# CALIFORNIA COASTAL COMMISSION

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## STAFF REPORT: REGULAR CALENDAR

APPLICATION NO .:

**APPLICANTS:** 

PROJECT LOCATION:

**PROJECT DESCRIPTION:** 

APN 506-281-03(1) Reconstruct and armor 2,720 lineal feet of an existing dike and add earthen fill land ward of dike to maintain

7000 Lanphere Road, Arcata, Humboldt County,

height and bulk of dike for 5 years; (2) excavate part of existing drainages and wetlands to provide earth for dike repair and to enhance seasonal wetlands via the creation of shallow ponds; and (3) stockpile concrete rubble and other clean fill within a pasture near the dike for future dike repair.

GENERAL PLAN DESIGNATION:

ZONING DESIGNATION:

Agricultural Exclusive

Agricultural Exclusive, 60-acre minimum parcel size with Archeological Resource [A], Dune and Beach Area [B], Flood Hazard [F], and Transitional Agricultural Lands [T] combining zones.

LOCAL APPROVALS RECEIVED:

Humboldt Bay Harbor District Permit No. 1998-5.

SUBSTANTIVE FILE DOCUMENTS: (1) Humboldt Bay Area Land Use Plan, (2) California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California, September

1-98-102

C. J. & CAROL RALPH



1988, 4<sup>th</sup> Edition, (3) The Ecology of Humboldt Bay, California, An Estuarine Profile, U.S. Fish and Wild Life Service, January 1992, (4) Coastal Protection Structures and their Effectiveness by Kim Fulton-Bennett and Gary Griggs, Marine Sciences Institute, University of California at Santa Cruz in conjunction with the California Department of Boating and Waterways.

## **STAFF NOTES:**

### 1. <u>Permit History</u>.

In October of 1992, the Coastal Commission approved CDP application No. 1-91-217 for a similar agricultural dike repair project. However, the permit was never issued and CDP No. 1-91-217 expired two years after it was approved by the Commission. On October 25, 1996, the Coastal Commission approved CDP application No. 1-95-35 which included work that was substantially the same as the work proposed under CDP approved under CDP No. 1-91-217. However, this permit also was never issued and CDP No. 1-95-35 expired two years after it was approved by the Commission. Neither of the CDPs were ever issued as the applicants did not satisfy the special conditions of the permit.

In October of 1996, the applicants applied for and received an emergency permit (No. 1-96-14-G) to replace a broken flood gate and a collapsed outlet pipe in the dike and to repair a highly eroded portion of the dike for a distance of 50 yards on either side of the flood gate. This emergency repair work was previously approved as a non-emergency item in the project that was approved under CDP No. 1-91-217. However, since CDP No. 1-91-217 was never issued, the delayed repairs became an emergency situation when the outlet pipe started leaking salt water into the farmed pasture on the landward side of the dike. The highly eroded portion of the dike would have been extremely vulnerable to flooding by salt water from the slough during winter storms, and there was a need to quickly repair this portion of the dike during a low-tide event. Permit application No. 1-95-35, in addition to requesting approval for on-going dike repair, would have also made permanent the emergency floodgate and pipe repair work which was authorized under Emergency Permit No. 1-96-14-G.

In October of 1998, the applicants applied for and received an emergency permit (No. 1-98-090-G) to repair a 120-foot section of the dike. The applicants cited rapid dike erosion by persistent waves and an experimental dike design as a cause of the emergency. As in the case above, this emergency repair work was previously approved as a non-emergency item in the project that was approved under CDP No. 1-95-35. However, since CDP No. 1-95-35 was never issued, the delayed repairs became an emergency situation and were authorized under Emergency Permit No. 1-98-090-G.

As discussed above, neither of the regular CDPs that were intended to permanently authorize previous emergency repairs was ever issued. Therefore, in addition to the now modified five-year dike repair and wetland enhancement project proposed under the present CDP application (1-98-102), the emergency work approved under Emergency Permit Nos. 1-96-14-G and 1-98-090-G are also included in the subject CDP application.

### 2. <u>Standard of Review</u>:

The proposed development is located along the Mad River Slough within the Commission's retained coastal development permit jurisdiction. Thus, the standard of review for the permit application is the Coastal Act.

### SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval with special conditions of the proposed dike repair and wetland enhancement project to prevent inundation of coastal agricultural lands and to protect environmentally sensitive, freshwater wetlands against any significant disruption of habitat values. This recommendation is based, in part, on an analysis of Coastal Act Sections 30200(b) and 30007.5. Coastal Act Section 30200(b) provides in applicable part that where the Commission, in implementing the provisions of this division, identifies a conflict between the policies of this chapter, Section 30007.5 shall be used to resolve the conflict. Coastal Act Section 30007.5 provides in applicable part that conflicts may occur between one or more policies of the division and that such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this case, the filling of coastal wetlands and disturbance of environmentally sensitive habitat area associated with the proposed dike repair and realignment is inconsistent with Sections 30233 and 30240 of the Coastal Act. However, failure to perform the development on the dike would result in inundation of agricultural lands and the destruction of freshwater wetlands inconsistent with Sections 30241 and 30231 of the Coastal Act. Staff believes that allowing the dike repair and realignment to occur is on balance the most protective of coastal resources. The Commission has approved similar projects on this site on this basis twice previously.

