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Staff:	Diane Landry
Staff Report:	February 24, 2005
Hearing Date:	March 17, 2005
Commission Action:	

### STAFF REPORT: REGULAR CALENDAR

**APPLICATION NUMBER:** 1-03-004

**APPLICANT:** **Reclamation District #768; Lois Wallace, Domingo Santos, and Earl Moranda Directors**

**PROJECT LOCATION:** 1,500- to 1,600-acre Reclamation District located north and south of Highway 255 along the northern shoreline of the Arcata Bay lobe of Humboldt Bay and the banks of Mad River Slough, Arcata Bottom area, Humboldt County

**PROJECT DESCRIPTION:** Repair of a 230-foot-long breach in a portion of the levee north of Hwy 255, replacement of three 36-inch-diameter culverts and floodgates, and a ten-year permit for routine repair and maintenance activities on the levee system.

**LOCAL APPROVALS:** Humboldt County Planning approval, April 17, 2003

**SUBSTANTIVE FILE DOCUMENTS:** Humboldt County Local Coastal Program

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**SUMMARY OF STAFF RECOMMENDATION:**

The Reclamation District is proposing the project to repair and maintain the existing 4.9-mile-long levee system included within District boundaries. The purpose of the project is to repair and maintain the levee system so that it will not fail and cause the inboard agricultural land and improvements to be flooded. All of the land and improvements protected by the levees are at very low elevations above the bay and, without a properly maintained levee system will regularly flood. Another reason for maintaining the system is to avoid siltation of the bay waters that occurs if the agricultural land is flooded. Increased turbidity caused by siltation would harm the nearby oyster aquaculture facility in the Mad River Slough that depends on clean water to function.

The proposed project includes the following three elements:

**Emergency Permit Follow-up Coastal Development Permit for Culvert**

**Replacement:** The first part of the project is a follow up permit to two Emergency Permits granted by the North Coast District Office in 2003 and 2004 for the replacement of three failing 36" corrugated metal culverts and flood gates located at the west end of the levee system along Humboldt Bay and south of State Highway 255. The failed culverts were replaced with the same size sound culverts and flood gates, clean armoring rock was re-installed around the outboard side (side of the levee adjacent to Humboldt Bay) of the levee consistent with the conditions placed on the Emergency Permit regarding the type of materials to be used in the repair of this section of the levee.

**Emergency Permit Follow up Permit for Major Levee Breach:** On December 23, 2003 a combination of extraordinarily high tides and 45mph winds caused a 230" breach in a portion of the levee located north of Highway 255. This breach resulted in the flooding of about an acre and a half of pasture and was temporarily contained by the installation of large "water bag" dikes. An Emergency Permit was subsequently obtained from the North Coast District Office for repair of the breach along the original alignment with an earthen levee and outboard armoring as had existed prior to the incident. This Emergency Permit was conditioned to require the use of clean fill for the levee and clean rock (no debris, no re-bar) for the outboard armoring.

**Ten Year Permit for Ongoing Repair and Maintenance Activities:** The final element of the project is a proposal for a ten-year permit to undertake routine repair and maintenance of the levee system. The Reclamation District maintenance program includes vegetation control (mowing) along the top of the levees to allow access for maintenance equipment, replacement of rip rap that has migrated or is needed to repair erosion, placement of clean fill to repair eroded areas and flood gate and culvert replacement with the same size facilities. All of the work is proposed within the existing footprint of the levee and will not result in any encroachment into Humboldt Bay or on the inboard side of the levee into the seasonal wetlands.

Although the Reclamation District is proposing a number of protocols directed towards avoiding and mitigating adverse impacts on water quality and nearby wetland and marine resources, additional conditions are needed to adequately protect coastal resources. Staff is therefore recommending conditions that limit the initial period of permit authorization to five years, establish parameters for fill and armoring materials, provide for pre-construction training for the contractor, limit repair and maintenance activities to dry weather, avoid sensitive species, require the replanting of sensitive disturbed areas and require periodic monitoring.

As conditioned, Staff recommends approval.

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**STAFF NOTES:**

1. **Standard of Review**

The proposed development will be performed on levees located within state tidelands and public trust lands in Humboldt County. Pursuant to Section 30519 of the Coastal Act, the Coastal Commission retains jurisdiction over the review and issuance of Coastal Development Permits in these areas even though the County of Humboldt has a certified Local Coastal Plan. The standard of review for projects located in the Commission's original jurisdiction is Chapter 3 of the Coastal Act.

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I. **MOTION, STAFF RECOMMENDATION, AND RESOLUTION OF APPROVAL:**

The staff recommends that the Commission adopt the following resolution:

**Motion:**

I move that the Commission approve Coastal Development Permit Number 1-03-004 pursuant to the staff recommendation.

**Staff Recommendation of Approval:**

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

**Resolution to Approve a Coastal Development Permit:**

The Commission hereby approves the coastal development permit on the ground that the development as conditioned, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the coastal development 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 amended development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the amended development on the environment.

**II. STANDARD CONDITIONS See attached.**

**III. SPECIAL CONDITIONS**

**1. Length of Development Authorization**

Development authorized by this permit is valid for five (5) years from the date of Commission approval (until March 17, 2010). One request for an additional five-year period of development authorization may be accepted, reviewed and approved by the Executive Director for a maximum total of 10 years of development authorization, provided the request would not substantively alter the project description, and/or require modifications of conditions due to new information or technology or other changed circumstances. The request for an additional five-year period of development authorization shall be made prior to March 17, 2010. If the request for an additional five-year period would substantively alter the project description, and/or require modifications of conditions due to new information or technology or other changed circumstances, an amendment to this permit will be necessary.

**2. Standards for Repair and Maintenance Work**

- a. Armoring Rock: All new revetment material to be used shall consist of either clean quarry rock or concrete rubble materials that are free of asphalt and waste materials. The revetment materials shall not be greater than three feet in any one direction or smaller than one cubic foot in size. All exposed reinforcement bar shall be removed prior to installation of any concrete rubble riprap. Armoring rock shall be stockpiled outside seasonal wetlands and transitional agricultural lands. No rock shall be placed outside of the existing footprint of the levee system.
- b. Fill Material: Only dry, clean fill may be used for levee repairs and must be free of debris (vegetation, asphalt etc.). Fill material shall be stockpiled

outside of seasonal wetlands or transitional agricultural lands. No fill shall be placed outside of the existing footprint of the levee system.

- c. Placement of Materials: Materials placed on the levees to be repaired, including all riprap, shall not extend into the slough or Arcata Bay beyond the footprint of the levee as it existed before the repair. The determination of the location of the front of the levee shall be made through a 'string line' method, whereby the portions of the levee that are not in need of repair or restoration on each side of the areas that is in need of repair shall be used to determine the maximum extent of the repair. Revetment material shall not be end-dumped, but placed in an interlocking fashion along the levee face to avoid spreading beyond the former footprint of the levee and to provide a structurally integrated revetment.
- d. Revegetation Of Disturbed Areas: When repair and maintenance activities disturb more than 100 square feet of area within the existing footprint of the levee, the disturbed area shall, immediately upon completion of the repair and maintenance activity, be revegetated with appropriate native plants.
- e. Disposal of Excess Material and Vegetation: All construction debris and cut vegetation shall be removed from the site and disposed of only at an authorized disposal site. Side casting of such material or placement of any such material within Arcata Bay, Mad River Slough, any wetland area including the grazed seasonal wetlands inboard of the levees is prohibited.
- f. Installation of Silt Fences: Silt fences or equivalent devices shall be installed along the perimeter of each repair site prior to the placement of any fill materials to reduce the discharge of fill materials and sediment laden runoff into Arcata Bay, Mad River Slough, or the wetlands on the inboard sides of the damaged levees. The installed silt fences or equivalent devices shall be maintained during project construction and removed upon completion of the project.
- g. Spill Prevention: To prevent and address spills of equipment fuels, lubricants, and similar materials, the repair work shall incorporate the following measures: (a) no equipment fueling shall occur on the site or elsewhere along the levees; (b) all equipment used during construction shall be free of oil and fuel leaks at all times; (c) oil absorbent booms and/or pads shall be on site at all times during project construction and deployed if necessary in the event of a spill; and (d) all spills shall be reported immediately to the appropriate public and emergency services response agencies.

- h. Wet Season Work Prohibited: Repair and maintenance activities authorized by this permit shall only be performed during the dry season (October 15 to April 15).
- i. No Wetland Fill: No permanent or temporary fill of tidal wetlands or of the inboard ditch or any other seasonal wetland is allowed by this permit. Ditch crossings must be accomplished by temporary bridging that must be removed within one week of completion of work on that portion of the levee served by the bridge.
- j. Pre-construction Contractor Training: Prior to the commencement of any repair and maintenance activities authorized by this permit which have not yet been undertaken, the Applicant shall ensure that the Contractor understands and agrees to observe the standards for work outlined in this permit and in the detailed project description included as part of the Applicants submittal and as revised by these conditions.
- k. Monitoring: Repair and maintenance activities shall be monitored on a quarterly basis by a qualified Civil Engineer, or equivalent expert, to ensure that work performed under this permit is consistent with the terms of the permit. The Monitor shall have the authority to stop work and to recommend remediation of ongoing work in order to comply with the terms and conditions of this permit.
- l. Annual Reports: The Applicant shall submit an annual report to the Executive Director on the anniversary date of the approval of this permit beginning in 2006. The report shall describe the repair and maintenance activities completed during the reporting period and identify potential activities for the coming year.
- m. Annual Inspection: The levee system shall be inspected by a qualified Civil Engineer or equivalent, to identify areas where repair and maintenance work will be needed within the coming year. The location and type of work needed shall be described in a written report. The Engineers report shall be submitted to the Reclamation Board of Directors, the district's biologist and to the Executive Director. The report is due on the anniversary date of approval of this permit, beginning in 2006. Based on this report, the biologist shall survey areas where work is planned in the coming year for the presence of Point Reyes Bird's Beak or Humboldt Bay Owl's Clover. If either of these species are found in the area scheduled for disturbance, the plants shall be avoided.

#### **IV. FINDINGS AND DECLARATIONS**

The Commission finds and declares as follows:

##### **A. Project Description.**

The proposed project includes three separate, but related, elements as discussed below. All of the proposed work will be, or has already been, done by Reclamation District No. 768 on the 4.9 miles of earthen levees included within the district boundaries. The District itself was officially formed by resolution of the Humboldt County Board of Supervisors in 1904 and is considered a "Special District" under the definition found in Section 30118 of the Coastal Act. The district is responsible for maintaining the levees and appurtenant development (e.g., culverts, flood gates, levee access etc.) within its boundaries. The levee system exists to protect approximately 1,500 to 1,600 acres of agricultural land, homes, farm buildings, public utilities and roads (See Exhibit A, Location Map).

