# CALIFORNIA COASTAL COMMISSION

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January 29, 2000

Date of Extension Request:

January 28, 2000

Length of Extension:

90 Days

Final Date for Commission Action: April 14, 2000

Staff:

Jim Baskin

Staff Report:

March 24, 2000

Hearing Date:

April 14, 2000

Commission Action:

**REGULAR CALENDAR STAFF REPORT:** 

APPLICATION NO.:

1-99-064

APPLICANT:

**California Department of Transportation** 

PROJECT LOCATION:

Highway 101 at Front Street, Crescent City, Del

Norte County

PROJECT DESCRIPTION:

As part of the state highway roadway rehabilitation project through the City of Crescent City, replace an existing 660mm diameter x 24m length storm drain pipe with a 750mm diameter x 24m length section. This drainage facility is located within the state highway right-of-way and discharges into Elk Creek

just upstream of where the watercourse enters

Crescent City Harbor.

LOCAL APPROVALS RECEIVED: None required.

OTHER APPROVALS REQUIRED: U.S. Army Corps of Engineers approval may be

required.

SUBSTANTIVE FILE

**DOCUMENTS:** 

Del Norte County CDP No. 1-99-064;

City of Crescent City Local Coastal Program; and

RWQCB North Coast Water Quality Control (Basin) Plan

#### PROCEDURAL NOTE:

The Commission opened and continued a public hearing on this permit application at its meeting on January 14, 2000. The Commission expressed its concerns that an opportunity for enhancing area water quality was being lost as no provisions for stormwater discharge treatment had been included in the project design. The Commission continued the hearing so that the applicant might investigate the potential for including some form of water quality treatment measures as part of the project. The applicant was agreeable to this continuance and granted a 90-day extension to the deadline for Commission action on the application to allow time for an investigation of treatment options.

Since the January hearing, staff has met with the applicant to discuss ways of incorporating feasible water treatment measures into the project. As of the date of this report, Caltrans staff has informed Commission staff that Caltrans was not able to identify appropriate water quality protection measures for the project. Further, it is Commission staff's understanding that Caltrans believes that if the Commission were to require that water quality treatment measures be included with the project, the Commission would be acting beyond its regulatory authority in this matter. The applicant has requested that the continued item be returned to the April agenda where Caltrans might make a presentation to the Commission detailing why treatment measures have not been developed or are not appropriate for inclusion with this project.

The Commission will re-open the continued public hearing and vote on the matter at its April 14, 2000 meeting.

#### SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission approve the proposed drainage facility replacement project with conditions. The proposed project is part of the Department of Transportation's roadway rehabilitation of State Highway 101 through the City of Crescent City. The overall project involves numerous roadway improvements (i.e., pavement overlays, re-striping, installation of drop curbing, drainage system enhancements, and traffic signal replacements) over a six-tenths mile length of Highway 101. Most of this work, however, is either: 1) outside of the coastal zone; 2) located within Crescent City's coastal permit jurisdiction; and/or 3) exempt from coastal development permit requirements as "repair and maintenance activities" pursuant to Coastal Act Section 30610(d). Only a small portion of the proposed project needs a coastal development permit and is located within the Commission's permit jurisdiction. This development involves the replacement of the terminal drainage culvert conveying stormwater runoff into Elk Creek, a coastal waterway on Crescent City Harbor.

The project raises potential issues regarding construction activities in or near coastal waters and discharges of stormwater runoff into coastal waters. With respect to these

construction impacts, consultations with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the California Department of Fish and Game were made regarding potential impacts to estuarine and riparian habitat. Of particular concern were potential project effects on federal- and state- listed fish species such as the tidewater goby and coho salmon. These agencies have all concluded that the project is likely to have no adverse affect to existing fish and wildlife resources provided mitigation measures included within the project design and conditioned as part of the project are followed. Special conditions relating to the timing, location, and methods for pipe replacement have been recommended to insure that the mitigation measures identified by resource agencies are carried out to avoid construction-related impacts to coastal waters.

The project also has potential water quality implications from the discharge of nonpoint-source polluted runoff into coastal waters from roadways and impervious surfaces as the culvert to be replaced will drain an approximately 12-acre area of downtown Crescent City. However, the quality and net amount of stormwater being discharged into Elk Creek is an existing condition that will not be made worse by the proposed project. The Regional Water Quality Control Board has reviewed the project and found that the proposed activities meet the provisions of the North Coast Water Quality Control (Basin) Plan and will have no significant effects to the water quality of Elk Creek. As the proposed culvert replacement will cause no greater discharge impact on water quality, staff is not recommending special conditions that would require treatment of the discharge from the culvert.

Staff believes the proposed project as conditioned is consistent with the Coastal Act and recommends approval.

#### STAFF NOTES

#### 1. Jurisdiction and Standard of Review

The proposed stormdrain pipe replacement project is located within the Coastal Commission's area of original or retained jurisdiction. Therefore, the standard of review is the applicable Chapter 3 policies of the Coastal Act.

## STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

## I. MOTION, STAFF RECOMMENDATION, AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

**Motion:** 

I move that the Commission approve Coastal Development Permit No. 1-99-064 pursuant to the staff recommendation.

## **Staff Recommendation of Approval:**

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

## **Resolution to Approve Permit:**

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

# II. STANDARD CONDITIONS: See attached.

# III. <u>SPECIAL CONDITIONS</u>:

- 1. <u>Construction Site De-watering Plan</u>
- A. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the applicant shall submit for the review and approval of the Executive Director a construction site de-watering and barrier plan to minimize adverse effects to coastal waters. The plan shall specify:
  - a. The specific barrier device type to be used (i.e., cofferdam, sandbagging, sheet-piling, etc);
  - b. The location of the construction barrier, placed as close as possible to the culvert's outlet, not to encroach more than ten feet into Elk Creek as measured from the base of the rock slope protection materials; and
  - c. The date and time for removal of the construction barrier, not exceeding 30 days from the date of the drainpipe's replacement.
- 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 required.

## 2. <u>Debris Disposal Plan</u>

- A. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the applicant shall submit for the review and approval of the Executive Director a plan for the disposal of construction-related debris. The plan shall describe the manner by which the material will be removed from the construction site and identify a disposal site that is in an upland area where materials may be lawfully disposed.
- 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 required.

## 3. <u>Construction Methods</u>

The proposed development shall be conducted in accordance with the methods and techniques described in the application project description dated July 29, 1999, prepared by Rod Parsons, Environmental Planner, and submitted to the Commission on August 2, 1999. These methods and techniques include, but are not limited to the following specific measures:

- A. All work in or near Elk Creek shall be confined to the period of June 1, 2000 through October 15, 2000, and undertaken during a low tide when the receiving waterway is naturally de-watered.
- B. A temporary barrier per the approved Construction Site De-watering Plan (see Special Condition No. 1, above) shall be constructed around the worksite to prevent all work from being conducted in the flowing stream and/or tidal influence of bay waters.
- C. The overlying roadway shall be trenched and rock slope protection materials removed with appropriate mechanized excavating equipment located such that encroachment into coastal waterways and vegetated areas will be avoided.
- D. The rock slope materials shall be carefully removed for re-use, and the existing pipe carefully removed in such a manner that disturbance to the site is kept to a minimum and contained behind the temporary barrier.

