

CALIFORNIA COASTAL COMMISSION

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STAFF REPORT: REGULAR CALENDAR

Application No.: 6-16-0459

Applicant: City of Solana Beach

Agent: Jim Greenstein

Location: City pump station between the railroad ROW and the San Elijo Lagoon on an existing dirt access road beginning at the north end of Rios Avenue, Solana Beach, San Diego County (APN: 263-011-22)

Project Description: Construction of a new underground emergency overflow storage facility and replacement of a wet well, pumps, piping, valves and other mechanical equipment in an existing sewer pump station

Staff Recommendation: Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The City proposes to partially replace and to upgrade an existing sewer pump station. The proposed project involves construction of a new wetwell and replacement of the existing wetwell, pumps, piping, valves, and other mechanical equipment. The proposed project also involves the construction of a 152,000 gallon capacity emergency overflow below-grade storage basin. This pump station pumps approximately 92% of the City's sewage through a force main under the San Elijo Lagoon to the San Elijo Joint Powers Authority

water reclamation facility. The treated sewage is then pumped through existing piping back under the lagoon into an existing ocean outflow pipe¹. The proposed project does not expand the capacity of the pump station. Instead, the proposed project upgrades the facility to current standards for sewer pump stations.

The subject site is located within the City of Solana Beach (Exhibit 1). Specifically, the project is located between the railroad right-of-way and the San Elijo Lagoon on an existing dirt access road beginning at the north end of Rios Avenue (Exhibit 2). San Elijo Lagoon is a coastal wetland with ecological resources that are important to the region, as well as a recreational and visual amenity for the community.

As proposed, no direct impacts to native habitat area is expected. However, a 2015 survey found that there were various pairs of Ridgeway's rails within a close proximity to the pump station (Exhibit 5). While no direct impacts to sensitive species are anticipated, if the noise intensive construction activities of the project were to extend into the breeding season, special status avian species, including the Coastal California gnatcatcher, Least Bell's vireo, Light-footed clapper rail, western snowy plover, and California least tern could be affected by temporary construction noise if the birds are nesting near the construction area. The applicant has provided a construction schedule showing that the most noise intensive construction activities will be performed outside of the bird breeding season. Special Condition 3 of this permit requires that pre-construction and ongoing weekly bird nesting surveys be undertaken during nesting season and that work only occur within 500 ft. of an active California gnatcatcher or Ridgeway's rail nest if the decibel level is kept to a maximum of 60 dB(A).

The Commission's Sea Level Rise guidance document found that the best available science suggests that sea level could rise by as much as 2 feet by the year 2050 and as much as 5.5 feet by the year 2100.^{2,3} The applicant states that the design life of the existing pump station and the proposed improvements is approximately 50 years. Based on FEMA 100-year flood maps and the expected Sea Level Rise the pump station is not expected to be affected by rising sea levels in the lagoon within its design life. 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 order to ensure that no additional substantive measures or protective devices will be required to protect the structure in the future, Special Condition 8 requires the applicant to acknowledge that the site is subject to coastal hazards and agree to remove the proposed

¹ The San Elijo Joint Powers Authority has applied to the Commission for a CDP to replace the existing outflow pipe beneath the San Elijo Lagoon (6-16-0099/San Elijo Joint Powers Authority). This permit application will likely be heard by the Commission in early 2017.

² The 2012 National Research Council's Report, *Sea Level Rise for the Coasts of California, Oregon and Washington: Past Present and Future*, is currently considered the best available science on sea-level rise for California. The NRC report predicts that for areas south of Cape Mendocino, sea level may increase between 16.56 and 65.76 inches between 2000 and 2100 (NRC, 2012).

³ California Coastal Commission Sea Level Rise Policy Guidance – Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits – Adopted August 12, 2015.

development when it is threatened in such a way that would require a response beyond ordinary repair and maintenance.

Two unrelated projects are also scheduled to occur in the immediate vicinity and at the same time as the development proposed with this application (railroad double-tracking and San Elijo Lagoon Restoration Project (SELRP)). The railroad double-tracking project and the SELRP are of a much larger scale than the proposed project and will result in substantial impacts to the lagoon habitat. The applicant has coordinated with the entities managing these projects in order to minimize impacts to coastal resources.

The applicant has also coordinated with the California Department of Fish and Wildlife (CDFW), the US Fish and Wildlife Service (USFWS), and the San Elijo Lagoon Conservancy on the design of the proposed project. The Commission finds that this proposal represents the feasible alternative that lessens the adverse impacts to coastal resources because impacts will be minimized to the maximum extent practicable, based on the circumstances. Commission staff recommends **approval** of coastal development permit application 6-16-0459 as conditioned.

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APPENDICES

[Appendix A – Substantive File Documents](#)

EXHIBITS

[Exhibit 1 – Project Location](#)

[Exhibit 2 – Staging/Access](#)

[Exhibit 3 – Staging Area](#)

[Exhibit 4 – Site Plan](#)

[Exhibit 5 – 2015 Light-Footed Ridgway’s Rail Nesting Survey](#)

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 6-16-0459 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 6-16-0459 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. Submittal of Revised Final Plans.

- (a) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and written approval of the Executive Director, two full-size sets of the following revised final plans, modified as required below:
 - (i) Final Plans, that substantially conform with the plans submitted to the Commission, titled Solana Beach Pump Station 2016 Mechanical Upgrades, dated April 6, 2016, except that they shall be modified to eliminate reference to the staging area located to the north of the sewer pump station.
- (b) The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

2. Submittal of Final Storage and Staging Area Plans.

- (a) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and written approval of the Executive Director, two full-size sets of the final Storage and Staging Area Plans, that substantially conform with the plans submitted to the Commission, titled General Site Access and Staging Plan, received by the Commission on November 2, 2016.
- (b) The permittee shall comply with the plans for the proposed storage and staging areas. Additionally, all staging and storage shall be maintained within the proposed staging areas located outside of sensitive habitat. If conditions require relocation of staging/storage areas, the San Diego District office of the Coastal Commission shall be contacted prior to any changes to the project in the field for written approval of the Executive Director.

