#### CALIFORNIA COASTAL COMMISSION

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STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:

1-95-35

APPLICANT:

C. JOHN & CAROL RALPH and CLIFFORD & JANET DEMELLO

PROJECT LOCATION:

6440 and 7000 Lanphere Road, along Mad River Slough in the Arcata bottoms area of Humboldt County. APNs

(1) Permanently authorize the work approved under

506-281-03, 506-312-01, and 506-312-09.

PROJECT DESCRIPTION:

Emergency Permit No. 1-96-14G to replace a broken flood gate and a 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; (2) construct a 3 by 10-foot removable catwalk to service the flood gate; (3) temporarily stockpile concrete rubble rip rap material within a pasture area on the inside edge of the dike and within a 30-yard-square parking lot area on the property; and (4) repair, on an "as needed" basis over a 5-year time period, a 2,850-foot-long agricultural dike by filling collapsed portions of the dike with recovered earthen dike material that slid into the slough and by placing an approximately 1.5-foot-thick layer of concrete rubble rip-rap material on the lower half of the slough side face of the dike.

Zoning:

Agricultural Exclusive, 60-acre min. parcel size. Plan designation: Agricultural Exclusive, 60-acre min. parcel size.

LOCAL APPROVALS RECEIVED:

Humboldt Bay Harbor, Recreation, and Conservation

District Administrative Permit No. 96-4.

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, Sept. 1988, 4th Edition, (3) The Ecology of Humboldt Bay, California, An Estuarine Profile, U.S. Fish and Wildlife 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 CA. Department of Boating and Waterways.

#### STAFF NOTES

#### 1. Permit History.

The Coastal Commission approved Permit No. 1-91-217 in October of 1992. The work which was approved under Permit No. 1-91-217 is substantially the same as the work which is proposed under this permit application, No. 1-95-35. Permit No. 1-91-217 expired two years after it was approved by the Commission. The permit was never issued as the applicants did not satisfy a condition which required them to submit revised dike repair plans for the review and approval of the Executive Director prior to issuance of the permit. In addition, the applicants did not apply for a one-year time extension prior to expiration of the permit. Since that time, the applicants have obtained approval for the proposed project from the U.S. Army Corps of Engineers and from the Regional Water Quality Control Board.

In October of 1996, the applicants applied for and received an emergency permit (No. 1-96-14G) 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 Permit No. 1-91-217. However, since Permit No. 1-91-217 was never issued, the delayed repairs recently 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 this winter's storms, and there was a need to quickly repair this portion of the dike during a low tide event prior to the Commission's November meeting and the start of the winter rainy season. Permit Application No. 1-95-35, in addition to requesting approval for ongoing dike repair, will also make permanent the emergency floodgate and pipe repair work which was authorized under Emergency Permit No. 1-96-14G.

The State Lands Commission (SLC) has indicated that the permittees need not apply to the SLC for project authorization as the project area is located on lands which have been legislatively granted to the Humboldt Bay Harbor, Recreation, and Conservation District (HBHRCD). The HBHRCD granted Administrative Permit No. 92-1 for the work which was previously approved

under Permit No. 1-91-217. However, Administrative Permit No. 92-1 expired and it has been superceded, in part, by Administrative Permit No. 96-4, which only covers the work authorized under Emergency Permit No. 1-96-14G. The Executive Director of the HBHCD has indicated that the HBHCD will likely approve another permit this winter for the balance of the project not covered by the emergency permit.