The Special Conditions require that: (1) the applicants submit evidence of their legal ability to implement the project as conditioned herein; (2) the concrete rubble material to be used to repair the dike be in a clean condition, to prevent pollution and to maintain the biological productivity of and quality of coastal waters and wetland; (3) the concrete rubble properly sized to insure structural stability of the dike in a flood hazard area; (4) the repair work be implemented per plans that are shown and described in this permit to minimize the amount of fill in a tidal wetland; (5) the spaces between the pieces of rip-rap in the concrete revetment above the line of the highest tidal action be planted with native vegetation to minimize adverse impacts on the visual character of the area; (6) all existing concrete rubble material that is temporarily stockpiled within the pasture area next to the dike be incorporated into the dike or removed within one year of Coastal Commission approval of this permit to eliminate impacts to seasonal wetlands and use on the pasture for agriculture; (7) the pasture under the former stockpile area be re-seeded with a compatible grass mixture if the pasture area fails to re-vegetate within three months after removal of the concrete rubble material; (8) that the applicant submit for Executive Director approval a Stockpile Management Plan that provides a stockpile location outside of pastureland and/or wetlands; (9) the wetland enhancement project be carried out in a manner consistent with the Conservation Plan that was prepared in consultation with Natural Resources Conservation Service and the U.S. Fish and Wildlife Service; (10) the requirement of all of the special conditions be met; and (11) the approved project be limited to a period of five years. Staff recommends that the Commission find that the proposed development, as conditioned, is consistent

with the Coastal Act, including Coastal Act requirements that public coastal access not be adversely affected by development.

## **STAFF RECOMMENDATION:**

The staff recommends that the Commission adopt the following resolution:

I. <u>Approval with Conditions</u>.

The Commission hereby grants a permit, subject to the conditions below, for the proposed development on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, is located between the sea and the first public road nearest the shoreline and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

- II. <u>Standard Conditions</u>. See Attachment A.
- III. Special Conditions.
- 1. <u>Annual Harbor District Permits</u>. No development shall be performed without a valid Harbor Permit. By May 1 of each year, the applicant shall submit for the review and approval of the Executive Director a copy of the administrative permit issued by the Humboldt Bay Harbor, Recreation, and Conservation Commission which authorizes dike reconstruction activities at the subject property for the coming year.
- 2. <u>Condition of Concrete Rubble Material</u>. The Concrete rubble material to be used to repair the dike shall be in a clean condition that is free of asphalt and waste materials. The concrete rubble material shall not be greater than 3-feet in any one direction or smaller than 1-cubic-foot in size. All exposed re-enforcement bar shall be removed prior to the installation of the rubble rip-rap.
- 3. <u>Implementation of Project per Approved Plans</u>. The dike reconstruction project shall be implemented per the plans that are describe in this report and shown in Exhibit Nos. 4 & 5.
- 4. <u>Replanting with Native Vegetation</u>. The spaces between the pieces of concrete rubble rip-rap revetment above the line of the highest tidal action shall be filled with earth and the sides of the dike planted with appropriate native vegetation.
- 5. <u>Concrete Rubble Stockpile Management Plan</u>. PRIOR TO ISSUANCE OF THE PERMIT the applicant shall submit for Executive Director review and approval a stockpile management plan that identifies stockpile locations outside of pasture lands and within an upland area. All stockpiling activities shall occur in accordance with the stockpile management plan as approved by the Executive Director. Upon review and approval of an acceptable stockpile

management plan the Executive Director will provide written authorization that indicates condition compliance.

- 6. <u>Removal of Stockpiled Concrete Rubble From Pasture Area</u>. Within one year of approval of this permit, all concrete rubble material temporarily stockpiled within the pasture area next to the dike shall be: (a) incorporated into the dike as a part of the repair work approved under this permit; (b) transferred to a upland non-pasture area in accordance with the approved Concrete Rubble Stockpile Management Plan required by Special Condition No. 5; or (c) removed from the property and taken to an approved disposal area. No additional material shall be stockpiled within the pasture or anywhere else on the subject property unless it is in accordance with the approved Concrete Rubble Stockpile Management Plan.
- 7. <u>Restoration of Pasture under Stockpile Areas</u>. All debris shall be removed from the pasture area that was used to temporarily stockpile concrete rubble material. The impacted areas shall be re-seeded with a compatible grass mixture if the pasture area fails to re-vegetate within three months after removal of the concrete rubble material.
- 8. <u>Condition Compliance</u>. All requirements specified in the foregoing conditions that the applicant is required to satisfy as prerequisites to the issuance of this permit must be met within six months of Commission action on this permit application. Failure to comply with these requirements within the time period specified, or within such additional time as may be granted by the Executive Director for good cause, will result in nullification of this permit approval.
- 9. <u>Conservation Plan Compliance</u>. The wetland enhancement components of this project shall be carried out in a manner that is consistent with the Conservation Plan that was prepared in consultation with Natural Resources Conservation Service and the U.S. Fish and Wildlife Service and included as Substantive File Document for the preparation of this report.
- 10. <u>Expiration Date</u>. This permit shall expire on November 1, 2000 and shall not be subject to a time extension. Dike repair to be performed after the expiration date shall require a new coastal development permit.
- 11. <u>U.S. Army Corps of Engineers</u>. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the permittee shall to submit to the Executive Director evidence of U.S. Army Corps of Engineers approval of the project prior to the commencement of work.
- IV. Findings and Declarations.

The Commission hereby finds and declares as follows:

### 1. <u>Project and Site Description</u>.

The subject property is located near the western terminus of Lanphere Road, adjacent to the Mad River Slough, Arcata Bottoms, Humboldt County (APN 506-281-03). See Exhibits 1, 2 and 3. The applicants propose to repair an approximate 2,600 lineal foot rock and earth fill dike along the west shoreline of the Mad River Slough by placement of approximately 15,000 cubic yards of concrete rubble and soil on the dike with the majority of the fill (approximately 11,000 cubic yards) proposed to be obtained from excavation of existing drainageways on the subject property and from the excavation of 2.1 acres of wetland pasture (historic baylands) to create three shallow ponds and enhanced wetlands. See Exhibits 7 and 8. The dike repair and wetlands enhancement project is proposed to be undertaken over a five year period, wherein sections of the dyke would be repaired on an as-needed basis.

