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W 11a**STAFF RECOMMENDATION****ON CONSISTENCY DETERMINATION**

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| Consistency Determination No. | CD-084-04 |
| Staff: | LJS-SF |
| File Date: | 11/8/2004 |
| 60 th Day: | 1/7/2005 |
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| Commission Meeting: | 3/16/2005 |

FEDERAL AGENCY:**Bureau of Land Management****DEVELOPMENT****LOCATION:**

Humboldt Bay South Spit, Humboldt Co. (Exhibits 1-2)

DEVELOPMENT**DESCRIPTION:**

South Jetty Road Shoreline Stabilization Project

SUBSTANTIVE FILE**DOCUMENT:**

1. Consistency Determination CD-052-02 (BLM, Humboldt Bay South Spit Interim Management Plan).

EXECUTIVE SUMMARY

The Bureau of Land Management (BLM) has submitted a consistency determination for the South Jetty Road shoreline stabilization project. The BLM proposes to construct a small rock revetment on the bay side of a 200-foot-long eroded stretch of South Jetty Road near the

southern end of the South Spit of Humboldt Bay. South Jetty Road provides vehicle access to the BLM's public lands on the South Spit for public recreational uses, Native American traditional practices, emergency and law enforcement personnel, and federal agency staff for maintenance of the South Jetty. The BLM states in its consistency determination that over the last several years South Jetty Road at the project site has been undermined by tidal and wave action and that placement of unconfined cobbles and gravel has been unsuccessful in checking the erosion and loss of roadbed.

BLM proposes to excavate a 200-foot-long trench to a depth of three feet below the road surface and with encroachment of no more than five feet into the adjacent mudflat/tidal zone. The trench will be lined with a filter fabric, a one-foot-thick layer of cobbles and sand bags, additional filter fabric, and then capped with one-quarter to one-half ton armor stone. The two-foot by 50-foot section of eroded pavement would then be graveled and repaved. The revetment would extend no more than one foot above the existing road elevation, and would confine the roadbase and asphalt to prevent further erosion into the bay.

The project qualifies as an incidental public service under Section 30233(a)(5) and constitutes an allowable use for fill of open coastal waters, due to its public service purpose and because it would not increase the existing capacity of South Jetty Road. The project is the least environmentally damaging alternative and is necessary to prevent the complete undermining of South Jetty Road and the resultant loss of vehicle access along the South Spit. The project includes a 4.5:1 mitigation ratio for permanent mudflat habitat loss. Mitigation is comprised of restoration of adjacent mudflat habitat degraded by eroded roadbase and asphalt materials, and the removal of invasive iceplant from salt marsh habitat just south of the project site. The project is consistent with the wetland and open coastal waters fill policy (Coastal Act Section 30233(a)) of the California Coastal Management Program (CCMP).

The proposed revetment is designed to protect the existing South Jetty Road and designed to avoid or mitigate adverse impacts on water circulation, wave action, and sand supply, and is consistent with the shoreline structure policy (Coastal Act Section 30235) of the CCMP. The project will protect the mudflats and water quality of Humboldt Bay by preventing further erosion of the roadway into the bay, by removing previously eroded materials from the bay, and by occupying only the minimal amount of mudflat habitat. The project is consistent with the marine resource and water quality policies (Coastal Act Sections 30230 and 30231) of the CCMP. The project site does not contain any environmentally sensitive habitat, supports no listed wildlife species, avoids sand dune habitat on the west side of South Jetty Road, and is consistent with the environmentally sensitive habitat policy (Coastal Act Section 30240) of the CCMP.

Aside from temporary traffic delays on South Jetty Road at the work site and the temporary disruption to small boat launching at the work site during construction of the revetment, the proposed project would not adversely affect, but rather would protect, existing public access and recreation opportunities on the South Spit. The proposed project is consistent with the public access and recreation policies (Coastal Act Sections 30210, 30211, 30212, and 30220) of the CCMP.

The proposed 200-foot-long trenched revetment will extend no more than one foot above the current elevation of South Jetty Road, will extend no more than five feet horizontally onto the upper reaches of the adjacent mudflats, and will be comprised of quarry rock common to the local area. Other man-made improvements are adjacent to and in the vicinity of the project site, and the presence of this structure will generate only a minor impact on the scenic quality along South Jetty Road. The project is consistent with the visual resource policy (Coastal Act Section 30251) of the CCMP. A cultural resources survey was completed in 2002 on the South Spit and no cultural resources were identified on the project site. BLM has committed that the project will not affect any nearby cultural resources and has coordinated with the Table Bluff Reservation – Wiyot Tribe. The project is consistent with the archaeological and paleontological resource policy (Coastal Act Section 30244) of the CCMP.

STAFF SUMMARY AND RECOMMENDATION

I. Project Description. The Bureau of Land Management (BLM) proposes to construct a small rock revetment on the bay side of a 200-foot-long eroded stretch of South Jetty Road near the southern end of the South Spit of Humboldt Bay (**Exhibits 1 and 2**). The South Jetty Road provides public access to the BLM's public lands on the South Spit for a wide variety of recreational uses including fishing, surfing, picnicking, beachcombing, wildlife viewing, waveslope vehicle use, and horseback riding. The project site has long-supported the launching of small boats into Humboldt Bay due to the road's extremely close proximity to the bay. South Jetty Road is used by the Table Bluff Reservation – Wiyot Tribe to access cultural areas and to perform traditional practices, and also provides access to commercial fishermen, federal and state resource management agency staff, and emergency vehicles. In addition, the Corps of Engineers and U.S. Coast Guard use the road to access and perform maintenance on the South Jetty of Humboldt Bay. The BLM estimates that approximately 40,000 visitors travel the road each year.

The BLM states in its consistency determination that over the last several years South Jetty Road has been undermined by tidal and wave action (**Exhibit 3**). Past maintenance of the eroded road segment involved placing small cobbles and road base material along the edge of the asphalt to keep the pavement from breaking apart. However, this type of recurring maintenance has not occurred for several years; the subject road segment is now undermined and the asphalt surface has failed. The BLM further reports that:

During the winter of 2003-2004, the 100-foot section of South Jetty Road previously proposed for revetment underwent further erosion in both north and south directions, and dislodged nearly two feet by 50 feet of existing pavement. The road, for approximately 200 feet, is now only one lane wide. The BLM placed approximately 300 sand bags along the edge of the impacted area to temporarily prevent further road erosion. More permanent repair work needs to be completed to prevent further erosion and deterioration.