### 2. Standard of Review.

The proposed development is located along Mad River Slough and 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 of the proposed dike repair project with special conditions to prevent salt water intrusion into the adjoining pasture area to protect environmentally sensitive, freshwater wetlands against any significant disruption of habitat values and to maintain the productivity of prime agricultural lands. 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 used to repair the dike be in a clean condition, free of all asphalt and waste materials, and that all exposed reinforcement bar be removed prior to installation to prevent pollution and maintain the biological productivity and quality of coastal waters and wetlands; (3) the concrete rubble material not be greater than 3 feet in any one direction and not less than I cubic foot in size to assure the structural stability of the dike in a flood hazard area; (4) the repair work be implemented per the 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 riprap in the concrete revetment above the line of highest tidal action be planted with native shrubby vegetation to minimize adverse impacts on the visual character of the area; (6) all existing concrete rubble material 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 the pasture for agriculture, (7) the pasture under the former stockpile area be reseeded with a compatible grass mixture if the pasture area fails to revegetate within three months after removal of the concrete rubble material; (8) no additional material be stockpiled within the pasture area or anywhere else except the parking lot storage area; (9) the requirements in all of the conditions be met; and (10) the approved project be limited for a period of 5 years with a November 12, 2001 expiration date. As conditioned, staff believes the project is consistent with the Coastal Act.

#### **STAFF RECOMMENDATION:**

The staff recommends that the Commission adopt the following resolution:

### I. Approval with Conditions.

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. Standard Conditions. See attached.
- III. Special Conditions.
- 1. Applicants Legal Ability to Implement Balance of Project. PRIOR TO ISSUANCE of the coastal development permit, the applicants shall submit for the review and approval of the Executive Director evidence of their legal ability to develop the project as conditioned herein, including permission from the Humboldt Bay Harbor, Recreation, and Conservation District.
- 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 reinforcement bar shall be removed prior to installation of the rubble rip rap.
- 3. <u>Implementation of Project per Approved Plans</u>. The repair work shall be implemented per the plans that are described in this permit and shown in Exhibit No. 6. The footprint (width) and height of the repaired dike shall not exceed the footprint and height of the original dike as shown in Exhibit No. 6.
- 4. Replanting with Native Vegetation. The spaces between the pieces of riprap in the concrete revetment above the line of highest tidal action shall be filled with earth, and the sides of the dike be planted with native shrubby vegetation, such as willow and twinberry.
- 5. Removal of Stockpiled Concrete Rubble Materials in the Pasture Area. Within one year of Coastal Commission 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 part of the repair work approved under this permit, (b) transferred to the parking lot storage area on the property, 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 except the parking lot storage area.

- 6. Restoration of Pasture Area Under the Temporary Stockpile Area. All debris shall be removed from the pasture area that was used to temporarily stockpile concrete rubble material. The impacted area shall be reseeded with a compatible grass mixture if the pasture area fails to revegetate within three months after removal of the concrete rubble material.
- 7. <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 the nullification of this permit approval.
- 8. <u>Expiration Date</u>. The permit shall expire on November 12, 2001, 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.
- IV. Findings and Declarations.
- 1. <u>Project Description</u>, <u>Purpose</u>, and <u>Location</u>.

The applicants propose to: (1) permanently authorize the work approved under Emergency Permit No. 1-96-14G to replace a broken flood gate and a 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; (2) construct a 3 by 10-foot removable catwalk to service the flood gate; (3) temporarily stockpile concrete rubble rip rap material within a pasture area on the inside edge of the dike and within a 30-yard-square parking lot area on the property; and (4) repair, on an "as needed" basis over a 5-year time period, a 2,850-foot-long agricultural dike by filling collapsed portions of the dike with recovered earthen dike material that previously slid into the slough and by placing an approximately 1.5-foot-thick layer of concrete rubble rip-rap material on the lower half of the slough side face of the dike.

The purpose of the project is to prevent tidal waters of Mad River Slough from flooding about 115 acres of adjacent farmed, fresh water wetlands. The floodgate is attached to a culvert under the dike and allows storm water runoff from the agricultural fields to drain into the slough when the tide is out. The project is located on the west side of Mad River Slough in the Arcata Bottoms area of Humboldt County. See locational Exhibits No. 1 and 2.