The applicants also seek permanent authorization for development approved under Emergency Permit No. 1-96-14-G to replace a broken flood gate and collapsed outlet pipe within an agricultural dike and to repair the dike for a distance of 50 yards on either side of the flood gate; and 2) development approved under Emergency Permit 1-98-090-G to repair a 120-foot section of the dike that had eroded as a result of persistent waves and an experimental dike design.

The purpose of the project is to prevent tidal waters of the Mad River Slough from flooding about 115 acres of adjacent farmed, freshwater wetlands. The applicant's existing dike is one of many similar structures found throughout the Arcata Bottoms (former tidelands) and Mad River Slough that were constructed since the early 1900's for the purpose of reclaiming former baylands for agricultural use, including livestock grazing. The subject dike was first installed at the turn of the century. The dike was improved in the 1950's to prevent periodic flooding by the highest tides. The present height and configuration of the dike is similar to what the dike looked like after it was improved in the 1950's, except that much of the earthen material on the slough-side face of the dike has slumped down into the slough. The applicant asserts that flooding and tidal action associated with several years of heavy rainfall has compromised the integrity of the existing dike and that it continues to erode and deteriorate. The applicant asserts that the dike is now about 3 to 4 feet lower than its former level in some locations and has been eroded from the slough side to only a couple of feet thick is some locations.

The approximately 22-foot-wide foot print of the repaired dike would occupy substantially the same foot print as the existing structure. Although the footprint is substantially the same, the dike would be aligned slightly landward along some portions, and would occupy approximately 0.6 acres of former pasture land along the entire 2600-foot reconstruction project; other significant construction details of the project include the following: (1) the 10-foot-height of the repaired dike would have the same height as the original dike; (2) a backhoe would be used to place excavated earth from the pond areas onto the dike as fill material; (3) a filter fabric or erosion control cloth would then be placed on the slough side face of the dike to prevent erosion; (4) a 1.5-foot thick layer of concrete rubble rip-rap would then be placed over the filter fabric to form a revetment; (5) the revetment would have an engineered toe extending two-feet downward into the slough mud to secure the lower portion of the

revetment; (6) the slough side of the dike would have a 1:1 to 1:1.5 slope (1-foot vertical to 1:1.5 feet horizontal); (7) the concrete rip-rap material would be no smaller than one-cubic-foot in size and no larger than 3-feet in any one direction; (8) the concrete rip-rap material would be free of asphalt, exposed re-enforcement bar and other foreign matter; (9) the top of the repaired dike would be kept free of large, woody vegetation; (10) the spaces between the pieces of rip-rap would be planted with native vegetation to give it a more natural appearance; and (11) wetland enhancement component of the project would be implemented in a manner that is consistent with the Conservation Plan that was developed in consultation with the Natural Resource Conservation Service and the U.S. Fish and Wildlife Service.

The application states that approximately 10,000 to 15,000 cubic yards of earth and rock material would be needed to complete the five year project. The application further states that it is necessary to stockpile concrete rubble on the subject property because of the availability and economics associated with acquisition of such materials. In fact, the applicant has already begun to stockpile when concrete rubble on the subject property without the benefit of a coastal development permit. According to the CDP application, concrete rubble material must be accepted when it is available and placed close to where it would be used, so it will not have to be lifted into a truck a second time. Previously, the applicants have stockpiled such materials within upland areas of the subject property. However, when some concrete became available in June of 1998, the applicants began to stockpile it within an area classified as a wetland pasture. As such, broken concrete stockpiles are currently accumulating both within upland and wetland areas of the property. The unpermitted stockpiling of concrete rubble on the subject property constitutes a violation of the Coastal Act that would be remedied through this permit authorization. (see findings for Violation and Wetland Fill)

The creation of the three wetland ponds and the enhancement of wetland drainage areas would be undertaken for the dual purpose of providing a source for part of the earthen fill material for dike repair and to provide a resting and feeding area for migratory waterfowl, shorebirds, and migratory neotropical birds. The three ponds would be irregular in shape and have depths ranging from 2 feet to 4 feet below the existing wetland pasture surface. See Exhibits 7 and 8. Pond A would cover an excavated area of 1.3 acres, Pond B would cover 0.4 acres, and Pond C 0.8 acres for a total area of 2.1 acres of excavated wetland pasture area. The applicant has entered into an agreement with the U.S. Fish and Wildlife Service (USFWS) to obtain funding and technical support for the wetland enhancement project as a part of the "Partners For Wildlife." The Natural Resource Conservation Service (NRCS) has also contributed funding and technical expertise for the wetland enhancement portion of this project.

## 2. <u>Why a Permit is Necessary</u>.

Coastal Act Section 30610 exempts certain kinds of development activities from coastal development permit requirements. Section 30610 states: in applicable part that:

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.

Although the subject development is in part a repair and maintenance activity, the development is the kind of repair and maintenance activity that the Commission, as authorized by Section 13252 of its administrative regulation, has determined should require a permit because of potential adverse impacts on coastal resources. Section 13252 of the Commission Administrative Regulations states in applicable 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 and maintenance to facilities or structures or work located in an 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 other forms of solid materials.
- (D) The presence, whether temporary or permanent, of mechanized equipment or construction materials within 20 feet of coastal waters or streams.