3. **Timing of Construction and Bird Nesting Surveys.** In order to avoid impacts to nesting birds, the permittee shall avoid, to the maximum extent feasible, construction activities that generate noises greater than 60 dB(A) during bird nesting season, from February 15th through September 15th. If project construction is necessary during the bird nesting season, a qualified biologist with experience in conducting bird nesting surveys shall conduct a minimum of three survey days within seven days of initiating construction activities. At least one survey shall be conducted the day prior to the initiation of construction activities. Weekly surveys for nesting birds shall also be conducted during any work occurring within the nesting season. If during pre-construction or weekly surveys, active California gnatcatcher or Ridgway's clapper rail nests are identified within 500 feet of the project site, noise monitoring shall be conducted and construction activities shall not occur until a qualified biologist determines that the young have fledged, the nest has been abandoned, or noise monitoring indicates that noise levels remain below 60 d(B)A equivalent continuous noise level. If this level is exceeded, feasible noise attenuation measures shall be implemented to reduce noise levels at active nests to at or below 60 dB(A) (except as necessary for emergencies with written approval by the Executive Director of the Commission after consultation with the California Department of Fish and Wildlife, and the Carlsbad Fish and Wildlife Office). Limits of construction around active nests shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The monitoring biologist shall halt construction activities if he or she determines that the construction activities may be disturbing or disrupting the nesting activities. The monitoring biologist shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the active nests or birds. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) installation of temporary sound barriers or sound blankets, and (3) utilizing alternative construction methods and technologies to reduce the noise of construction machinery. The monitoring biologist shall review and verify compliance with these avoidance boundaries and shall verify that the nesting effort has finished in a written report. Unrestricted construction activities may resume when the biologist confirms no active nests are found. Bird nesting surveys shall be provided to the Executive Director of the Commission, to the California Department of Fish and Wildlife, and to the Carlsbad Fish and Wildlife Office within 48 hours, and if Ridgway's rail are located, within 24 hours of locating any Ridgway's rails.
4. **Construction Methods.** Throughout implementation of the proposed sewer pump station upgrades, the following shall be required:
- (a) All vehicular use shall be constrained to the existing dirt access road and the staging area as delineated in the Final Storage and Staging Plans (Reference Special Condition 2).
 - (b) Work shall be performed only during daylight hours, except for a limited number of evenings where the pump station must be shut down.

(c) A copy of this CDP shall be kept on-site at all times during project implementation.

5. **As-Built Plans.** Within 30 days of completion of the project, the applicant shall submit as-built plans for the approved pump station mechanical upgrades, acceptable to the Executive Director, verifying the pump station mechanical upgrades have been constructed in conformance with the approved plans for the project pursuant to Special Condition 1 of this permit.

6. **Construction Pollution Prevention Plan (CPPP).** At a minimum of 30 DAYS PRIOR TO CONSTRUCTION, the permittee shall submit for the review and approval of the Executive Director, a Construction Pollution Prevention Plan (CPPP) prepared and signed by licensed engineer. To comply with the California State Water Resources Control Board (SWRCB) stormwater permit requirements, an applicant may be required to develop and implement a *Stormwater Pollution Prevention Plan* (SWPPP) that addresses construction activities. Applicable information provided in the SWPPP may also be included as part of the CPPP. At a minimum, the CPPP shall demonstrate that the development complies with the following requirements:

- (a) During construction, development shall minimize site runoff and erosion through the use of temporary BMPs, and shall minimize the discharge of sediment and other potential pollutants resulting from construction activities (e.g., chemicals, vehicle fluids, petroleum products, cement, debris, and trash).
- (b) Development shall minimize land disturbance during construction (e.g., clearing, grading, and cut-and-fill) and shall phase grading activities, to avoid increased erosion and sedimentation. Development shall minimize soil compaction due to construction activities, to retain the natural stormwater infiltration capacity of the soil.
- (c) Development shall minimize the damage or removal of non-invasive vegetation (including trees, native vegetation, and root structures) during construction, to achieve water quality benefits such as transpiration, vegetative interception, pollutant uptake, shading of waterways, and erosion control.
- (d) Development shall implement soil stabilization BMPs (such as mulching, soil binders, erosion control blankets, or temporary re-seeding) on graded or disturbed areas as soon as feasible during construction, where there is a potential for soil erosion to lead to discharge of sediment off-site or to coastal waters. Unpaved staging areas shall be hydroseeded after the construction has been completed with a native seed mix for control of soil erosion.
- (e) During construction, development shall avoid the use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers), in order to minimize wildlife entanglement and plastic debris pollution.