- E. The new culvert shall be placed in the same alignment as the existing one, ensuring that the culvert outlet does not create an impedance to the free-flowing nature of the stream channel, nor create a barrier to fish migration in the stream.
- F. The rock slope protection shall be replaced per engineered specifications and keyed into the rock slope protection materials both upstream and downstream of the culvert outlet.
- G. Upon completion of the culvert installation and rock slope protection replacement, the temporary barrier shall be removed along with all debris associated with the construction and shall be properly disposed of, consistent with the approved Debris Disposal Plan (see Special Condition No. 2, above).
- H. No trees, wetlands, or riparian vegetation shall be removed or otherwise impacted during the pipe replacement construction activities.

## IV. FINDINGS AND DECLARATIONS.

## A. Site Description.

The project site is located within the state right-of-way of Highway 101, approximately 100 yards southeast of the intersection of southbound US101 with Front Street, at the southern entrance to Crescent City. The subject drainpipe runs from a drop inlet basin located in a wide grassy median between the two highway segments, crossing beneath the highway to an outlet at the base of rock slope protection riprap just north of the Elk Creek Bridge. The outlet currently discharges stormwater runoff from a ½-acre-area into Elk Creek approximately 1,000 feet upstream from where the watercourse enters Crescent City Harbor. This stretch of Elk Creek has been significantly channelized both below and upstream of the site. Streamside vegetation is sparse, consisting primarily of weedy species growing between the blocks of riprap. The streambed in vicinity of the project site consists of denuded silty substrate.

The project site is surrounded by open space areas comprising the Crescent City Beach Front Park. The downtown commercial district begins approximately 100 yards to the northwest. The Harbor-City Bicycle Path passes alongside the drainpipe location.

# B. Project Description.

The proposed project consists of two components: 1) replacing an existing drainage culvert; and 2) modifying the area's stormwater drainage facility discharges to correct localized flooding problems. These inter-related project elements are discussed more specifically below.

## Culvert Replacement

The primary project activity involves the replacement of an existing 660mm diameter x 24m reinforced concrete pipe (RCP) with a 750mm x 24m RCP at the Elk Creek Bridge. This pipe currently drains an approximately ½-acre area comprising the grassy median between the southbound and northbound lanes of Highway 101. The culvert will be placed at a slightly steeper gradient --- 0.75%, compared to the present 0.67% slope. The new outlet will be set 0.37m (1.2 feet) lower than the present outlet elevation, corresponding with the Mean High Tide elevation of 1.5m (4.5 feet) above mean sea level. The pipe's present average 10-year-storm discharge (Q<sub>10</sub>) is less than 1 cubic-foot per second (cfs). This drainage facility upgrade will not involve fill within coastal waters, as the pipe does not encroach into the coastal waters of Elk Creek. However, a temporary barrier constructed around the outlet to contain construction debris and separate construction activities from the stream course and/or tidal influence will be placed within the Elk Creek streambed. The applicant will allow the construction contractor to design the particular barrier to be used.

To minimize impacts to coastal waters, the work is proposed for the dry season (June through October) and on a low tide when Elk Creek is naturally de-watered. Existing rock slope protection materials in which the existing pipe is set will be carefully removed, stored on site, and replaced per engineering specifications around the replacement pipe. Any incidental construction debris would be cleaned up and properly disposed of away from coastal waters. The location of the disposal site for these materials has not been identified. The applicant allows its construction contractor to choose the site. Finally, the temporary barrier would be removed. The anticipated time for completing the project is one workday.

#### **Drainage System Modifications**

To alleviate localized flooding that occurs at a separate drainage culvert located pipe approximately 200 feet upstream, stormwater flows that currently discharge from the separate culvert will be re-directed to the culvert proposed for replacement. The upstream pipe currently drains a developed urban area of approximately 20 acres with a Q<sub>10</sub> discharge of approximately 32 cfs. The proposal calls for diverting roughly half of the drainage coming into the upstream pipe into the new culvert. The re-routing of drainage discharge points will be undertaken after the pipe replacement work at the Elk Creek Bridge has been finished by changing the cross-connectors between the two culverts beneath the City's streets in that part of the project area outside of the Coastal Zone.

Following these drainage system modifications, the upstream pipe will drain an approximately nine-acre-area, with its  $Q_{10}$  discharge reduced to approximately 14 cfs. The culvert being replaced will then convey drainage from a 12-acre area with its  $Q_{10}$  discharge increased to about 19 cfs. These flows will represent 2% and 3%, respectively, of Elk Creek's  $Q_{10}$  discharge (600 cfs) as measured at the Elk Creek Bridge. No net increase in stormwater discharge into Elk Creek will result from these modifications.

Additionally, this increase in stormwater discharge at the Elk Creek Bridge culvert is not of a significant quantity to cause increased scour or other hydraulic impacts to the Elk Creek streambed. Furthermore, the shifting of discharge quantities between the two culverts will result in stormwater being released further downstream than it presently does. This will effectively reduce overall exposure of the watercourse to stormwater for the 200-foot reach between the outfalls.

# C. Need for Permit

Section 30601(d) of the Coastal Act exempts certain "repair and maintenance" activities from the need for a coastal development permit. However, these exemptions are limited to maintenance activities that "...do not result in an addition to, or enlargement or expansion of, the object of those repair and maintenance activities." The replacement drainpipe has a larger diameter than that of the existing culvert, consequently a coastal development permit is required.

In addition, Section 30610 provides that by regulation, the Commission can identify certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact that will require a permit. Section 13252 of the Coastal Act Regulations identifies a number of activities involved in this project that are extraordinary methods of repair, including:

- Any method of repair or maintenance to a seawall revetment, bluff retaining wall, breakwater, groin, <u>culvert</u>, <u>outfall</u>, or similar shoreline work that involves:
  - ♦ The placement, whether temporary or permanent, of rip-rap, <u>artificial berms of sand or other beach materials</u>, or any form of solid materials on a beach or in coastal waters, <u>streams</u>, wetlands, estuaries, and lakes, or on a shoreline protective work except for agricultural dikes within enclosed bays or estuaries. [CCR §13252(a)(1)(B)]...
  - ♦ The presence, whether temporary or permanent, of mechanized construction equipment or construction materials on any sand area, bluff, or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams. [CCR §13252(a)(1)(D)]
- Any repair or maintenance to facilities or structures or work located in an environmentally sensitive habitat area, any sand area, within 50 feet of the edge of a coastal bluff or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams that include:
  - ♦ The placement or removal, whether temporary or permanently, of <u>rip-rap rocks</u>, <u>sand or other beach materials or any other form of solid materials</u>;
  - ♦ The presence, whether temporary or permanently, of <u>mechanized equipment or construction materials</u>. [CCR §13252(a)(3)] (emphases added)

As the proposed development includes the placement of solid materials within Elk Creek in the form of the temporary barrier and other solid materials within 20 feet of Elk Creek in the form of the new culvert, the proposed project constitutes repair and maintenance activities involving a risk of substantial adverse environmental impact pursuant to Section 13252 of the Commission's regulations for which a coastal development permit is required.