The proposed repair and maintenance components of this project involve both the placement of rip-rap and earth fill and the use of mechanized equipment and construction materials within 20 feet of coastal waters. Therefore, the repair and maintenance components of the project are not exempt from permit requirement under Coastal Act Section 30610(d).

## 4. <u>Site Description</u>.

The subject dike separates two distinct wetland areas. The area behind and west of the dike is a farmed (i.e. grazed pasture), fresh-water wetland. Since the area behind the dike also has prime agricultural soils and is being used for farming, it is designated as Agricultural Exclusive in the Humboldt County Land Use Plan. The area in front of and east of the dike is a tidal wetland, consisting of mud flats and a slough channel that are part of Mad River Slough.

The land to the west and north of the Ralph property is part of the Humboldt Bay National Wildlife Refuge and was formerly known as the Lanphere-Christensen Preserve. The Lanphere-Christensen Preserve Site is a well known area that is primarily used for public recreation, hiking, and scientific,

educational, and nature study. The land to the east of the Mad River Slough consists of other farmed wetlands in the Arcata Bottoms area.

A previous botanical survey of the dike indicates that the top of the dike is approximately 8 to 10 feet wide and is vegetated primarily by weedy species, such as velvet grass (Holcus lanatus), perennial rye grass (Lolium perenne), creeping bentgrass (Agrostis stolonifera), tall fescue (Festuca arundinacea), yarrow (Achillea millefolium), English plantain (Plantago lanceolata), and wild radish (Raphanus sativus). Other plant species found on the top of the dike include: California blackberry (Rubus vitifolius), Canada thistle, (Cirsium arvense), and a small amount of coyote brush (Baccharis pilularis var. consanguinea). A similar species composition was found on the pasture side of the dike, along with isolated clumps of soft rush (Juncus effusus var. brunneus).

Along much of the slough side face of the dike, a mid-slope ledge with an abrupt slope has formed as result of wave erosion and slope failure. Most of the slough side face of the dike is sparsely vegetated. The vegetation that does exist consists of a narrow, discontinuous band of salt marsh vegetation made up of: Chilean cordgrass (Spartina densiflora), fleshy jaumea (Jaumea carnosa), perennial pickleweed (Saliccornia virginica) and, the Humboldt Bay gumplant (Grindelia stricta ssp. blakei).

## 5. Diking, Filing and Dredging of Wetlands and Coastal Waters.

Coastal Act Section 30233 states in applicable part that the diking, filling, or dredging of open coastal waters shall be permitted where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. In addition, Section 30233 limits the diking, filling, or dredging of coastal waters, wetlands, estuaries, and lakes to only eight permissible uses. These eight permissible uses are:

(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 ....

(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.

The above policies set forth a number of different limitations on what fill projects may be allowed in coastal waters and environmentally sensitive habitat areas. For analysis purposes, the limitations can be grouped into three general categories or tests. These tests are:

- a. that the purpose of the project is limited to one of eight allowable uses.
- b. that the project has no feasible less environmentally damaging alternative; and
- c. that adequate mitigation measures to minimize the adverse impacts of the proposed project on habitat values have been provided.

The proposed project includes three distinct components, each of which must be analyzed separately for project conformity with the policies of Section 30233 of the Coastal Act: (a) reconstruction of the dike; (b) wetland enhancement; and (c) stockpiling of concrete rubble material within a pasture area. Neither the dike reconstruction nor the wetland restoration could be accomplished without some dredging or filling of a coastal wetland. More specifically, the subject agricultural dike is located directly in between mud flats of the Mad River Slough and seasonal freshwater wetlands in the form of farmed wetlands on the landward side. As such, development activities associated with both the dike reconstruction and wetland enhancement will directly impact a coastal wetland. As discussed below, the stockpiling of concrete rubble material within a seasonal wetland pasture area, also constitutes fill within a wetland.

## (a) <u>RECONSTRUCTION OF DIKE</u>.

Although the reconstructed dike would cover substantially the same area as the existing structure, the project cannot be accomplished without some dredging and filling of a coastal wetland. More specifically, the toe of the dike on the slough side would be keyed down a few feet below the surface to provide a stable foundation for the structure. Additionally, the dike would be reconstructed with existing dike material and imported materials including earthen fill. Finally, concrete rubble rip rap is proposed to armor the slough-side of the dike. However, the proposed dredging and filling are not included as one of the eight uses allowed under Section 30233. Therefore, the Commission cannot find that the dike reconstruction component is consistent with Section 30233.

Coastal Act Section 30240(a) requires in applicable part that only those uses that are dependent on the resources within environmentally sensitive habitat areas are allowed within those areas. The farmed freshwater wetland on the landward side of the dike and the salt water slough on the tidal side of the dike are both environmentally sensitive wetlands. However, the repair of the dike is not a use that is dependent on the resources within this environmentally sensitive wetland area. Therefore, the Commission cannot find that the dike reconstruction component is consistent with Section 30240.



Failure to repair and maintain the dike would be more environmentally damaging to coastal wetlands, environmentally sensitive habitat areas, and coastal agriculture than the impacts that are likely to result from the limited dredging and filling of a tidal wetland. The proposed fill associated with dike reconstruction would result in the loss of about 0.6 acres of seasonal freshwater wetlands. The failure to maintain the dike would also allow the dike to continue to collapse into the slough and compromise tidal mudflat habitat. In addition, the failure to maintain the dike would ultimately cause flooding and saltwater inundation of the pasture lands behind the dike which would destroy the biological productivity and the quality of the fresh water wetland and result in the loss of prime agricultural lands that are currently in agricultural production.

Other Chapter 3 policies of the Coastal Act provide support for protecting the environmentally sensitive, fresh water wetland and the prime agricultural lands on the landward side of the dike which would be lost if the dike was not repaired. These policies are:

Coastal Act Section 30231, which requires in applicable part that the biological productivity and the quality of coastal waters, wetlands, and estuaries be maintained.