##### **Project Components**

**Follow-up Permitting for Culvert Replacement Emergency Permit Nos. 1-03-070-G and 1-04-017-G:** The first part of the project is a follow up permit to two Emergency Permits granted by the North Coast District Office in 2003 and 2004 for the replacement of three failing corrugated metal culverts and floodgates located at the west end of the levee system along Humboldt Bay and south of State Highway 255 (see Exhibit No 1). The failed culverts were replaced with the same type and size of culverts and floodgates, with clean armoring rock re-installed around the outboard side of the levee (adjacent to Humboldt Bay), consistent with the conditions placed on the Emergency Permits specifying the type of materials to be used in the repair of this section of the levee.

**Follow-up Permitting for Major Levee Breach Repair Emergency Permit No. 1-04-040-G:** On December 23, 2003, a combination of extraordinarily high tides and 45 mile-per-hour (mph) winds caused a 230-foot-long breach in a portion of the levee located north of Highway 255 (Please see Exhibit A. This breach resulted in the flooding of about an acre and a half of pasture and was temporarily contained by the installation of large "water bag" dikes. Emergency Permit No. 1-04-040-G was subsequently obtained from the North Coast District Office for repair of the breach along the original alignment with an earthen levee and outboard armoring as had existed prior to the incident, as well as the repair of 15 other, smaller eroded areas on the levee fronting Arcata Bay. This Emergency Permit was conditioned to require the use of clean fill for the levee and clean rock (i.e., no debris, no re-bar) for the outboard armoring.

**Ten Year Programmatic Permit for Ongoing Repair and Maintenance Activities:** The final part of the project is a proposal for a ten-year permit to undertake routine repair and maintenance of the levee system. A detailed description of the proposed activities

and method for accomplishing them is attached as Exhibit C. In summary, the Reclamation District maintenance program includes vegetation control (mowing) along the top of the levees to allow access for maintenance equipment, replacement of rip rap that has migrated or is needed to repair erosion, placement of clean fill to repair eroded areas and flood gate and culvert replacement with the same size facilities. All of the work is proposed within the existing footprint of the levee and will not result in any encroachment into Humboldt Bay or on the inboard (reclaimed land) side of the levee into the seasonal wetlands.

**B. Permit Authority, Extraordinary Methods of Repair and Maintenance.**

Coastal Act Section 30610(d) generally exempts from Coastal Act permitting requirements the repair or maintenance of structures that does not result in an addition to, or enlargement or expansion of the structure being repaired or maintained. However, the Commission retains authority to review certain extraordinary methods of repair and maintenance of existing structures that involve a risk of substantial adverse environmental impact as enumerated in Section 13252 of the Commission regulations. Section 30610 of the Coastal Act provides, in relevant part:

*Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas: . . .*

*(d) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter. [Emphasis added]*

Section 13252 of the Commission administrative regulations (14 CCR 13000 *et seq.*) provides, in relevant part:

*(a) For purposes of Public Resources Code section 30610(d), the following extraordinary methods of repair and maintenance shall require a coastal development permit because they involve a risk of substantial adverse environmental impact: . . .*

*(3) 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:*



(A) *The placement or removal, whether temporary or permanent, of rip-rap, rocks, sand or other beach materials or any other forms of solid materials;*

(B) *The presence, whether temporary or permanent, of mechanized equipment or construction materials.*

*All repair and maintenance activities governed by the above provisions shall be subject to the permit regulations promulgated pursuant to the Coastal Act, including but not limited to the regulations governing administrative and emergency permits. The provisions of this section shall not be applicable to methods of repair and maintenance undertaken by the ports listed in Public Resources Code section 30700 unless so provided elsewhere in these regulations. The provisions of this section shall not be applicable to those activities specifically described in the document entitled Repair, Maintenance and Utility Hookups, adopted by the Commission on September 5, 1978 unless a proposed activity will have a risk of substantial adverse impact on public access, environmentally sensitive habitat area, wetlands, or public views to the ocean. ...*

[Emphasis added.]

The proposed project is a repair and maintenance project because it does not involve an addition to or enlargement of the levee. Although certain types of repair projects are exempt from CDP requirements, Section 13252 of the regulations requires a coastal development permit for extraordinary methods of repair and maintenance enumerated in the regulation. The proposed levee repair involves the placement of construction materials and removal and placement of solid materials within 20 feet of coastal waters. The proposed repair project therefore requires a coastal development permit under Sections 13252(a)(1) of the Commission regulations.

In considering a permit application for a repair or maintenance project pursuant to the above-cited authority, the Commission reviews whether the proposed *method* of repair or maintenance is consistent with the Chapter 3 policies of the Coastal Act. The Commission's evaluation of such repair and maintenance projects does not extend to an evaluation of the conformity with the Coastal Act of the underlying existing development.

The repair and maintenance of levees can have adverse impacts on coastal resources, in this case primarily bay waters and the inboard seasonal wetlands, if not properly undertaken with appropriate mitigation. The Applicant proposes to maintain the levees in their existing footprint by repairing eroded areas with clean fill material similar to the existing earthwork, replacing outboard armoring as needed to avoid erosion, replacing failing culverts and floodgates to ensure that they function properly as drainage facilities and to keep access open along the top of the levees so that equipment and supplies can be

brought in as needed. The methods proposed for maintaining the existing system are typical of levee maintenance statewide. The District has included a number of mitigation measures as part of their proposal such as limiting vegetation removal to the minimum necessary to allow access along the top of the levees, various spill prevention measures, designated staging areas and the consistent use of siltation fences in areas under active repair. These measures and others proposed by the District in their application are appropriate, however, additional measures are needed to avoid as necessary, or minimize impacts on water quality, wetlands and Environmentally Sensitive Habitat (ESHA). The conditions required to meet this standard are discussed in the following findings relevant to water quality and ESHA. Finally, the Applicant has requested a ten year permit for the on going maintenance and repair activities outlined in their application and described in Exhibit B. The Commission has, on occasion granted special districts multi-year permits for such activities (i.e. 3-04-72, Moss Landing Harbor District routine pier replacement; and 3-00-034, Santa Cruz Port District, routine maintenance dredging; and 3-02-047, Monterey Harbor, routine operations and maintenance) in order to reduce both Commission and District staff workload associated with processing repetitive, routine coastal permits. However, given the fact that circumstances can change over time and techniques for addressing maintenance needs can also evolve, the Commission chooses to grant an initial five year period of development authorization with a one-time ability to extend the period of development authorization for another five years for a maximum total of 10 years of development authorization if there are no changed circumstances that require review. This permit is conditioned accordingly. Therefore, as conditioned in these Findings, the Commission finds that the proposed project is consistent with PRC Section 30236.

**C. Public Access.**

This project is located between the first public road and the sea (Please see Exhibit A, Location Map). Section 30604 (c) of the Coastal Act requires that every Coastal Development Permit issued for development between the first public road and the sea "*shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).*"

**Coastal Act Policies**

Section 30210 of the Coastal Act states:

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

Section 30211 of the Coastal Act states:

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

Section 30212 of the Coastal Act states:

*(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated access way shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the access way.*

*(b) For purposes of this section, "new development" does not include:*

*(1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.*

*(2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.*

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

*(4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not seaward of the location of the former structure.*

*(5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach.*

*As used in this subdivision, "bulk" means total interior cubic volume as measured from the exterior surface of the structure.*

*(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution. [Emphasis added.]*

The access policies cited above are those relevant to this project and direct the Commission to generally require maximum public access in new development unless the access would be inconsistent with public safety, resource protection, private property rights, or military security needs (§§30210 and 30212) or would be otherwise exempt from providing access by statute (§30212(b)(5)). Coastal Act Section 30211 requires that new development shall not interfere with existing public access that has been acquired either by use or through legislative authorization.

#### Analysis

As stated above, the proposed project is for the ongoing repair and maintenance of a pre Coastal Act levee system. Ordinarily, routine repair and maintenance is an exempt activity under Coastal Act Section 30610(d) and thus no coastal development permit would be required. Certain repair and maintenance activities are, however, excepted from this general exemption by regulation, as authorized by Section 30610(d), because they may "*involve the risk of substantial adverse environmental impact*". The Commission's regulations identify repair and maintenance activities performed near the shoreline, as proposed by this application, must obtain coastal development permits and are not exempt under Section 30610 (d) (California Code of Regulations, Title 14, Section 13252 (a) (3)). However, because repair and maintenance is not considered new development for purposes of Section 30212, Coastal Act Section 30212(b)(5) excludes these repair and maintenance activities from Coastal Act access requirements unless the Commission "*determines that the activity will have an adverse impact on lateral beach access.*"

The proposed repair and maintenance activities will have no impact on lateral beach access because the proposed work will be accomplished within the existing footprint of the levees, staging areas are located outside of any access or access points and because there is no beach adjacent to the levees. The project is, therefore consistent with the requirements of Sections 30210 and 30212.

Coastal Act Section 30211 also requires new development to not interfere with existing access. While exempt from this policy as discussed above, the Commission notes that the levee system has not been used by the public to gain access to the shores of Humboldt Bay and Mad River Slough during its long existence except by permission of the owners.

In conclusion, the proposed project is not considered new development for the purposes of application of the Public Access Policies of the Coastal Act because it is a repair and maintenance activity that will not adversely affect lateral beach access and is therefore consistent with the policy direction found in Section 30212.

**D. Water Quality.**

The proposed repair and maintenance work will take place on levees located immediately adjacent to Humboldt Bay on the outboard side and seasonal wetlands on the inboard side, thus there is a potential for adverse impacts to water quality of the bay waters and the waters that feed the seasonal wetlands.

Coastal Act Policy

Section 30231 of the Coastal Act states:

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

Coastal Act Section 30233 states:

*(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 subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and 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.*
- (b) *Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.*
- (c) *In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.*

*For the purposes of this section, 'commercial fishing facilities in Bodega Bay' means that not less than 80 percent of all boating facilities proposed to be developed or improved, where such improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.*

*(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.*

These policies require the protection of coastal waters to ensure biological productivity, protect public health and water quality. New development must not adversely affect these values and should help to restore them when possible.

