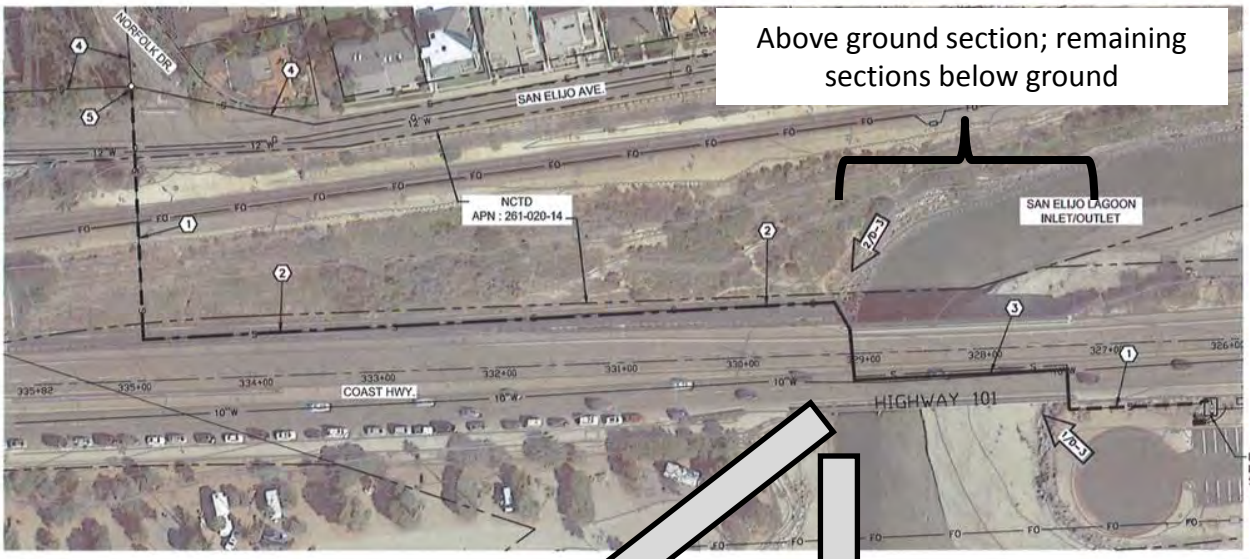


EXHIBIT NO. 4

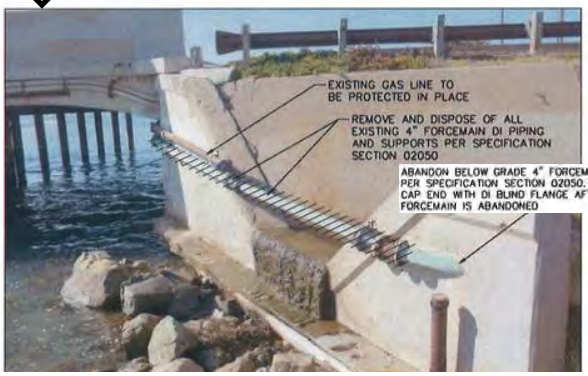
APPLICATION NO.
6-15-1186

Existing Pump Station Conditions

California Coastal Commission



Photograph of above ground section under Coast Highway 101 Bridge



Photograph of above ground section along Coast Highway 101 Bridge abutment

DEMOLITION LEGEND - PHASE 3

(1) - - - - UNDERGROUND PORTION OF EXISTING FORCEMAIN TO BE ABANDONED WITH ENGINEERED FILL PER SPECIFICATION SECTION 03310 AND NOTES 10 AND 11 ON DWG G-7.

(2) — - — UNDERGROUND PORTION OF EXISTING FORCEMAIN TO BE ABANDONED PER SPECIFICATION SECTION 02050

(3) ——— ABOVE GROUND PORTION OF FORCEMAIN TO BE REMOVED AND DISPOSED OF PER SPECIFICATION SECTION 02050

(4) - - - - EXISTING SEWER TO REMAIN IN SERVICE

(5) FORCEMAIN TO BE ABANDONED FROM HIGH POINT IN EXISTING MANHOLE WITH ENGINEERED FILL PER SPECIFICATION SECTION 02050. AFTER FORCEMAIN IS ABANDONED END SHALL BE PLUGGED WITH WATER-TIGHT CONCRETE PLUG.