Coastal Act Section 30240, which requires in applicable part that environmentally sensitive habitat areas be protected against any significant disruption of habitat values.

Coastal Act Section 30241, which requires in applicable part that the maximum amount of prime agricultural land be maintained in agricultural production to assure the protection of the area's agricultural economy.

Furthermore, Coastal Act Section 30200(b) provides in applicable part that where the Commission, in implementing the provisions of this division, identifies a conflict between the policies of this chapter, Section 30007.5 shall be used to resolve the conflict. Coastal Act Section 30007.5 provides in applicable part that conflicts may occur between one or more policies of the division and that such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources.

Repairing the dike would: (1) maintain the maximum amount of prime agricultural lands in agricultural production as required by Section 30241 since these lands would not be subject to flooding; (2) maintain the biological productivity and the quality of the fresh water wetland as required by Section 30231 since these lands would not be subject to salt water intrusion and; (3) maintain the environmentally sensitive habitat values of the fresh water wetland as required by Section 30240 since this wetland would not be subject to salt water intrusion.

As conditioned herein, the project has no feasible less environmentally damaging alternative. The "no project" alternative will not protect the freshwater wetland from the adverse impacts of salt water intrusion when failure of the dike occurs. In addition, the repaired dike would cover substantially the same footprint (width) and height of the dike and the dike repair has been designed to make the dike more structurally sound than when it was originally constructed. As a result, the repaired dike will

displace no more wetland habitat area than was originally displaced and the repaired dike will be more structurally sound.

As conditioned herein, the project provides adequate mitigation measures to minimize adverse environmental effects. As conditioned herein, the concrete rubble material used to repair the dike will be in a clean condition that is free of asphalt, exposed reinforcement bar, and other foreign matter. Thus, the proposed materials that are in contact with rainfall, ground waters, and tidal waters will not result in water pollution problems. As conditioned herein, all of the concrete rubble material that is temporarily stockpiled over the freshwater wetland pasture area must be removed within one year of Coastal Commission approval of the permit in accordance with a required concrete rubble management plan and the impacted area re-seeded with a compatible grass mixture if the pasture area fails to re-vegetate within three months after removal of the concrete rubble material. As conditioned herein, the applicants will fill the spaces between the pieces of rip-rap in the concrete revetment with earth, and re-vegetate the sides of the dike with suitable native vegetation, to give it a more natural appearance and to provide habitat for wildlife.

<u>Conclusion</u>. Protecting 115 acres of farmed, fresh water wetlands to maintain both biological and agricultural productivity is, on balance, more protective of significant coastal resources than protecting the 0.6 acres of freshwater seasonal wetland that is required for the dike repair work. Therefore, pursuant to Sections 30200(b) and 30007.5, the Commission balances the conflict between Section 30233 (a policy that would not allow the dredging and filling of a 0.6-acre wetland area for this particular use) and Section 30240 (a policy that does not allow a use that is not dependent on an environmentally sensitive habitat area), in favor of Section 30231 (a policy which requires that the biological productivity and water quality of a wetland be maintained) and Section 30241 (a policy which requires that the maximum amount of prime agricultural land be maintained in agricultural production) because this balancing is the most protective of significant coastal resources.

As a final mitigation measure to ensure that the project is being implemented in a manner that is most protective of significant coastal resources, the Commission attaches Special Condition No. 7 which states that the permit shall expire on November 1, 2004, shall not be subject to a time extension, and that continued dike repair operations after the expiration date shall require a new coastal development permit.

# (b) WETLAND ENHANCEMENT.

The proposed wetland enhancement component would result in the creation of three fresh water ponds and an enhanced riparian drainage system. This component of the project would be constructed for the dual purpose of providing earthen fill material for the dike repair and to provide a resting and feeding area for migratory waterfowl, shorebirds, and migratory neotropical birds. These ponds would be irregular in shape and have depths ranging from 2 feet to 4 feet below the existing wetland pasture surface. As shown in Exhibits 7 & 8, Pond A would cover an excavated area of 1.3 acres; Pond B would cover 0.4 acres; and Pond C would cover 0.8 acres of existing seasonal wetland pasture. The applicants have entered into an agreement with the U.S. Fish and Wildlife Service ("Partners in Wildlife")and the Natural Resource Conservation Service for funding and technical expertise to carry out the wetland enhancement component of the project. This component of the project is proposed as a wetland enhancement project and is therefore one of the eight enumerated uses allowable under Section 30233(a). Therefore, the Commission finds that the project meets the requirement of Coastal Act Section 30233 for permissible uses for fill in wetlands.

Coastal Act Section 30233 does not allow dredging and filling in wetlands if there are feasible, less damaging alternatives to the project. Alternatives to the project as proposed must be considered before a finding can be made that the project satisfies this provision of 30233. The only possible project alternative identified is the no project alternative. The "no project" alternative would mean <u>not</u> creating the three shallow ponds or enhancing the riparian drainages. This alternative would not result in dredging or filling within the seasonal wetland pasture area. However, the alternative would not accomplish the wetland restoration objectives of the project and therefore is not a feasible alternative.