- (f) A description of the dewatering operations, including rates and volumes of water expected to be generated, and the Best Management Practices that will be used to prevent impacts to water quality.
- (g) Development shall implement additional BMPs for construction taking place over, in, or adjacent to coastal waters, if there is a potential for construction chemicals or materials to enter coastal waters. BMPs shall include, where applicable:
 - (i) Tarps to capture debris and spills. Use tarps or other devices to capture debris, dust, oil, grease, rust, dirt, fine particles, and spills to protect the quality of coastal waters. Implement appropriate BMPs for treatment, storage, construction, curing, slurry management and other appropriate practices for concrete work.
 - (ii) BMPs for preservative-treated wood. If preservative-treated wood is used, implement appropriate BMPs that meet standards for treatment, storage, and construction practices for preservative-treated wood; at a minimum, those standards identified by the American Wood Protection Association.
 - (iii) Conduct fueling and maintenance of construction equipment and vehicles off site if feasible. Any fueling and maintenance of mobile equipment conducted on site shall take place at a designated area located at least 50 feet from coastal waters, drainage courses, and storm drain inlets, if feasible (unless these inlets are blocked to protect against fuel spills). The fueling and maintenance area shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated to a designated fueling and maintenance area (such as cranes) may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills.
 - (iv) Methods to control fugitive dust on the access road shall be applied as necessary.
 - (v) The Construction Pollution Prevention Plan shall include a construction site map and a narrative description addressing, at a minimum, the following required components:
 - (A) A map delineating the construction site, all staging areas, construction phasing boundaries, and the location of all temporary construction-phase BMPs (such as silt fences, inlet protection, and sediment basins).
 - (B) BMPs that will be implemented to minimize land disturbance activities, the project footprint, soil compaction, and damage or removal of non-invasive vegetation.

- (C) BMPs that will be used to identify, and remove or isolate soils, containing aurally deposited lead.
- (D) BMPs that will be implemented to minimize erosion and sedimentation during construction activities, including:
 - (1) BMPs that will be implemented to stabilize soil during construction.
 - (2) BMPs that will be implemented to control erosion and sedimentation during construction.
 - (3) A schedule for installation and removal of temporary erosion and sedimentation control BMPs, and identification of temporary BMPs that will be converted to permanent post-development BMPs.
 - (4) BMPs that will be implemented to minimize polluted runoff from stockpiling soil and other excavated materials.
 - (5) A construction phasing schedule, if applicable to the project, with a description and timeline of significant land disturbance activities.
- (E) BMPs that will be implemented to minimize the discharge of other pollutants resulting from construction activities (such as paints, solvents, vehicle fluids, asphalt and cement compounds, trash, and debris) into runoff or coastal waters, including:
 - (1) BMPs that will be implemented to minimize polluted runoff from staging, storage, and disposal of construction chemicals and materials. Hydro mulch or a suitable alternative shall be placed at the staging area prior to its use for staging.
 - (2) Site management “good housekeeping” BMPs that will be implemented during construction, such as maintaining an inventory of products and chemicals used on site, and having a written plan for the clean-up of spills and leaks.
 - (3) BMPs that will be implemented, if needed, to either infiltrate runoff or treat it prior to conveyance off-site during construction.
 - (4) A construction schedule including the timing of inspection and maintenance of construction-phase BMPs, including temporary erosion and sedimentation control BMPs, as needed to ensure that the Coastal Development Permit’s water quality requirements are met.

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 a

Commission amendment to this Coastal Development Permit unless the Executive Director determines that no amendment is legally required.

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

- (a) By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards, including but not limited to waves, storms, and flooding, many of which will worsen with future sea level rise; (ii) to assume the risks to the permittee 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 subsection A of this condition.

8. 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 coastal erosion and 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 the pump station and other development authorized under this CDP when the development becomes threatened by coastal hazards, such that the development 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 adjacent wetlands and lawfully dispose of the material in an approved disposal site.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The City is proposing to partially replace and to upgrade an existing sewer pump station. The proposed project involves construction of a new wetwell and replacement of the existing wetwell, pumps, piping, valves, and other mechanical equipment. The proposed project also involves the construction of a 20 ft. wide, 108 ft. long, 10 ft. deep, 152,000 gallon capacity emergency overflow below-grade storage basin. Temporary sheet piles will be driven in with a vibratory hammer to support the perimeter walls of the new emergency overflow storage basin during construction and then removed when the concrete walls of the basin are poured. During construction of the basin, the applicant will remove groundwater to a minimum of one foot below the deepest excavation and will discharge the water per the requirements of a National Pollution Discharge Elimination System (NPDES) permit from the San Diego Regional Water Quality Control Board. Approximately 1,500 cy of material will be exported to a disposal site located outside the Coastal Zone. All work will take place within the existing 6,600 sq. ft. footprint of the existing pump station (Exhibit 4). Construction staging for the proposed development will be located within an existing disturbed dirt area to the south of the pump station and access will be obtained via an existing dirt service road beginning at the north end of Rios Avenue (Exhibit 2). The applicant has estimated that the proposed development will take approximately eight months to complete.

This station pumps approximately 92% of the City's sewage through a force main under the San Elijo Lagoon to the San Elijo Joint Powers Authority water reclamation facility. The pump station was originally constructed in 1966. The City undertook significant upgrades to the pump station in 1982 and in 2014 the City replaced the entire electrical system of the pump station (CDP Exemption 6-13-0226-X/City of Solana Beach). The proposed project does not expand the capacity of the pump station, which is limited by the force main. Instead, the proposed project upgrades the facility to current standards for sewer pump stations.

Two unrelated projects are also scheduled to occur in the immediate vicinity and at the same time as the development proposed with this application. In May 2016, the Commission concurred with the consistency certification for the construction of 1.5 miles of a second mainline railroad track (double-tracking), a new railroad bridge over San Elijo Lagoon, and associated crossovers, signals, and other improvements (CC-0004-15/SANDAG). A portion of the railroad double-tracking is located within 100 ft. of the sewer pump station. The railroad double-tracking project is expected to commence in 2017 and will take up to three years to complete. In addition, the San Elijo Lagoon Restoration Project (SELRP) is expected to go before the Commission at an upcoming hearing (CDP Application 6-16-0275/San Elijo Lagoon Conservancy & Caltrans). The SELRP includes significant reconfiguration of the lagoon elevations via grading and dredging to improve tidal circulation. Portions of the lagoon restoration are also planned within 100 ft. of the sewer pump station.