The more significant construction details of the project include the following: (1) the approximately 22-foot-wide footprint of the repaired dike will occupy exactly the same area as the original dike, (2) the 10 to 11-foot-height of the repaired dike will have the same height as the original dike, (3) a backhoe will be used to retrieve the mud that has slumped into the slough and to place the mud on the dike as fill material, (4) a filter fabric or erosion control cloth will then be placed on the lower half of the slough

side face of the dike to prevent erosion, (5) a 1.5-foot thick layer of concrete rubble rip rap will then be placed over the filter fabric to form a revetment, (6) the revetment will have a moderately engineered toe that extends 1 to 2 feet downward into the slough mud to secure the lower portion of the revetment, (7) the final slope on the slough side of the dike will not be steeper than 1 to 1 (one foot horizontal to one foot vertical), (8) the concrete rip rap material will be no smaller than one cubic foot in size and no larger than three feet in any one direction, (9) the concrete rip rap material will be free of asphalt, exposed reinforcement bar, or other foreign matter, (10) the top of the repaired dike will be kept free of large, woody vegetation to maintain access, (11) the spaces between the pieces of riprap will be filled with earth, and (12) the sides of the dike will be planted with shrubby vegetation, such as willow and twinberry, to give it a more natural appearance.

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 earthern material on the slough-side face of the dike has slid down into the slough.

The applicants indicate that about 2,250 feet of the 2,850-foot-long dike is in fairly urgent need of repair. The applicants intend to first repair those sections of the dike that are the most damaged, particularly certain sections on the slough side of the dike that have become very steep and eroded. See Exhibits No. 3 and 4. Exhibit No. 3 shows the site plan. Points A through E on the site plan are the areas of the dike that are most in need of repair. Point C is the location of the emergency permit work to replace a broken flood gate and a collapsed outlet pipe. Exhibit No. 4 shows a long profile and cross-sections of the dike. Exhibit No. 5 shows a plan view and cross-section of that portion of the dike containing the floodgate, culvert, and removable catwalk. Exhibit No. 6 shows a typical cross-section of the dike after it has been repaired.

The applicants plan to obtain the concrete rip rap material on an as needed basis and they have indicated that the material will require only a minimal amount of processing and sorting before being used to repair the dike. In anticipation of the work to be performed under the emergency permit, the applicants have begun to place concrete rubble material in temporary stockpiles within a 30-yard-square parking lot area on the property and within the pasture next to the dike. The applicants plan to use existing driveways and the top of the dike as the access routes to move rip rap materials from the stockpiled areas to the dike repair areas.

#### 2. Why a permit is necessary.

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

Notwithstanding any provision in 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 that involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained under this chapter.

Although the subject development is 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 regulations has determined should require a permit because of potential adverse impacts on coastal resources. Section 13252 of the Commission's 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 or 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;
- (B) The presence, whether temporary or permanent, of mechanized equipment or construction materials.

The proposed project involves a repair or maintenance activity that uses mechanized equipment (a back hoe) to place solid materials (concrete rubble rip rap) on a facility or structure (the dike) that is located within 20 feet of coastal waters (the slough). Therefore, the project is not exempt from permit requirements under Coastal Act Section 30610(d).

### 3. <u>Site Description and Botanical Surveys</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 and Demello properties is owned by the Nature Conservancy and is known as the Lanphere-Christensen Preserve. The Lanphere-Christensen Preserve 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 botanical survey of the dike was conducted on November 14, 1991 by Anni Eicher, a botanist with Botanica Northwest Research Associates. 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).

The Humboldt Bay gumplant is a high marsh plant that prefers a location approximately 7 to 9 feet above mean low lower water. The gumplant is a short-lived herbaceous perennial that is able to rapidly colonize disturbed soils. The gumplant is a member of the aster family. This particular subspecies of the gumplant was previously considered by the California Native Plant Society as a candidate species for designation as rare and endangered throughout its range. However, due to a recent botantical reclassification of this subspecies, the California Department of Fish and Game now indicates that this subspecies is no longer being considered as a candidate species for designation as rare and endangered.