The third limitation on filling and dredging projects set forth by Section 30233 of the Coastal Act is that adequate mitigation measures to minimize the adverse impacts of the proposed project on habitat values would be provided. As noted above, the wetland enhancement component of the proposed project includes the creation of three shall ponds and enhancing the riparian drainages by excavating 2 feet to four feet below the existing pasture and drainage corridors elevations. The wetland enhancement component would be carried out in conformance with agreements with the U.S. Fish and Wildlife Service and the Natural Resource Conservation Service and is intended to convert surface drained pasture land into seasonal and permanent wetlands for the benefit of waterfowl, shorebirds, neotropical migratory birds and other wetland dependant species. The final composition of the project would include a matrix of submerged and emergent macrophytes, seasonal wetlands dominated by sedges and spike rushes and riparian area within the pasture area. These the surrounding area is to be planted with native shrubs and trees in conformance with the Conservation Plan. This component of the project also includes the use of fencing and grazing management practices to allow the enhanced wetlands to become established over the first growing season. Therefore the Commission finds that the wetland restoration component of the project, as submitted, includes adequate mitigation measures to protect and enhance sensitive coastal resources to meet the mitigation requirements of Section 30233.

# Conclusion.

The wetland enhancement component of the project meet all three tests of Section 30233: (1) Wetland restoration is a permissible use under Section 30233; (2) there are no feasible less environmentally damaging alternatives; and (3) adequate mitigation measures have been incorporated into the project design to reduce potentially significant impacts to wetland resources. Therefore, the Commission finds that the wetland restoration component of the project is consistent with Section 30233 of the Coastal Act.

# (c) <u>STOCKPILING OF CONCRETE RUBBLE</u>.

According to the CDP application, the applicant has already begun to create concrete rubble stockpiles within three location on the subject property: two of the stockpile areas are located within upland

pasture areas and the third stockpile is located within a seasonal wetland. The third stockpile constitutes fill in a wetland that must be analyzed for consistency with Section 30233.

The applicants assert that the concrete rubble stockpiles must be located in close proximity to the work area so it does not have to be moved too far of a distance from the original stockpile location. The applicants further assert that if the stockpile is located outside of the wetland pasture area, the rubble material would have to be moved twice: once upon initial delivery and then again when construction activities commence.

Stockpiling concrete rubble material for future use on the dike repair project is not an allowable use under Section 30233 and thus does not meet the permissible use test as discuss above. More importantly, feasible less environmentally damaging alternative stockpile locations exist on the subject property which do not adversely impact seasonal wetland resources in the wetland pasture area. The 30-square-yard parking lot on the property is a suitable alternative to the use of the pasturelands. Therefore, the Commission attaches Special Condition Nos. 5, 6 and 7. Special Condition No. 5 requires that prior to issuance of the permit, the applicant shall submit a Concrete Rubble Stockpile Management Plan, for review and approval of the Executive Director, which identifies stockpile locations outside of the wetland pasture. Special Condition No. 6 requires that within one year of approval of this permit, all concrete rubble material temporarily stockpiled within the pasture area next to the dike shall be: (a) incorporated into the dike as a part of the repair work approved under this permit; (b) transferred to a upland non-pasture area in accordance with the approved Concrete Rubble Stockpile Management Plan required by Special Condition No. 5; or (c) removed from the property and taken to an approved disposal area. No additional material shall be stockpiled within the pasture or anywhere else on the subject property unless it is in accordance with the approved Concrete Rubble Stockpile Management Plan. And finally, Special Condition No. 7 requires that all debris shall be removed from the pasture area that was used to temporarily stockpile concrete rubble material and that the impacted areas shall be re-seeded with a compatible grass mixture if the pasture area fails to revegetate within three months after removal of the concrete rubble material.

# **Conclusion**

The Commission thus finds that the proposed concrete rubble stockpile in a wetland is not an allowable use for fill of coastal waters under Section 30233(a), and that feasible, less environmentally damaging alternatives exist. Therefore, the Commission finds that the proposed concrete rubble stockpile in a wetland is <u>not</u> consistent with Section 30233 of the Coastal Act. However, as conditioned to require removal of the stockpile from the wetland area and require use of upland areas for this purpose, the stockpiling component of the project is consistent with Section 30233 of the Coastal Act.

# 5. <u>Hazards</u>.

Coastal Act Section 30253 requires in applicable part that new development minimize risks to life and property in areas of high flood hazard and that new development assure stability and structural



integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area.

The original dike was improved in the 1950's. However, those improvements were never properly designed and engineered, and merely adding additional material to the dike did not correct certain inherent design flaws in the dike. The Commission therefore finds that any structure or facility that is designed to prevent flooding should require design and engineering expertise. Since the dike is protecting farmed freshwater wetlands and no habitable structures, the design standards for the dike need not be as stringent as the design standards used to protect habitable structures.

The dike reconstruction project's design was reviewed in March of 1992 by SHN, consulting engineers and geologists. Since then, the project's design has been fine tuned, based on experimental designs implemented under emergency permit authorization, to improve its stability and structural integrity as required under Section 30253. It is clear that the more stable the concrete rip rap revetment, the less likely that it will collapse into the slough. A 2 to 1 (horizontal to vertical) slope is generally recommended for rip rap revetments on page 41 of substantive file document No. 4 for "Coastal Protection Structures and Their Effectiveness". However, local site conditions must also be taken into account. In this case, the subject dike is not located on an ocean beach that is subject to strong wind and flood water velocities. Rather, the subject dike is located in a protected area with a relative lack of wind and flood water velocities. Based on observation of other dikes in the area that have been repaired over time, the applicants indicate that the provision of 1 to 1 side slopes for dikes in the area has been shown to be quite stable. As a result, a 1 to 1 side slope for this project should be adequate. Based on their observation of other dikes in the area, the applicants indicate that the displacement of small pieces of rip rap, even down to 0.5 cubic feet, is very rare. As conditioned, the rip rap will be no smaller than one cubic foot in size. Substantive file document No. 4 indicates that rip-rap revetments will inevitably settle downward into soft sands and muds and that this settlement can be minimized by designing a proper, toe to help anchor the revetment in place. As a result, the proposed project provides an engineered toe to help stabilize the concrete revetment. In addition, a filter fabric or erosion cloth will be added between the earthen fill and the concrete rubble revetment to prevent the fill from being washed into the slough. As conditioned, the Commission finds that the project has been designed in a manner which assures the stability and structural integrity of the dike per Section 30253 of the Coastal Act.