The subject site and the proposed staging area are located within the City of Solana Beach. Specifically, the project is located between the railroad right of way and the San Elijo Lagoon on an existing dirt access road beginning at the north end of Rios Avenue (Exhibit 2). The proposed development is located within the Commission's area of original jurisdiction and as such, the standard of review is the Chapter 3 policies of the Coastal Act, with the City of Solana Beach's LUP used as guidance.

B. BIOLOGICAL RESOURCES/WATER QUALITY

Section 30240 of the Coastal Act requires that development in areas adjacent to environmentally sensitive habitat areas be sited designed to prevent impacts which would significantly degrade those areas. Sections 30230, 30231, and 30232 of the Coastal Act protect the quality of coastal waters and marine resources.

Section 30240

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

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. 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

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, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water

reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and clean up facilities and procedures shall be provided for accidental spills that do occur.

The following policies of the City of Solana Beach certified Land Use Plan also protect environmentally sensitive habitats:

Policy 3.8: *ESHA shall be protected against significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.*

Policy 3.13: *ESHA shall be protected and, where feasible, enhanced. Where pedestrian access through ESHA is permitted, well-defined footpaths or other means of directing use and minimizing adverse impacts shall be used. Nesting and roosting areas for sensitive birds such as Western snowy plovers and least terns shall be protected by means, which may include, but are not limited to, fencing, signing, or seasonal access restrictions.*

Policy 3.16: *The use of insecticides, herbicides, rodenticides or other toxic substances by City employees and contractors in construction and maintenance of City facilities and other development shall be minimized in and adjacent to ESHA.*

Policy 3.22: *Development adjacent to ESHAs shall minimize impacts to habitat values or sensitive species to the maximum extent feasible...*

Policy 3.33: *The City should coordinate with the CDFW and USFWS, NMFS, and other resource management agencies, as applicable, in the review of development applications in order to ensure that impacts to ESHA and marine resources, including rare, threatened, or endangered species, are avoided and minimized.*

Policy 3.42: *Earthmoving during the rainy season (extending from November 1 to March 1) should be restricted for development that is (1) located within or adjacent to ESHA, or (2) that includes grading on slopes greater than 4:1 except for grading on coastal bluffs that is required for bluff retention devices. In such cases, approved grading shall not be undertaken unless there is sufficient time to complete grading operations before the rainy season. If grading operations are not completed before the rainy season begins, grading shall be halted and temporary erosion control measures shall be put into place to minimize erosion until grading resumes after March 1, unless the City determines that completion of grading would be more protective of resources.*

Policy 3.43: *Where grading is permitted during the rainy season (extending from November 1 to March 1), erosion control measures such as sediment basins, silt fencing, sandbagging, installation of geofabrics, shall be implemented prior to and*

concurrent with grading operations. Such measures shall be maintained through final grading and until landscaping and permanent drainage is installed.

Policy 3.69: *The biological productivity and the quality of wetlands shall be protected and, where feasible, restored.*

Policy 4.57: *Siting and design of new shoreline development and bluff retention devices shall take into account predicted future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered and based upon up-to-date scientific papers and studies, agency guidance (such as the 2010 Sea Level Guidance from the California Ocean Protection Council), and reports by national and international groups such as the National Research Council and the Intergovernmental Panel on Climate Change. Consistent with all provisions of the LCP, new structures shall be set back a sufficient distance landward to eliminate or minimize, to the maximum extent feasible, hazards associated with anticipated sea level rise over the expected economic life of the structure.*

San Elijo Lagoon Ecological Reserve is a coastal wetland with ecological resources that are important to the region, as well as a recreational and visual amenity for the community. The lagoon and adjacent uplands in the reserve provide habitats that support sensitive species. The lagoon area is biologically rich with over 20 species of fish, over 20 species of reptiles and amphibians, 24 species of mammals, and over 295 bird species (including 65 nesting), in addition to a complex suite of terrestrial and marine invertebrates. Included are six federally threatened and endangered birds, such as light-footed Ridgway's rail (*Rallus obsoletus levipes*) and least Bell's vireo (*Vireo bellii pusillus*). Biological surveys of the lagoon study area (for example, the San Elijo Lagoon Restoration Project Final EIR/EIS) have identified at least one federally listed plant species, Del Mar manzanita (*Arctostaphylos glandulosa ssp. crassifolia*); one state-listed plant species, Orcutt's goldenbush (*Hazardia orcuttii*); and 20 additional special status plants. A mosaic of habitat and ecosystems occurs, from open water to dense freshwater marsh. The lagoon's habitat values are linked directly to tidal inundation and frequency.

The pump station site itself is graded and developed and does not contain any sensitive habitat. The existing dirt access road is sufficient to allow construction vehicles to access the site, and the City has identified a staging area adjacent to the roadway that is disturbed and large enough to accommodate the project without encroaching into sensitive habitat. Thus, as proposed, no direct impacts to native habitat area are expected.

However, construction noise can adversely impact bird species, particularly during the breeding season. The applicant has proposed to undertake the most noise intensive construction activities outside of the bird breeding season. However, a 2015 survey by AECOM of the San Elijo Lagoon found that there were various pairs of Ridgeway's rails within a close proximity to the pump station (Exhibit 5). While no direct impacts to sensitive species are anticipated, if the noise intensive construction activities of the project were to extend into the breeding season, special status avian species, including the Coastal California gnatcatcher, Least Bell's vireo, Light-footed clapper rail, western snowy plover, and California least tern could be potentially be affected by temporary construction noise if the birds are nesting near the construction area.