EXHIBIT NO. 5

APPLICATION NO.
6-15-1186

Existing Forcemain Demolition

California Coastal Commission

EXHIBIT NO. 6

APPLICATION NO.

6-15-1186

Existing and Proposed Forcemain Routes

California Coastal Commission

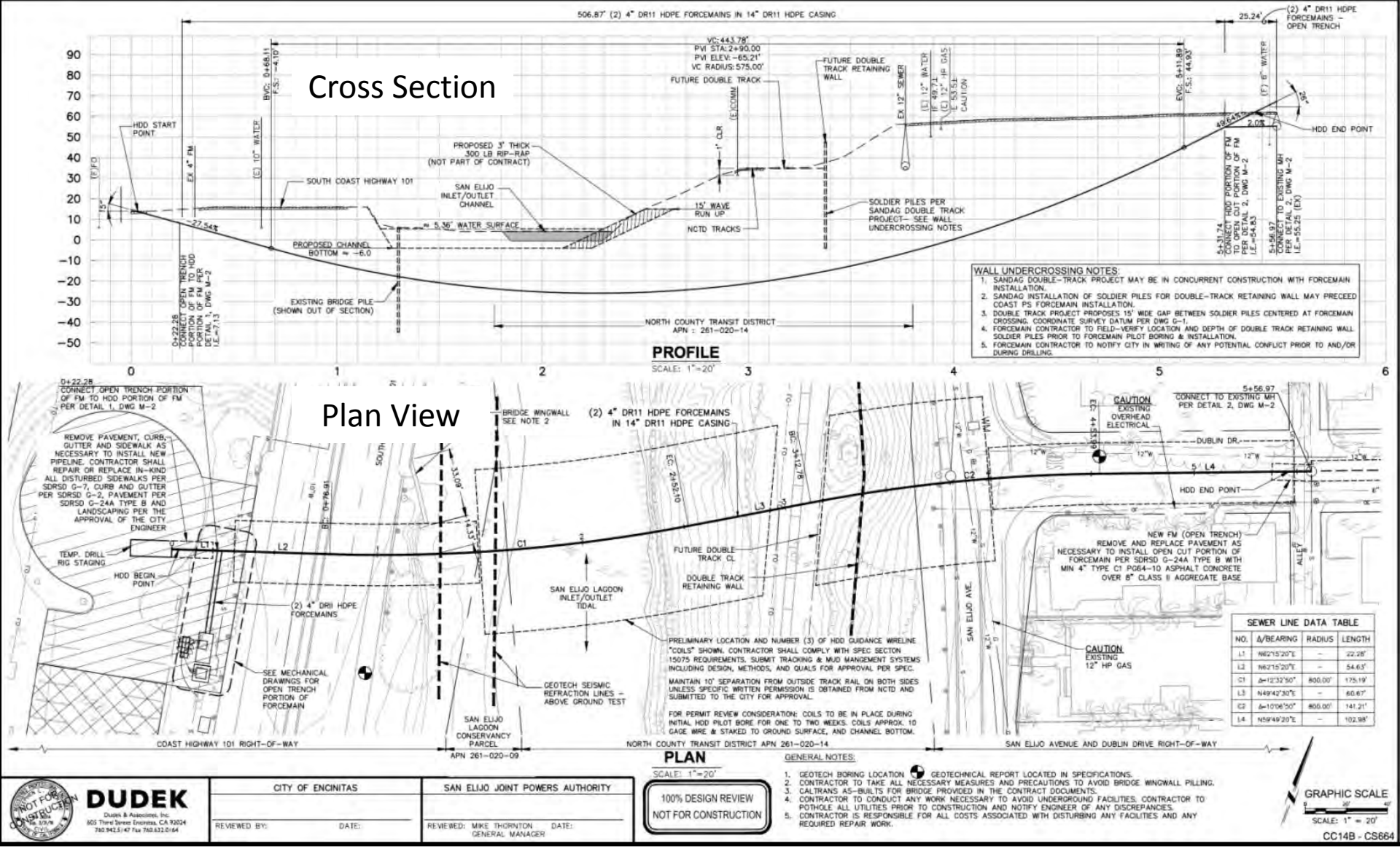
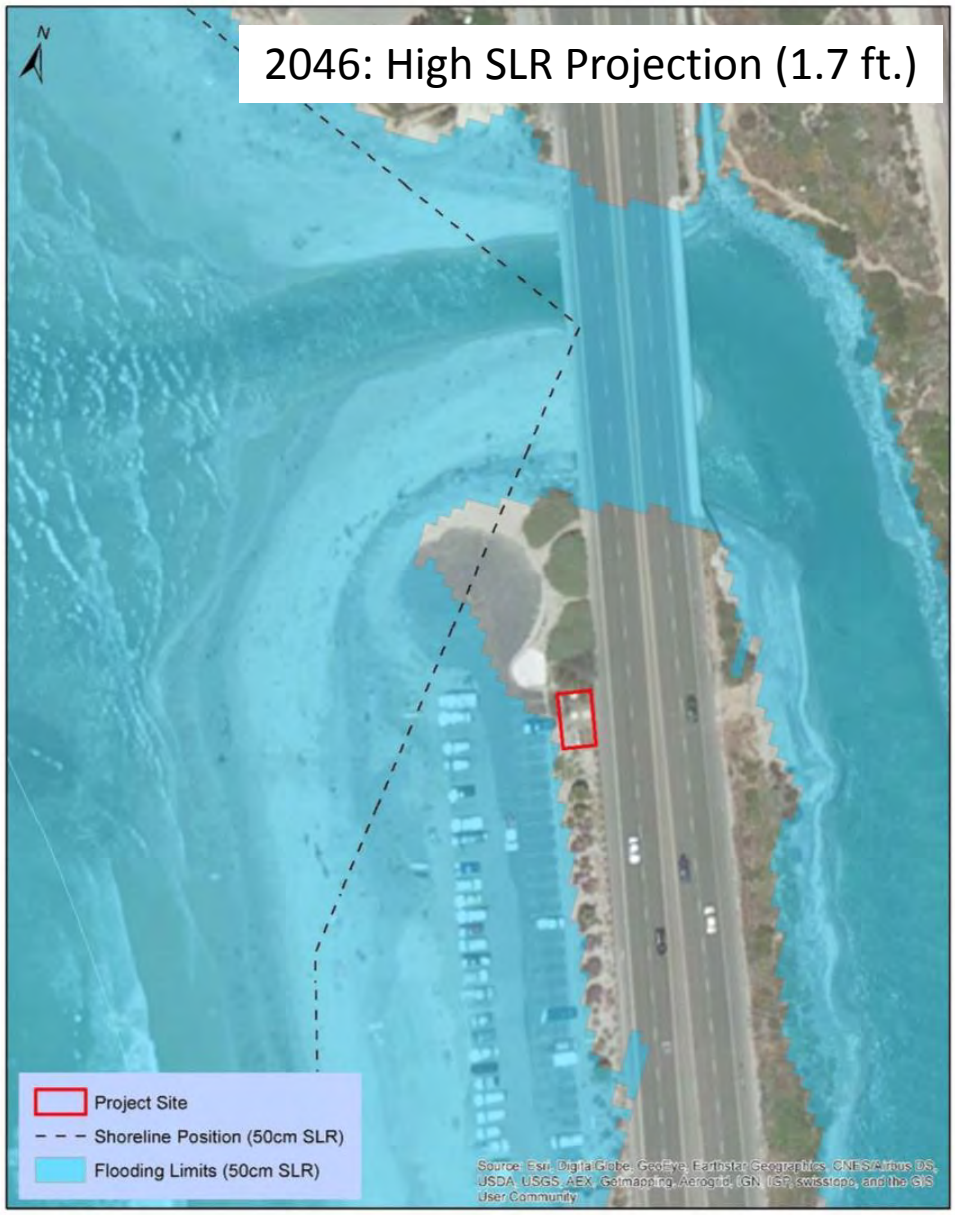