#### D. Water Quality Issues.

Section 30231 of the Coastal Act addresses the protection of coastal water quality in conjunction with development and other land use activities. Section 30231 reads:

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

Based upon the above-cited policy, the project raises two issue areas with respect to water quality:

- Project effects associated with the construction-phase activities; and
- Discharges from the drainage facility being upgraded.

## 1. Effects of Construction Activities

The drainage conveyed through the subject culverts discharges into Elk Creek, a first-order coastal stream. The drainpipe discharges into the creek approximately 1,000 feet upstream of where Elk Creek enters Crescent City Harbor.

The project was reviewed by several resource agencies based on the fish and wildlife habitat Elk Creek provides. These reviews included biological consultations with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), pursuant to Section 7 of the Federal Endangered Species Act, and analysis conducted by the California Department of Fish and Game for the Stream Alteration Agreement to address project related work within the Elk Creek corridor.

These agencies have concluded that the project may affect, but is not likely to adversely affect, fish and wildlife resources provided mitigation measures within the project's design are followed. These mitigation measures relate primarily to construction phase activities that may disturb the creek bed and banks resulting in erosion, sedimentation or the introduction of construction debris into the waterway. With respect to water quality effects on anadromous fisheries, the NMFS consultation concluded that the stormwater flows entering Elk Creek should not attract migrating adult *coho* salmon causing them to be diverted from reaching spawning areas upstream.

Accordingly, provided the mitigation measures identified and required by these agencies are followed during the project, no adverse impacts to the water quality of coastal waters is anticipated. The application project description dated July 29, 1999 prepared by the applicant included such mitigation measures. Although proposed by the applicant, the Commission has included Special Condition No. 3 to ensure that the mitigation measures are implemented. These requirements relate to timing and location of construction activities, and specific actions to be taken to prevent construction materials from entering, blocking or otherwise degrading the coastal waters of Elk Creek and Crescent City Harbor. As conditioned, the proposed project is consistent with Section 30231 of the Coastal Act in that the quality of coastal waters will be maintained and protected from degradation by construction activities associated with the proposed project.

# 2. Stormwater Discharge Impacts

#### Potential Nonpoint Source Pollution

As noted above, the subject stormwater facility drains an approximately 20-acre urbanized area of city streets and pavement in southeast Crescent City. Roadways and adjacent impervious surfaces such as parking lots, sidewalks, and driveways are typically sources of nonpoint polluted runoff that discharges to coastal waters through stormwater drainage facilities.

Characteristic pollutants from urban stormwater runoff include entrained petroleum hydrocarbons from lubricants and fuels, brake lining particulate, pesticide and herbicide residues, heavy metals, pathogens (bacteria and viruses), nutrients, sediment, and litter. Unless interception and filtration devices are incorporated into the drainage system works, these materials can pass through the stormwater drains until they are discharged directly or indirectly into coastal waters.

These materials have been found to have profound effects on coastal water quality, either directly by impacting the productivity of wetlands and other wildlife habitat areas, or cumulatively by collecting within aquatic and terrestrial organisms, and sediments. In addition, these pollutants can contribute to a lowering of general water quality leading to health advisories and closures affecting recreational uses of coastal waters.

The above discussion generally describes the impacts to water quality from polluted runoff in stormwater. It should be emphasized that the quality of stormwater runoff currently passing through the project drainage facility has not been ascertained. Moreover, this drainage represents an existing condition for which the project, if conducted in accordance with recommended conditions, will not cause or contribute to greater water quality degradation.

## Water Quality Permit Determinations for the Project

The project has been found exempt from the requirements of National Pollution Discharge Elimination System (NDPES) permit requirements of Section 401 of the Federal Clean Water Act as administered by the Regional Water Quality Control Board (RWQCB). In correspondence from Bill Rodriguez of the RWQCB's North Coast Regional Office, dated November 1, 1999, the agency waived the requirements for a NDPES permit, concluding:

The proposed activity meets the provisions of the Regional Water Board's Basin Plan and will pose no significant threat to the water quality of the (sic) Elk Creek. Consequently, pursuant to California Code of Regulations, Section 3858, we will take no further action on your application.

A copy of this determination is provided in Exhibit 5.

In subsequent discussions with Mr. Rodriguez, it was revealed that the project's compliance with the North Coast Water Quality Control (Basin) Plan relates to the repair and maintenance aspect of the project. In addition, the stormwater associated with the project is not addressed under the present scope of Clean Water Act, as Crescent City with a present population of under 10,000 falls well below the "Phase I" permit requirements developed by the U.S. Environmental Protection Agency. These regulations set permitting requirements for discharges in jurisdictions having populations of 100,000 persons or more.

Given that the project: 1) does not comprise new road construction for which a Section 401 permit might be required; 2) involves stormwater discharges exempt under the USEPA Phase I permit threshold; and 3) entails water quality issues not presently addressed in the North Coast Basin Plan, the proposed activities were found to be covered under the Department of Transportation's state-wide NDPES permit for repair and maintenance activities on existing roadways. Subsequently, no separate Section 401 permit was required by the RWQCB.

The proposed project's stormwater discharges do not increase water quality impacts as they are an existing condition. Further, the project entails the redistribution of drainage and does not increase the overall capacity of the system or the net amount of water discharged into Elk Creek. Therefore, the project is consistent with Section 30231 to the

extent that the project maintains the current biological productivity and water quality conditions as they relate to the pipe discharge.

## Feasibility of Restoring Coastal Water Quality

Section 30231 also states that water quality should be restored where feasible. However, no site-specific evidence has been submitted that demonstrates that the quality of water that drains through the storm drain that is the subject of this application requires restoration. Furthermore, whatever the quality of water in the drain, it will not be worsened by this project. Instead, this project merely transmits the drainage flows that already exist in the subject area.