The BLM proposes to protect this stretch of road from further erosion and repair the damaged segment by installing a small revetment (**Exhibit 4**):

Cobbles (two to six inch diameter rocks) and quarry rock (1/4 to 1/2 ton armor stone) would be used to control erosion along the road. Construction would entail excavation of an approximately 200-foot long trench to a depth of three feet below the road surface. The anticipated maximum extent of encroachment into the tidal zone would be approximately five feet. The excavation would be lined with a non-woven filter fabric (geo-textile) and then an approximately one-foot thick layer of cobbles and existing sand bags would be placed in the trench to hold the geo-textile in place. The geo-textile would then be pulled back over the cobbles and the armor stone (1/4 to 1/2 ton) would be placed on top of the geo-textile to anchor the cobbles and filter fabric. Finally, an approximately six-foot wide path would be created over the revetment by grouting the interstices between the armor stones with cement. This would allow safe access to the bay for small boat users. The two-foot by 50 foot section of pavement lost last winter would be graveled and repaved (Figure 2). At no time would any motorized equipment be operated or placed off South Jetty Road.

The armor stone would not protrude significantly above the road surface and should not significantly alter circulation or wave action in Humboldt Bay. The proposed repairs would not change the tidal prism of Humboldt Bay or prevent waves from washing over the road. Even with the repairs in place, South Jetty Road would occasionally be inundated during high tides, especially when coincident with high southerly wind events. Rather, the repairs would serve to confine the road's gravel subgrade and prevent migration of additional gravel into the bay. This repair has dual beneficial effects: prevent future contamination of the mud/sand flat by gravel and asphalt chunks and also maintain the driving surface of the only access route to the South Jetty. Access along South Spit [Jetty] Road is important both for maintenance of the South Jetty and for public use of the area.

The BLM also notes in its consistency determination that the proposed South Jetty Road Shoreline Stabilization Project was an element of the BLM's *South Spit Interim Management Plan (July 2002)*. This plan was the subject of consistency determination CD-052-02 which the Commission conditionally concurred with in December 2002. However, the BLM removed the South Jetty Road project from CD-052-02 and committed at that time to submit a consistency determination at a later date for the road project. With the submittal of the subject consistency determination, the BLM is fulfilling that 2002 commitment to the Commission.

II. Status of Local Coastal Program. The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If an LCP that the Commission has certified and incorporated into the California Coastal Management Program (CCMP) provides development standards that are applicable to the project site, the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated the LCP into the CCMP, it cannot guide the Commission's decision, but it can provide background information. The County of Humboldt's LCP has been certified by the Commission and incorporated into the CCMP.

III. Federal Agency's Consistency Determination. The Bureau of Land Management has determined the project consistent to the maximum extent practicable with the California Coastal Management Program.

IV. Staff Recommendation.

The staff recommends that the Commission adopt the following resolution:

MOTION: I move that the Commission **concur** with consistency determination CD-084-04 that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

Staff Recommendation:

The staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution to Concur with Consistency Determination:

The Commission hereby **concurs** with the consistency determination by the Bureau of Land Management, on the grounds that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

V. Findings and Declarations.

The Commission finds and declares as follows:

A. Marine Resources and Environmentally Sensitive Habitat. The Coastal Act provides the following:

Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and

substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233(a). The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

...

(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. . . .

Section 30235. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30240.

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

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The 200-foot-long segment of South Jetty Road to be protected by the proposed revetment is located immediately adjacent to the shoreline of Humboldt Bay. The habitat type present is bay mudflat and daily tidal action inundates the mudflats and occasionally washes over South Jetty Road. The mudflats provide habitat for bivalves, worms, crustaceans, and other benthic organisms. However, even at high tide the shallow water depths adjacent to the project site do not provide adequate habitat for bottom fish or fin fish.

The proposed project includes permanent fill in open coastal waters as defined under the Coastal Act, and therefore triggers the three-part test under Section 30233(a): allowable use, alternatives, and mitigation. Under the first of these tests, a project must qualify as one of the eight stated uses allowed under Section 30233(a). Since the other allowable uses clearly do not apply, the

Commission must determine whether the proposed project can be permitted under Section 30233(a)(5), which authorizes fill for:

Incidental public service purposes, including but not limited to, burying cables, pipes or inspection of piers and maintenance of existing intake and outfall lines.

In order for an "incidental public service purpose" a proposed fill must satisfy two tests: (1) the project must have a "public service purpose"; and (2) the purpose must be "incidental" within the meaning of that term as it is used in Section 30233(a)(5). Because the project will be constructed by a public agency (BLM) for the purpose of protecting a segment of South Jetty Road from erosion and collapse, the fill is for a public service purpose. Thus, the project satisfies the first test under Section 30233(a)(5).

With respect to the second test, in 1981 the Commission adopted the "Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas" (hereinafter, the "Guidelines"). The *Guidelines* analyze the allowable uses in wetlands under Section 30233 including the provision regarding "incidental public service purposes." The *Guidelines* state that fill is allowed for:

Incidental public service purposes which temporarily impact the resources of the area, which include, but are not limited to, burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines (roads do not qualify).

A footnote (no. 3) to the above-quoted passage further states that:

When no other alternative exists, and when consistent with the other provisions of this section, limited expansion of roadbeds and bridges necessary to maintain existing traffic capacity may be permitted.

The Court of Appeal has recognized the Commission's interpretation in the *Guidelines* of the term "incidental public service purposes" as a permissible one. In the case of *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4th 493, 517, the Court found that:

... we accept Commission's interpretation of sections 3023 and 30240 ... In particular we note that under Commission's interpretation, incidental public services are limited to temporary disruptions and do not usually include permanent roadway expansions. Roadway expansions are permitted only when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.

In past cases the Commission has considered the circumstances under which fill associated with the expansion of an existing "roadbed or bridge" might be allowed under Section 30233(a)(5). In such cases the Commission has determined that, consistent with the analysis in the *Guidelines*, the expansion of an existing road or bridge may constitute an "incidental public service purpose"

when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.

