

CALIFORNIA COASTAL COMMISSION

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September 12, 2019

Permit Application No.: 1-18-1078

COASTAL DEVELOPMENT PERMIT

On August 7, 2019, the California Coastal Commission granted to **CA Department Of Transportation (Caltrans) District 1** this permit subject to the attached Standard and Special conditions, for development consisting of construction of the Eureka-Arcata Route 101 Corridor Improvement Project including: installation of median crossing closures; construction of new interchange at Indianola cutoff; extensions of highway acceleration & deceleration lanes; replacement of southbound Jacoby Creek Bridge; replacement of bridge rails on northbound Jacoby Creek and Gannon Slough Bridges; replacement of tide gates; and other roadway improvements, more specifically described in the application filed in the Commission offices.

The development is within the coastal zone along a six-mile long segment of Highway 101 between Eureka and Arcata along the east side of Humboldt Bay (Eureka Slough Bridge, Eureka to the 11th St. overcrossing, Arcata).

Issued on behalf of the California Coastal Commission by

Sincerely,

John Ainsworth
Executive Director

A handwritten signature in black ink, appearing to read "Robert S. Merrill".

Robert S. Merrill
District Manager

ACKNOWLEDGMENT:

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

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The undersigned permittee acknowledges that Government Code Section 818.4, which states in pertinent part that "*A Public entity is not liable for injury caused by the issuance... of any permit...*", applies to the issuance of this permit.

IMPORTANT: THIS PERMIT IS NOT VALID UNLESS AND UNTIL A COPY OF THE PERMIT WITH THE SIGNED ACKNOWLEDGEMENT HAS BEEN RETURNED TO THE COMMISSION OFFICE. 14 Cal. Admin. Code Section 13158(a).

Date: 9/13/19

Signature 

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.

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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:

Notes: (1) The term “**the Highway 101 Corridor.**” as used in the special conditions below, refers to the U.S. Highway 101 Corridor located between Eureka and Arcata as generally depicted in Exhibit 2 of the Commission staff recommendation for CDP Application No. 1-18-1078.

(2) The term “**Project Description,**” as used in the special conditions below, refers to the Permittee’s final project description titled “Eureka-Arcata Route 101 Corridor Improvement Project, Project Information, Project Descriptions,” dated July 2019 (submitted July 25, 2019) and attached as Exhibit 4 to the Commission Staff Recommendation for Coastal Development Permit No. 1-18-1078.

1. **Sea Level Rise and Flooding Impact Monitoring and Reporting.**
 - A. **Baseline Report.** The Permittee shall submit a baseline report to the Executive Director by May 1, 2020 that:
 1. Identifies the following water elevation information at the North Spit Tide Gauge (based on current tidal datums from NOAA and/or other applicable data identified by the Permittee, and referenced to NAVD88): Mean Sea Level, Mean Monthly Maximum, and the highest observed tide.
 2. Identifies sites from which to take photographs on an annual basis during King Tides and/or other extreme tidal events to show changing site conditions over time. These sites shall include locations that allow for photo documentation at the most vulnerable areas of each segment of the Highway 101 Corridor. The baseline report shall include photos of the King Tide events occurring during the winter of 2019-2020.
 - B. **Annual Reports.** The Permittee shall submit annual monitoring reports to the Executive Director by May 1st of every year starting in 2020 and continuing until the CDP amendment required by Special Condition 2 has been acted upon by the Commission. These annual reports shall be presented to the Commission and shall document all of the following for the Highway 101 Corridor:

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1. **Water Elevation Data:** Using NOAA tides and currents or other applicable data from the North Spit Tide Gauge, document annual and monthly maximum water elevations, the mean monthly maximum, and the mean sea level over the reporting period. Describe how these elevations are different from the baseline report and any previous monitoring reports and identify if any new record maximum elevations have been reached.
2. **Coastal Hazards Impacts:** Provide a description of any temporary or ongoing flood, erosion, or other coastal hazards impacts to highway infrastructure in the Highway 101 Corridor during the reporting period. Include documentation of the dates, duration, and location of any hazards impacts, as well as a description of the conditions causing impacts (*e.g.*, King Tides, storms, overtopping and/or breaching of dikes, tide gate failures, groundwater and/or drainage issues, or any combinations of the same). Reporting should include a qualitative description of impacts, including narratives of events with maps and photos (including photos of King Tide and other extreme tidal events), as well as quantitative information such as flood depth, as applicable and feasible.
3. **Adaptation and Hazards Response:** Describe any effects on highway function and the actions that were taken to address temporary hazards impacts during the reporting period (*e.g.*, road closures/reroutes; repairs to damaged infrastructure) as well as any repair and maintenance activities performed by the Permittee or known to the Permittee to have been performed by other entities to repair dikes or berms that protect the highway corridor from flooding impacts within the Highway 101 Corridor. Include photographs as well as any information on damage/repair costs.

In addition, describe any planned responses to coastal hazards that may need to be implemented before the next monitoring cycle to address anticipated impacts (*e.g.*, dike repair, temporary detour/contingency plans, or other similar strategies) and include a plan for submitting any necessary amendments to CDP 1-18-1078, or separate CDP applications, that are necessary for those planned responses.

4. **Adaptation Plan Progress:** Document the Permittee's progress in developing the Comprehensive Adaptation and Implementation Plan (CAIP) required by Special Condition 2 including: (a) updates on the actions the Permittee has taken to develop the final CAIP and compliance with the deadlines required by Special Condition 2; and (b) the actions the Permittee has taken to coordinate with the local governments, relevant public interest groups, and other relevant stakeholders.
5. **Flood Events:** Document every time any travel portion of the Highway 101 Corridor has been closed due to flooding during the reporting period.