Nevertheless, as noted above, drainage courses that transmit urban stormwater runoff commonly contain a variety of pollutants. Consequently, Commission staff explored with Caltrans staff the possibility of including in this project preventive measures that would address potential nonpoint pollution sources. Suggested options discussed included: 1) creation of sediment retention ponds within the highway median; 2) installation of a stormwater interceptor vault above the discharge outlets; 3) installation of drop inlet filtration inserts throughout the system; and 4) other preventative measures, such as public educational efforts.

Caltrans project managers and design engineers expressed their concerns for accommodating suggested treatment as part of the project at this juncture. These concerns can be characterized as follows:

- Engineering Feasibility Some of the suggested structural treatment methods (sediment ponds, stormwater interceptors) may not be feasible options due to the location of the project site in relation to flowline elevations and sea level.
- Multiple Jurisdictions The stormwater being drained and suggested for treatment originates both within the state highway right-of-way and properties within the incorporated boundaries of the City of Crescent City. While Caltrans is required to accept and pass City drainage, it is not responsible for its treatment.
- Uncertain Treatment Goals Stormwater treatment objectives associated with
  roadway repair and maintenance activities have not been presently quantified.
  Without knowing the level of water quality being targeted, treatment devices installed
  on a project-by-project basis may later need to be replaced in order to conform to
  programmatic water quality treatment standards developed at a later time.
- Timing The project design is being finalized. To modify the proposal at this late
  date would require re-design that would inevitably delay the contract bidding and
  construction phases, possibly postponing the whole project until the 2001 season.

- Funding The expenditures for the roadway rehabilitation project have been fixed
  within the agency's construction budget. Additional sources of revenue would need
  to be identified to offset the additional costs of supplementary treatment facilities.
- Environmental Review Integration of treatment devices would constitute a major project modification which would require re-assessment of the effects of those facilities on the environment (e.g., grading and excavation for retention ponds).

Caltrans staff did indicate that some non-structural management measures could feasibly be integrated in the project. In addition to existing drainage system maintenance activities, such as Crescent City's street-sweeping program, other preventative efforts could similarly be initiated. An example of this kind of measure would be stenciling the curbsides adjacent to drop inlets to inform persons that placing trash, oil or other substances into the stormwater facility will adversely affect the water quality of coastal waters. However, the project description for the proposed project currently does not include such measures.

The Commission finds that the replacement of this storm drain, as proposed, is a relatively minor project that does not contribute to the pollution of coastal waters and that does not offer readily-available options for reducing non-point source pollutants. Given the nature of the project, the Commission finds that it is not feasible to require the incorporation of restoration measures in this instance.

#### E. Fill in Coastal Waters and Wetlands.

Section 30108.2 of the Coastal Act defines fill as including "...earth or any other substance or material ... placed in a submerged area." The primary project activity of replacing the stormdrain culvert does not involve the placement of fill in coastal waters or wetlands. Construction activities will entail the temporary trenching of the existing roadbed and excavation of the rock slope protection materials that will be reused to encase the replacement pipe the same location. No enlargement of the area covered by the rock slope protection materials will result. Although the replacement pipe will be set at a lower position than the existing culvert, its finished elevation will correspond to the Mean High Tide line and will not encroach into the coastal waters of Elk Creek as delineated by that datum.

The temporary coffer damming or other barrier materials to be installed during the pipe replacement construction phase to separate the work area from the streambed, however, does constitute fill as defined in Section 30108.2.

Section 30233 of the Coastal Act addresses the placement of fill within coastal waters. Section 30233(a) provides as follows, in applicable part:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
  - (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
  - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
  - (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subsection (b) of Section 30411, for boating facilities, including berthing areas turning basins, necessary navigation channels, or any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
  - (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities, and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
  - (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
  - (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
  - (7) Restoration purposes.
  - (8) Nature study, aquaculture, or similar resource dependent activities. (emphasis added)

The above policy sets forth a number of different limitations on what fill projects may be allowed in coastal waters. For analysis purposes, the limitations can be grouped into three general categories or tests. These tests are:

- 1. That the purpose of the fill is for one of the eight uses allowed under Section 30233; and
- 2. That the project has not feasible less environmentally damaging alternative; and
- 3. That adequate mitigation measures to minimize the adverse impacts of the proposed project on habitat values have been provided.

# 1. Permissible Use

The placement of coffer damming or other barrier materials by Caltrans, a public agency, will be temporary and directly associated with the maintenance replacement of a terminal drainage culvert. The terminal drainage culvert is a form of outfall line, and as such is specifically enumerated as a permissible type of incidental public service purpose in the above-cited policy. Therefore, the Commission finds that the temporary placement of coffer damming or barrier materials can be allowed pursuant to Section 30233(a)(5) of the Coastal Act.

## 2. Alternatives

Coastal Act Section 30233 does not allow fill of coastal waters if there is a feasible, less environmentally damaging alternative to the project. Alternatives to the project as proposed must be considered before a finding can be made that the project satisfies the provision of Section 30233.

The review of possible alternatives has been limited to the applicable component of the project constituting fill in coastal waters --- construction barrier materials as a project mitigation measure. Accordingly, fill alternatives rather than overall project alternatives have been assessed. The only potentially feasible alternative identified and considered by staff is the "no project" alternative, in other words, not using any barrier material between the construction area and the streambed.

#### No Project Alternative.

The objective for including construction barrier materials within the overall project design is to prevent and contain any materials dislodged during the pipe replacement activities from entering the Elk Creek stream course. Bits of paving and roadbase overburden or debris from between the blocks of rock slope protection riprap are examples of the substances intended to be retained behind the barrier.

The no project alternative would not provide the protection to coastal waters to achieve the objective of assuring that "no trees, riparian vegetation, or wetlands will be impacted by the project," as stated in the permit application. In fact, the absence of a construction containment barrier would likely result in more pronounced coastal water impacts. The "no project" alternative is therefore not a feasible alternative with respect to meeting either the project objectives of protecting environmentally sensitive areas, or similar goals within the Coastal Act.

Therefore, the Commission finds that there is no less environmentally damaging alternative.

# 3. Adequate Mitigation Measures

The last of the tests for assessing if a fill project is consistent with Section 30233 of the Coastal Act is whether adequate mitigation measures to minimize the adverse environmental impacts of the proposed project have been provided.

The construction barrier materials themselves are a mitigation measure to prevent materials from entering and degrading coastal waters. However, the barrier and the materials it is intended to contain can have their own environmental effects, if not properly managed. Accordingly, the proposed project would remove all incidental debris contained behind the barrier at the conclusion of the pipe replacement's construction phase. Following removal of the debris, the barrier itself will be removed.

The result of this action will be limiting the impacts of the fill impacts to the one-day construction period such that no long-term impacts to coastal waters result. The Commission has included the removal of debris and the temporary barrier among the project Special Conditions to ensure that construction impacts to water quality are adequately prevented. Therefore the Commission finds that no additional mitigation is necessary for the temporary displacement of streambed area covered by the barrier materials and incidental construction debris.