The City has provided a construction schedule showing that the work that generates the highest noise levels, which includes demolition, shoring, and excavation, will be conducted outside of the nesting season. The City has also proposed the following noise reduction measure if noise levels exceed 60 dB(A) during the nesting season:

Temporary sound barriers or sound blankets shall be installed between construction operations and off-site bird nests. The project contractor shall construct a temporary sound wall between the location of the heavy equipment of the areas of any nearby nesting birds. Sound walls shall be a height of at least 10-feet above grade, and shall be constructed of a material with a minimum weight of two pounds per square foot with no gaps or perforations. The sound wall shall remain in place until the conclusion of construction activities.

In addition, as previously described, the project is proposed to be constructed in the immediate vicinity and at the same time as the railroad double-tracking project and with the upcoming SELRP project. The railroad double-tracking project and the SELRP are of a much larger scale than the proposed project and will result in substantial impacts to the lagoon habitat that are required to be mitigated for, including noise impacts. In the Commission's concurrence with the double-tracking, the Commission determined that sensitive bird species would be adequately protected from the construction noise associated with that work if pre-construction bird nesting monitoring is undertaken and that work only occur within 500 ft. of an active California gnatcatcher or Ridgeway's rail nest if the decibel level was kept to a maximum of 60 dB(A). The subject project is not expected to have any greater noise impacts than the double-tracking project. Therefore, consistent with the Commission's approval of the railroad double-tracking project, Special Condition 3 of this permit requires that pre-construction and ongoing weekly bird nesting surveys be undertaken and that work only occur within 500 ft. of an active California gnatcatcher or Ridgeway's rail nest if the decibel level is kept to a maximum of 60 dB(A).

The applicant shall also be responsible for providing the surveys to the Executive Director of the Commission, to the California Department of Fish and Wildlife, and to the Carlsbad Fish and Wildlife Office (USFWS) within 48 hours of undertaking the survey and within 24 hours of locating any Ridgeway's rails. The Commission ecologist and staff from CDFW and USFWS have reviewed the subject project and concur with the adequacy of the project design and special conditions to protect listed bird species in the vicinity of the project site.

The Solana Beach Land Use Plan (LUP) encourages grading to take place outside the rainy season (Extending from November 1 to March 1st). However, in this particular case and consistent with the LUP, allowing grading during the rainy season (outside of bird nesting season) would be most protective of the endangered bird species that inhabit the San Elijo Lagoon. To prevent adverse impacts to the lagoon, Special Conditions 4 and 6 require extensive spill prevention and water quality protection measures. As conditioned, grading during the rainy season is not expected to adversely impact the adjacent lagoon.

Special Condition 1 is required so that the Commission receives final plans and to memorialize the elimination of a northern staging area that is no longer proposed by the applicant. Special Condition 2 requires that the applicant submit a final staging plan to the Commission to delineate the location of fences to be installed around the development site and the staging area to ensure that sensitive habitat areas are not impacted by the proposed development. The applicant is required to submit any changes to the staging plan to the Executive Director of the Commission for written approval.

Alternatives

The City evaluated alternative locations for the pump station, but ultimately determined the pump station was necessary and optimal in its current location. Relocation of the pump station at this time is infeasible due primarily to the locations and elevations of the existing incoming sewer pipelines. The existing incoming pipelines use gravity to transport sewage to the existing low-lying pump station. Relocation of the pump station to a higher elevation outside the lagoon would result in the need for multiple additional pump stations to get sewage to the primary pump station. In addition, if the pump station were relocated, the existing sewer forcemain within the lagoon and the existing incoming sewer pipelines would need to be re-routed which would result in construction impacts to the lagoon. Therefore, topographical and slope requirements to maintain adequate flow speeds within the gravity sewers and new impacts to lagoon habitat preclude moving the pump station outside of the hazardous area at this time.

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 alternative locations or options for long-term infrastructure management siting. In the case of the proposed project, the pump station is expected to be safely sited for its design life of 50 years. However, in order to ensure that no additional substantive measures or protective devices will be required to protect the structure in the future, Special Condition 8 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 7 requires the applicant to assume all risks for developing at this location. Special Condition 5 requires that as-built plans be submitted to the Commission within 30 days of project completion.

The applicant has coordinated with the California Department of Fish and Wildlife (CDFW), the US Fish and Wildlife Service (USFWS), and the San Elijo Lagoon Conservancy on the design of the proposed project. The CDFW, USFWS, and the San Elijo Lagoon Conservancy provided direction and confirmation on the type and scope of work to be performed by the applicant. The Commission finds that this proposal represents the alternative with the least adverse impacts to coastal resources because impacts will be minimized to the maximum extent feasible, based on the circumstances. In summary, all impacts to native habitats have been avoided or minimized and mitigated to the maximum extent feasible. Therefore, the Commission finds the proposed development, as conditioned, is consistent with Section 30240 and 30251 of the Coastal Act and with the policies of the City's certified LUP.

C. COASTAL HAZARDS AND SEA LEVEL RISE

Coastal Act Section 30253 states:

New development shall...: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) 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 [...]