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- C. **Frequent Flood Event Reports.** Every time flooding causes closure of any travel portion of the Highway 101 Corridor within 12 months of any previous closure of any travel portion of the Highway 101 Corridor due to flooding, the Permittee shall inform the Commission in writing within 30 days of the closure. The frequent flood event report shall be submitted in addition to the documentation of flood events to be included in the Annual Reports required above.
2. **Long-Term Sea Level Rise Comprehensive Adaptation and Implementation Plan and Required CDPA.**
- A. **Comprehensive Adaptation and Implementation Plan.** The Permittee shall submit a Comprehensive Adaptation and Implementation Plan (CAIP) by December 31, 2025 or within one year of the time that flooding closes any travel portion of the Highway 101 Corridor 4 times a year over any 12-month period, whichever comes first. The CAIP shall identify a suite of strategies necessary for protecting, relocating, or otherwise adapting the development authorized by CDP 1-18-1078 as necessary to maintain safety from flooding and other coastal hazards in order to minimize risk and assure stability and structural integrity in the long-term (at least through 2100). The CAIP shall reflect the outreach, education, and coordination with the ongoing long-term planning efforts of Humboldt County and the cities of Eureka and Arcata, and shall also reflect coordination with the Humboldt County Association of Governments, relevant public interest groups, and other relevant entities. The CAIP shall include:
1. An analysis of current and future coastal hazards in the Highway 101 Corridor, including flood and erosion hazards caused by overtopping wave impacts, elevated groundwater and/or reduced or inadequate drainage that: (a) takes into account local sea level rise through at least 2100, considering medium-high risk aversion and extreme risk aversion scenarios, and based on the best available science at the time of plan preparation; and (b) utilizes the data provided in the annual monitoring reports and flood event reports required by Special Conditions 1(B) and 1(C).
 2. An evaluation of CDP amendment alternatives to the development authorized by CDP 1-18-1078 to address any coastal hazard vulnerabilities identified, including but not limited to alternatives involving accommodation strategies (viaducts, overpasses, etc.), protection measures (dikes, living shorelines, or other natural or engineered features), and relocation of the development to an area safe from flooding and other coastal hazards. The evaluation shall describe the specific design elements and adaptation measures, including how different strategies may be used in combination and over time, to ensure the integrity and functionality of the highway system. The information concerning CDP amendment alternatives must be

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sufficiently detailed to enable the Commission to evaluate the feasibility and Coastal Act consistency of each amendment alternative, including whether the alternatives: (1) minimize risks to life and property of flood and geologic hazards, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area; (2) ensure the resiliency of the transportation infrastructure; (3) avoid impermissible impacts to wetlands and only involve the feasible least environmentally damaging alternative for any diking, dredging, or filling of wetlands; (4) protect other coastal resources as sea level rise and other natural processes occur; (5) maximize and protect public access and recreation to and along the shoreline in a full multi-modal transportation network; and (6) avoid reliance on hard shoreline armoring or diking. The alternatives evaluation shall include a feasibility analysis that considers all potential constraints, including geotechnical and engineering constraints, project costs, the feasibility of land acquisition and potential funding options.

3. A timetable for implementation of the CAIP based on updated projections of SLR and anticipated impacts from coastal hazards. If adaptation strategies would be implemented in response to defined triggers, such as amounts of sea level rise and/or impacts to highway infrastructure, the timetable should identify the time horizons over which such triggers are anticipated to occur. The timetable shall take into consideration expected timeframes for any necessary land acquisition, planning, permitting, design, and construction.

B. CDP Amendment Trigger. The Permittee shall submit to the Commission an application for a CDP amendment within one year of the time that flooding closes any travel portion of the Highway 101 Corridor four (4) times a year over any 12-month period. The CDP Amendment application shall propose to either (a) extend the length of time all or portions of the development is authorized by CDP 1-18-1078 and modify its design as needed to ensure consistency with the Coastal Act, and/or (b) relocate all or portions of the development authorized by CDP 1-18-1078 and modify all or portions of the authorized development's design as needed to ensure consistency with the Coastal Act, and/or (c) remove all or portions of the development authorized by CDP 1-18-1078.

1. The required CDP amendment application shall conform to the Commission's permit filing regulations at the time and shall at a minimum include the long-term sea level rise CAIP required above.
2. If the CAIP was submitted previously to the Commission pursuant to the deadlines of Part A. above, the Permittee shall update the CAIP or provide an equivalent document prior to submittal of the CDP Amendment application to include the following: (1) an updated analysis of current and future coastal hazards that

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considers medium-high risk aversion and extreme risk aversion scenarios based on the best available science at the time of preparation of the updated CAIP, (2) an analysis of any additional CDP amendment alternatives identified since preparation and submittal of the original CAIP consistent with the requirements of Part A, above, of Special Condition 2; and (3) an updated timeline for implementation of the CAIP.

3. **Visual Impacts Mitigation.** Within 90 days of completing construction activities authorized by this CDP, the Permittee shall submit a final Visual Impacts Mitigation Report that documents the removal of all overhead infrastructure, safety corridor signs and other road signs, and that is at a minimum consistent with the information provided in Exhibit 28, a PDF copy of an excel sheet, which provides a listing and photos of the safety corridor signs that will be removed.
4. **Coastal Trail Planning.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE INDIANOLA INTERCHANGE RELATED DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit for the review and approval of the Executive Director:
 - A. Construction plans showing that the Indianola Interchange construction includes a separated bike and pedestrian connection from Indianola Cut Off to the Humholdt Bay Trail or other separated trail that may be constructed in the future as proposed in the Project Description, or documentation that shows the bike/pedestrian connection is already complete. The plans or documentation shall evidence that the connection pathway will (a) be at least six feet in width (to match the width of the Indianola sidewalk through the interchange), (b) not require wetland fill, and (c) be installed and available for use by completion of any extension of the Humholdt Bay Trail southward past the Highway 101/Indianola Cutoff intersection or interchange.
 - B. The Permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the final approved plan shall be reported to the Executive Director. Changes to the final approved plan shall require an amendment to the Coastal Development Permit unless the Executive Director determines that no amendment is legally required.
5. **Spartina Removal Plan as Additional Offsite Mitigation for Permanent Wetland Impact.** PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT THAT MAY RESULT IN WETLAND IMPACTS, the Permittee shall submit for the review and approval of the Executive Director, a final revised *Spartina* Removal Plan for *Spartina densiflora* (*Spartina*) removal and salt marsh restoration, and long-term monitoring and maintenance to provide additional off-site mitigation for 10.25 acres of permanent wetland impacts of the approved development. The final revised *Spartina*

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Removal Plan shall substantially conform with the plan dated July 16, 2019 titled "Wetland Mitigation Plan for the Humboldt Bay Area Mitigation (HBAM) Project" and shall include the following components:

- A. Acknowledgement. The plan shall acknowledge that the mitigation being undertaken pursuant to the approved final plan and the calculation of mitigation credits pursuant to the plan shall be subject to the following assumptions, terms, and conditions, in addition to all other conditions of this permit as required herein:
1. Wetland mitigation credits for *Spartina* removal shall be proportional to the density of *Spartina* cover within the mitigation area as follows: One acre of wetland mitigation credit shall be provided by successfully (based on success standards required pursuant to subsection (b) below) removing 1.24 acres of high density (>60% cover) *Spartina*, or by successfully removing 2.33 acres of medium density (26-60% cover) *Spartina*, or by successfully removing 7.69 acres of low density (1-25% cover) *Spartina*. For example, removing *Spartina* from 10 acres of high density infested saltmarsh would provide 8.1 acres of mitigation credit; equivalent credit would be provided by restoring 18.8 acres of saltmarsh infested with medium density *Spartina* cover.
 2. The calculation of mitigation acreages and credits to be awarded based on *Spartina* cover shall be based on mapping by the U.S. Fish and Wildlife Service and reported in the document titled "The Distribution of *Spartina densiflora* in the Humboldt Bay Region: Baseline Mapping." The mitigation credit scheme to be awarded for *Spartina* eradication shall comply with section A.1. above.
 3. The plan shall provide a minimum of 41 acres of mitigation credit to mitigate for 10.25 acres of permanent wetland impacts of the project at a 4:1 mitigation ratio, including mitigation credit for any on-site wetland mitigation within the Highway 101 Corridor pursuant to Special Condition 11. Any additional mitigation credits created may be considered by the Coastal Commission for use in mitigating wetland impacts for the Arcata Bay Trail North project and the Humboldt Bay Trail South project. Mitigation credits for the Bay Trail projects shall only be awarded pending separate approvals by the Coastal Commission of (1) a CDP for Humboldt County Bay Trail South and (2) a material amendment to the Arcata Bay Trail North CDP (CDP 1-16-0122), with the Commission finding that *Spartina* eradication provides feasible mitigation for wetland impacts resulting from the trail project(s). Whether or not such CDP approvals are granted to the County and/or to the City, the Permittee (Caltrans) acknowledges its responsibility to implement the approved Final Revised *Spartina* Removal Plan, including all required acreages of *Spartina* eradication required under the plan.

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and no mitigation credits may be used to mitigate any development other than the development authorized by this CDP and the Bay Trail Permits identified herein.

4. Although a Management Entity may implement the *Spartina* Removal Plan through a binding co-operative agreement (or similar agreement), the Permittee (Caltrans) shall remain responsible for implementation of the Removal Plan and compliance with all terms and conditions of this CDP. The Permittee shall also ensure the submittal of the regular monitoring reports required under Special Condition 4 of CDP 1-14-0249 and as required herein.
- B. Final Implementation, Monitoring, and Reporting Plan Components. Consistent with CDP 1-14-0249 (authorization to implement the Humboldt Bay Regional *Spartina* Eradication Plan), the final plan shall include implementation, monitoring, and reporting plan components, including at a minimum, the following:
1. Maps of the total proposed mitigation area(s) that substantially conform with the geographic extent of public- and/or Wiyot-owned lands depicted in Exhibit 16 and which shows polygons of the three cover classes of *Spartina* as described in section A.1 above for that area and the corresponding land ownership of all mitigation lands.
 2. Determinations of mitigation acreages and credits to be provided as calculated consistent with sections A.1 and A.2 above.
 3. All of the plan components required by Special Condition 4 of CDP 1-14-0249 and provisions to insure that the *Spartina* removal activities will satisfy all requirements of Special Conditions 5, 7, 8 and 9 of CDP 1-14-0249.
 4. An executed copy of a Memorandum of Understanding (MOU), cooperative agreement, or similar legally binding agreement, with the Wiyot Tribe and any other landowner of property subject to *Spartina* Removal (for e.g. the City of Eureka if it still holds title to some of the land) that provides for: (a) the implementation of the *Spartina* removal, (b) monitoring and maintenance for five years after meeting the removal success criteria, (c) subsequent long term monitoring and maintenance conducted in perpetuity, and (d) the permanent protection of the areas of *Spartina* removal from future development as defined by Section 30106 of the Coastal Act except for the ongoing removal of *Spartina* and other non-native invasive species, maintenance of native vegetation, and habitat restoration. The final MOU or agreement shall be submitted for the review and written approval of the Executive Director prior to its execution to ensure that it provides sufficient guarantees that all elements of the *Spartina* Removal Plan will be carried out and that the Plan areas are permanently protected consistent with all terms and conditions of this CDP.

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5. Executed copies of MOUs, cooperative agreements, or similar legally binding agreements, with a designated "Management Entity" or Entities that will be responsible for the implementation of *Spartina* removal, monitoring and maintenance for five years after meeting the removal success criteria, and the subsequent long term monitoring and maintenance that will be conducted in perpetuity. The entity or entities must have experience in *Spartina* removal and habitat restoration. The final MOUs or agreements shall be submitted for the review and written approval of the Executive Director prior to its execution to ensure that they provide sufficient guarantees that all elements of the *Spartina* Removal Plan will be carried out and that the Plan areas are permanently protected consistent with all terms and conditions of this CDP.
6. A provision that the proposed mapping and estimation of ground cover of native saltmarsh and *Spartina* throughout Tuluwat Island using high resolution aerial imagery obtained by unmanned aerial vehicles shall be accomplished at a minimum: 1) prior to *Spartina* removal, 2) after successful primary removal, and 3) at the end of five years of maintenance when the final success criteria are assessed. The photo-interpreters must be well-qualified with demonstrated experience and approved by the Executive Director.
7. A detailed description of the methods that will be used after primary removal and during long-term monitoring to estimate the ground cover of *Spartina*. After primary removal and during long-term monitoring estimation of *Spartina* ground cover shall include methods for intensively searching for *Spartina* within delineated polygons of known area, visually estimating *Spartina* cover within areas of infestation and the size of the areas infested, and documenting the search tracks with a global positioning system (GPS). The entire treatment area must be visually examined along tracks that are sufficiently narrow that small *Spartina* plants can be recognized. This task could be done in conjunction with the maintenance removal of *Spartina*.
8. A description of the methods that will be employed if on-the-ground sampling is used to estimate ground cover of the native saltmarsh vegetation in order to assess whether the success criterion has been met. The sampling plan must insure more-or-less uniform spatial coverage of the removal areas, randomized placement of the sampling units, and shall include replication sufficient to provide an estimate of mean ground cover of native saltmarsh vegetation with a margin of error of 10% ground cover with 90% confidence. These methods must be described in sufficient detail to enable an independent scientist to apply them in the field.
9. Success criteria for removal of *Spartina* that include: 1) $< 5\%$ ground cover of *Spartina* after primary removal, after five years following primary removal, and during maintenance removal; and 2) $\geq 80\%$ ground cover of native species within five years following primary removal with no unvegetated areas $> 2.5 \text{ m}^2$.