#### Analysis

Implementation of the proposed repair and maintenance program will result in the transportation and placement of fill and armoring materials to the sites to be maintained, the removal and replacement of culverts and flood gates, the use of staging areas for stockpiling of materials to be used for the project and other material to be disposed of (old culverts, excess fill etc.) and the removal of vegetation by mechanical mowing equipment. Unless appropriate protocols are followed, all of these activities could result in fuel or oil spills, improper storage of materials in or adjacent to sensitive areas, increased turbidity that would have adverse impacts on water quality. The repair and maintenance program proposed by the District includes a number of protocols to protect water quality including the use of geo-textile fabric between fill and armoring to reduce migration of fill into bay waters, the consistent use of siltation fences at work sites to reduce discharges, proper disposal of abandoned or excess materials and vegetation to appropriate off site disposal facilities, a prohibition on the storage of any excess materials within any wetland including the transitional agricultural lands, spill prevention measures and the location of a staging area outside any sensitive lands (see Exhibits C, Project Description).

In general, the protocols proposed by the District are appropriate to protect water quality although they lack adequate specificity in some instances, a lack that is remedied by

conditions attached to these Findings. The District's proposal also includes one measure that does not meet current standards however, and that is the provision for the temporary filling of the inboard ditch to provide levee top access for equipment (Ditch Crossings, page 2, Project Description, Exhibit B). The inboard ditch, has over the years, taken on the characteristics of a wetland (hydric soils, wetland vegetation, etc). The introduction of the temporary fill and culverts will have an adverse impact on the portion of the wetland covered by the material and also on the water quality of the unfilled portions nearby due to increased turbidity caused by fill placement. The use of a temporary bridge to gain access is feasible and would avoid the need to place fill in the wetland.

The proposed protocols are also incomplete in other areas. For example, the proposed protocols do not limit repair and maintenance activities to dry periods. Work performed during rainy periods is much more likely to result in the discharge of inappropriate material into the adjacent waters because the fill will be saturated. The proposed protocols also lack specificity regarding the type of fill material and armoring that can be used. The normal run off from the use of contaminated materials would have an adverse impact on water quality. Finally, the protocols do not provide for monitoring, or pre-construction training for the contractor to ensure the proper protocols are understood and carried out.

As conditioned to add specificity to proposed protocols, bridge rather than fill the ditch, limit work to dry times, identify appropriate fill and armoring materials, monitor the work and train the contractor, this project is consistent with the direction of Policy 30231 and 30233 to protect water quality.

#### **E. Marine Resources.**

The outboard side of the levee system is, in most places adjacent to Humboldt Bay and the proposed repair and maintenance program has the potential to adversely affect marine resources. The following section of the Coastal Act requires that new development maintain, enhance and where feasible restore damaged marine resources.

#### Coastal Act Policy

Section 30230 of the Coastal Act states:

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



Analysis

The waters of Humboldt Bay provide habitat for a number of marine species. The Biological Report prepared by Mad River Biologists on August 14, 2003 discusses the habitat value of the bay and bay muds near the project site and reports that Humboldt Bay in the vicinity of the project is home to one endangered species, the Tidewater Goby and two plant species of concern, Point Reyes Birds Beak and Humboldt Bay Owls Clover. (see Exhibit D, Habitat Assessment for Humboldt County Reclamation District 768, Culvert and Flood Gate Replacement Project.). The report states that the Tidewater Goby is sensitive to turbidity in the water and therefore recommends that siltation fences be used when working on the outboard side of the levee in order to avoid the discharge of sediments into the bay waters. As conditioned to train contractors prior to work and to require the use of siltation fences, the impact on the Tidewater Goby from the proposed repair and maintenance activities will be insignificant. The habitat assessment also identified rare salt marsh plants growing in the vicinity of the project but did not survey all of the outboard side of the levee to determine the location, if any, of these plants on the Districts levees. The report does state that "no habitat likely to support either the Point Reyes Birds Beak or the Humboldt Bay Owl's Clover exists on the site." In order to assure protection of these resources, Special Condition No. 2m requires an annual survey of sites chosen for repair and maintenance activities prior to the commencement of that year's work to determine if either of the rare plants exist within the work areas. If such rare plants are found, significant disruption of the plants must be avoided. As conditioned, the project can be found consistent with the Coastal Act Policy 30230.

**F. Environmentally Sensitive Habitat.**

Because the Tidewater Goby and the Point Reyes Bird Beak and Humboldt Bay Owl's Clover are rare, their habitat meets the definition of Environmentally Sensitive Habitat (ESHA) found in the Coastal Act (PRC Section 30107.5) and thus development adjacent to these habitats must also comply with Section 30240 (b) of the Coastal Act.

Coastal Act Policy

Section 30240 of the Coastal Act states:

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

*(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and*

*shall be compatible with the continuance of those habitat and recreation areas.*

### Analysis

For the reasons discussed in the previous Findings on Marine Resources and Water Quality, as conditioned, the proposed project will not significantly degrade the adjacent Tidewater Goby, Point Reyes's Birds Beak or Humboldt Bay Owl's Clover habitat and is compatible with the continuance of the habitat as required by PRC Section 30240 (b).

### **G. California Environmental Quality Act (CEQA).**

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. This staff report has discussed the relevant coastal resource issues with the proposal, and has recommended appropriate mitigations to address adverse impacts to said resources. Accordingly, the project is being approved subject to conditions which implement the mitigating actions required of the Applicant by the Commission (see Section III, "Special Conditions").

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to achieve consistency between the proposed project and the requirements of the applicable policies of the Coastal Act. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. Mitigation measures that will minimize or avoid all significant adverse environmental impact have been required.

As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, 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 and to conform to CEQA. As such, the Commission finds that only as modified and conditioned by this permit will the proposed project not have any significant adverse effects on the environment within the meaning of CEQA.

V. **EXHIBITS**

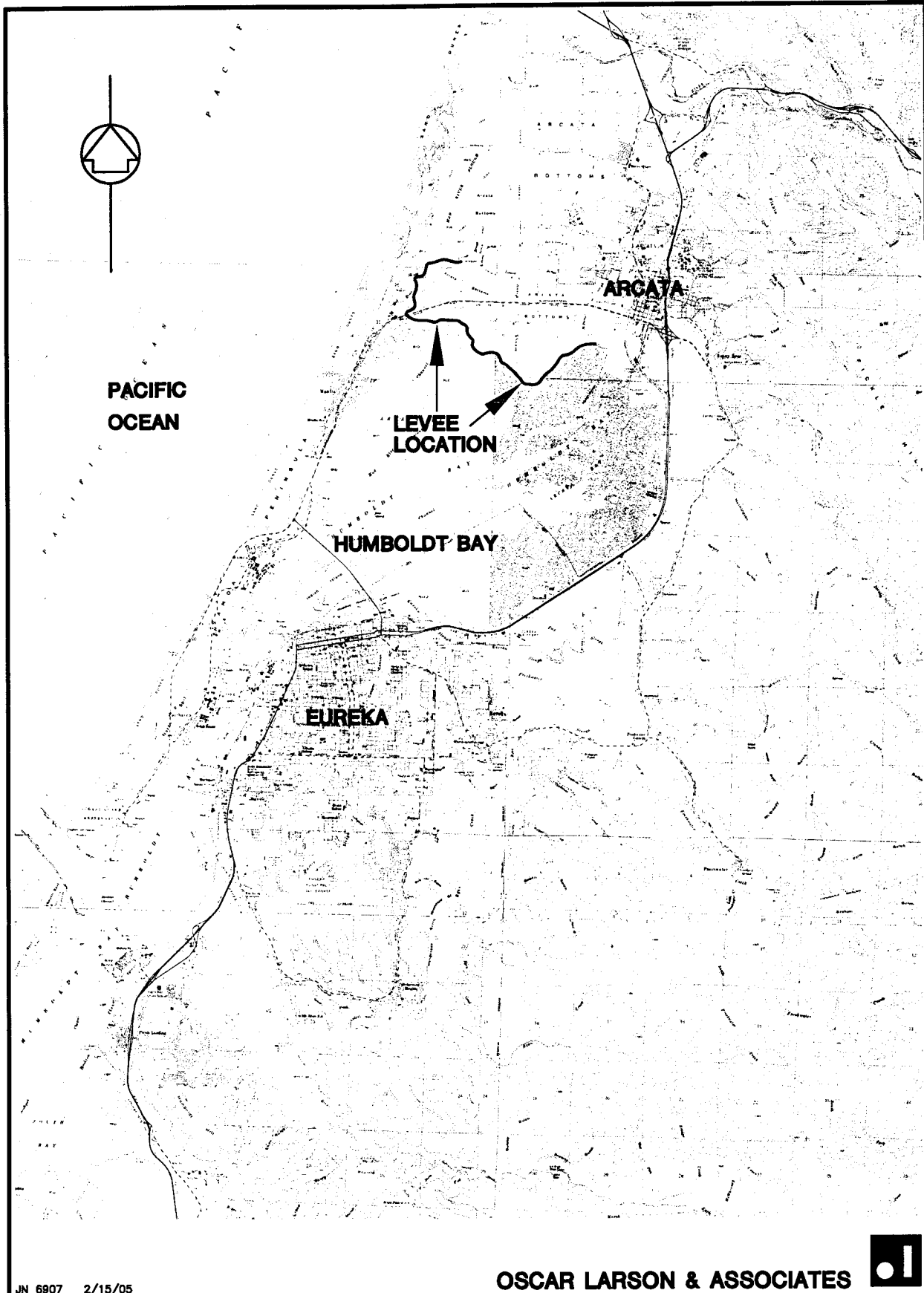
- A. Location Map
- B. Emergency Permits
- C. Project Description
- D. Habitat Report

ATTACHMENT

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 or interpretation of any condition will be resolved by the Executive Director of the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