The botanical survey also looked for two other rare plant species; namely, the Humboldt Bay owl's clover (Orthocarpus castillejoides var. humboldtiensis) and the Point Reyes bird's beak (Cordylanthus maritimus ssp. palustris). Neither of these two other plant species were found during the November, 1991 survey or during a follow-up survey in May of 1992.

### 4. Protection of Significant Coastal Resources.

Among other requirements, Coastal Act 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 proposed project cannot be accomplished without some dredging and filling of a coastal wetland. Specifically, the collapsed dike material is proposed to be dredged from the mud flats and placed back on the slough-side of the dike and concrete rip rap is proposed to be placed on the slough-side of the dike. However, the proposed diking and filling is not one of the eight uses allowed under Section 30233. Therefore, the Commission cannot find that the project is consistent with Section 30233.

Further, 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 also cannot find that the project is consistent with Section 30240.

However, 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 filling and diking would result in the loss of about 0.6 acres of tidal mudflat habitat. The failure to maintain the dike would also allow the dike to continue to collapse into the slough and cover more than 0.6 acres of tidal mudflat habitat. In addition, the failure to maintain the dike would ultimately cause flooding and saltwater inundation of the 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 areas 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 will not expand the original footprint (width) or 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 and the impacted area reseeded with a compatible grass mixture if the pasture area fails to revegetate within three months after removal of the concrete rubble material. As conditioned herein, the applicants will fill the spaces between the pieces of riprap in the concrete revetment with earth, and revegetate the sides of the dike with native shrubby vegetation, such as willow and twinberry, to give it a more natural appearance and to provide habitat for wildlife.

In conclusion, 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 tidal mudflats 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 agriculturual land be maintained in agricultural production) because this balancing is the most protective of signficant 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 Novmeber 12, 2001, 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.

### 5. Hazards.

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 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 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 stablize 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>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 concrete rubble rip rap material that is used to repair the dike will be free of all exposed reinforcement bar and other foreign material. To soften the appearance of the dike after it has been repaired, the sides of the dike will be replanted with native shrubby vegetation, such as willows and twinberry. 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 suitable for the temporary stockpiling of the concrete rubble material as the lot is located within a wooded area that is not open to public view. However, the pasture area near the dike is open to public view, in addition to being an environmentally sensitive wetland area and a prime agricultural land area. Consequently, the pasture area is not a suitable area to stockpile concrete rubble materials. Therefore, the Commission attaches Special Condition No. 5 requiring removal of the concrete rubble material that has been temporarily stockpiled in the pasture area within one year of Commission approval of this permit. As conditioned, the Commission finds that the project is consistent with Section 30251 as the project is consistent with the character of the surrounding area and as coastal views and scenic resources will be protected.

### 7. Public Access.

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

In applying Sections 30210, 30211, and 30212, the Commission is limited by the need to show that any denial of a permit application based on those 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 public 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 use over the dike. The Commission therefore finds that the project is consistent with Section 30211 as it will not interfere with any existing public rights of access. In addition, approval of the project will not create any additional demand for public access for this property or in the surrounding area as the project does not change the development potential of

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the property. In addition, 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.

### 8. Public Trust.

The project will be located on lands which have been legislatively granted to the Humboldt Bay Harbor, Recreation, and Conservation District. The Commission therefore attaches Special Condition No. 1, which requires the applicants to submit evidence of their legal ability to develop the land as conditioned herein, including a written determination from the Harbor District prior to issuance of the coastal development permit demonstrating that the applicants have the necessary approval to proceed with the project as conditioned herein.

### 9. U.S. Army Corps of Engineers Review.

The applicants have obtained approval for the project from the U.S. Army Corps of Engineers and from the Regional Water Quality Control Board.

#### 10. Alleged Violation.

Concrete rubble material has been placed within the pasture area near the dike without the benefit of a coastal development permit. 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 site without a coastal permit.

### 11. Humboldt County LUP/Prejudice to LCP.

Humboldt County LUP policies No. 2(b) and 2(c) address the protection of natural resources within transitional agricultural lands (i.e. farmed wetlands).