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10. Five years of annual monitoring and maintenance following the achievement of the success criteria for primary removal. During this period an accurate record shall be maintained of annual field efforts and expenditures to aid in the final calculation of the amount of the non-wasting endowment necessary to provide sufficient proceeds to fund long-term monitoring and removal of *Spartina* in all restoration areas in perpetuity.
 11. A long-term monitoring and maintenance plan to be implemented after the first five years of monitoring and maintenance following successful primary *Spartina* removal. The Permittee shall establish a non-wasting endowment to fund the long-term monitoring and removal of *Spartina* in perpetuity as is required below by Special Condition 5(C) of CDP 1-18-1078.
 12. A Reporting Plan that includes 1) an "initial removal report" after the two years of removal implementation, and 2) a "final monitoring report" for the *Spartina* removal at the end of the subsequent five years of monitoring and maintenance following successful primary removal. The final monitoring report shall include the actual costs of maintenance and monitoring for the five years after successful primary removal. This information shall be utilized to determine the funding necessary for the endowment in Section B.14, below.
 13. A provision that consistent with Special Condition 4 (B) of CDP 1-14-0249, if the "final monitoring report" described in Section B.11 above, indicates that the *Spartina* removal project has been unsuccessful, in part or in whole, based on the approved success criteria, the Permittee shall submit a revised or supplemental plan to compensate for those portions of the original plan that did not meet the approved performance standards. The revised plan will complete the full removal of *Spartina* in the area of the initial project or in new replacement areas of Humboldt Bay, such that the plan completes the full removal of *Spartina* from an equivalent amount of acreage. For those areas that did not meet the success criteria, the revised plan shall extend the monitoring period for an additional five years. The revised plan shall be processed as an amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
 14. If the *Spartina* removal activities of the approved final revised *Spartina* Removal Plan are not completed before the end of the authorization period for *Spartina* removal activities authorized under CDP 1-14-0249, the Permittee shall obtain an amendment to CDP 1-18-1078 to authorize the remaining *Spartina* removal activities.
- C. Non-wasting endowment fund.

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1. The Permittee shall establish a non-wasting endowment to fund the long-term monitoring and removal of Spartina in perpetuity. The long-term monitoring and removal of Spartina that will be funded by the non-wasting endowment fund shall commence five years after the Permittee has demonstrated restoration success pursuant to Special Condition 5 of CDP 1-18-1078. Coincident with the Permittee demonstrating restoration success pursuant to Special Condition 5 of CDP 1-18-1078, the Permittee shall submit evidence that within 2 years they will have established a non-wasting endowment to fund the long-term monitoring and removal of Spartina in all restoration areas in perpetuity as is required by CDP 1-18-1078. The non-wasting endowment that is established shall be consistent with all terms and conditions of Special Condition 5 of CDP 1-18-1078 and shall include the following:
 - a) The non-wasting endowment fund shall be held, managed, invested, and disbursed solely for, and permanently restricted to, the long-term monitoring and removal of Spartina in perpetuity as is required by Special Condition 5 of CDP 1-18-1078. The fund shall be operated and administered in accordance with the Uniform Prudent Management of Institutional Funds Act.
 - b) The non-wasting endowment fund shall be calculated to include a principal amount that, when managed and invested, generates interest reasonably anticipated to cover the annual costs of the long-term monitoring and removal of Spartina in perpetuity as is required by Special Condition 5 of CDP 1-18-1078. The total annual expenses shall include investment and administration costs/fees. The non-wasting endowment shall be established in a manner that ensures that necessary disbursements are provided three years after the non-wasting endowment fund has been funded.
 - c) The entity holding the non-wasting endowment fund shall have the capacity to effectively manage the non-wasting endowment fund, including the capacity to achieve reasonable rates of return. The entity holding the non-wasting endowment shall submit an annual report to the Executive Director at the end of every year detailing the compliance with Special Condition 5 of CDP 1-18-1078. The entity holding the non-wasting endowment also shall use generally accepted accounting practices and provide an annual fiscal report to the Executive Director.

- D. The Permittee shall undertake development in accordance with the approved final revised Spartina Removal Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

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6. **Jacoby Creek Bridge Tidewater Goby Monitoring and Survey.** Consistent with the Project Description and with the USFW's "Biological Opinion for Proposed Eureka-Arcata Corridor Improvement Project," a qualified biological monitor shall be present during the demolition of the southbound Jacoby Creek Bridge. The Permittee shall follow all other Conservation Measures identified within the Biological Opinion to ensure the protection of the tidewater Goby and its habitat in the project areas.
7. **Jacoby Creek Bridge Demolition Plan.** PRIOR TO COMMENCEMENT OF ANY DEMOLITION ACTIVITIES FOR THE JACOBY CREEK BRIDGE AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit for the review and approval of the Executive Director a final demolition plan for the south bound Jacoby Creek Bridge that complies with the following:
 - A. Consistent with (i) the Project Description and (ii) the USFW Biological Opinion, the Final Demolition Plan shall include: (a) a proposed debris containment system to be placed prior to demolition, (b) a provision that all debris shall be removed and disposed of at an authorized disposal site consistent with the debris removal plan approved pursuant to Special Condition 16. (c) a provision for biological monitoring, provisions to limit the amount and extent of construction workers or activities in the wetted channels of Jacoby Creek, including temporary barrier fencing, and (d) a requirement that any demolition activities be scheduled during low tidal flow times to minimize spreading of impacts.
 - B. The Permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
8. **Tide Gate Replacement and Monitoring.** PRIOR TO COMMENCEMENT OF ANY ACTIVITIES TO REMOVE AND REPLACE TIDAL GATES AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit for the review and approval of the Executive Director a Tide Gate Installation Plan that substantially conforms to the Project Description and Caltrans' Biological Assessment and Essential Fish Habitat Assessment dated February 2016 included in the permit file for CDP 1-18-1078, except as modified herein. The Tide Gate Installation Plan shall include the following components:
 - A. Type of tide gate to be installed and construction method to be used at each location. The configuration of the fish-friendly tide gates that will be installed where salmonids or tidewater gobies are present shall include a float arm or other self-regulating device to ensure that the tide gate is open at all times for fish passage and that it