**LOCATION MAP  
RECLAMATION DISTRICT 768**

SCALE: 1" = 10,000' ±

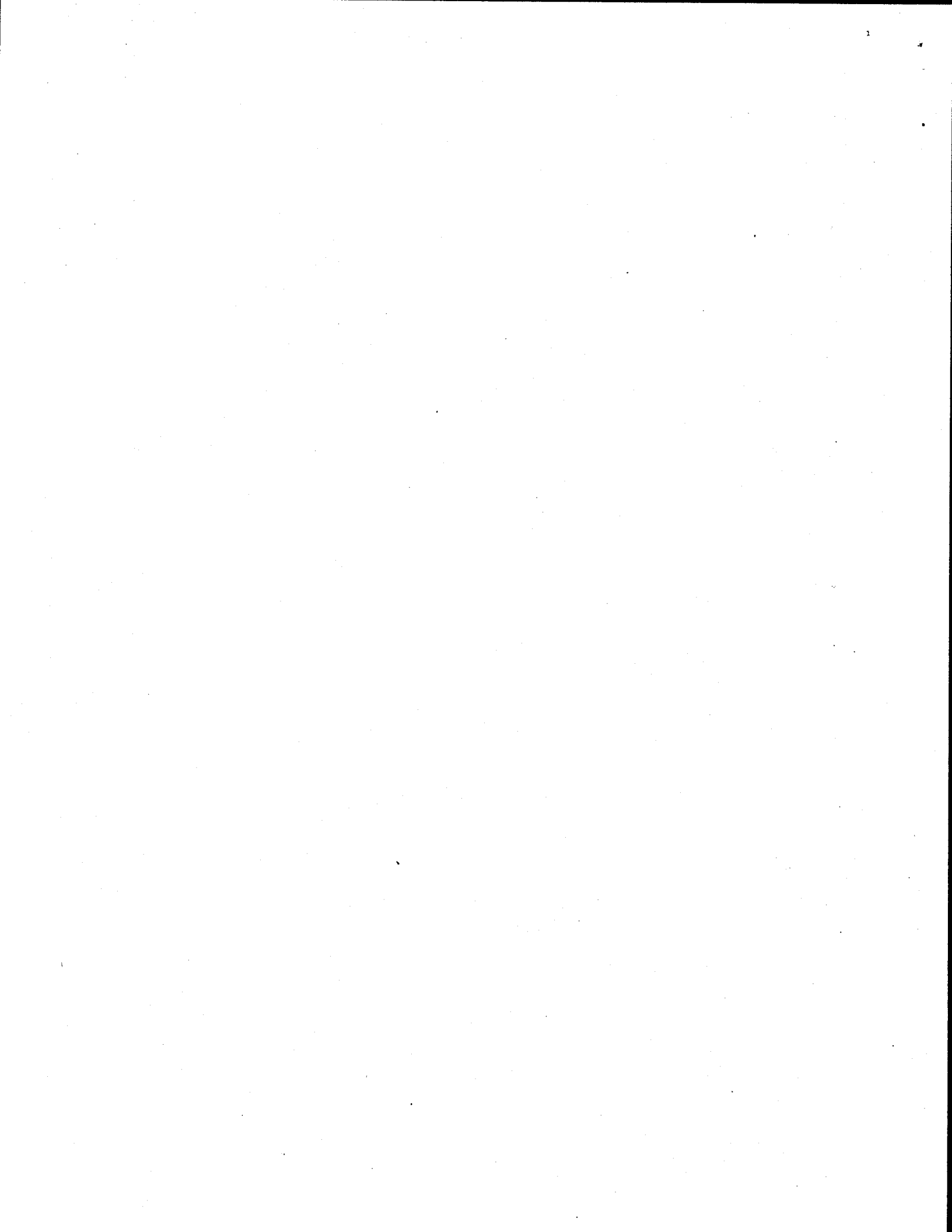


JN 6907 2/15/05  
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OSCAR LARSON & ASSOCIATES



**EXHIBIT A, 1-03-004  
LOCATION MAP**



**CALIFORNIA COASTAL COMMISSION**

NORTH COAST DISTRICT OFFICE  
710 E STREET, SUITE 200  
EUREKA, CA 95501  
[www.coastal.ca.gov](http://www.coastal.ca.gov)

(707) 445-7833

**EMERGENCY PERMIT**

Lois Wallace, Director  
Reclamation District 768  
4150 Old Samoa Road  
Arcata, CA 95521

Date: September 24, 2004  
Emergency Permit No.: 1-04-060-G

**LOCATION OF EMERGENCY WORK:****Site 1**

Along the levee that separates the east side of Mad River Slough from the Arcata Bottoms, approximately one-half mile north of Samoa Boulevard, west of Arcata, Humboldt County (APN(s) 506-171-01).

**Site 2**

East of the mouth of Mad River Slough, near the west end of the 4.9-mile levee that separates the Arcata Bottoms from Arcata Bay.

**Site 3**

At 15 discrete locations along an approximately 0.8-mile portion of the 4.9-mile levee that separates the Arcata Bottoms from Arcata Bay, extending southwesterly along the levee from a point approximately 0.2 miles west of the tide gates at the mouth of Janes Creek/McDaniel Slough.

**WORK PROPOSED:****Site 1**

Repair a breach in the levee by (1) placing approximately 3,700 cubic yards of mud excavated from the inboard side of the levee within the approximately 250-foot-long portion of the levee that has breached, (2) placing approximately 130 cubic yards of riprap along the slough side of the tubes, and (3) covering the top of the riprap with topsoil and revegetating the areas covered with top soil.

**Site 2**

Replace in-kind an approximately 50-foot long culvert that is leaking within the levee structure with a new culvert of the same diameter by (1) excavating the earthen levee in the culvert location, (2) temporarily stockpiling the levee material on top of adjacent portions of the levee, (3) replacing the culvert, and (4) replacing the earthen levee and revetment materials protecting the levee in the culvert location.

**Site 3**

Repair eroded portions of the existing earthen levee by (1) placing dry earthen fill material (a total of approximately 168 cubic yards for all 15 repair locations) as needed to restore the former footprint and slope of the levee at each of the 15 repair locations as they existed prior to erosion, (2) placing geofabric or similar erosion control material between the sections of earthen levee repaired on the bay side of the levee and any proposed revetment materials, and (3) placing revetment materials over the erosion control material placed along the sections of the earthen levee repaired on the bay side of the levee.

**EXHIBIT B, 1-03-004  
EMERGENCY PERMITS**

**Emergency Permit No. 1-04-060-G**

**Date: 9/24/2004**

**Page 2 of 4**

This letter constitutes approval of the emergency work your or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an unexpected occurrences in the form of (1) the failure of a previous emergency repair of the levee breach that involved the placement of an "aqua dam" (2) the leaking within the levee structure of the area around the existing culvert near the west end of the levee that separates the Arcata Bottoms from Arcata Bay, and (3) the erosion of a section of levee separating the Arcata Bottoms from Arcata Bay west of the mouth of Janes Creek/McDaniel Slough are all flooding, or threatening to flood, surrounding agricultural lands. Therefore, the situation requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director of the Coastal Commission hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit;
- (b) Public comment on the proposed emergency action has been reviewed if time allows;
- (c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

Sincerely,

PETER M. DOUGLAS  
Executive Director

By: ROBERT MERRILL  
District Manager

2 of 8



CONDITIONS OF APPROVAL:

1. The enclosed Emergency Permit Acceptance form must be signed by the PROPERTY OWNER and returned to our office within 15 days.
2. Only that work specifically described in this permit and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.
3. The work authorized by this permit must be completed within 60 days.
4. The permittee shall obtain a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 180 days of the date of this permit, unless this requirement is waived in writing by the Executive Director.
5. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.
6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies (i.e. Humboldt County, Humboldt Bay Harbor District, Dept. of Fish & Game, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, State Lands Commission).
7. To protect eelgrass growing in the Mad River Slough near the levee at Site 1, and minimize the placement of fill in coastal waters, at all repair sites, the materials placed on the levees to be repaired, including all riprap, shall not extend into the slough or Arcata Bay beyond the footprint of the levee as it existed before the damage occurred. The determination of the location of the front of the levee shall be made through a 'string line' method, whereby the portions of the levee that are not in need of repair or restoration on each side of the areas that is in need of repair shall be used to determine the maximum extent of the repair. Revetment material shall not be end-dumped, but placed in an interlocking fashion along the levee face to avoid spreading beyond the former footprint of the levee and to provide a structurally integrated revetment.
8. All new revetment material to be used shall consist of either clean quarry rock or concrete rubble materials that are free of asphalt and waste materials. The revetment materials shall not be greater than three feet in any one direction or smaller than one cubic foot in size. All exposed reinforcement bar shall be removed prior to installation of any concrete rubble riprap.
9. No invasive exotic plant species shall be used in revegetating the areas covered with topsoil.
10. All construction debris and cut vegetation shall be removed from the site and disposed of only at an authorized disposal site. Side casting of such material or placement of any such material within Arcata Bay, Mad River Slough, any wetland area including the grazed seasonal wetlands inboard of the levees is prohibited.
11. Silt fences or equivalent devices shall be installed along the perimeter of each repair site prior to the placement of any fill materials to reduce the discharge of fill materials and sediment laden runoff into Arcata Bay, Mad River Slough, or the wetlands on the inboard sides of the damaged levees. The installed silt fences or equivalent devices shall be maintained during project construction and removed upon completion of the project.
12. To prevent and address spills of equipment fuels, lubricants, and similar materials, the repair work shall incorporate the following measures: (a) no equipment fueling shall occur on the site or elsewhere along the levees; (b) all equipment used during construction shall be free of oil and fuel leaks at all times; (c) oil absorbent booms and/or pads shall be on site at all times during project construction and deployed if necessary in the event of a spill; and (d) all spills shall be reported immediately to the appropriate public and emergency services response agencies.

13. Only dry earthen fill materials may be placed at Site 3 to restore the former footprint and slope of the levee at each of the 15 repair locations as they existed prior to erosion. No use of dredged mud is authorized for these repairs.
14. No stockpiling of materials shall occur in wetland areas, including the grazed seasonal wetlands on the agricultural lands adjoining the levees to be repaired.
15. The new culvert to be installed at Site 2 shall be of the same diameter as the culvert that will be replaced.

As noted in Condition #4, the emergency work carried out under this permit is considered to be TEMPORARY work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal Permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate and easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from storm waves.

If you have any questions about the provisions of this emergency permit, please call the Commission's North Coast District Office at the address and telephone number listed on the first page.

cc: Kirk Girard, Planning Director, Humboldt County  
Oscar Larson & Associates, Attn: Martin McClelland  
U. S. Army Corps of Engineers, Attn: David Ammerman  
Department of Fish & Game, Attn: Karen Kovacs  
David Hull, Humboldt Bay Harbor, Recreation and Conservation District

Enclosure: Acceptance Form

4 of 8

## EMERGENCY PERMIT

707) 445-7833

Lois Wallace, Director  
Reclamation District 768  
4150 Old Samoa Road  
Arcata, CA 95521

Date: March 10, 2004  
Emergency Permit No.: 1-04-017-G

### LOCATION OF EMERGENCY WORK:

Two separate locations along the 4.9-mile levee that separates the Arcata Bottoms from Arcata Bay south of Samoa Boulevard, west of Arcata, Humboldt County (APN(s) 505-051-10, 506-011-07)

### WORK PROPOSED:

The work proposed involves the replacement in-kind of a 36-inch diameter 50-foot-long crushed culvert with a new 36-inch culvert and the replacement of a tide gate which has recently fallen off of a separate culvert, both of which extend through the 4.9-mile levee that separates the Arcata Bottoms from Arcata Bay. The culvert to be replaced is located near the west end of the levee near Mad River Slough. The culvert replacement work will involve excavation of the earthen levee and the temporary stockpiling of material on the top of the levee, replacement of the culvert, and replacement of earthen levee and revetment materials protecting the levee in the culvert location. The culvert to be fitted with a new tide gate is located in the Names Creek/McDaniel Slough area.