Policy No. 2(b) states in applicable part:

"Diking and filling for new development within transitional agricultural lands shall be limited to the principal uses in the Agriculture Exclusive (AE) land use designation, including construction of spillways and modification or repair of existing dikes threatened by erosion...and incidental public service purposes."

Policy No. 2(c) states:

"Dredging in transitional agricultural lands shall be limited to incidental public service purposes and to maintenance and repair of existing tide gates, flood gates, dikes, levees, and other drainage works, including replacement of drainage works damaged by flood or tidal surges."

The project, as conditioned, is consistent with Humboldt County LUP policies No. 2(b) and 2(c) above as it is limited to the modification or repair of an existing dike that is threatened by erosion to maintain the principal use of transitional agricultural lands that are designated as Agricultural Exclusive.

### 12. CEOA.

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 conditioned 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.

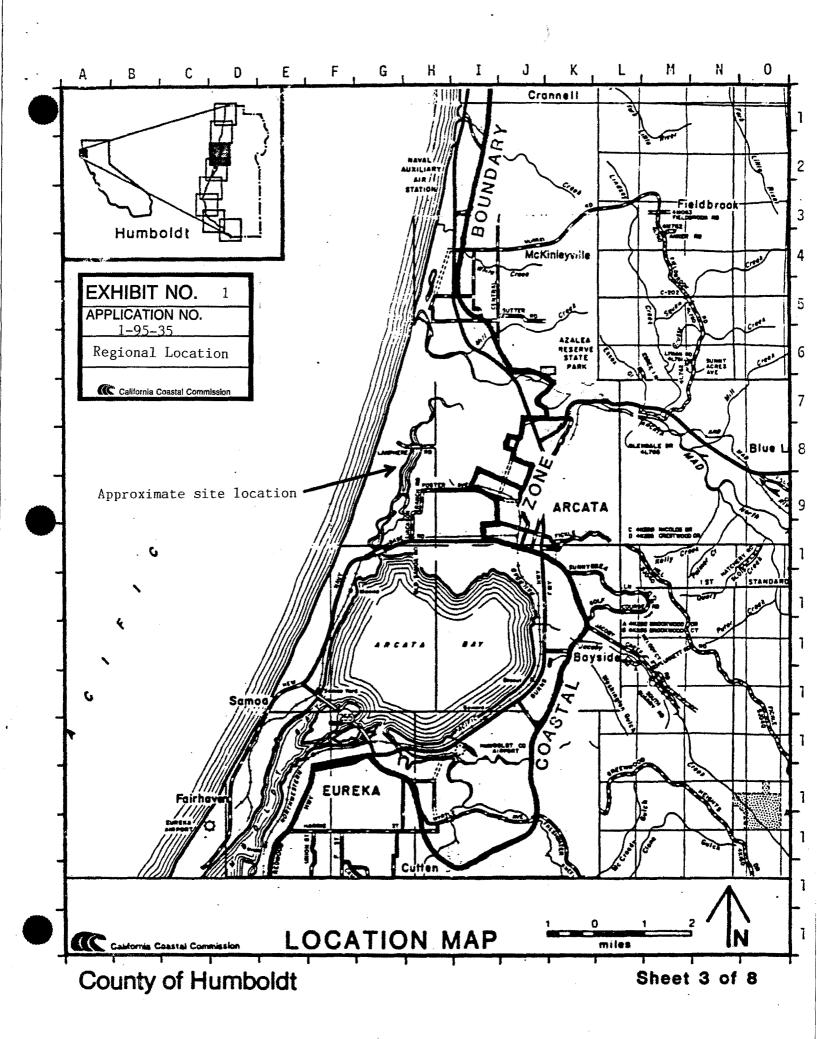
As discussed above, the project has been mitigated to ensure consistency with the Coastal Act in a manner that, on balance, is the most protective of significant coastal resources and to maintain the maximum amount of prime agricultural lands in agricultural production, to maintain the biological productivity 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 a 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 significant adverse impact which the activity may have on the environment.