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- provides for a continuous tidal flow through the tide gate at moderate water velocities, with a final design to be determined in consultation be determined in cooperation with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS).
- B. Equipment and access to be used at each location. No new roads shall be constructed to provide access.
- C. A hydrology, water quality, and monitoring plan for locations where salmonids or tidewater gobies are present that substantially conforms with the Project Description in Exhibit 4 to these findings and that includes:
1. Pre-construction monitoring for one season (April 1-November 30) and post-construction monitoring for one year.
 2. Specification of the monitoring locations, the data collection methods, and the frequency of data collection at each location during the pre-construction and post-construction periods.
 3. A reporting plan.
- D. Conservation Methods. The Plan shall include the following conservation methods, including, but not limited to those methods proposed in the Permittee's Project Description listed below:
1. Construction shall only take place during the summer dry season from July 1 through October 15.
 2. Construction shall only take place during a defined time period around the lowest low tide of the mixed semidiurnal daily tides. The work window for each location shall be defined by the permittee, in consultation with the NMFS and the USFWS, in terms of tidal height relative to Mean Lower Low Water, taking into consideration the channel bed elevation at the tide gate. The intent of the work window is to restrict construction activities to the period when water and fish are not present. For the convenience of contractors, the work window shall be expressed as a specified number of hours before and after each designated low tide.
 3. When feasible, tide gate installation work shall be conducted during periods of low tide when no water or fish are present. A protocol shall be developed in consultation with the NMFS and USFWS for conservation procedures if water and fish are present.
 4. No rock-slope-protection (RSP) or rocks for a weir shall be placed at any of the tide-gate locations.

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5. Site-specific best management practices (BMPs) to minimize impacts to water quality, aquatic habitat, and listed fish species.
 - E. The Permittee shall undertake development in accordance with the approved final Tide Gate Installation Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
- 9. Pile Driving Protections.** All project activities involving the installation of temporary or permanent piles or sheet-piles shall be undertaken in accordance with the requirements set forth herein. The restrictions of this Special Condition shall apply to any pile-driving activities that could affect the aquatic environment of Jacoby Creek, including but not limited to pile driving associated with the temporary and permanent bridge abutments, cofferdams, testing, and any other such activities that may produce sound, shaking, disturbance of sediments and gravels in the riverbed, or produce other potentially disruptive effects within the aquatic environment, regardless of whether such activities are undertaken outside of the limits of the flowing waters of the river. All such project activities shall be undertaken in full accordance with the following requirements:
- A. **Timing & Limitations.** To facilitate monitoring, pile-driving shall be 1) limited to daylight hours or nighttime hours when the monitoring equipment is illuminated through the use of artificial lighting within the Jacoby Creek corridor; and 2) limited annually to July 1 – October 15 (including those dates).
 - B. **Monitoring.** Pile-driving activities shall only be undertaken if all of the following conditions are continuously met:
 1. At least one authorized fisheries biological monitor is present at the location of the pile-driving;
 2. The hydroacoustic monitoring personnel and equipment are in place and ready to commence monitoring; and
 3. Pile driving must adhere to the dual metric exposure criteria set forth in Special Condition 10B. Neither criteria of the dual metric exposure criteria set forth in Special Condition 10B below may be exceeded.
 - C. Pile driving may only commence consistent with Special Condition 10. If any of the conditions set forth in Special Condition 10 are not continuously met at any time during pile-driving, pile-driving operations shall be stopped until compliance is restored, and pile-driving shall not re-commence until full compliance with all pertinent conditions has been verified by the fisheries biological monitor and entered

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into the monitoring records. If pile-driving is stopped because hydroacoustic limits are exceeded, the additional requirements set forth in Special Condition 10B and other special conditions set forth herein shall apply.

- D. Future Amendment. Project activities shall be conducted at all times in accordance with these provisions. Any proposed changes to these pile-driving requirements and limitations shall be reported to the Executive Director. No changes to the requirements of the special condition shall be made without an amendment to the Coastal Development Permit, unless the Executive Director determines that no amendment is legally required.

10. Hydroacoustic Monitoring Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit, for the Executive Director's review and written approval, a Hydroacoustic Monitoring Plan. Prior to submitting the plan to the Executive Director, Caltrans shall submit copies of the plan to the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service for their review and consideration. The plan shall include the following components:

- A. The plan shall be based on the "dual metric exposure criteria" set forth below and shall state that exceedance of either criterion shall be deemed injurious or lethal to exposed fish and non-compliant with the Conditions of the Coastal Development Permit. The dual criteria for injury to fish are: 1. a peak Sound Pressure Level (SPL) at or above 206 dB (re 1 μ Pa) from a single hammer strike; or, 2. an accumulated Sound Exposure Level (SEL) at or above 187 dB (re: 1 μ Pa²-sec) for fish > 2 grams and an SEL at or above 183 dB (re: 1 μ Pa²-sec) for fish \leq 2 grams. To estimate the sound energy to which a fish is exposed during multiple hammer strikes, NMFS uses the simple summation procedure where Total SEL = Single Strike SEL + 10 log (number of strikes). At a minimum, the Plan shall include all of the following:
1. Establish the field locations of hydroacoustic monitoring stations that will be used to document the extent of the hydroacoustic hazard footprint during pile-driving activities.
 2. Describe the method of hydroacoustic monitoring that will continuously assess the actual conformance of the proposed pile-driving with the dual metric exposure criteria up- and down-stream of the pile-driving locations on a real-time basis, including relevant details such as the number, location, distances, and depths of hydrophones and associated monitoring equipment.
 3. For all pile-driving activities that may produce measurable acoustic effects in the aquatic environment of Jacoby Creek, include provisions to continuously record

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pile strikes in a manner that tracks the time of each strike, the number of strikes, and the interval between strikes to be determined.