The Commission previously granted to the Cities of Seal Beach and Long Beach a coastal development permit (5-00-321) for the construction of bridge abutments and concrete piles for the Marina Drive Bridge located on the San Gabriel River. The Commission found that the project involved the fill of open coastal waters for an incidental public service purpose because the fill was being undertaken by a public agency in pursuit of its public mission, and because it maintained existing road capacity.

The Commission has also determined in conjunction with a project (El Rancho Road Bridge) proposed by the U.S. Air Force at Vandenberg AFB that permanent impacts to wetlands are allowable under Section 30233(a)(5) of the Coastal Act as an incidental public service because the Air Force was undertaking the fill in pursuit of a public service mission and because the "permanent fill [was] associated with a bridge replacement project [that] would not result in an increase in traffic capacity of the road." (CD-070-92, and reiterated in CD-106-01).

Thus, based on past interpretations, fill for the expansion of existing roadways and bridges may be considered to be an "incidental public service purpose" if: (1) there is no less damaging feasible alternative; (2) the fill is undertaken by a public agency in pursuit of its public mission; and (3) the expansion is necessary to maintain existing traffic capacity. The proposed South Jetty Road revetment is designed to protect a 200-foot-long stretch of damaged roadway from further erosion into Humboldt Bay. The proposed revetment and roadway repair will not increase the existing capacity of South Jetty Road and is necessary to maintain vehicle access to the South Spit and South Jetty of Humboldt Bay. Thus, for reasons comparable to those projects previously discussed, the Commission concludes that the proposed project qualifies as an incidental public service under Section 30233(a)(5) and constitutes an allowable use for fill of open coastal waters.

In addition, the proposed South Jetty Road shoreline protection requires fill below the mean high tide line (i.e., fill of coastal waters). Section 30233 of the Coastal Act identifies eight allowable uses for the dredging, diking, and filling of coastal waters; seawalls are not one of the listed uses. As a result, a seawall is prohibited in coastal waters by Section 30233(a). However, Section 30235 of the Coastal Act requires the Commission to approve a seawall if it is necessary to protect an existing structure and if it meets the other requirements of that section. Section 30235 clearly anticipates dredging, diking, and filling of coastal waters for seawalls and is a more specific policy than Section 30233(a) in this regard. In other words, Section 30235 of the Coastal Act requires the Commission to approve seawalls in certain circumstances, even though such activities may not comply with the allowable-use test of Section 30233(a) of the Coastal Act. Thus, to the extent Section 30235 requires that the Commission approve this project, the more specific direction of Section 30235 would override in this case.¹

¹ Note that other coastal resource issues associated with such fill are addressed in subsequent findings. Note too that the requirements of Section 30233(a) as regards mitigating impacts and identifying the last environmentally damaging feasible alternative would still apply. The intent of this finding is to explain the distinction between Sections 30233(a) and 30235 as it relates to seawalls occupying coastal waters. Giving precedence to the more particular provisions of Section 30235 over the

The consistency determination and accompanying Environmental Analysis examined the following alternatives to the proposed trenched rock revetment to protect South Jetty Road from further erosion:

1. Geotextile armoring involves placement of geo-textile confining materials (e.g., Geoweb and Geobags) filled with granular material. The geo-textile holds the granular material in place until vegetation has the opportunity to establish. Cost is moderate and once vegetation has been established, aesthetics can be pleasing. However, there are a limited number of contractors in the area that are familiar with this technology and the reliability of this approach is relatively unproven in marine environments. Moreover, vegetated geo-textile revetments likely cannot withstand trampling associated with the small boat launches that occur frequently at this location.

2. Quarry stone armoring with cement chinking involves placement of quarry stones on a bed of cobbles and geo-textile. Once the quarry stone has been placed the interstices are filled with concrete grout to prevent undermining of the revetment. This approach is time tested, but usually does not provide high quality habitat and can result in unintended effects due to wave reflection. Similar to geo-textile armoring, the cost is moderate. Aesthetically, these types of revetments are acceptable, but may not blend in with the surroundings. To improve the aesthetics and allow for hand launching of boats, BLM would not allow the revetment to extend more than one foot above the existing road surface.

3. Quarry stone armoring with sand chinking involves placement of quarry stone as described in the previous treatment, but instead of filling the interstices with cement, sand is used, so that plants can colonize the area. When vegetated, these types of revetments can be as pleasing as well vegetated geotextile treatments, but have lower cost and have been demonstrated to be very reliable when designed properly. To improve the aesthetics and allow for hand launching of boats, BLM would not allow the revetment to extend more than one foot above the existing road surface.

4. Segmental retaining walls involve the use of pre-cast cement blocks. Due to their flat faces, they tend to reflect wave energy more than other alternatives. Additionally, the cost is high, they do not produce useable habitat, and aesthetically they do not blend in with the environs. A segmental retaining wall would interfere with the existing use of this area as a small boat launch.

5. Placement of sand involves the routine replenishment of sand at the location where erosion is occurring. Sand placement is inappropriate at this location because it would alter the characteristics of the adjacent mudflats and cause a decrease in the tidal prism of Humboldt Bay.

6. *Bridging involves the use of structural members to span the area where erosion is occurring. Bridging would reduce the effects of the roadway on existing sediment transport patterns in the Bay. However, bridging is costly, requires significant maintenance, and would not add to the aesthetics of the site. Bridging is incompatible with the existing use of the site as a small boat launch.*

The BLM's objective is to protect this segment of South Jetty Road from further erosion, minimize the encroachment of any protective device into the adjacent mudflats, protect water quality by preventing the erosion of asphalt materials into the bay, maintain the existing small boat launch activity at the site, and minimize the visual impacts of any protective device. The BLM concluded that the proposed trenched rock revetment best meets those objectives and minimizes resource impacts. The other alternatives analyzed by the BLM would either create greater impacts on the adjacent mudflats, not adequately address the erosion problem, inhibit small boat launching, or create unacceptable visual resource effects. It is not feasible to relocate South Jetty Road landward to the west due to the presence of environmentally sensitive sand dune habitat along the entire length of the roadway. There is no alternative vehicular access route along the South Spit and to the South Jetty. Therefore, the Commission concludes that the BLM's determination that the proposed trenched rock revetment represents the least environmentally damaging alternative, and that the project meets the alternatives test of Section 30233(a)(5) of the Coastal Act.