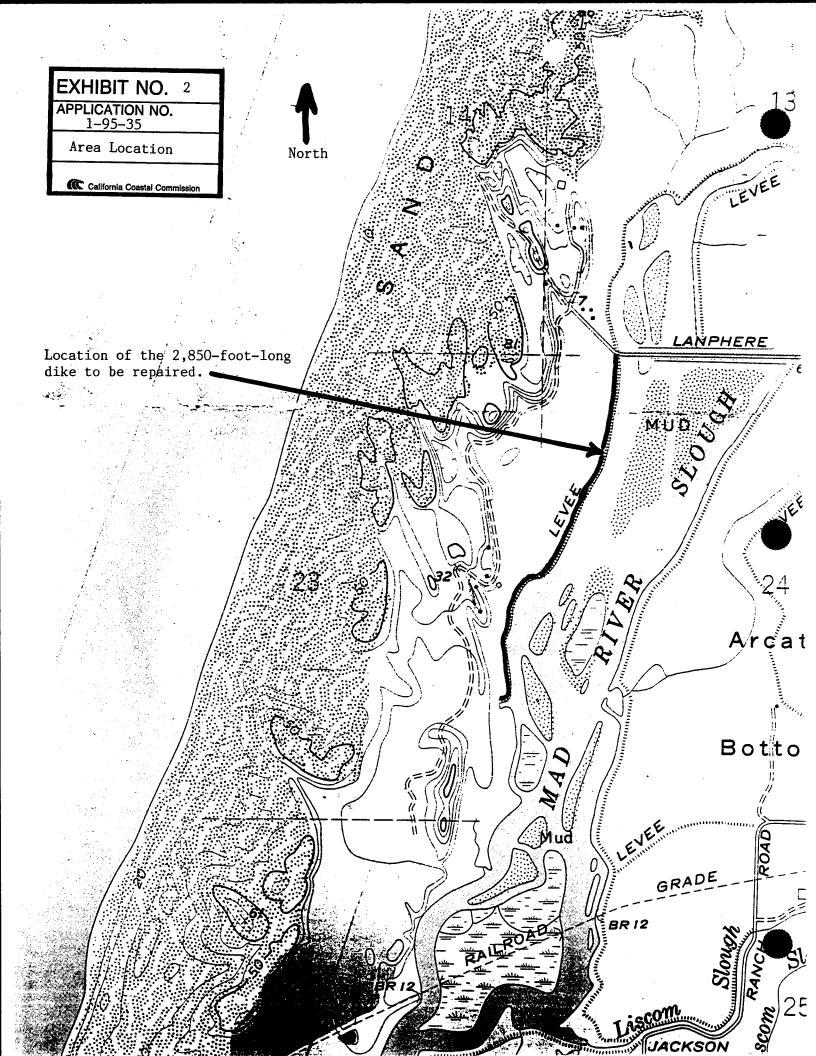
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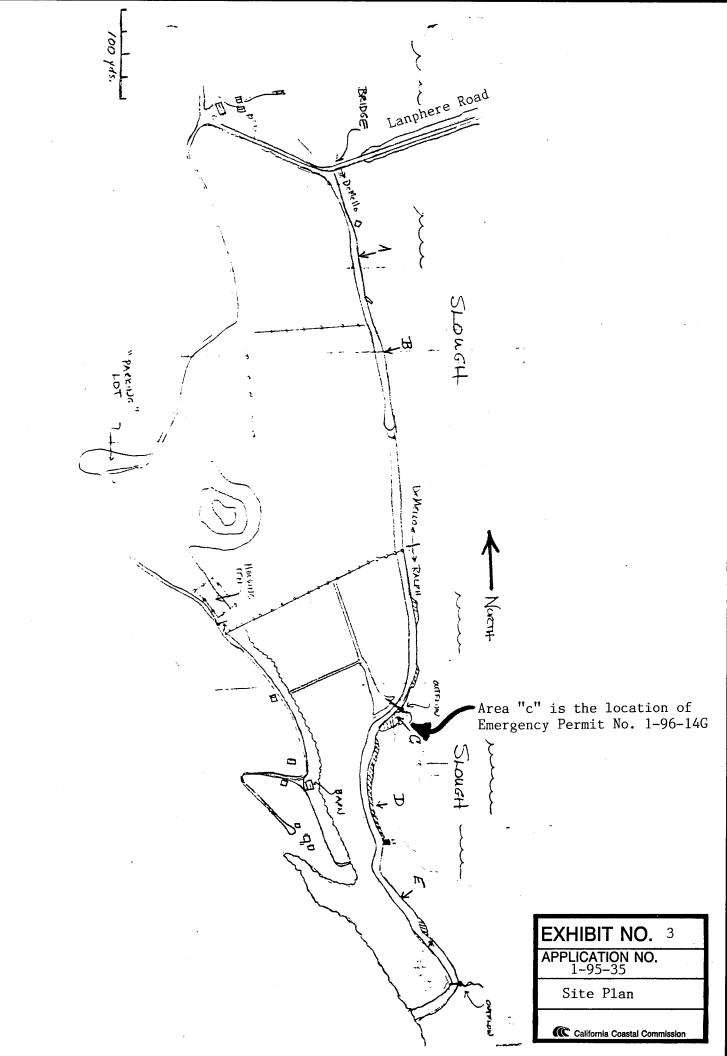
#### ATTACHMENT A