4. Include provisions for real-time identification and reporting of any exceedance of the dual metric exposure criteria, clear action and notification protocols to stop pile-driving in case of such exceedance, including the authority of the fisheries biological monitor to order pile-driving to stop immediately, and procedures to notify pertinent parties including the Executive Director and other pertinent state and federal agencies immediately after any exceedance of the dual metric exposure criteria.
 5. Include a monitoring and reporting program that will be coordinated with the fisheries biological monitor and will include provisions to provide daily summaries of the hydroacoustic monitoring results to the Executive Director and to other agencies requesting such summaries, as well as more comprehensive summary reports on a monthly basis during the pile-driving season.
- B. Compliance with the Dual Metric Exposure Criteria.
1. At Jacoby Creek, the Permittee shall avoid hydroacoustic noise at or above 183 dB cumulative SEL, the level the U.S. Fish and Wildlife Service finds will result in "take" of fish ≤ 2 grams, such as the endangered tidewater goby, due to direct physical injury.
 2. During pile-driving, the peak sound pressure level (SPL) within the Jacoby Creek aquatic environment shall not exceed 205 dB and the accumulated sound exposure level (SEL) shall not exceed 182 dB at 10 meters distance from pile-driving or at any other location in the river.
 3. If the accumulated SEL approaches 183 dB at 10 meters distance from pile-driving, pile-driving will be stopped to avoid exceeding the criterion and will not commence again for at least 12 hours.
 4. In the event of an exceedance of either criterion of the dual metric exposure criteria, pile-driving operations shall be immediately stopped and shall not recommence unless the Executive Director, in consultation with the fisheries biologists of the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, so authorizes based on the deployment of additional sound attenuation or other measures deemed likely by qualified technical experts to return the pile-driving to conformance with the dual metric exposure criteria.
 5. If the return to pile-driving after the implementation of the additional measures discussed in Subsection B(3) above results in an exceedance of either criterion of the dual metric exposure criteria, pile-driving shall be stopped immediately and

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shall not re-commence until or unless the Commission approves an amendment to the Coastal Development Permit that proposes substantial changes to the proposed project that are deemed by the Executive Director to offer a high likelihood of success in preventing further exceedances of the dual metric exposure criteria.

- C. Project activities shall be conducted at all times in accordance with the provisions of the final approved plan. Any proposed changes to the final approved plan shall be reported to the Executive Director. Changes to the final approved plan shall require an amendment to the Coastal Development Permit unless the Executive Director determines that no amendment is legally required.

- 11. **On-Site Mitigation and Monitoring Plan.** PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit for the review and approval of the Executive Director a final revised On-Site Mitigation and Monitoring Plan that substantially conforms to the plan dated July 2019, except as modified herein. The Final Revised On-Site Mitigation and Monitoring Plan shall include, at a minimum, the following added components:

- A. Environmental Impact Assessment.

- 1. Permanent impacts shall include those wetland areas that are to be developed, or that will be frequently disturbed to maintain the development, or where the impact to the habitat lasts longer than one year. Mitigation for all permanent wetland impacts shall be implemented pursuant to the final revised *Spartina* Removal Plan (Special Condition 5).
- 2. All other impacts are "temporary" and the following procedure shall be employed to confirm that the impacts qualify as such:
 - a. If no impacts are apparent after 90 days, no action is required;
 - b. If impacts persist 90 days after the impact, the habitat shall be restored within 30 days;
 - c. If no impact is apparent after one year, no additional mitigation is required
 - d. If, after one year from the date of impact, the habitat has not recovered, the impact is, by definition "permanent," and must be mitigated. The Permittee shall submit a revised or supplemental mitigation plan to mitigate for these additional permanent impacts. The revised or supplemental mitigation plan shall be processed as an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
- 3. Assessment of Recovery. The plan shall include (1) methods for assessing temporary impacts and recovery at 90 days and 1 year after the impact, and (2) restoration methods for those areas that have not recovered in 90 days.

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- B. Lyngbye's Sedge. A stand-alone section of the Plan shall be provided for documenting and mitigating at 1:1 ratio by area any impacts to Lyngbye's sedge from construction at Jacoby Creek with the following components:
1. Monitoring. Methods of estimating ground cover of Lyngbye's sedge shall be described. This may be based on sampling using spatially stratified, random placement of sampling units. Alternatively, since the area at risk of impacts is small, ground cover in contiguous quadrates covering the entire area could be visually estimated, essentially a "census" providing a single estimate of cover rather than an estimated mean. Evaluation of recovery within the impacted area and establishment at mitigation areas shall be based on the same methods as used for the baseline study.
 2. Salvage. If Lyngbye's sedge is documented during baseline studies to be within the construction area, the plants that are at risk from construction shall be salvaged and planted in bare areas in nearby estuarine locations as soon as is feasible.
 3. Reestablishment and mitigation. If Lyngbye's sedge is impacted by construction, areas of equivalent size (in the aggregate) shall be identified and planted with Lyngbye's sedge. Following construction, the impacted area shall be replanted. The Plan shall include planting methods and provision that roots and rhizomes will be collected from no more than 20% of a source area, i.e. will not reduce ground cover to less than 80% of the initial cover.
 4. Success Criteria. The final success criteria for recovery within the impact area and for establishment in the mitigation area(s) shall be ground cover of 80% of that observed in the construction area prior to impact.
 5. Final Monitoring Report. Interim reports describing progress shall be submitted annually. A final monitoring report that assesses whether the success criteria have been met shall be submitted for the review and approval of the Executive Director at the end of the performance monitoring period.
- C. Provision for Possible Further Action. Acknowledgement that if the final monitoring report indicates that the restoration project has been unsuccessful, in part, or in whole, based on approved success criteria, the Permittee shall submit within 90 days a revised or supplemental restoration program to compensate for those portions of the original program which did not meet the approved success criteria. The revised restoration program shall be processed as an amendment to this CDP unless the Executive Director determines that no amendment is legally required.