The following policies of the City of Solana Beach certified Land Use Plan are applicable to development located within flood prone areas:

Policy 4.5: *Development within flood prone areas subject to inundation or erosion shall be prohibited unless no alternative building site exists on the legal lot and proper mitigation measures are provided to minimize or eliminate risks to life and property from flood hazard. The City shall ensure that permitted development and fill in the 100-year floodplain will not result in an obstruction to flood control and that such development will not adversely affect coastal wetlands, riparian areas, or other sensitive habitat areas within the floodplain. (The Floodplain Overlay applies to areas within the 100-year floodplain as shown in Exhibit 4-6)*

Policy 4.6: *Permitted infill development in the 100-year floodplain shall be limited to structures capable of withstanding periodic flooding without requiring the construction of on or off-site flood protective works or channelization. Proposed development shall be required to incorporate the best mitigation measures feasible pursuant to Public Resources Code Section 30236.*

The Coastal Act requires that development minimize risks in areas of high flood hazard. Wastewater treatment and disposal systems are often located in areas that will be impacted by flooding and 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.

Sea Level Rise

Sea level rise has occurred on a local and global scale over the past century, and projections suggest that its rate may accelerate in the future. Since the existing sewer pump station is located directly adjacent to the marine environment, sea level rise considerations must be incorporated into its design to determine and avoid potential sea level rise impacts. Potential effects of sea level rise on the pump station include increased shoreline erosion, scour and flooding, all of which could affect the long-term stability of the pump station. In March 2013, the State of California's Climate Action Team and

Ocean Protection Council established the latest sea level rise guidance- with projected ranges in sea level rise of 0.13-0.98 ft. between 2000 and 2030, 0.39-2 ft. between 2000 and 2050, and 1.38-5.48 ft. between 2000 and 2100.⁴ The Commission's Sea Level Rise guidance document, adopted in August 2015, found that the best available science suggests that sea level could rise by as much as 2 feet by the year 2050 and as much as 5.5 feet by the year 2100.^{5,6}

The applicant states that the design life of the existing pump station and the proposed improvements is approximately 50 years and is not expected to be affected by rising sea levels in the lagoon within its design life. The elevation of the existing dirt service road is at approximately nine ft. MSL, while the pump station is protected up to elevation 14 ft. due to a perimeter retaining wall that is proposed to be partially replaced pursuant to this application. The 100 year FEMA flood maps for this area show that the base flood elevation is at nine ft. An additional 24 inches of sea level rise (high end estimate for 2050) would result in a flood elevation of approximately 11 ft. Thus, the at-grade components of the pump station would be safe from inundation, while the dirt service road would be subject to flooding. The City states that the dirt service road could be elevated incrementally in the future without adversely impacting the San Elijo Lagoon, which would ensure accessibility to the pump station. The below-grade components of the pump station are designed to resist water infiltration and would not be at risk from sea level rise.

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.

D. VISUAL RESOURCES

Section 30251 of the Coastal Act requires the minimization of the alteration of natural landforms to protect the scenic and visual qualities of coastal areas.

Section 30251

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

⁴ Based on the latest and most relevant science presented in the 2012 National Research Council Study

⁵ The 2012 National Research Council's Report, Sea Level Rise for the Coasts of California, Oregon and Washington: Past Present and Future, is currently considered the best available science on sea-level rise for California. The NRC report predicts that for areas south of Cape Mendocino, sea level may increase between 16.56 and 65.76 inches between 2000 and 2100 (NRC, 2012).

⁶ California Coastal Commission Sea Level Rise Policy Guidance – Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits – Adopted August 12, 2015.

areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The following policies of the City of Solana Beach certified Land Use Plan also protect the scenic and visual qualities of coastal areas:

Policy 6.1: *The City of Solana Beach contains scenic resources of local, regional and national importance. The scenic and visual qualities of these areas shall be protected and where feasible enhanced.*

Policy 6.6: *New development on properties visible from public trails in and around San Elijo Lagoon and the San Dieguito River Valley shall be sited and designed to protect public views of the ridgelines and natural features of the area through measures including, but not limited to, providing setbacks from the slope edge, restricting the building maximum size, reducing maximum height limits, incorporating landscape elements and screening, incorporating earthen colors and exterior materials that are compatible with the surrounding natural landscape (avoiding bright whites and other colors except as minor accents). The use of highly reflective materials shall be prohibited.*

The project area is visible from the public access trails within the San Elijo Lagoon. However, the proposed development consists of replacing the existing mechanical elements of the pump station and constructing below-grade improvements. The visual aspects and height of the pump station will not change as a result of the proposed development. The proposed development, as conditioned, will be compatible with the character and scale of the surrounding area and will not impact public views. Therefore, the Commission finds that the development, as conditioned, conforms to Section 30251 of the Coastal Act and the visual resource policies of the Coastal Act and with the policies of the City's certified LUP.

E. PUBLIC ACCESS

The following Chapter 3 policies of the Coastal Act are most applicable to this development, and states, in part:

Section 30212

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with ... the protection of fragile coastal resources, (2) adequate access exists nearby...

(b) For purposes of this section, “new development” does not include:

[...]

(3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure...

Section 30604(c)

[...]

(c) Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200)...

Section 30253

New development shall do all of the following:

[...]

(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development...

The following policy of the City of Solana Beach certified Land Use Plan also protects existing public access trails:

Policy 2.3: *The shoreline, parklands, beaches and trails located within the City provide coastal access and a wide range of recreational opportunities in natural settings which include hiking, bird watching, walking, bicycling, educational study and picnicking. These recreational opportunities should be protected, and where feasible, expanded or enhanced as resources of regional, state and national importance.*

The pump station is located on an existing dirt service road which is also open for pedestrian use. The applicant is not proposing to close the service road to the public during the eight month project construction period. There will be an increase in the number of truck trips resulting from the project during construction (~3,145 truck trips); however, since the road will remain open, this is not expected to significantly impede public access.