## 6. <u>Coastal Agriculture</u>.

The current use of the property is livestock grazing which is considered an agricultural use. The Coastal Act affords certain priority to coastal agriculture over other kinds of uses that might be proposed within the coastal zone.

Section 30241 of the Coastal Act states in applicable part that:

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses ...

Coastal Act Section 30241 requires in applicable part that the maximum amount of prime agricultural land be maintained in agricultural production to assure the protection of the area's agricultural economy. Section 30241 affords a higher priority to coastal agriculture over other kinds of uses that might be proposed within the coastal zone. The proposed project includes three type of activities that would affect the agricultural land use of the site: (1) wetland enhancement, (2) dike reconstruction, and (3) the concrete rubble stockpiles.

Wetland Enhancement and Dike Repair. Approximately 0.5 acres of pasture area would be consumed by the slight realignment of the dike structure itself. In addition, the wetland enhancement component of the project would result in the excavation of approximately 2.1 acres of the farmed freshwater wetland on the landward side of the dike to create three shallow ponds and to enhance the riparian drainages. Therefore, the wetland enhancement and dike repair project would result in a decrease of approximately 2.6 acres of prime agricultural land. However, the excavation of earth fill material to create the three ponds would make the dike repair portion of the project feasible. This development is essential to prevent the remaining 113+/- acres from being inundated with salt water in the event of a dike failure. Therefore, the disturbance of 2.6 acres of grazing land is necessary to ensure that the overall agricultural viability of the site for agriculture will be mentioned.

In addition, in accordance with the Natural Resource Conservation Service Conservation Plan, livestock grazing management measures would limit use of the pond areas throughout the first growing season to allow the biota of the ponds to become established. Once the wetland biota is established, the ponds would become an integral part of the pasture area and would in fact enhance the viability of the agricultural operation by providing a source of fresh water. Therefore, the Commission finds that the proposed wetland enhancement and dike repair components of the project are consistent with Section 30241 of the Coastal Act.

<u>Concrete Rubble Stockpiles</u>. The applicants have already begun to create concrete rubble stockpiles within three location on the subject property: two of the stockpile areas are located within upland pasture area and the third stockpile is located within a seasonal wetland pasture area. The applicants assert that the concrete rubble stockpiles must be located in close proximity to the work area so it does not have to be moved too far of a distance from the original stockpile location. The applicants further assert that if the stockpile is located outside of the wetland pasture area, the rubble material would have to be move twice: once upon initial delivery and then again when construction activities commence.

Stockpiling concrete rubble material for future use on the dike repair project would not serve to maintain the maximum amount of prime agricultural land in agricultural production as required by Section 32041 of the Coastal Act because the stockpiles would displace agricultural activities within portions of the pasture areas. More importantly, feasible less environmentally damaging alternative stockpile locations exist on the subject property which do not adversely impact seasonal wetland resources in the wetland pasture area. (See also Diking, Filing and Dredging of Wetlands and Coastal Waters Section for additional discussion on wetland pasture stockpile areas). Therefore, the Commission attaches Special Condition Nos. 5, 6 and 7. Special Condition No. 5 requires that prior to

issuance of the permit, the applicant shall submit a Concrete Rubble Stockpile Management Plan, for review and approval of the Executive Director, which identifies stockpile locations outside of the wetland pasture. Special Condition No. 6 requires that within one year of approval of this permit, all concrete rubble material temporarily stockpiled within the pasture area next to the dike shall be: (a) incorporated into the dike as a part of the repair work approved under this permit; (b) transferred to a upland non-pasture area in accordance with the approved Concrete Rubble Stockpile Management Plan required by Special Condition No. 5; or (c) removed from the property and taken to an approved disposal area. No additional material shall be stockpiled within the pasture or anywhere else on the subject property unless it is in accordance with the approved Concrete Rubble Stockpile Management Plan. Finally, Special Condition No. 7 requires that all debris shall be removed from the pasture area that was used to temporarily stockpile concrete rubble material and that the impacted areas shall be reseeded with a compatible grass mixture if the pasture area fails to re-vegetate within three months after removal of the concrete rubble material. The Commission finds that as conditioned the concrete stockpile component of the project, is consistent with Section 30241 of the Coastal Act as all impacts of the stockpiling operation on the agricultural use of the site will be eliminated and the maximum amount of prime agriculture will be maintained in agricultural production.

## 7. <u>Visual Resources</u>.

Coastal Act Section 30251 requires in applicable part that the scenic and visual qualities of coastal areas be considered and protected as a resource of public importance, that permitted development be sited and designed to protect views to and along the ocean and scenic coastal areas, and that permitted development be visually compatible with the character of surrounding areas.

The project as proposed would not block views, but the appearance of the rubble revetment along the dike and the stockpiling of material on the pasture lands would not be visually compatible with the character of the area. However, the project can be conditioned to make it visually compatible with the character of the surrounding area. Special Condition No. 2 requires that the concrete rubble rip rap material to be used to repair the dike be free of all exposed reinforcement bar and other foreign material. To soften the appearance of the dike after it has been repaired, Special Condition No. 4 requires that the sides of the dike will be replanted with native shrubby vegetation. As a result, the revegetated dike will look similar to other dikes in the surrounding area.