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- D. The Permittee shall undertake development in accordance with the approved final revised On-Site Mitigation and Monitoring Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
12. **Construction Responsibilities.** The Permittee shall comply with the following construction-related best management practices (BMPs) and avoidance and minimization measures:
- A. All construction-related BMPs and avoidance and minimization measures included in the subsections of the "Water Quality Impact Description" section on pages 19-26 of the Project Description titled, "Avoidance of Direct Water Quality Impacts," "Avoidance of Indirect Impacts," "Short Term Construction Site BMPs," "Temporary Construction Site BMPs," "Staging Areas," "Conservation of Riparian Habitat," "Prevention of Spread of Invasive Species.
- B. All construction-related BMPs and avoidance and minimization measures included in the section of the Project Description dated July 2019 (Exhibit 4) titled, "Jacoby Creek Bridge Replacement," including, but not limited to (i) containment of all excavated material to prevent sediments from entering waterways, or the placement of all excavated material directly into dump trucks and carried to an approved disposal site, (ii) removal of all drilling spoils as drilling progresses, (iii) placement of a temporary concrete washout facility on-site for concrete clean-up, (iv) staging of all pile-driving equipment outside the banks of Jacoby Creek, (v) installation of a debris containment system consistent with the final Jacoby Creek Demolition Plan approved pursuant to Special Condition 7, and (vi) the presence of a biological monitor during all in-stream activities associated with removal of the existing SB Jacoby Creek Bridge and piers.
- C. Only wildlife-friendly 100% biodegradable erosion control products that will not entrap or harm wildlife shall be used. Erosion control products shall not contain synthetic (that is, plastic or nylon) netting. Photodegradable synthetic products are not considered biodegradable.
- D. Prior to the commencement of construction, workers shall be educated about the construction related BMPs that must be employed during construction.
13. **Erosion and Sediment Control and Pollution Prevention Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit, for

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the review and written approval of the Executive Director, an erosion and sediment control and pollution prevention plan. The plan shall comply with the following requirements:

- A. The plan shall demonstrate that temporary construction impacts to the biological productivity and quality of coastal waters and wetlands shall be minimized during project construction consistent with the provisions of Special Condition 12.
- B. The plan shall include a construction site map and a narrative description addressing, at a minimum, the following required components:
 - 1. A map delineating the construction site, construction phasing boundaries, and the location of all temporary construction-phase BMPs.
 - 2. A description of the BMPs that will be implemented to minimize erosion and sedimentation, control runoff and minimize the discharge of other pollutants resulting from construction activities.
 - 3. A schedule for the management of all construction-phase BMPs (including installation and removal, ongoing operation, inspection, maintenance, and training).
 - 4. The plan shall specify that copies of the signed Coastal Development Permit (CDP) and the approved Erosion and Sediment Control and Pollution Prevention Plan be maintained in a conspicuous location at the construction job site at all times, and be available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the CDP and the approved Erosion and Sediment Control and Pollution Prevention Plan, and the public review requirements applicable to them, prior to commencement of construction.
- C. The Permittee shall notify planning staff of the Coastal Commission's North Coast District Office at least three working days in advance of commencement of construction or maintenance activities, and immediately upon completion of construction or maintenance activities.
- D. The Permittee shall undertake development in accordance with the approved final Erosion and Sediment Control and Pollution Prevention Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

- 14. Herbicide Management Plan.** AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT USING HERBICIDE, the Applicant

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shall submit, for the review and approval of the Executive Director, an Herbicide Management Plan. The plan shall be prepared and submitted in conjunction with the Revised Onsite MMP required by Special Condition 11. The plan shall demonstrate the following:

- A. **Managed Herbicide Control.** Herbicides shall be applied directly to plants during the summer dry season to minimize the potential application of herbicide directly to standing or flowing water. Herbicides shall be applied by a certified applicator and in accordance with application guidelines and the manufacturer label. The Control Program shall obtain coverage under the statewide General NPDES Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States (SWRCB 2004). The specific measures that will be required are not known at this time.
- B. **Minimize Herbicide Spill Risks.** The mixing and application of herbicides must be conducted by or under the direct supervision of trained, certified or licensed applicators. Storage of herbicides and surfactants on or near project site shall not be allowed.
- C. **Worker Injury from Accidents Associated with Herbicide Application.** A health and safety plan shall be developed to identify and educate workers engaged in herbicide application. Appropriate safety procedures and equipment, including hearing, eye, hand and foot protection, and proper attire, shall be used by workers to minimize risks associated with herbicide treatments. Workers shall receive safety training appropriate to their responsibilities prior to engaging in treatment activities.
- D. **Worker Health Effects from Herbicide Application.** Appropriate health and safety procedures and equipment, as described on the herbicide or surfactant label, including PPE as required, shall be used by workers to minimize risks associated with chemical treatment methods.
- E. Herbicides shall not be applied unless the predicted chance of rain is less than 40 percent for the Redwood Coast segment of the National Weather Service's forecast for Northwestern California.
- F. Herbicide use shall not occur when winds are in excess of 10 miles per hour.
- G. A description of the type of equipment and application techniques to be used to reduce the amount of small droplets that could drift into adjacent areas.
- H. Provisions for posting warning/notification signs at potential points of access to herbicide application sites a minimum of one week prior to treatment.

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- I. A site plan depicting the primary treatment area, designated access routes, location of any sensitive resources (e.g., rare plants) and locations of relevant mitigation measures (e.g., staking or fencing for rare plant protection; and,
 - J. A schedule for timing of work.
 - K. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
15. **Final Lighting Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit, for the review and written approval of the Executive Director, a final lighting plan for all proposed new permanent outdoor night lighting along the highway project corridor.
- A. The plan shall demonstrate that all new outdoor night lighting shall be minimized, directed downward, and shielded using the best available dark skies technology and pole height and design that minimizes light spill, sky glow, and glare impacts.
 - B. The Permittee shall undertake development in accordance with the approved final Lighting Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
16. **Debris Removal Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-18-1078, the Permittee shall submit, for the review and written approval of the Executive Director, a plan for the disposal of excess construction related debris, including the following provisions:
- A. The plan shall identify a disposal site that is in an upland area where materials may be lawfully disposed and describe the manner by which the material will be removed from the construction site.
 - B. The Permittee shall undertake development in accordance with the approved final Debris Removal Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur

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without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

17. **Protection of Archaeological Resources.** As agreed to by the Permittee in its consultation with relevant tribal entities, the Permittee shall provide a qualified (archeologist or cultural resources specialist) on-site monitor at the specified (confidential) locations during specified construction activities including grading and earthmoving as requested by the tribes. If an area of cultural deposits or human remains is discovered during the course of the project, all construction shall cease and shall not re-commence until:
- A. A qualified cultural resource specialist, in consultation with the Tribal Historic Preservation Officers of the Wiyot Tribe, the Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria, analyzes the significance of the find.
 - B. The cultural resource specialist submits a supplementary archaeological plan for the review and approval of the Executive Director.
 - 1. If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after this determination is made by the Executive Director.
 - 2. If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to Coastal Development Permit 1-18-1078 is approved by the Commission.
18. **Final Construction Plans.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF EACH PHASE OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT 1-18-1078, the permittee shall submit for the review and written approval of the Executive Director, final site and construction plans that are consistent with the Project Description and plans submitted to the Commission in the permit application, and consistent with all special conditions of Coastal Development Permit 1-18-1078. The plans shall include, at a minimum:
- A. Plan and profile architectural drawings for all elements of construction.
 - B. Identification of the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view.