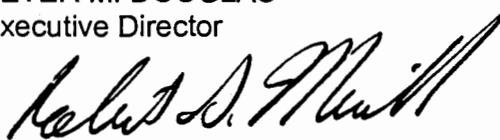
This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of salt water intrusion through the damaged culverts is contaminating an existing well, converting a recently enhanced fresh water wetland area at the Department of Fish & Game Mad River Slough Wildlife Area and other grazed seasonal freshwater wetlands to a brackish condition, and damaging productive agricultural lands. Therefore, the situation requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director of the Coastal Commission hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit;
- (b) Public comment on the proposed emergency action has been reviewed if time allows;
- (c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

Sincerely,

PETER M. DOUGLAS  
Executive Director



By: ROBERT MERRILL  
District Manager

5 of 8

CONDITIONS OF APPROVAL:

1. The enclosed Emergency Permit Acceptance form must be signed by the PROPERTY OWNER and returned to our office within 15 days.
2. Only that work specifically described in this permit and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.
3. The work authorized by this permit must be completed within 60 days.
4. The permittee shall obtain a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 180 days of the date of this permit, unless this requirement is waived in writing by the Executive Director.
5. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.
6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies (i.e. Humboldt County, Dept. of Fish & Game, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, State Lands Commission).
7. Earthen materials from the excavation not re-usable as structural fill may be spread on the top of the levee in the vicinity of the culvert replacement. All other construction debris shall be removed from the site and disposed of at an authorized disposal site.
8. Materials for the revetment repair shall match materials in place at the site to the extent that the rock revetment material to be used in the repair areas currently armored with broken concrete blocks and angular quarry rock shall consist of angular rock, and the rock material to be used in repair areas currently armored with rounded boulder materials shall consist of rounded quarry rock. Revetment material shall not be end-dumped, but placed in such a manner so as to interlock with the residual revetment materials still in place along the dike face to provide a structurally integrated revetment.
9. All protruding metal reinforcement bar, flanges, and other exposed metal within existing revetment materials to remain in the repair areas shall be torch-cut off flush with the concrete block in which they are encased or attached. Any other easily extricable debris materials (e.g., tires, wiring conduit, etc.) within the project area shall be removed prior to placement of the repair riprap.

As noted in Condition #4, the emergency work carried out under this permit is considered to be TEMPORARY work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal Permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate and easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from storm waves.

If you have any questions about the provisions of this emergency permit, please call the Commission's North Coast District Office at the address and telephone number listed on the first page.

cc: Local Planning Department  
Oscar Larson & Associates, Attn: Martin McClelland

Enclosure: Acceptance Form

6 of 8

EX. B.

## CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE

110 E STREET, SUITE 200

EUREKA, CA 95501

www.coastal.ca.gov

707) 445-7833

**EMERGENCY PERMIT**

Lois Wallace, Director  
 Reclamation District 768  
 4150 Old Samoa Road  
 Arcata, CA 95521

Date: December 19, 2003  
 Emergency Permit No.: 1-03-070-G

**LOCATION OF EMERGENCY WORK:**

Two separate locations along the 4.9-mile levee that separates the Arcata Bottoms from Arcata Bay south of Samoa Boulevard, west of Arcata, Humboldt County (APN(s) 505-051-10, 506-011-07)

**WORK PROPOSED:**

The work proposed involves the replacement in-kind of a 36-inch diameter 50-foot-long crushed culvert with a new 36-inch culvert and the replacement of a tide gate which has recently fallen off of a separate culvert, both of which extend through the 4.9-mile levee that separates the Arcata Bottoms from Arcata Bay. The culvert to be replaced is located near the west end of the levee near Mad River Slough. The culvert replacement work will involve excavation of the earthen levee and the temporary stockpiling of material on the top of the levee, replacement of the culvert, and replacement of earthen levee and revetment materials protecting the levee in the culvert location. The culvert to be fitted with a new tide gate is located in the Names Creek/McDaniel Slough area.

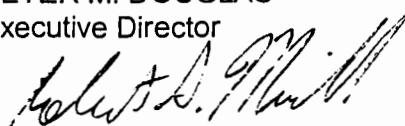
This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of salt water intrusion through the damaged culverts is contaminating an existing well, converting a recently enhanced fresh water wetland area at the Department of Fish & Game Mad River Slough Wildlife Area and other grazed seasonal freshwater wetlands to a brackish condition, and damaging productive agricultural lands. Therefore, the situation requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director of the Coastal Commission hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit;
- (b) Public comment on the proposed emergency action has been reviewed if time allows;
- (c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

Sincerely,

PETER M. DOUGLAS  
 Executive Director



By: ROBERT MERRILL  
 District Manager

7 of 8

EX. B

CONDITIONS OF APPROVAL:

1. The enclosed Emergency Permit Acceptance form must be signed by the PROPERTY OWNER and returned to our office within 15 days.
2. Only that work specifically described in this permit and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.
3. The work authorized by this permit must be completed within 60 days.
4. The permittee shall obtain a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 180 days of the date of this permit, unless this requirement is waived in writing by the Executive Director.
5. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.
6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies (i.e. Humboldt County, Dept. of Fish & Game, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, State Lands Commission).
7. Earthen materials from the excavation not re-usable as structural fill may be spread on the top of the levee in the vicinity of the culvert replacement. All other construction debris shall be removed from the site and disposed of at an authorized disposal site.
8. Materials for the revetment repair shall match materials in place at the site to the extent that the rock revetment material to be used in the repair areas currently armored with broken concrete blocks and angular quarry rock shall consist of angular rock, and the rock material to be used in repair areas currently armored with rounded boulder materials shall consist of rounded quarry rock. Revetment material shall not be end-dumped, but placed in such a manner so as to interlock with the residual revetment materials still in place along the dike face to provide a structurally integrated revetment.
9. All protruding metal reinforcement bar, flanges, and other exposed metal within existing revetment materials to remain in the repair areas shall be torch-cut off flush with the concrete block in which they are encased or attached. Any other easily extricable debris materials (e.g., tires, wiring conduit, etc.) within the project area shall be removed prior to placement of the repair riprap.

As noted in Condition #4, the emergency work carried out under this permit is considered to be TEMPORARY work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal Permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate and easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from storm waves.

If you have any questions about the provisions of this emergency permit, please call the Commission's North Coast District Office at the address and telephone number listed on the first page.

cc: Local Planning Department  
Oscar Larson & Associates, Attn: Martin McClelland

Enclosure: Acceptance Form

8 of 8

EX. B

## Reclamation District 768 Routine Maintenance, Repair and Restoration Program

The levee system has numerous locations where repairs or restoration are needed to maintain the integrity of the facility. Attached is a project map upon which the locations of the more serious locations of concern are located. For each location a rough calculation of the volume of materials has been developed. The materials have been separated between structural fill and riprap. The program is to be conducted over the next five years and depends to a high degree on the availability of funds to perform the activities. The primary source of financing is the annual assessment of the District members.

### **Facility Description**

Routine maintenance and Restoration Activities include the repair or restoration of any part of the facilities. The facilities include the access roads to and along the top of the levee, the levee (see typical cross section), the culverts and tide gates (see cross sections and plan views), the inland side ditch along the base of the levee, internal access roads and the slough remnants located inland of the levee.

### **Culverts**

Replacement of any culvert shall be through the use of a culvert of the same size, location and flow line elevation as the culvert being replaced. Any change in the size, location or elevation shall first require a modification of this permit/s as applicable through each agency.

### **Levee Restoration**

No expansion in the Bay or inland side of the levee is allowed beyond the previously existing line of the front of the levee. The determination of the location of the front of the levee shall be made through a 'string line' method. The portion of the levee that is not in need of repair or restoration on each side of the area that is in need of repair shall be used to determine the maximum bay ward extent of the repair. In addition, the footprint of the levee shall not be larger than the typical width shown in the typical cross section.

### **Levee Repair Methods**

All repair or restoration activities of the levee shall include the placement of geofabric or similar erosion control material between the structural fill of the levee and the placement of riprap.

All repair activities that include the removal or placement of levee materials (whether for structural purposes or protection (riprap)), shall incorporate silt fences or equivalent devices to reduce the discharge of materials into the Bay. The device/s shall be of sufficient strength to contain the materials that are being removed or replaced. The devices shall be removed from the repair location following their use.

Tracked or wheeled vehicles may be used. Hand tools and equipment may be used.

Reclamation District 768  
Routine Maintenance, Repair and Restoration

August 20, 2003

**EXHIBIT C , 1-03-004  
DETAILED WORK DESCRIPTION  
BY APPLICANT**



## **Removal of other materials from the Bay**

Any historically placed, abandoned or sloughed materials that are within twenty feet of the toe of the slope of the levee shall be removed in the least environmentally damaging, most feasible and practicable manner.

## **Vegetation Maintenance**

Vegetation along the top of the levee and within three feet vertically (from the levee top) along the sides may be routinely cut with the vegetation left in place. If, owing to the amount and type of the vegetation it needs to be removed from the facility it may be transported off of the levee to an appropriately permitted transfer or disposal facility (including recycling facilities if available.). No side casting of vegetative materials is authorized below the three-foot elevation level.

## **Ditch Crossings**

Temporary ditch crossings are authorized as needed for the repair or restoration program. The typical section of the crossing is found attached. The crossing may only be placed in a location where there is an access road adjoining the area in which the crossing is to be placed. The crossing is to be removed within thirty days of completion of the restoration activities for which the crossing was constructed. Materials used in the crossing shall be placed on top of the levee (without side-casting) or removed to an authorized location.

## **Tide Gate Repairs**

Tide gate repairs or replacement occur when the hinge of the gate or the connection with the culvert becomes corroded or otherwise stuck in one position, falls off or does not otherwise function properly (leaks or allows salt water intrusion). The repair of the tide gate typically involves activities in place. Sometimes its removal from the end of the culvert is needed. In this case, the gate is removed for repair to the top of the levee or to a machine shop where the repairs are made. The gate is then re-installed on the end of the culvert.

## **Discharge prohibitions and Controls**

Any excess materials resulting from the restoration activities shall not be placed within any wetland area including the transitional agricultural lands. Facilities such as culverts and tide gates that are no longer serviceable and are being replaced shall be removed to an appropriately permitted transfer or disposal facility. Temporary placement of materials is allowed within the agricultural lands providing the area is not larger than 10,000 square feet (.23 acre), the materials are to be removed if not used within two years of its placement, and the area is vegetated with agricultural grasses.