The 30-yard-square parking lot on the property is a suitable alternative to use of the pasturelands for the stockpiling of the concrete rubble material as the lot is located within a wooded area that is not open to public view. Therefore, the Commission attaches Special Condition Nos. 5, 6 and 7. Special Condition No. 5 requires that prior to issuance of the permit, the applicant shall submit a Concrete Rubble Stockpile Management Plan, for review and approval of the Executive Director, which identifies stockpile locations outside of the wetland pasture such as the parking lot area. Special Condition No. 6 requires that within one year of approval of this permit, all concrete rubble material temporarily stockpiled within the pasture area next to the dike shall be: (a) incorporated into the dike as a part of the repair work approved under this permit; (b) transferred to a upland non-pasture area in accordance with the approved Concrete Rubble Stockpile Management Plan required by Special Condition No. 5; or (c) removed from the property and taken to an approved disposal area. No

additional material shall be stockpiled within the pasture or anywhere else on the subject property unless it is in accordance with the approved Concrete Rubble Stockpile Management Plan. Finally, Special Condition No. 7 requires that all debris shall be removed from the pasture area that was used to temporarily stockpile concrete rubble material and that the impacted areas shall be re-seeded with a compatible grass mixture if the pasture area fails to re-vegetate within three months after removal of the concrete rubble material. Therefore, the Commission finds that the project, as conditioned, is consistent with Section 30251 of the Coastal Act as the project is consistent with the character of the surrounding area and as coastal views and scenic resources will be protected.

### 8. <u>Public Access</u>.

Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or adequate access exists nearby. Section 30211 requires that development not interfere with the public's right to access gained by use or legislative authorization. In applying Section 30211 and 30212, the Commission is also limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential access.

The subject dike is located between the first public road and the sea, (the Mad River Slough is considered to be an arm of the sea). There is no evidence of any historic public access use over the subject property. The Commission therefore finds that the project is consistent with Section 30211 as it would not interfere with any public rights of access. In addition, approval of the project will not create any additional demand for public access for this property or the surrounding area as the project does not change the development potential of the property. Furthermore, the access inventory section of the Humboldt County LUP shows that existing public access is available at the north end of the dike where Lanphere Road crosses the mad river slough. The Commission therefore finds that the proposed development, which does not include public access, is consistent with Sections 30210 and 30212.

## 9. Public Trust.

The project is located on lands which have been legislatively granted to the Humboldt Bay Harbor, Recreation, and Conservation District (Harbor District). On April 22, 1999, the Harbor District granted Permit No. 1998-5 which authorized the subject dike repair project. According to the CDP application, the dike repair project would be undertaken over a five year period. However, the Harbor District approval is valid only until April 22, 2000, unless it is specifically extended prior to expiration of the permit. The Commission therefore attaches Special Condition No. 1, which requires the applicants to submit evidence on an annual basis of their legal ability to undertake the dike repair project over the five-year period requested under this CDP application. The evidence shall include a written determination from the Harbor District prior to the issuance of the coastal development permit demonstrating that the applicants have the necessary approval to proceed with the project as approved by the Commission and conditioned herein.

# 10. California Regional Water Quality Control Board Approval.

The project requires a 401 Water Quality Certification from the California Regional Water Quality Control Board (RWQCB). The Commission therefore attaches Special Condition No. 2, which requires the applicants to submit proof of RWQCB 401 Water Quality Certification prior to the issuance of this permit.

# 11. U.S. Army Corps of Engineers Approval.

The project requires review and approval by the U.S. Army Corps of Engineers. Pursuant to the Federal Coastal Zone Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the U.S. Army Corps of Engineers, the Corps will not issue a permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches Special Condition No. 11 which requires the permittee to submit to the Executive Director evidence of U.S. Army Corps of Engineers approval of the project prior to the commencement of work.

# 12. Alleged Violation.

Concrete rubble material has been placed within an agricultural area of the property at three separate locations without the benefit of a coastal development permit: one area is classified as an a seasonal wetland and the other two areas are classified as upland pasture. Although development has taken place prior to approval of this permit application, consideration of the application by the Commission has been based solely upon the Chapter 3 Policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to the alleged violation nor does it constitute an admission as to the legality of any development undertaken on the subject property without a coastal development permit.

# 13. California Environmental Quality Act (CEQA).

Section 13096 of the Commission's administrative regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) 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 impact which the activity may have on the environment.

As discussed above, the project has been conditioned to ensure consistency with the Coastal Act in a manner, that on balance, is the most protective of sensitive coastal resources and to maintain the maximum amount of agricultural lands in agricultural production, to maintain the biological

productivity and water quality, of environmentally sensitive, fresh water wetlands, to assure the stability and structural integrity of the dike that is to be repaired, to minimize the inadvertent filling of a tidal wetland due to collapse of a repaired dike and, to ensure that the project is consistent with both the public trust and the coastal management program of the State. Consequently, there are no additional feasible alternatives or additional mitigation measures which would substantially lessen any potentially significant adverse impact which the activity may have on the environment. The Commission finds that the project, as conditioned, therefore will not have a significant adverse effect on the environment within the meaning of CEQA.

### EXHIBITS:

- 1. Regional Location Map
- 2. Location Map
- 3. Location Map
- 4. Dike Reconstruction Plans
- 5. Dike Reconstruction Plans
- 6. Site Plan; Existing Development
- 7. Site Plan, Wetland Restoration
- 8. Wetland Restoration

## ATTACHMENT A

### Standard Conditions

- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration</u>. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Compliance</u>. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
- 4. <u>Interpretation</u>. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
- 6. <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 7. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

Ralph/CDP No. 1-98-102











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