The BLM acknowledges in its consistency determination that the proposed 200-foot-long revetment will extend five feet into the tidal zone of Humboldt Bay, generating 1,000 sq. ft. of permanent fill of open coastal waters/mudflats that must be mitigated. The BLM proposed the following mitigation measure for the proposed revetment:

As a result of wind wave-induced erosion of the road and its subgrade material, a substantial volume of gravel has migrated into the mud flats adjacent to the road repair area. The presence of the gravel in the mud flat alters the mechanical properties of the mud and decreases the habitat value for bivalves, worms, crustaceans, and other benthic organisms. Because these organisms cannot burrow through such gravel deposits, their abundance is likely much reduced in the area where gravel has contaminated the mud flat. The decreased abundance of these benthic organisms likely reduces the value of the area for avian and aquatic predator species.

The BLM proposes to mitigate the repair and replacement of approximately 1,000 square feet of road prism along the Humboldt Bay shoreline at a ratio of 3 to 1. The proposed mitigation would consist of removal of gravel from approximately 3,000 square feet of mud flat. The gravel would be removed by hand raking it into piles and transporting the material to an upland location where it cannot erode back into Humboldt Bay. While labor intensive, performing the work by hand would result in the least disturbance to the mud flat and would minimize impacts to water quality resulting from mitigation activities. Preliminary investigation of the area indicates that the gravel has not yet migrated significantly downward into the mud/sand flat and that the flat can bear moderate loads. Therefore, a hand crew with landscape rakes should be able to remove most of the gravel and the surface

of the flat can most likely support wheelbarrows to move the gravel out of the bay. After the gravel has been removed, the area would be raked flat before being inundated by the tide. Work would be conducted during low tide and in a manner that does not promote further erosion of the shoreline or road. It is estimated that the work can be performed in two days with a crew of 10 hand laborers. The mitigation activities in conjunction with the proposed road repairs should ensure that the mud flat will return to its former habitat type within one season.

In addition to the above actions, the BLM committed to monitor the mitigation site on a semi-annual basis and to notify the Commission staff when the site once again supports a normal assemblage of benthic organisms.

After discussing with Commission staff the adequacy of the above measure to mitigate existing impacts to mudflats and the impacts from the proposed revetment, the BLM agreed to add the following element to its mitigation program (**Exhibit 5**):

*The new additional mitigation area is located approximately 1,000 feet south of the project site and totals 4,000 square feet of salt marsh habitat. The site is nearly 20 feet by 200 feet running parallel to the bay mudflats (see Map A). Within this habitat area, approximately 1,500 square feet of land is covered by iceplant clones that are displacing native salt marsh species such as the CNPS 1B Humboldt Bay Owl's clover (*Castilleja ambigua* spp. *humboldtiensis*), western sand spurrey (*Spergulariac Canadensis* var. *occidentalis*) and Pt. Reyes Bird's-beak (*Cordylanthus maritimus* ssp. *palustris*), as well as other endemic salt marsh plants such as sea lavender (*Limonium californicum*) and arrowgrass (*Triglochin concinna*).*

These ice plant clones will be dug up using hand tools, loaded into trucks, and hauled to one of several approved burning sites. Vehicle access adjacent to the work area will be along an existing hunter access corridor which is identified as a designated vehicle route.

Semi-annual monitoring of the site will occur to document native species growth, composition, and distribution. Any infestations of ice plant within the mitigation area will be removed.

With this addition, the BLM is proposing a 4.5:1 mitigation ratio for permanent mudflat habitat loss, a ratio which is consistent with the Commission's historic record of ensuring that any loss of such habitat (for an allowable use and if the least environmentally damaging alternative) must be fully and sufficiently mitigated in order to find that the proposed development is consistent with the wetland fill policies of the Coastal Act. Many Commission-issued coastal development permits and federal consistency reviews have required a mitigation ratio of 4:1 to compensate for wetland acreage and functional capacity lost during the re-establishment and maturation of the mitigation area. In some cases, larger ratios have been required to ensure that at least some compensation occurs in the event the mitigation project is only partially successful. In the subject project, the Commission finds that the proposed 4.5:1 mitigation ratio for the proposed permanent loss of mudflat habitat would not lead to adverse effects on mudflat habitat. Thus, the

Commission finds that the BLM's proposed mitigation is adequate and that the project meets the mitigation test of Section 30233(a) of the Coastal Act.

Section 30235 of the Coastal Act allows construction of a revetment when designed to protect an existing structure and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. The BLM's proposed revetment is designed to protect South Jetty Road, the only vehicle roadway traversing the South Spit of Humboldt Bay. As discussed above, without the proposed shoreline protective device, the ongoing erosion of South Jetty Road will continue in a westerly direction until the roadway is completely breached and vehicular access to the South Spit and South Jetty is blocked. The proposed revetment is designed to be trenched along a 200-foot-long stretch of the eastern edge of South Jetty Road and would extend no more than five feet into the adjacent mudflats of Humboldt Bay. The small scale and extent of the proposed revetment would not create any adverse effects on local or regional water circulation, wave action, or sand supply in Humboldt Bay. The revetment is not designed to prevent waves or high tides from washing over or inundating South Jetty Road, but rather is designed to check any further erosion of the road's gravel subgrade and asphalt pavement into the adjacent mudflats. Therefore, the Commission finds that the proposed revetment is designed to be consistent with the requirements of Section 30235 of the Coastal Act.

Sections 30230 and 30231 of the Coastal Act call for the protection of marine resources and water quality. The ongoing erosion of a segment of South Jetty Road has washed roadbed and surface materials into the adjacent mudflats of Humboldt Bay. The proposed project will repair the eroded segment, prevent additional erosion from occurring, and remove gravel and asphalt materials from the mudflats. The BLM will implement construction best management practices to control erosion and runoff, and will schedule as much construction work as possible during periods of low tides. The consistency determination states that:

There would be short-term, minor impacts on water quality due to the introduction of sediment and turbidity into Humboldt Bay waters during the construction period of the project. The project would have a moderate, long-term beneficial impact on the water quality of Humboldt Bay by preventing further erosion of the shoreline and decrease sedimentation into the bay . . . No motorized equipment would be allowed to operate off of South Jetty Road, so the potential for spillage of any hazardous substances into the bay would be extremely unlikely.