The Commission thus finds that the project is an allowable use, that there is no feasible less environmentally damaging alternative, and that no mitigation is required for the impacts associated with the temporary fill. Therefore, the Commission finds that the proposed development, as conditioned, is consistent with Section 30233 of the Coastal Act.

#### F. Public Access

Coastal Act Section 30210 requires in applicable part that maximum public access and recreational opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Section 30211 requires in applicable part that development not interfere with the public's right of access to the sea where acquired through use (i.e., potential prescriptive rights or rights of implied dedication). Section 30212 required in applicable part that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, such as when adequate access exists nearby or when the provision of public access would be inconsistent with public safety.

In applying Sections 30211 and 30212, the Commission is limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential public access.

The project site is adjacent Elk Creek, a coastal stream that connects to the Crescent City Harbor. Access to and along these waterways is available from an adjoining walking trail that runs through the adjacent Crescent City's Beachfront Park and merges onto the sidewalk along the highway just north of the Elk Creek Bridge. In addition, this portion of State Highway 101 and Front Street are part of the route of the Harbor-City Bicycle Path, as designated in the City of Crescent City's LCP. The LCP notes that where the bikeway crosses the Elk Creek Bridge, "...this path gives a complete view of the ocean and the recreational opportunity within Crescent City."

The project does not interfere with the public's right of access to the sea from the first public roadway. Neither does the project have adverse impacts on existing or potential public access, necessitating the need for special conditions to protect public access. Therefore, the Commission finds that the proposed project will have no impact on public access. The Commission further finds that the proposed project, which does not include new public access, is consistent with the public access policies of the Coastal Act.

## G. California Environmental Quality Act.

Section 13906 of the California Code of Regulation requires Coastal Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Public Resources Code Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse impact that the activity may have on the environment.

The proposed project has been conditioned to be consistent with the policies of the Coastal Act and the requirements of PRC §21080.5(d). Special condition(s) have been attached to require mitigation measures which will minimize all adverse environmental impacts. As conditioned, there are no further feasible alternatives or mitigation measures available which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

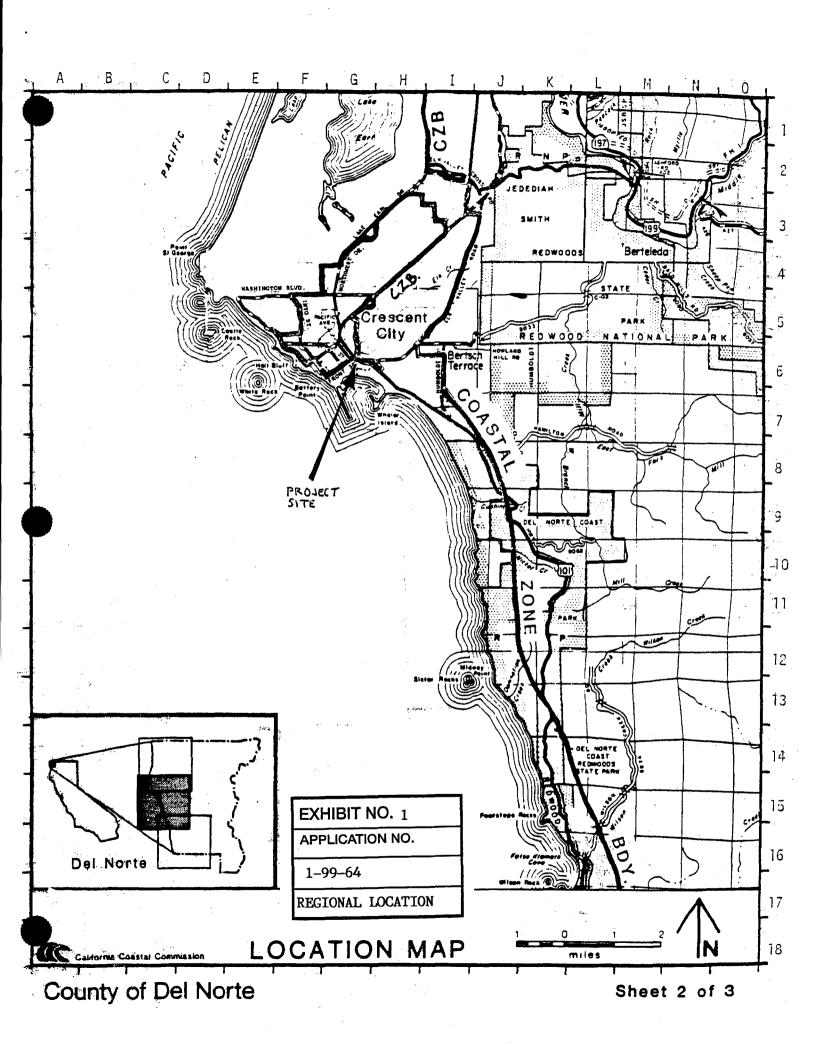
#### **EXHIBITS:**

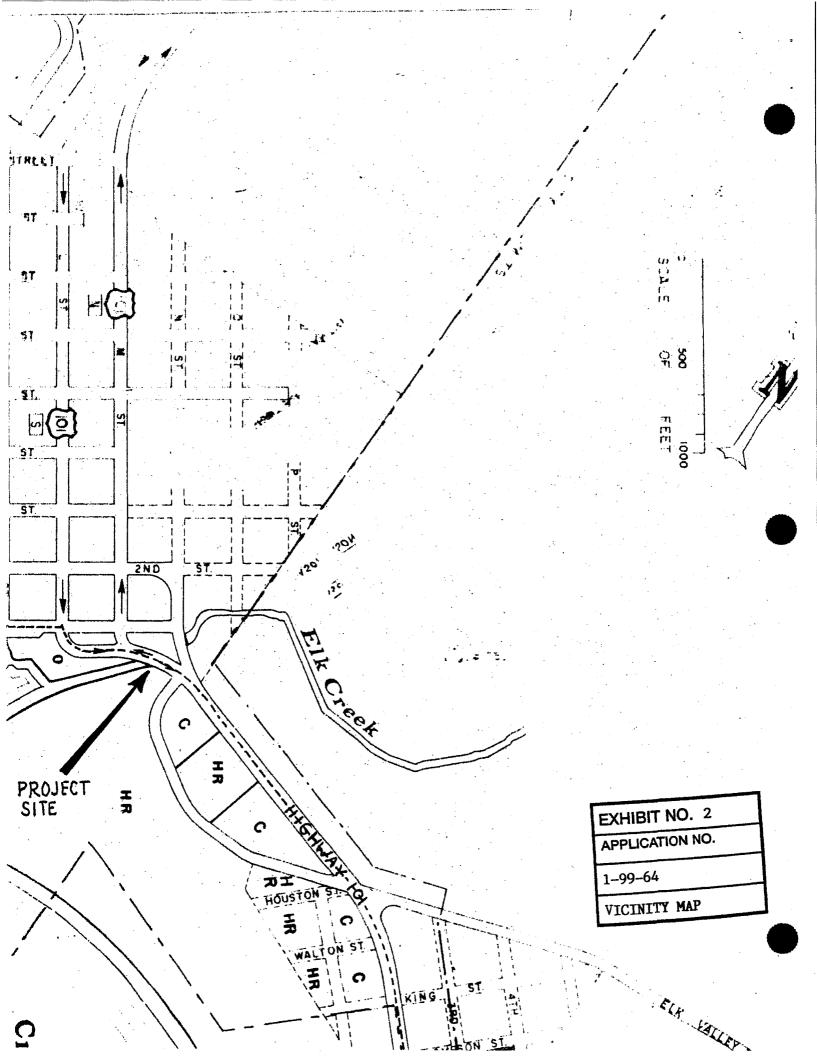
- 1. Regional Location Map
- 2. Vicinity Map
- 3. Jurisdictional Map (excerpt)
- 4. Drainage Plan Construction Details with "Exhibit 'A" Narrative
- 5. Agency Review Correspondence