Dredge spoils removed from the ditch system may be placed within fifty feet and along the inland side of the ditch or used along the levee for repair or restoration purposes. The materials may be stockpiled for future use in the levee repair or restoration program. If

Reclamation District 768  
Routine Maintenance, Repair and Restoration

August 20, 2003

2 of 12

2

EX.C



not used within two years of its placement, the materials are to be removed from the site to a permitted location outside of the District, Coastal Commission or Army Corps jurisdictional area. It may also be placed along the top of the levee.

### **Spill Prevention**

Spill prevention provisions shall be made conditions applicable to all contractors and District personnel, owners or operators. Generally, no on site refueling is allowed. The equipment shall be removed from the facility and refueled. Routine maintenance of equipment is required and no equipment that visually displays signs of leaking of fuels, lubricants or similar materials shall be allowed. The equipment shall be repaired in place with spill prevention measures employed or the equipment removed from the site immediately.

### **Dust Control**

Dust control measures shall be incorporated in contract documents when the materials that are being used are subject to fugitive dust creation. The watering of the work area or similar control/abatement techniques may be used. The amount of the water used shall not be of such volume as to cause runoff from the top of the levee or outside the boundary of the staging area.

### **Staging Areas and Access**

The facilities are accessed from the west at the intersection of the levee and State Route 255 on the east side of Mad River Slough Bridge. A staging area is available in this location. The east end of the facilities is accessed through the use of the public roads located within the Arcata Marsh and Wildlife Sanctuary with an entry road to the levee located therein. Other access is available along private roads that are located to the north of the levee on the private and public properties that are primarily used for agricultural purposes and public lands management and recreation purposes.

### **Term of the Permit**

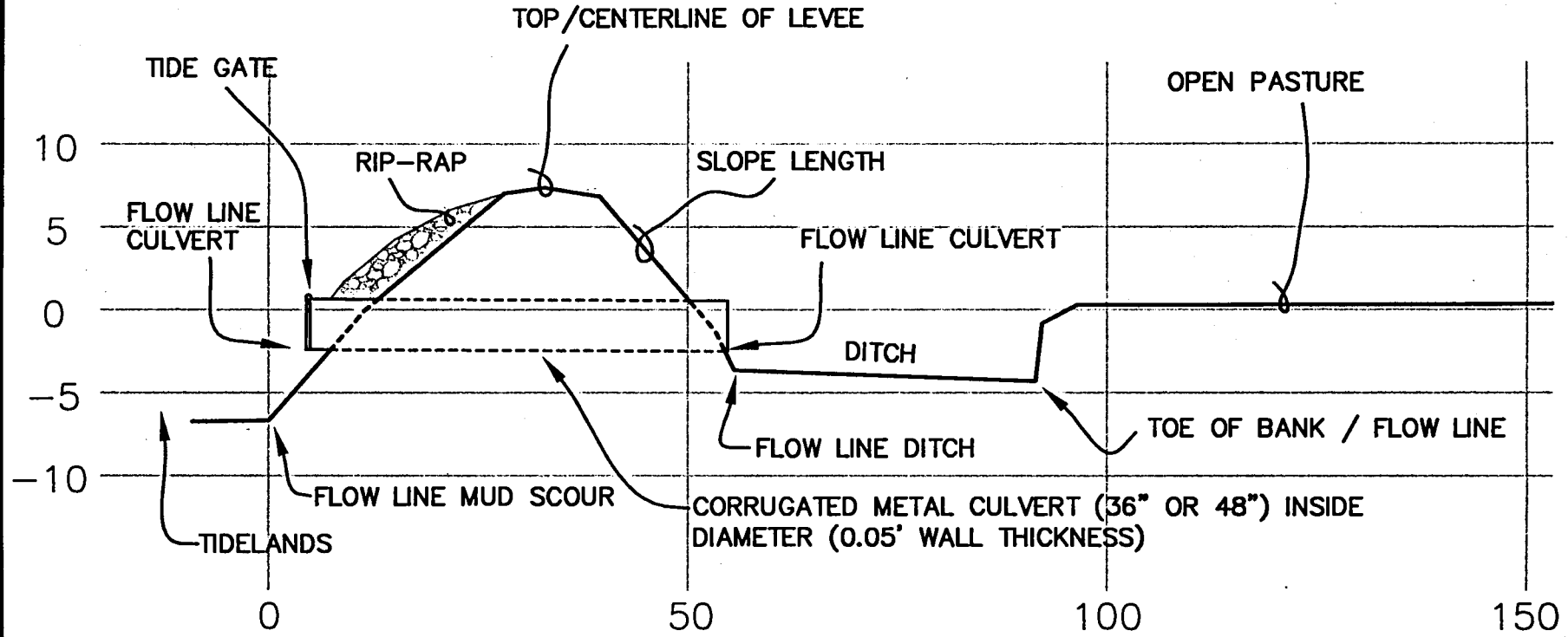
In addition to the repair or replacement of the failed culverts and tide gates, the District is requesting a ten (10) year authorization for the routine maintenance, repair and restoration of the facilities. The authorization will extend annually.

If any additional biological resource is listed by a State or Federal Trustee Agency, or any significant physical change occurs, then, within ninety (90) days of the effective date of the listing or significant change, the District shall cause the review of the effects of the routine maintenance and related activities upon the newly listed biological resource or the results of the change. A report shall be provided to the responsible trustee or regulatory agency.

5 of 12

### TYPICAL HUMBOLDT LEVEE CROSS-SECTION AT CULVERT

(LOOKING NORTHWEST)  
HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 10'



NOTE:  
SCALE IS TYPICAL, ACTUAL MAY VARY

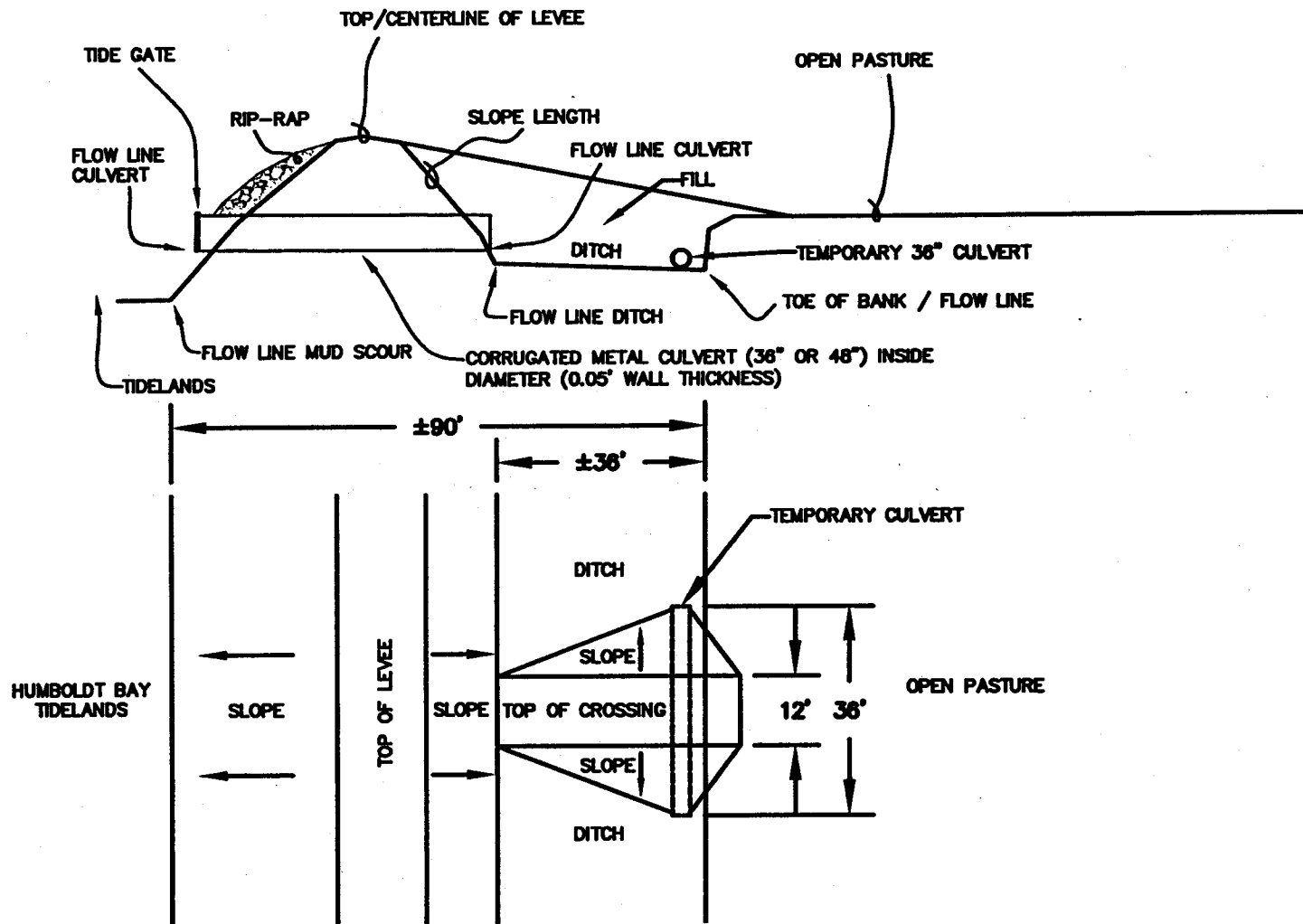
RECLAMATION DISTRICT 768 - TYPICAL CROSS-SECTION