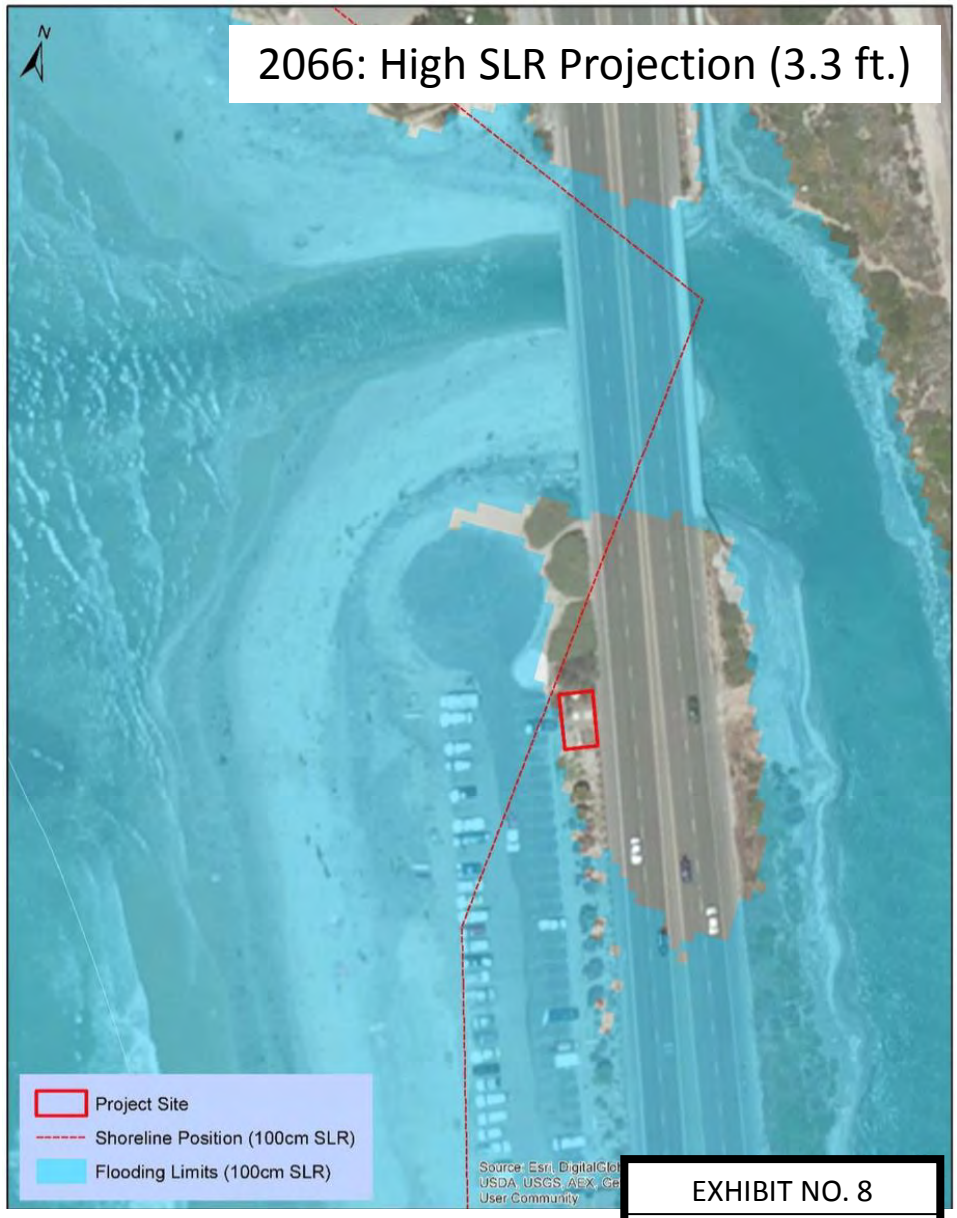
EXHIBIT NO. 7

APPLICATION NO.
6-15-1186

Proposed Forcemain Cross Section and Plan

California Coastal Commission





moffatt & nichol

EXHIBIT NO. 8

APPLICATION NO.
6-15-1186

Sea Level Rise Analysis

California Coastal Commission

EXHIBIT NO. 9

APPLICATION NO.

6-15-1186

Biological Resources

California Coastal Commission

EXHIBIT NO. 10

APPLICATION NO.

6-15-1186

Construction Staging Areas

California Coastal Commission