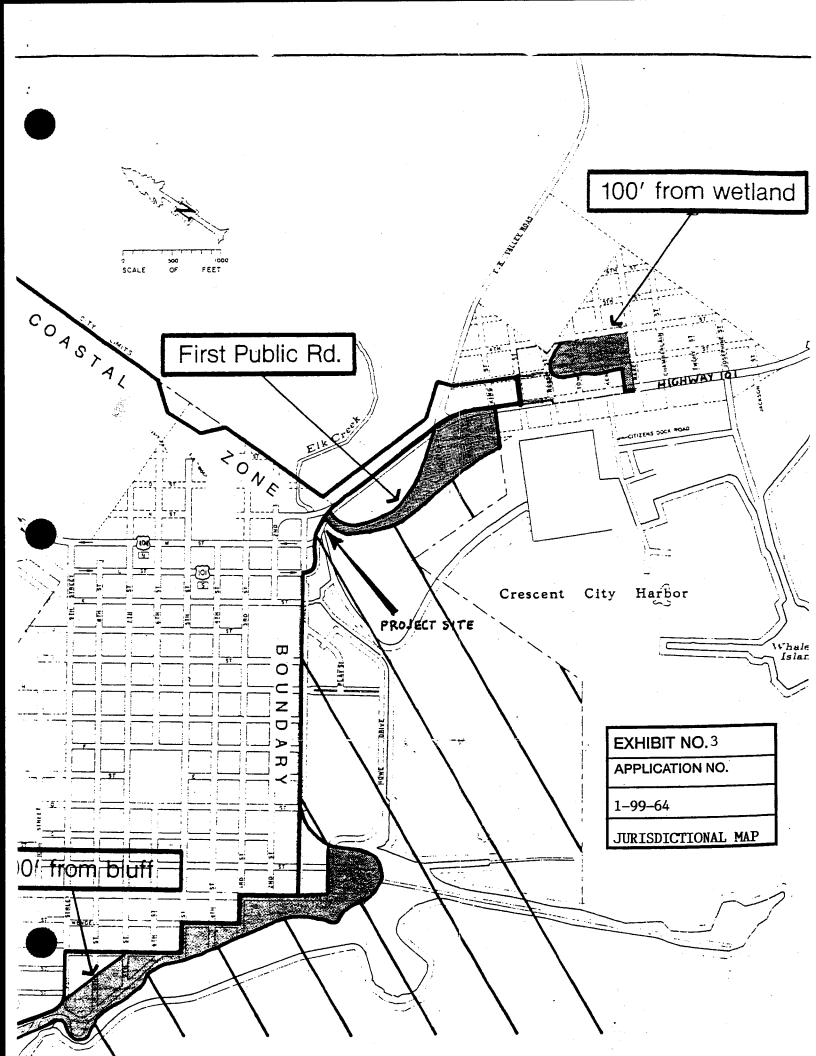
#### APPENDIX A

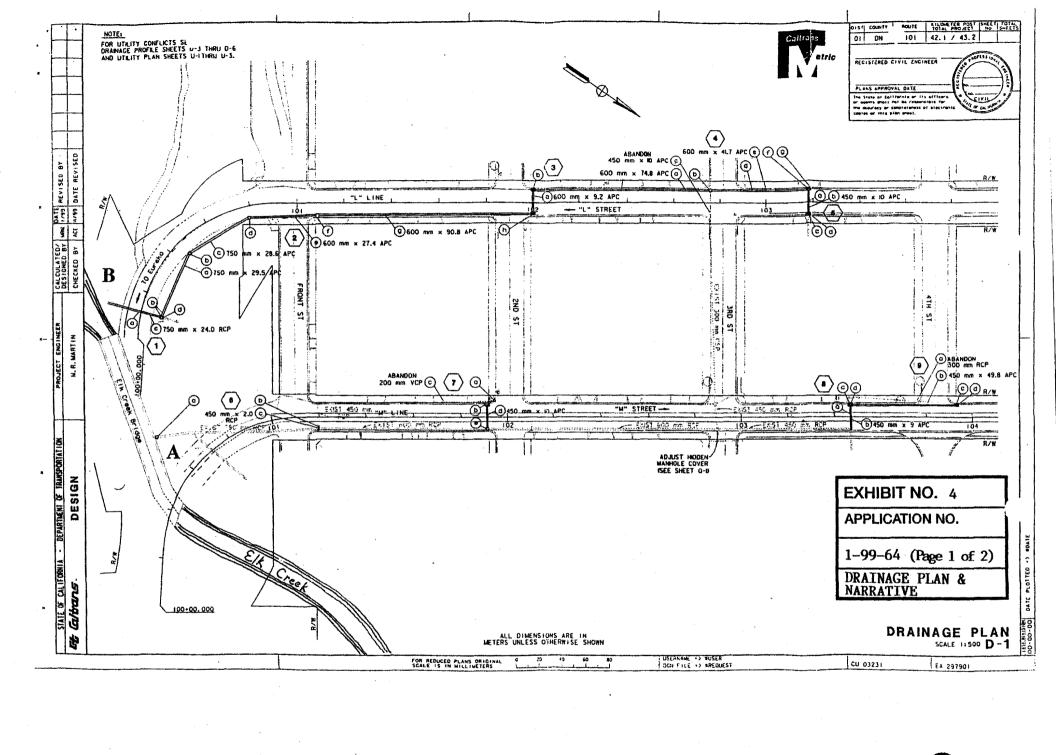
#### STANDARD CONDITIONS

- 1. <u>Notice of Receipt and Acknowledgement</u>. 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. <u>Expiration</u>. 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 amount of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Compliance</u>. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
- 4. <u>Interpretation</u>. Any questions of intent of interpretation of any condition will be resolved by the Executive Director of the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
- 6. <u>Assignment</u>. 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.
- 7. <u>Terms and Conditions Run with the Land</u>. 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.