The Commission finds that the proposed South Jetty Road revetment will protect the adjacent mudflats and water quality of Humboldt Bay and will remove previously eroded roadbed materials from the mudflats. While the proposed project will occupy a five-foot-wide by 200-foot-long strip of mudflat immediately adjacent to the existing roadway, the project would not generate any significant adverse effects on the marine resources or water quality of Humboldt Bay and will stabilize the ongoing erosion of roadbed materials into the bay. The project is therefore consistent with the marine resource and water quality policies (Sections 30230 and 30231) of the Coastal Act.

Existing vegetation at the project site consists only of European beach grass and iceplant, both of which are exotic plant species and neither of which provides habitat for any rare, threatened, or endangered wildlife species. No rare, threatened, or endangered plants or wildlife species occur at or immediately nearby the project site. All excavated and construction-related materials will be stored in currently disturbed, unvegetated areas adjacent to existing pullouts and parking areas. No construction-related activities will occur in the sand dune habitat located on the west side of South Jetty Road. Therefore, the Commission finds that the proposed project will not adversely affect environmentally sensitive habitat at or adjacent to the project site, and is consistent with the environmentally sensitive habitat policy (Section 30240) of the Coastal Act.

B. Public Access and Recreation. The Coastal Act provides the following:

Section 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212(a). Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

- 1. It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,*
- 2. Adequate access exists nearby*

Section 30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

As noted previously in this report, South Jetty Road is the only roadway that runs the length of the South Spit, and provides access to the general public for a variety of recreational uses, to public safety and enforcement personnel, to Native Americans for traditional practices, and to federal agency staff for repair and maintenance activities at the South Jetty. The consistency determination states that:

This project would ensure that public access (40,000 visits annually) continues to be provided along four miles of coastline, the south jetty, and Humboldt Bay. Outstanding recreation opportunities such as fishing, hiking along the beach, wildlife viewing, picnicking, waterfowl hunting, and horseback riding would be enhanced. During the project work period, periodic traffic delays from 15 to 30 minutes, several times a day for two days could be expected.

Any further erosion of the road may require the BLM to close it to vehicle use, preventing a substantial amount of diverse recreation uses from occurring.

The BLM also stated that prior to the start of construction, public notices would be posted and the media contacted to inform visitors of the two-day construction period. Aside from temporary traffic delays on South Jetty Road at the work site and the temporary disruption to small boat launching at the work site during construction of the revetment, the proposed project would not adversely affect, but rather would protect, existing public access and recreation opportunities on the South Spit. Therefore, the Commission finds that the construction and presence of the proposed project is consistent with the public access and recreation policies (Sections 30210, 30211, 30212, and 30220) of the Coastal Act.

C. Visual Resources. Section 30251 of the Coastal Act provides:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The proposed 200-foot-long trenched revetment will extend no more than one foot above the current elevation of South Jetty Road, will extend no more than five feet horizontally onto the upper reaches of the adjacent mudflats, and will be comprised of quarry rock common to the local area. The BLM reports that there are several man-made improvements adjacent to and in the vicinity of the project site, including the existing roadway, parking and picnic areas, restrooms, tables, and post and cable barriers. The presence of this structure will generate only a minor impact on the scenic quality along this segment of South Jetty Road. Therefore, the Commission finds that the proposed revetment's visual impacts have been minimized and that the project is consistent with the visual resource policies (Section 30251) of the Coastal Act.

D. Cultural Resources. Section 30244 of the Coastal Act provides:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Environmental Assessment for the proposed project states that:

The Humboldt Bay region including the South Spit lands have been occupied for at least the last 1,500 years by Algonquian speaking people now referred to as Wiyot. Descendants of these people, the Wiyot Tribe, now reside at Table Bluff Reservation and other places in

Humboldt County . . . The present day Wiyot Tribe feel a strong connection to the South Spit as part of their aboriginal territory, and it has a great significance to them as part of their heritage and is still used for hunting, fishing, and gathering shellfish and vegetal resources. In addition, several culturally sensitive areas have been identified.

...

An intensive Class III archaeological and cultural survey was completed in 2002 on the South Spit by cultural resources staff from Table Bluff Reservation – Wiyot Tribe and the BLM. Most of the sites have poor integrity which may have been caused over the last one hundred-fifty plus years by large storm events, accretion of sand, the construction and maintenance of the South Jetty over the years, and the active disturbance from modern encampments which have washed away, covered, eradicated and/or removed many traces of prehistoric and historic use by the Wiyot. There is one cultural site in the close vicinity of the project site. The BLM in close coordination with a Wiyot tribal representative will ensure that this site is not affected in any way by activities associated with the proposed project.

The consistency determination for the project states that:

No impacts would occur to any cultural resources. A historic site exists nearby, and the BLM would ensure that no activity occurs in its vicinity. A Table Bluff Reservation – Wiyot Tribe representative has been informed of the project and invited to monitor all project activities.

In addition, the BLM's South Spit Interim Management Plan (which includes the project area) states that a qualified archaeologist will be present during all ground disturbing activities that may occur during the three-year interim management plan period. The existing archaeological survey results and the above-referenced commitments on the part of the BLM will ensure that no disturbance to archaeological and cultural resources will occur during project construction. Therefore, the Commission finds that the proposed South Jetty Road revetment is consistent with the archaeological and paleontological resource policy (Section 30244) of the Coastal Act.