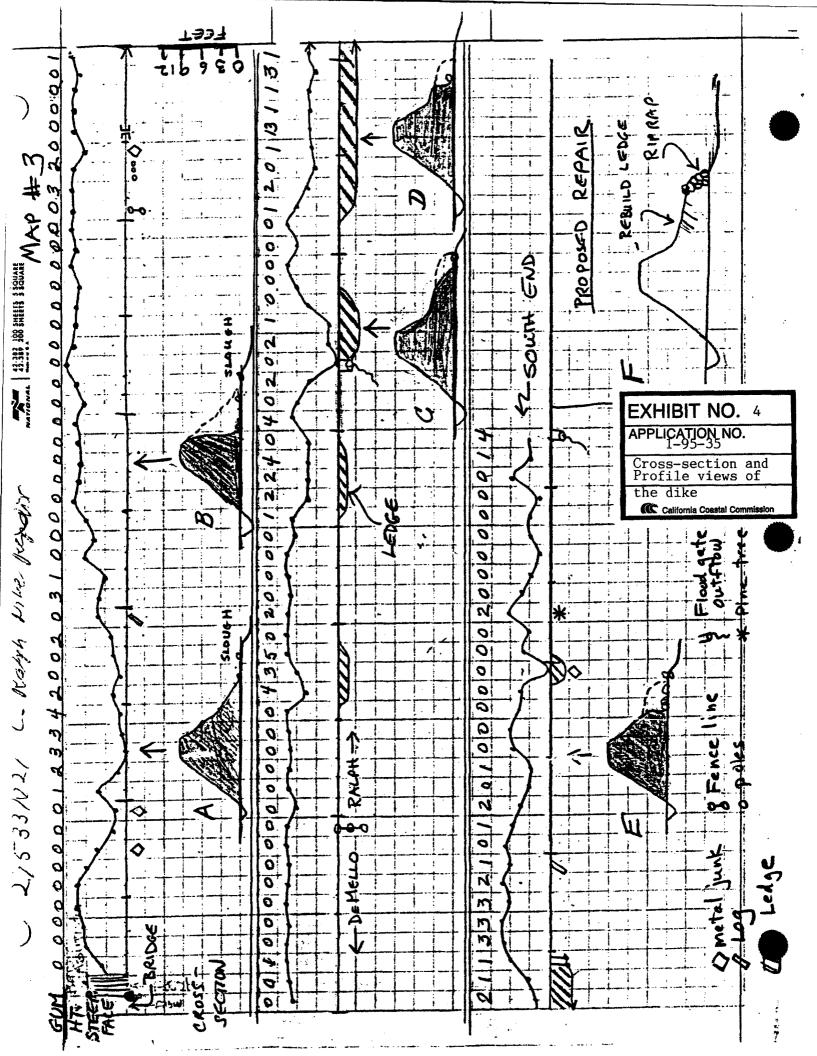
#### Standard Conditions

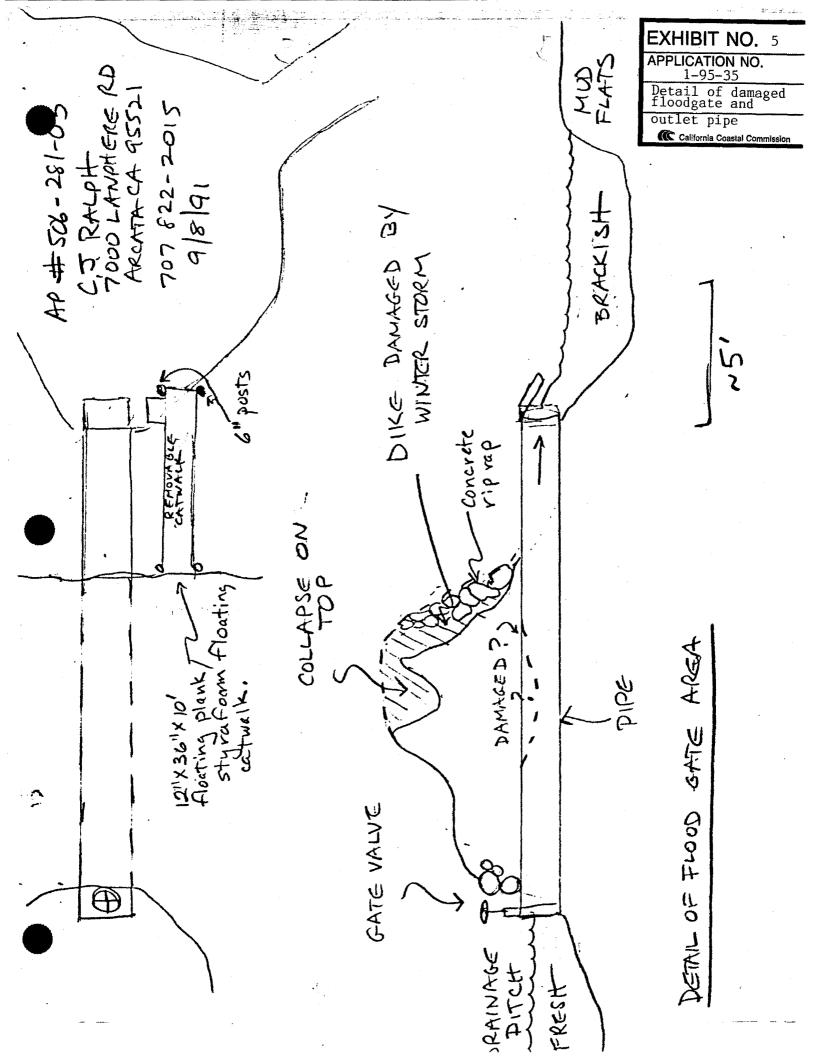
- 1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <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.











AR # 506-281-03 C.J. RAIDIN 506-312-01 C. DeMeus 506-312-09

TYPICAL CROSS-SECTION OF DIKE REALIR

EXISTING DIKE REPAIRED DIKE FILLED MATERIAL FROM SLOUGH RIP RAP MATERIAL. TOE 7 EROSION X -8 to 10 feet-EXISTING UKE. HTL=10.6 (MLLU) MHW= 7.03 (MLLW) EXHIBIT NO. APPLICATION NO. 1-95-35 Typical cross-sectof repaired dike 9