OSCAR LARSON & ASSOCIATES



EX. C

RECLAMATION DISTRICT 768  
 TEMPORARY DITCH CROSSING  
 TYPICAL CROSS SECTIONS



RECLAMATION DISTRICT 768 - TYPICAL TEMPORARY DITCH

6 of 12

EX. C



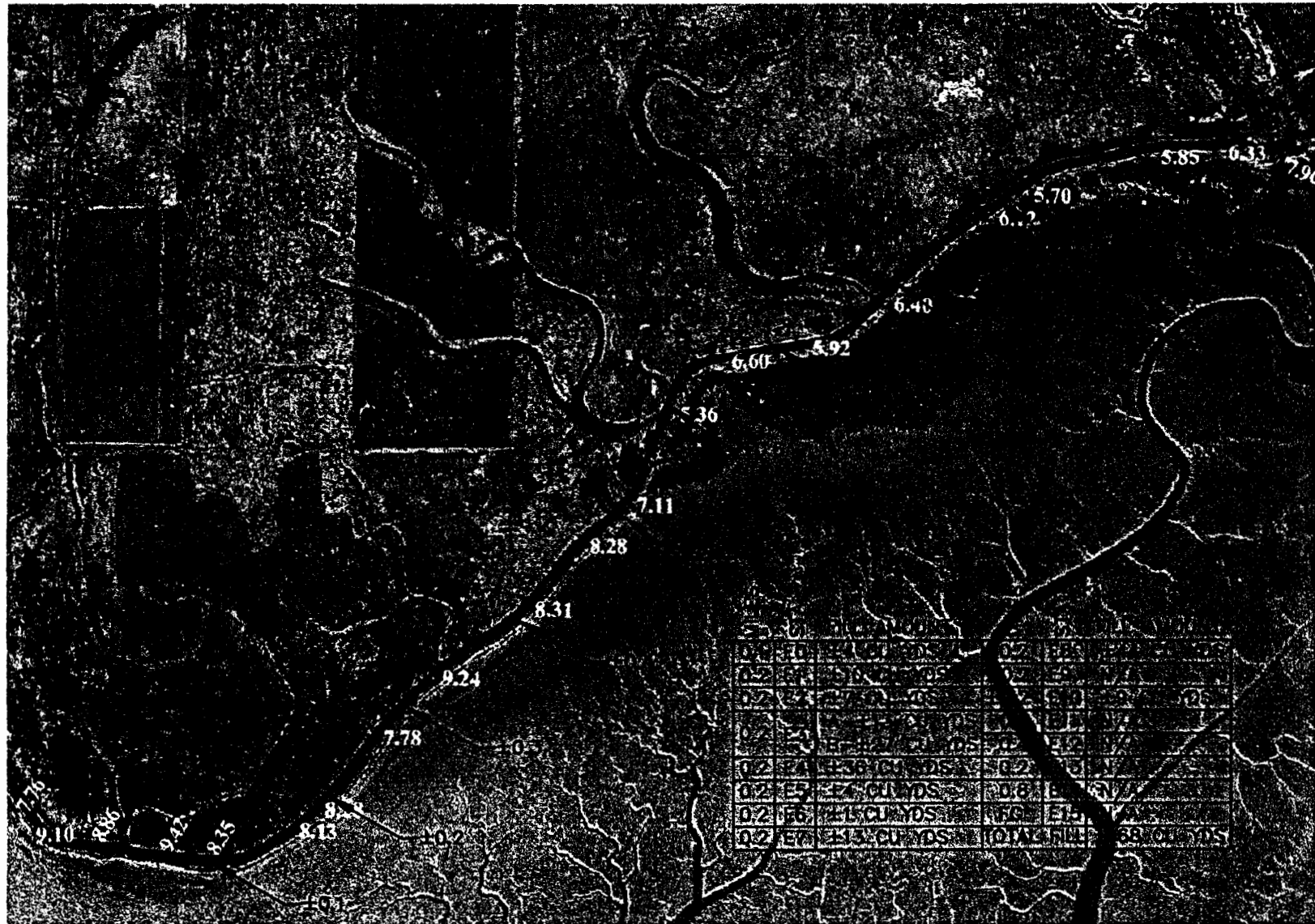
Reclamation District 768- Repair and restoration supplemental information

Attached in an aerial of the location of the facilities. It provides the location of the areas that are in need of repair or restoration as of August 2003. The locations are correlated with the following pages where a general description of the repairs or restoration that are needed at each location are provided, as well as the accompanying volumes of materials involved.

In addition, typical cross sections of the levee and a typical cross section of a ditch crossing (if needed) are provided. The cross section is provided to provide the maximum extent of any repairs or restoration activity that may be authorized.

PROJECT LOCATION - AERIAL MAP

SCALE: N.T.S.



RECLAMATION DISTRICT 768 CULVERT AND TIDE GATE REPLACEMENT - LEVEE REPAIR AND RESTORATION MAP

OSCAR LARSON & ASSOCIATES



JN 6907 8/1/03

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EX.C

8 of 12

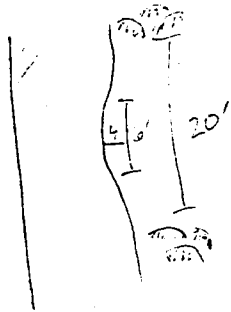
# DIKE RESTORATION

Beginning at Fish & Game Access Gate

*9/14/05  
10/11/05*

Mileage	Station	Photo(s)
0.1	E0	0

**Description:**  
Raised Dike ends, 20' exposed dirt on bay side, erosion is 5' deep, 4' wide and 6' long.

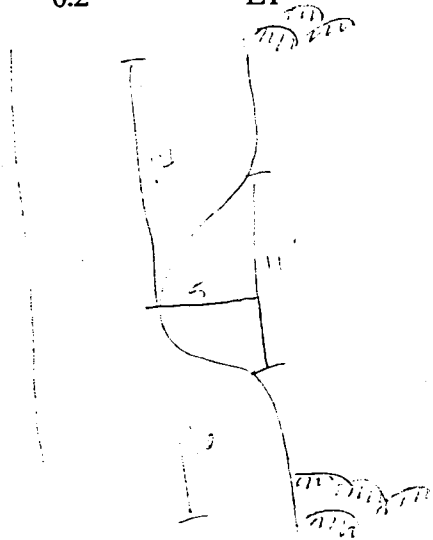


5' deep

$\pm 4.45$  cu/yds

0.2	E1	6
-----	----	---

30' exposed dirt, road is undercut by 2.5', erosion is ~5' deep, 5' wide and 11' long.



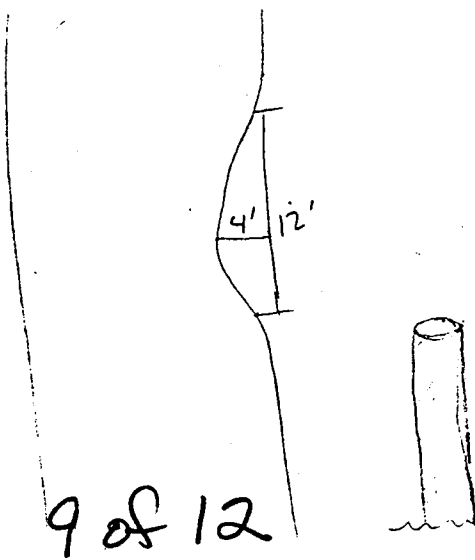
~5' deep

$\pm 10.19$  cu/yds

2.5' undercut in access Road

0.2	E2	1
-----	----	---

erosion is 4' deep, 4' wide and 12' long.



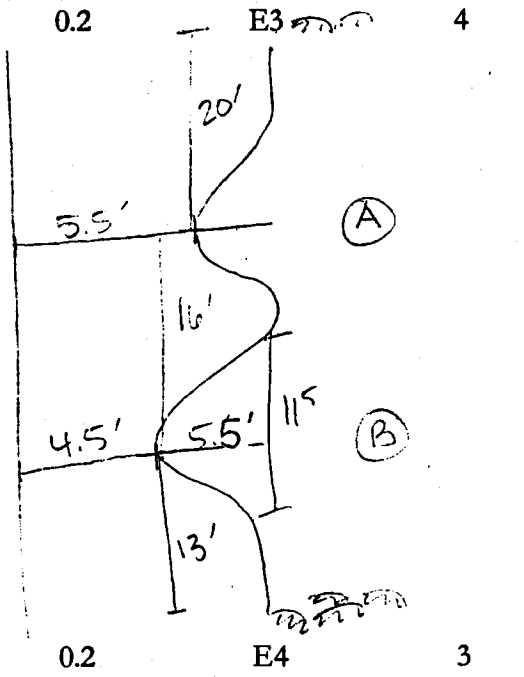
4' deep

$\pm 7.11$  cu/yds

9 of 12

EX. C

Mileage      Station      Photo(s)

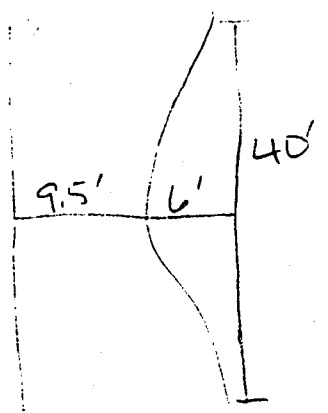


Description:  
 ~50' of exposed dirt. Adjacent areas of erosion both 6' deep, (A) 5.5' wide and 11' long (B) is ~6' wide and ~20' long.

(A) 13.44 cu/yds  
 (B) 26.67 cu/yds

6' deep

0.2      E4      3  
 (6' from E3)

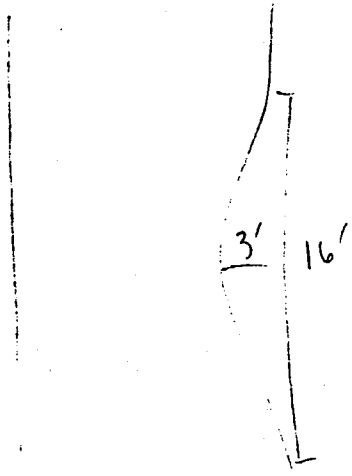


4' deep, 6' wide and 40' long.

35.56 cu/yds

4' deep

0.2      E5      1



More minor repairs, can pull existing rock up. 2' deep, 3' wide and 16' long.

3.56 cu/yds

2' deep

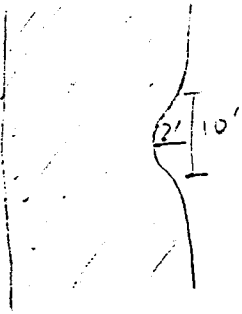


Mileage  
0.2

Station  
E6

Photo(s)  
0

Description:  
1.5' deep, 2' wide and 10' long.



1.11 cu/yds

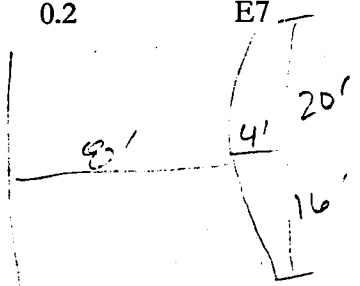
1.5' deep

0.2

E7

1

2.5' deep, 4' wide and 36' long.



13.33 cy/yds

2.5' deep

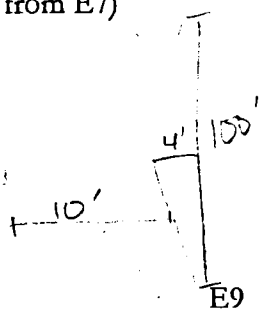
0.2

E8

5

open face 3' deep, 4' wide (at widest point) and 100' long.