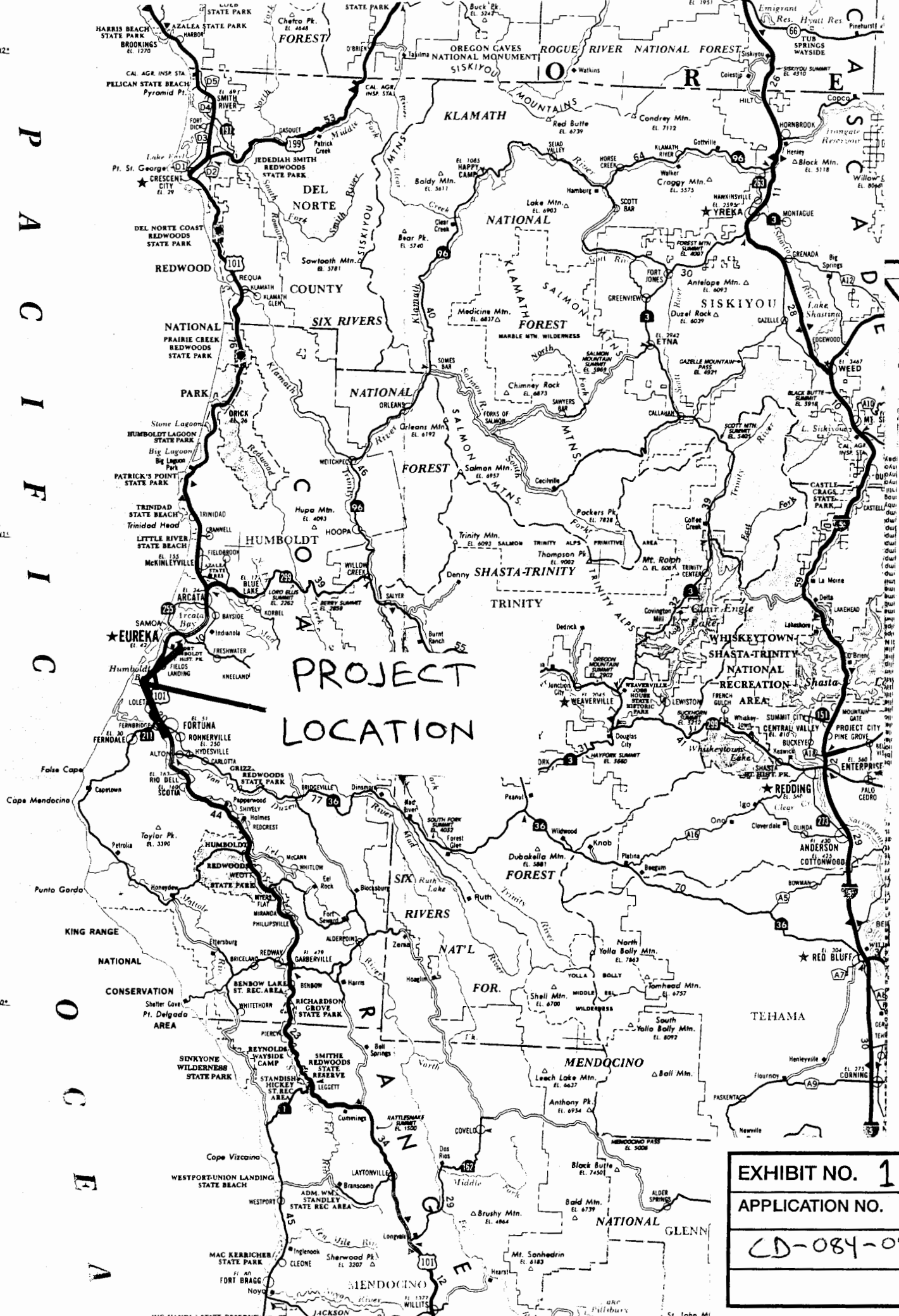


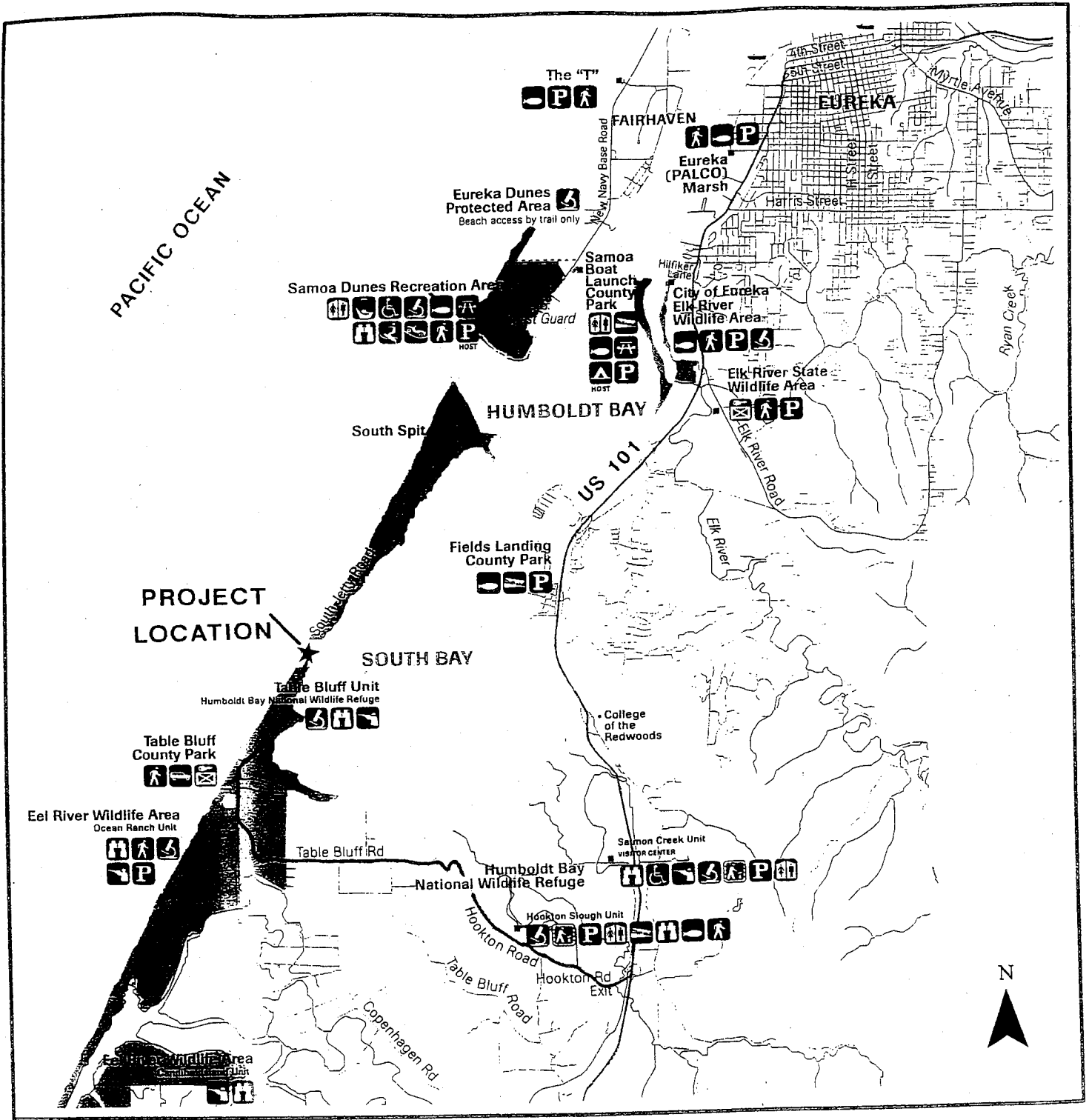
PACIFIC

OCEAN

PROJECT LOCATION

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| EXHIBIT NO. 1 |
| APPLICATION NO. |
| CD-084-04 |