# EXHIBIT "A"

#### CDP #1-99-064

- 1. The existing storm drain currently drains approximately 20 acres of developed urban area and discharges into Elk Creek at the location marked "A" on the diagram. The present Q<sub>10</sub> for the discharge is approximately 32 cfs.
- 2. The storm drain marked "B" on the diagram currently only drains approximately 1/2 acre of grassy parkland. The current  $Q_{10}$  discharge is less than 1 cfs during storm events.
- 3. The proposed project will split the discharge from the existing storm drain "A" in half. 12 acres of the existing drainage area, which used to discharge at "A" will discharge at "B". The Q<sub>10</sub> at "B" with the added flow will now be approximately 19 cfs.
- 4. The Q<sub>10</sub> for Elk Creek is 600 cfs with a current velocity through the Elk Creek Bridge of 5.9 fps. The average Q for Elk Creek is 20.6 cfs with an average velocity of 2.3 fps.
- 5. Splitting the storm drain will result in two discharge points with the discharge at "A" being 2% and the discharge at "B" being 3% of the Q<sub>10</sub> of Elk Creek. The two discharge points are on the same side of the creek within a channelized area. They are approximately 65 m apart.
- 6. Rock slope protection will be re-placed over the outlet pipe, but will not be placed in front of the pipe to block flow. Due to the low gradient and low flow a velocity dissipater at the outlet of "B" is not needed.
- 7. Storm water issues within the proposed project will be handled by staging construction as follows. First, the contractor will install the discharge pipe (which currently drains approximately 1/2 acre) when the estuary is naturally de-watered due to tidal action, there is no flow present in the pipe, and no rain is in the immediate forecast. This will result in no effects to the creek or any other drainage system from temporary diversion. Then, the contractor will work upstream from "B" to the existing storm drain system where the storm drains will be replaced and cross connectors to "A" will be disconnected.
- 8. Proposed short and long term diversions, including splitting the existing flow to two discharge points 65 m apart within a channelized reach of Elk Creek, will not result in adverse impacts to aquatic habitat, coastal wetlands, nor alter existing sedimentation patterns within the estuary. The storm water discharge from the system will not be changed in quantity (area of drainage), duration, nor quality (urban and highway runoff). Ten-year storm events discharge approximately 5% of the flow of Elk Creek through these drains. When no storm event is occurring, discharge through this storm drain system will be minute and result in little or no input to the receiving water.



UNITED STATE DEPARTMENT OF COMMERCE
National Oc. and Atmospheric Administration

NATIONAL MARINE ISHERIES SERVICE

Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213 TEL (310) 980-4000; FAX (310) 980-4018

July 1 1999

F/SWR3:NR

Mr. Jeffrey A. Lindley, U.S. Department of Transportation Federal Highway Administration 980 9th St. Suite 400 Sacramento, CA 95814-2724

Cear Mr. Lindley:

This letter is in response to your letter dated June 24, 1999, requesting concurrence with your agency's determination that the proposed project, file number DN-101-26.2, reconstructing the storm drain that flows into Elk Creek at Route 101, is not likely to adversely effect the listed Southern Oregon/northern California coast (SONCC) cohe salmon or its critical habitat. Cohe salmon occur in Elk Creek. Cohe juveniles are known to use estuaries and sloughs for three to four weeks during their outmigration, taking place between March and July, for purposes of feeding and growing, and adjusting to salinity gradients.

The project site is located at the Elk Creek-Route 101 intersection near Crescent City, California. The storm drain currently drains approximately 20 acres of developed urban area and has a discharge during the ten-year flood  $(Q_{10})$  of approximately 32 cubic feet per second (cfs). The proposed project is to remove the existing concrete pipe and replace it with a pipe of the same size set 0.37 meters (1.2 feet) lower at the same location. Fart of the drainage to this pipe will be rerouted through another pipe upstream; therefore, at the conclusion of the project the  $Q_{10}$  through the pipe will be approximately 11 cfs, or 2% of the  $Q_{10}$  flow in Elk Creek at this pipe and 19 cfs (approximately 3% of the Elk Creek  $Q_{10}$ ) through the pipe upstream. Rock slope protection covers the bank of Elk Creek in the project location and it will be moved aside before the pipe replacement activities and replaced at their conclusion.

The pipe will be replaced with either another concrete pipe or a metal pipe by either removing the road bed and placing the pipe or "jack and boring". The work is expected to take about one day from start to completion. Staging areas, storage areas and equipment parking will not occur adjacent to the creek or where

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EXHIBIT NO. 5

APPLICATION NO.

1-99-64 (Page 1 of 8)

AGENCY REVIEW CORRESPONDINGE

contaminated water could flow into either storm drain. The equipment and work access for the site will be from the top of the bank and will not disturb Elk Creek itself. Project activities will take place during a low tide when the outfall is naturally dewatered. The project is expected to take place after January 2000, probably in March when conditions permit. The storm drain will be dewatered if water is present by routing the flow through the upper storm drain.

The NMFS determines that the proposed project may affect, but is not likely to adversely affect coho salmon in the SONCC ESU. The storm water flows entering Elk Creek through the storm drains should not attract adult coho migrating upstream. Ground disturbance will be contained and kept out of Elk Creek, and construction by products will be kept out of Elk Creek and the water in the storm drains. The NMFS recommends that local citizens be encouraged to watch for and report the occurrence of adult coho in the storm drains in the unlikely event one gets lost.

This concludes the NMTS's consultation responsibilities under Section 7 of the Endangered Species Act with respect to the proposed Elk Creek storm drain replacement. However, consultation must be reinitiated if new information reveals effects of the action may affect listed species in a way not previously considered; the action is modified in a way that causes an effect on listed species that was not previously considered; or, a new species is listed or critical habitat is designated that may be affected by the action (50 CFR 402.16).

If you have any question concerning the above comments, please contact Nan Reck at (707) 441-3582.

Sincerely,

for Rodney R. McInnis,
Acting Regional Administrator

To: File

Date: April 13, 1999

File No.: DN-101-26.2

Re-Construct Storm Drain At Elk Creek

Hew from

EA 297901

From: DEPARTMENT OF TRANSPORTATION - North Region, Eureka Office

Steven Hansen, Associate Environmental Planner (Biologist)

Subject: Phone Concurrence from Ray Bosch; re., "No Affect" finding.

The above identified project located on Route 101 at post mile 26.2 in Del Norte County was subject to biological analysis and informal Section 7 consultation for potential impacts to the listed tidewater goby.