(4' from E7)



44.44 cu/yds

3' deep

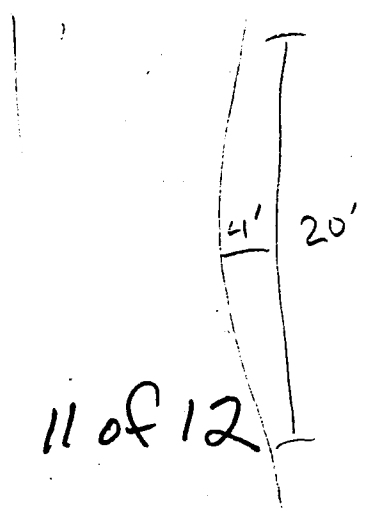
0

Exposed dirt for ~100 yards NE of E8

E10

1

~50' from end of E9, low spout in dike (raise 12") erosion is 3' deep, 4' wide and 20' long.



8.89 cu/yds

11 of 12

EX. C

<u>Mileage</u>	<u>Station</u>	<u>Photo(s)</u>	<u>Description:</u>
0.2	E11	4	Exposed dirt. Begins ~40' NE of E10 ends at 1st Douglas Fir on the dike (just opposite the big water trough).
0.4	E12	3	Exposed dirt for ~50 yards.
<p>Note: Turnaround is just W of the border of Salt water marsh grasslands</p> <p>Dike is 4' wide and low from ~50' past turn around</p> <p>Low area for 200'</p>			
	E13	0	Small, low area, erosion on slough side
0.8 (stake in saltwater marsh)	E14		2 erroded areas (slip-outs) on the slough side, dike needs to be raised.
At flood gates.	E15	6	Flood gate is missing. Other gates set high?

# MAD RIVER BIOLOGISTS

1497 Central Avenue • McKinleyville CA • 95519  
Voice: 707/839-0900 • Fax: 707/839-0867 • www.madriverbio.com

14 August 2003

To: Marty McClelland  
Oscar Larson & Associates  
317 Third Street  
Eureka, CA 95502-3806

Re: Habitat Assessment for Humboldt County Reclamation District 768 culvert and tide gate replacement project

Dear Mr. McClelland:

On 31 July 2003, Mad River Biologists conducted a habitat assessment of the area surrounding a failed culvert and tide gate, in need of replacement, in the Mad River slough east of Highway 255, Humboldt County, California. The tide gate and culvert are part of the Reclamation District's facilities located within the Humboldt Levee system along the bay margin of the Arcata Bottoms.

The purpose of this habitat assessment is to review the proposed tide gate and culvert replacement project in sufficient detail to determine to what extent the proposed action may affect any of the threatened, endangered, proposed, or sensitive species listed below.

The species considered with regard to this project are:

## Wildlife

No habitat for any threatened, endangered, proposed, or sensitive wildlife species exists within the project area.

## Fisheries

Tidewater goby (*Eucyclogobius newberryi*)

## Botanical

Point Reyes Bird's-beak (*Cordylanthus maritimus ssp. palustris*)  
Humboldt Bay Owl's-clover (*Castilleja ambigua ssp. humboldtiensis*)

## Description of Proposed Action

The Reclamation District 768 of Humboldt County is proposing to remove and replace a failed tide gate and culvert system in the Mad River Slough just east of Highway 255 in Arcata, California. Operations will involve the use of an excavator to remove the existing rock aggregate rip rap and structural material (primarily bay mud) overlaying the current culvert system. This will result in the excavation of approximately 80 cubic yards of volume. These materials will be set aside while the failed culvert system is removed, along with any other debris generated during the course of operations, and hauled away in a dump truck. Upon removal of the failed system, a new culvert and tide gate will be installed and overlain with the original bay mud structural material. If more fill

**EXHIBIT D, 1-03-004**

material is needed, a rock substrate will be used. A filter fabric will then be placed over the structural material to minimize erosion and finally the original rip rap material will be replaced.

Operations will be conducted within a timeframe of 2 days and will commence during low tide to minimize siltation into the bay. Hours of operation during the 2 full days of work will be between the hours of 0700 and 1900. An excavator and a dump truck are the only heavy equipment to be used during project operations. The graveled pull out area east of Highway 255, approximately 50 yards from the failed culvert, will serve as the staging area for project activities.

## Action Area

The proposed project area is located in the Mad River Slough region of Humboldt Bay in the southwest portion of the Reclamation District. The assessment area included the levee from the Mad River Slough Bridge northeast to 100 feet beyond the last of 4 tide gated culverts extending approximately 150 yards along the levee, the bay mud habitat adjacent to the levee on its southern (bay) side, and the agricultural pastureland north of the levee to its border with highway 255 west of the levee. The bay itself was also considered in relation to its suitability as habitat for tidewater goby (*Eucyclogobius newberryi*).

The exposed bay mud adjacent to the levee was devoid of vegetation and did not appear to support any sensitive or other vegetative species. The culverts were overlain by rock aggregate rip rap thus supporting no vegetation. The rest of the levee, with a maximum width of about 30 feet, was densely vegetated with species typically associated with disturbed areas. During the site visit, a channel of collected water stood behind the levee system on its northern side and was bordered by an agricultural field of compacted pastureland, currently in use as range land for cattle. Vegetation occurring within the agricultural land was primarily grasses and weedy species.

## Species Accounts and Status of the Species in the Action Area

### Wildlife

No habitat for any threatened, endangered, proposed, or sensitive wildlife species exists within the project area.

### Fisheries

#### Tidewater goby (*Eucyclogobius newberryi*)

Federal Status: Endangered, 1994

State Status: Species of Concern

Tidewater goby is the sole member of the monotypic genus *Eucyclogobius* in the family Gobiidae and is endemic to California. Tidewater goby occur only in coastal habitats containing brackish water such as coastal lagoons and estuaries with natural hydrological regimes, with the exception of the Humboldt Bay where the bay supports goby although its hydrology has been altered significantly (USFWS 2000). Suitable habitat for tidewater goby is also generally free, or nearly so, of exotic fish species known to predate upon tidewater goby. Coastal lagoons and estuaries with natural hydrology provide a unique suite of structurally complex habitat components necessary to support tidewater goby. Such components include, variance in habitat structure resulting in the presence of some deep pockets of permanent water that act as refugia during times of drought and a variety of substrate types suitable for both burrow construction and habitat for various types of emergent and aquatic vegetation providing the type of structural complexity that keeps all gobies from washing out to sea during flood events (USFWS 2000).

EX.D

Decline of tidewater goby populations has been attributed primarily to coastal development and other human activities such as sand and gravel mining, channelization, dredging and other such activities that alter the natural hydrologic function of the estuarine systems upon which tidewater goby rely (USFWS 2000).

Tidewater goby are known to occur within Humboldt Bay and have been detected in the Mad River Slough area of the Bay as recently as 2000 although current intensive surveys in the area have yet to relocate them (Greg Goldsmith, USFWS, personal communication). So, given the potential for impacts to tidewater goby habitat resulting from project activities, care should be taken to minimize the level of siltation into the bay. Since project activities, as outlined, will result in the movement of an insubstantial amount volume and will be conducted such that siltation into the bay is minimal, affects on tidewater goby habitat will be negligible, if any.

### Botanical

#### Point Reyes bird's – beak (*Cordylanthys maritimus ssp. palustris*)

Federal Status: Species of Concern  
State Status: Special Status Species  
CNPS: List 1B  
R-E-D code: 2-2-2

#### Humboldt Bay owl's – clover (*Castilleja ambigua ssp. humboldtiensis*)

Federal Status: Species of Concern  
State Status: Special Status Species  
CNPS: List 1B  
R-E-D code: 2-2-3

Two rare salt marsh plants are known to occur in Humboldt Bay, Humboldt Bay owl's-clover (*Castilleja ambigua ssp. humboldtiensis*) and Point Reyes bird's-beak (*Cordylanthus maritimus ssp. palustris*). Both taxa are considered endangered in a portion of their range and distributed in a limited number of occurrences. Point Reyes bird's-beak is rare outside of California, and Humboldt Bay owl's-clover is endemic to California (Skinner & Pavlik, 1994). Threats to these species are largely from coastal development.

Humboldt Bay owl's-clover is an annual, hemiparasitic member of the figwort family (Scrophulariaceae). Optimal habitat for this species is high salt marsh habitats at or below elevations of four feet mean sea level (MSL) (Eicher and Bivin). It occurs locally on island and mainland salt marshes around Humboldt Bay, from the mouth of the Eel River to the mouth of the Mad River (Newton 1989). Pickart (1990) reported that this species occurs more commonly on island marshes. Specific habitat for Humboldt Bay owl's-clover is the mixed marsh subtype of salt marsh described by Eicher (1987). The mixed marsh habitat is considered the most diverse marsh type in Humboldt Bay in terms of total number of species. It generally grows in open areas within low-growing vegetation such as pickleweed (*Salicornia virginica*), jaumea (*Jaumea carnosa*), saltgrass (*Distichlis spicata*), sea lavender (*Limonium californicum*), and arrowgrass (*Triglochin maritima* and *T. concinna*). The hemiparasitic nature of the owl's clover refers to the plants ability to parasitize other plant species by means of haustoria, which are modified roots capable of penetrating and absorbing material from host tissues. Eicher (1994) suggests that Humboldt Bay owl's-clover may not be host specific, and may in fact be capable of surviving in the absence of a host. Locally, Humboldt Bay

owl's-clover reaches its peak blooming period between May and mid-June, and then withers rapidly after setting seed, generally from mid June to early July.

Point Reyes bird's-beak is also an annual, hemiparistic member of the figwort family. Habitat for this species often overlaps with that of Humboldt Bay owl's-clover, although it is more common at slightly lower elevations (Eicher 1987). It has wider geographic range than the owl's clover, occurring from Morro Bay, California to Coos Bay, Oregon. Like the owl's clover, this species tends to be more abundant on islands rather than mainland marshes (Pickart 1990). Locally, the peak blooming period for Point Reyes bird's-beak is mid-June through July.

Neither Humboldt Bay owl's-clover nor Point Reyes bird's-beak were found on site. Additionally, no habitat likely to support either species was present in the project area.

## Determination

The project, as outlined, will have negligible effects on any listed species.

## Literature Cited

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- Skinner, M. W. and B. M. Pavlik. 2001. California Native Plant Society's electronic inventory of Rare and Endangered vascular plants of California. California Native Plant Society, Sacramento, California, USA.
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Sincerely,

Jessica R. Stauffer, Staff Biologist

4 of 4

EX.D.