BUREAU OF LAND MANAGEMENT

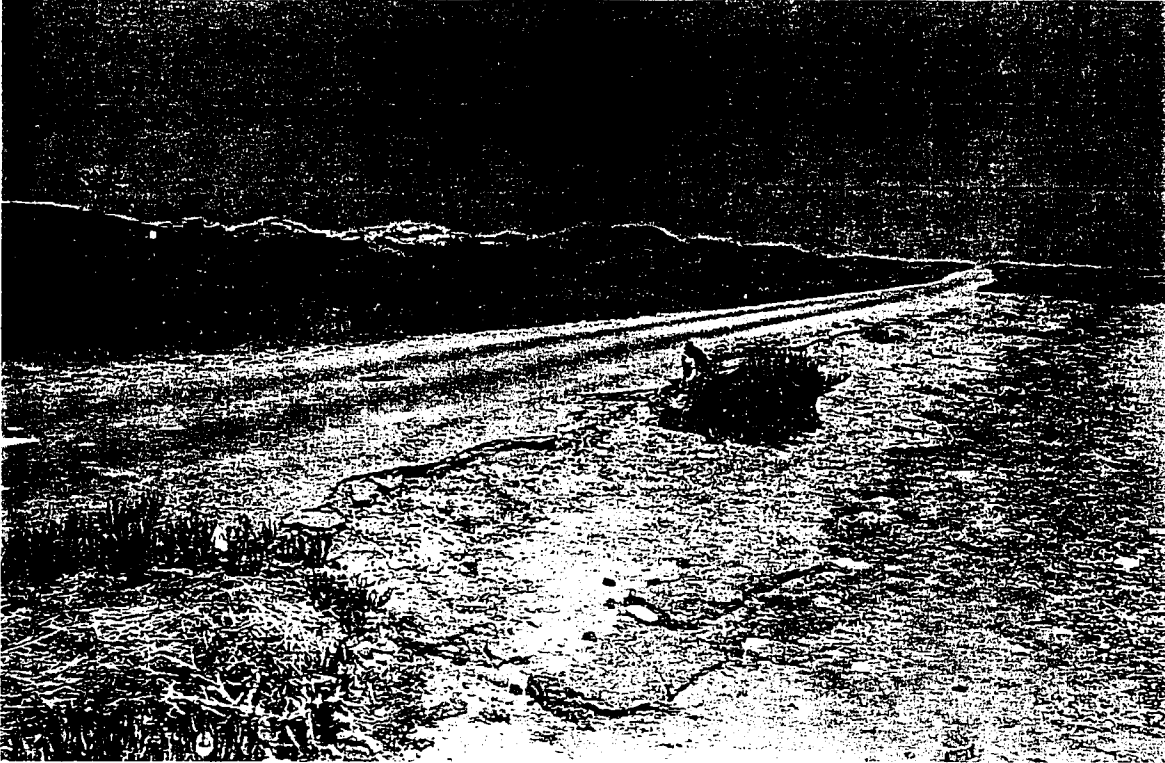
South Jetty Road Revetment

Figure 1 - Vicinity Map



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| EXHIBIT NO. 2 |
| APPLICATION NO. |
| CD-084-04 |
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Photo No. 1