Coordination with Railroad Double-Tracking and Lagoon Restoration

The City has indicated that they will be coordinating construction of the subject project with the railroad double-tracking project and with the SELRP and the work on this project is not expected to result in any conflicts with or need to modify the access routes, staging locations, or timing of the railroad double-tracking project or with the SELRP. While all three projects will use the existing dirt service road for project access, the identified staging area for the subject project is not proposed to be the primary access point for either of the other two projects. Close coordination of these three projects will achieve a number of important resource protection goals, including significant reductions in the duration of construction activities within and surrounding the lagoon, staging impacts, and truck and construction traffic, all of which would benefit wetlands and environmentally sensitive habitat, air quality, energy consumption, and public access and recreation.

The applicant has submitted the following statement in regards to the City's coordination with the other projects in the immediate vicinity:

The City of Solana Beach is proactively working with SANDAG, Caltrans, the San Elijo Lagoon Conservancy, the City of Encinitas, NCTD and the San Elijo JPA, and remains committed to coordinating the timing of construction with other geographically-related projects which includes the Outfall Replacement Project, San Elijo Lagoon Restoration Project, NCTD Double Tracking Project, and I-5 Widening Project in an effort to minimize the potential for effects on coastal resources.

Thus, the proposed development will not have an adverse impact on public access to the coast or to nearby recreational facilities. As conditioned, the proposed development conforms to Sections 30212, 30253, and 30604(c) of the Coastal Act and to the public access policies of the City's certified LUP and with the policies of the City's certified LUP.

F. LOCAL COASTAL PLANNING

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 has approved a Land Use Plan for the City of Solana Beach; however an Implementation Plan has not been approved by the Commission. Therefore, the City of Solana Beach does not have a certified LCP. As conditioned, the proposed development is consistent with the City's certified Land Use Plan and Chapter 3 of the Coastal Act. Therefore, approval of the project, as conditioned, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the Coastal Act.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits 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. The City of Solana Beach found that the proposed development was categorically exempt pursuant to California Code of Regulations, Title 14, Guidelines 15301(b) (existing utilities providing services including sewerage) and 15302(c) (reconstruction of existing utilities without expansion of capacity).

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. 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.

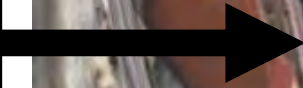
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APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- Project Plans by Dudek, dated April 6, 2016
- Storage and Staging Area Plans by Dudek, received November 2, 2016
- Update to Geotechnical Evaluation Report by Ninyo & Moore, dated May 19, 2016
- City of Solana Beach certified LUP
- City of Solana Beach General Plan and Zoning Ordinance
- Include 2015 AECOM exhibit and annotate. The presentation was sent to us on May 2, 2016 and presented to us on April 27, 2016. Add to substantive file docs.
- 2012 National Research Council’s Report, Sea Level Rise for the Coasts of California, Oregon and Washington: Past Present and Future, is currently considered the best available science on sea-level rise for California.
- California Coastal Commission Sea Level Rise Policy Guidance – Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits – Adopted August 12, 2015.

PROJECT LOCATION

Project Location



Solana Beach



EXHIBIT NO. 1
APPLICATION NO. 6-16-0459
Project Location
 California Coastal Commission

STAGING/ACCESS



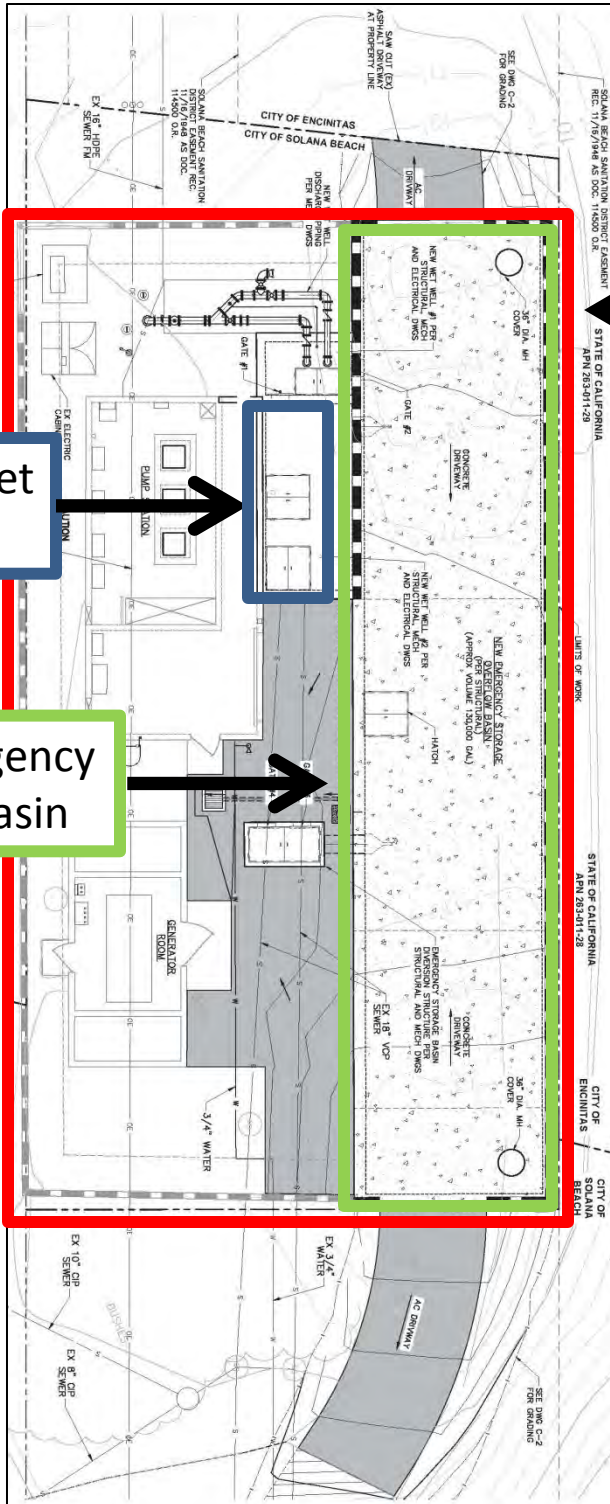
EXHIBIT NO. 2
APPLICATION NO. 6-16-0459
Staging/Access
 California Coastal Commission