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- C. Specification of all visual elements, including design and colors, of the project including cable rail barriers, guardrails, bridge rails, aesthetic treatments, signage and any other visual elements.
- D. Demonstration that the final plans are consistent with the identified seismic design criteria and tsunami design criteria as discussed in Exhibits 23 and 24.
- F. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

19. **Public Access During Construction.**

- A. Consistent with the Project Description, the Permittee shall maintain public access for bicyclists through the work corridor at all times by providing designated adequate space adjacent to the open traffic lane to safely traverse through the work zone except if necessary during construction of the bridge rails on North Bound Jacoby Creek and Gannon Slough Bridges, when traffic is reduced to one lane, and bikes will be accommodated with a shuttle vehicle service (currently scheduled as 2-4 weekend closures). The use of vehicle transportation to transport cyclists or pedestrians through the work corridor shall be avoided to the maximum extent feasible. Installation of the bicycle lane and provision of shuttle vehicle service shall be consistent with the final plans approved pursuant to Special Condition 18.
- B. The Permittee shall follow all provisions in the Project Description dated July 2019 (page 27) (Exhibit 4) and the submitted Transportation Management Plans (Exhibit 21), dated September 17, 2018, November 7, 2018, November 20, 2017, January 28, 2019, regarding lane closures and roadway closures, including no complete closures of vehicle travel north bound or south bound on Highway 101 shall occur except for the two brief night-time closures necessary to relocate the new Jacoby Creek Bridge, and no lane closures during weekday daytime hours.

20. **Final Tree Planting Plan.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT 1-18-1078, the Permittee shall submit, for the review and written approval of the Executive Director and consistent with the On Site Mitigation and Monitoring Plan dated July 16, 2019 (Exhibit 17) a plan to govern the restoration tree planting in the corridor. The Plan

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shall include specifications that all restoration tree planting shall maintain existing coastal views and inland views, specifically that all restoration tree planting shall be:

- A. Limited to the inland side of the highway.
 - B. Limited to areas either where there are existing trees or buildings.
 - C. Limited to the vicinity of the intersection of Highway 101 and Airport Road/Jacobs Avenue, along Jacobs Avenue, the east side of Highway 101 north of Mid-City Motors, the intersection of Highway 101 and Indianola Cutoff proposed, the east side of Highway 101 north of Bracut, the intersection of Highway 101 and Bayside Cutoff, the vicinity of Jacoby Creek Bridge.
 - D. The Permittee shall undertake development in accordance with the approved final Tree Planting Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
21. **Seasonal Limitations for Authorized Development.** Consistent with the Project Description, the Permittee shall adhere to the following seasonal limitations for the authorized development:
- A. Consistent with Special Conditions 8, 9, and 12, in-stream work (work within a bed, bank, or channel of a watercourse) shall be restricted to the period between July 1 and October 15. Construction activities confined to this timeframe shall include all tide gate replacements, pile installation on the banks of Jacoby Creek for the new bridge and the detour bridge, and all activities associated with workers potentially walking in Jacoby Creek to install/maintain the debris containment structure and remove the old bridge piers.
 - B. Clearing of trees or shrubs that may provide nesting habitat for avian species shall take place outside of the nesting season (March 1 to September 1) to the extent required by the FEIR avoidance and minimization measures to reduce the potential effects on migratory birds as specified on page 385 of the FEIR.
 - C. No proposed changes to the timing of development set forth in this condition may occur without an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
22. **State Lands Commission Approval.** PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT 1-18-1078, the Permittee shall provide to the Executive

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Director a written determination from the State Lands Commission that: (a) no State or public trust lands are involved in the development; or (b) State or public trust lands are involved in the development and all permits required by the State Lands Commission have been obtained; or (c) State or public trust lands may be involved in the development, but, pending a final determination, an agreement has been made with the State Lands Commission for the approved project as conditioned by the Commission to proceed without prejudice to that determination.

23. **Assumption of Risk, Waiver of Liability, and Indemnity Agreement.** By acceptance of this permit, the Permittee acknowledges and agrees (a) that the site may be subject to hazards from geologic and flood hazards, including but not limited to ground shaking, liquefaction, tsunami inundation, and flooding; (b) 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; (c) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (d) 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.
24. **U.S. Army Corps of Engineers Approval.** PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. I-18-1078, the applicant shall provide to the Executive Director a copy of a permit issued by the Army Corps of Engineers, or letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the Army Corps of Engineers. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
25. **Encroachment Permit.** PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. I-18-1078, the applicant shall submit to the Executive Director for review and written approval, evidence that any needed encroachment permit has been obtained from the City of Eureka and the County of Humboldt for the development or evidence that no such encroachment permit is required. The encroachment permits or exemption shall provide evidence the ability of the applicant to develop within City and County properties, including public street rights-of-way, as conditioned herein.
26. **Evidence of Legal Ability of Applicant to Undertake Development on Property Owned by Others and Comply with Conditions of Approval.** PRIOR TO ISSUANCE

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OF COASTAL DEVELOPMENT PERMIT 1-18-1078, the Applicant shall submit, for the review and approval of the Executive Director, evidence that clearly demonstrates that the legal owner(s) of APNs 014-151-008, 014-151-009, 501-241-030, 501-241-031, 501-241-033, the County of Humboldt owned right-of-way at Jacobs Avenue and Airport Road, and the lands on Indian Island where Spartina Removal will occur pursuant to Special Condition 5 have agreed in writing that the Applicant may undertake development on their property pursuant to Coastal Development Permit 1-18-1078 and as conditioned by the Commission herein. The agreements of the City of Eureka and the County of Humboldt shall be signed by authorized representatives of the City and County, respectively.

27. **Liability for Costs and Attorneys' Fees.** By acceptance of this permit, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys' fees that the Coastal Commission may be required by a court to pay that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission. PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT, the Permittee shall enter into a separate written agreement with the Executive Director agreeing to reimburse the Coastal Commission for all court costs and attorney's fees, consistent this condition.