Ray Bosch, with the USFWS in Arcata, reviewed the Biological Assessment prepared by Caltrans for the proposed project. On April 13, 1999 he concurred with a finding of "no affect" on the project based on the Biological Assessment.

cc: Ray Bosch - USFWS

#### AGREEMENT REGARDING PROPOSED STREAM ALTERATION

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department, and <u>Caltrans</u>, <u>District 1 of Eureka</u>, <u>California</u>, hereinafter called the operator, is as follows:

WHEREAS, pursuant to Division 2, Chapter 6 of California Fish and Game Code, the operator, on <u>January 22<sup>nd</sup></u>, 1999, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed of, the following water: <u>Elk Creek</u>, in the County of <u>Del Norte</u>, State of California, <u>Sec. 28</u>, T 16N, R1W.

WHEREAS, the Department, represented by Warden D.J. Kelly, has made an inspection of the subject area on <u>April 26th, 1999</u>, and has determined that such operations may substantially adversely affect existing fish and wildlife resources including: <u>Salmon</u>, steelhead trout, native trout, nongame fish, amphibians, aquatic invertebrates and riparian habitat dwelling wildlife species.

THEREFORE, the Department hereby proposes the following measures to protect fish and wildlife during the erator's work and the operator hereby agrees to accept these recommendations as part of his work. The operator, as designated by the signature on this agreement, shall be responsible for the execution of all elements of this agreement. A copy of this agreement must be provided to any contractor and/or subcontractor and must be in their possession at the worksite.

If the operator's work changes from that stated in the notification specified above, this agreement is no longer valid and a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this agreement and with other pertinent DFG Code sections may result in prosecution and/or cancellation of this agreement.

Nothing in this agreement authorizes the operator to trespass on any land or property, nor does it relieve the operator of responsibility for compliance with applicable federal, state, or local laws.

THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OR ENDORSEMENT OF A PROJECT OR OF SPECIFIC PROJECT FEATURES BY THE DEPARTMENT OF FISH AND GAME. INDEPENDENT REVIEW AND RECOMMENDATIONS WILL BE PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, OR FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

## AGREEMENT REGARDING PROPOSED STREAM ALTERATION

#### SITE-SPECIFIC WORK CONDITIONS:

- A. This agreement shall cover the storm drain replacement and rock slope protection replacement along Hwy 101, adjacent to the southbound lane in the Elk Creek drainage, Crescent City, California.
- B. All work in or near the stream shall be confined to the period: June 1st, through October 15th, 2000.
- C. The operator shall construct a temporary barrier around the worksite to prevent all work from being conducted in the flowing stream and/or the tidal influence of the bay waters.
- D. The operator shall carefully remove the rock slope protection for re-use and shall carefully remove the existing culvert in such a manner that disturbance is kept to a minimum and contained behind the barrier noted above.
- E. The operator shall then properly place the new culvert in the same alignment as the existing one, ensuring that the outlet of the culvert does not create an impedance to the free flowing nature of the stream channel nor create a barrier to fish migration in the stream.
- F. The operator shall then replace the rock slope protection per engineered specifications and keyed into the RSP in the undisturbed streambank both upstream and downstream from the culvert outlet.
- G. Upon completion of the culvert installation and rock slope protection replacement, the operator shall remove the temporary barrier, and all debris associated with the construction and shall properly disposed of it away from state waters.
- H. The operator shall notify the Department representative prior to commencing the project and prior to project completion at (707) 464-7157.

#### **GENERAL WORK CONDITIONS**

- 1. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.
- 1a. The disturbed portion of any stream channel shall be restored to as near original condition as possible.
- 3. Rock, riprap, or other erosion protection shall be placed in areas where vegetation cannot reasonably be expected to become reestablished.

#### AGREEMENT REGARDING PROPOSED STREAM ALTERATION

- 4. Installation of bridges, culverts, or other structures shall be such that water flow is not impaired and upstream or downstream passage of fish is assured at all times.
- 10. Equipment shall only be operated in stream channels as is necessary to construct the crossing.
- 18. If operations require moving of equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or crossing as specified in comments below.
- 19. If a stream channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. If a lake margin has been altered, it shall be returned as nearly as possible to its natural state without creating a future bank erosion problem. The gradient of the streambed or lake margin shall be as nearly as possible the same gradient as existed prior to disturbance.
- 20. Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
- 21. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete, oil or petroleum products or other organic or earthen material from any logging, construction, or associated activity shall be allowed to enter into or placed where it may be washed by rainfall or runoff into waters of the State.
- 22. The operator will notify the Department of Fish and Game of the date of commencement of operations and the date of completion of operations at least five days prior to such completion.

THIS AGREEMENT BECOMES EFFECTIVE UPON SIGNATURE BY BOTH THE OPERATOR AND THE DEPARTMENT REPRESENTATIVE AND REMAINS IN EFFECT UNTIL

Operator Pol toward DFG DFG DFG DFG DFG

Title Environmental Plane Fish and Game Warden

Organization Caltrais Department of Fish and Game

te April 28 1999 Date 4/28/99



# California Regional Water Quality control Board



Winston H. Hickox Secretary for Environmental Protection OALTRANS

North Coast Region
Ross R. Liscum, Chairman

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999 KCV - 12 11 0. 9 Internet Address: http://www.swrcb.ca.gov 5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403 Phone (707) 576-2220 FAX (707) 523-0135

November 1, 1999

Ms. Deborah L. Harmon, Chief Environmental Management Office Department of Transportation P.O. Box 3700 Eureka, CA 95502-3700

Dear Ms. Harmon:

Subject:

1-DN-101-PM26.2/26.8, Pavement Rehabilitation and Storm Drain Replacement;

Crescent City

We have reviewed the project to rehabilitate pavement and replace a storm drain in the City of Crescent City. The project will repave Highway 101 from Front Street to Cooper Street. The storm drain replacement will occur in the vicinity of "L" and "M" streets. No trees, riparian vegetation, or wetlands will be impacted and no equipment will be operated within Elk Creek.

The project has been determined to be Categorically Exempt from CEQA. We concur with that determination.

The proposed activity meets the provisions of the Regional Water Board's Basin Plan and will pose no significant threat to the water quality of the Elk Creek. Consequently, pursuant to California Code of Regulations, Section 3858, we will take no further action on your application.

While we anticipate no further action on this project, should any new information come to our attention indicating that water quality is being adversely impacted, we may consider the need to issue a formal order.

By copy of this letter we are notifying the Corps of Engineers of our decision to not act on this project. For their purposes this is equivalent to water quality certification.

California Environmental Protection Agency

Please call me at (707) 576-2683, if you have any questions.

Sincerely,

Milliam T. Rodriguez

Sanitary Engineering Associate

WTR:ejl\ctelkcr

cc: Corps of Engineers, Eureka