STAGING AREA



EXHIBIT NO. 3
APPLICATION NO. 6-16-0459
Staging Area
 California Coastal Commission

SITE PLAN



New Wet Well

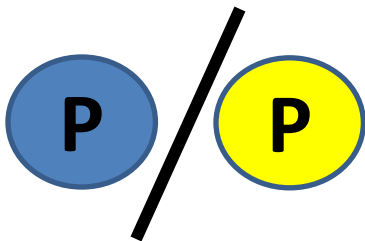
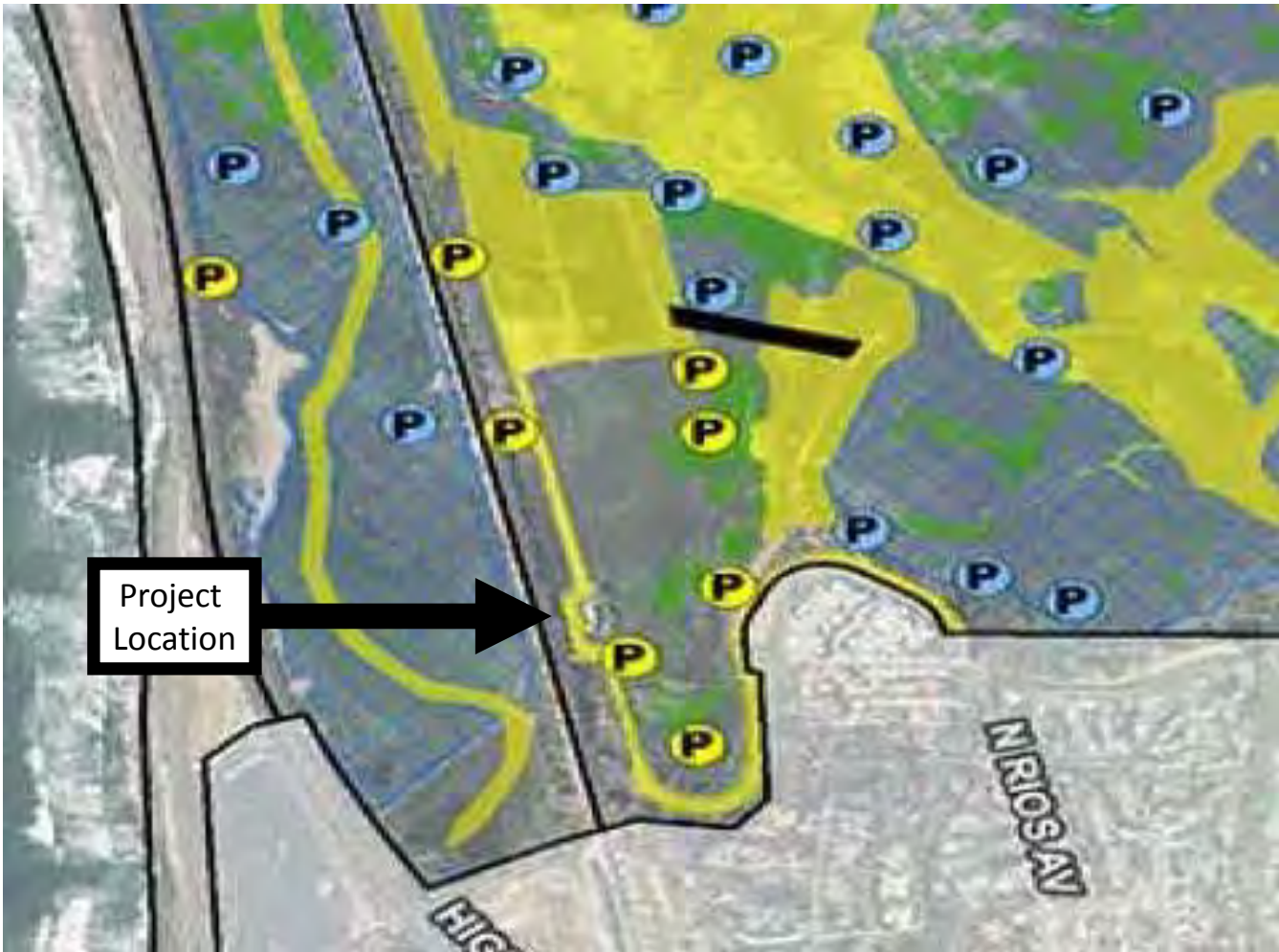
New Emergency Storage Basin

Pump Station Footprint

EXHIBIT NO. 4	
APPLICATION NO. 6-16-0459	
Site Plan	
	California Coastal Commission



2015 LIGHT-FOOTED RIDGWAY'S RAIL NESTING SURVEY



Light-footed Ridgway's Rail, 2015, Pair

EXHIBIT NO. 5
APPLICATION NO. 6-16-0459
Nesting Survey
 California Coastal Commission