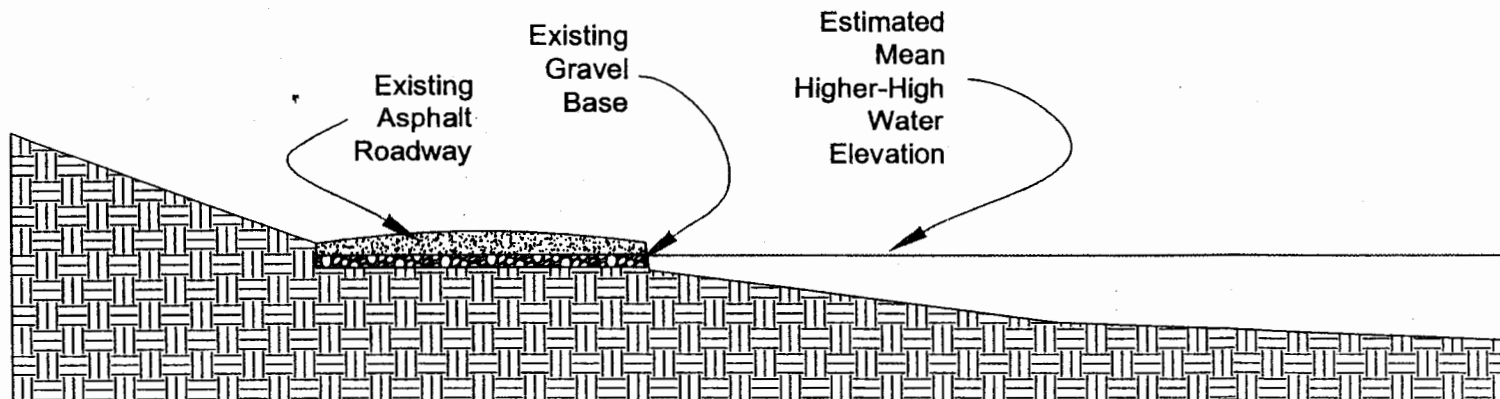


ERODED SEGMENT OF SOUTH JETTY ROAD

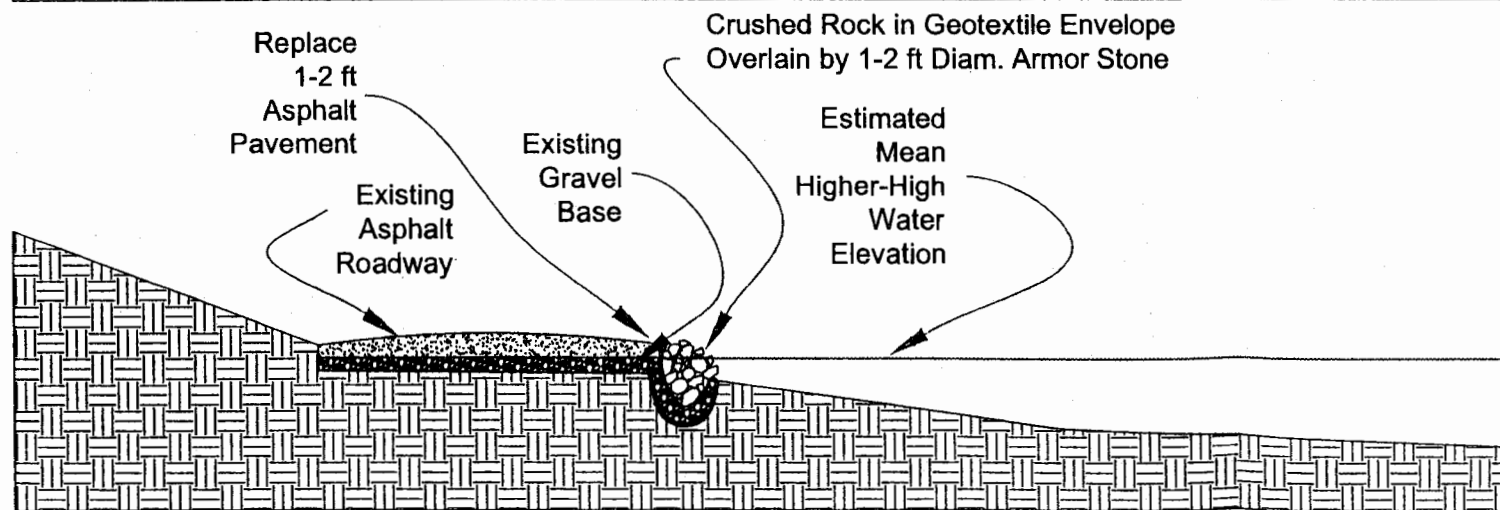
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| EXHIBIT NO. 3 |
| APPLICATION NO. |
| CD-084-04 |
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Profile View

Existing Condition



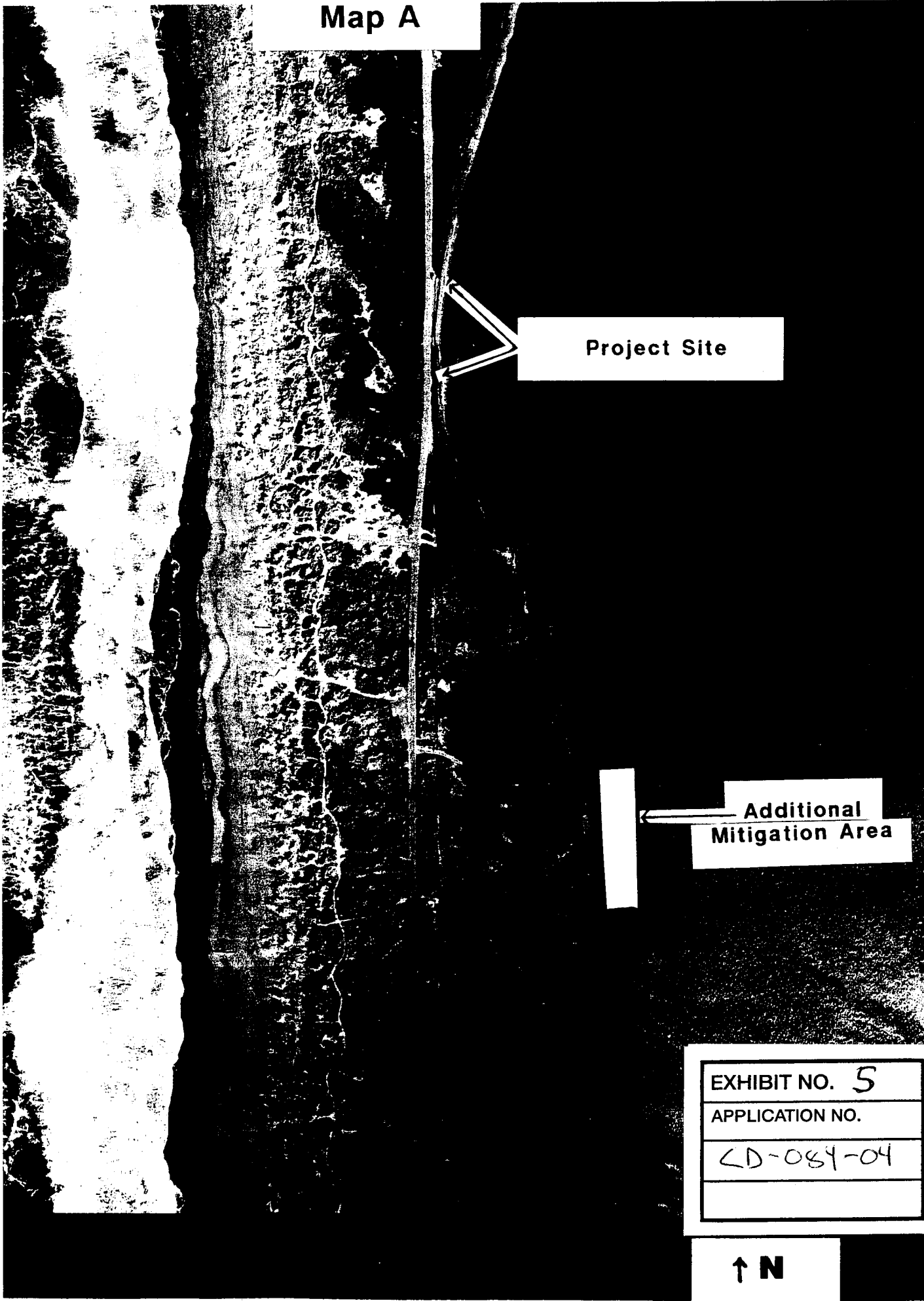
Proposed Road Repair



< 5.0' Encroachment into Bay → ← Mitigation area: 15 ft

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| EXHIBIT NO. 4 |
| APPLICATION NO. |
| CD-084-04 |

Map A



Project Site

Additional Mitigation Area

EXHIBIT NO. 5

APPLICATION NO.

CD-084-04

↑ N

1"=200'

