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Hearing Date: December 15, 2006
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: **1-02-034**

APPLICANT: **Naim and Louise Obeji**

PROJECT LOCATION: 1875 Buhne Drive, Eureka (King Salmon), Humboldt County (APNs 305-091-01, -02, and 305-092-05).

PROJECT DESCRIPTION: Renovate existing recreational vehicle park and marina including: (1) demolish existing 1,800-square-foot multi-purpose office/store/caretaker residence and replace with a 3,000-square-foot multi-use structure; (1) demolish existing 750-square-foot shop building and replace with a 750-square-foot shop building; (3) demolish existing boat hoist-launch structures and replace with new self-launch boat ramp; and (4) dedicate a 2,700-square-foot upland park area and reconstruct a previously existing boat dock and ramp for public coastal access use.

LAND USE PLAN DESIGNATION: Commercial Recreational (C-R)

ZONING: Commercial Recreational with Flood Hazard Combining Zone (CR/F).

LOCAL APPROVALS RECEIVED: County of Humboldt Conditional Use Permit No. CUP-02-04, issued April 3, 2003, and Humboldt Bay Harbor, Recreation, and Conservation District Development Permit No. 03-05, issued December 18, 2003.

OTHER APPROVALS RECEIVED: California Department of Housing and Community Development Special Occupancy Park Permit.

OTHER APPROVALS REQUIRED: U.S. Army Corps of Engineers FCWA Section 404 or Nationwide Permit; Department of Boating and Waterways Marina Certification, and California Department of Fish and Game – Office of Spill Prevention and Response Small Craft Refueling Dock Certificate of Registration.

SUBSTANTIVE FILE
DOCUMENTS:

(1) Coastal Development Permit *De Minimis* No. 1-02-144-W; (2) County of Humboldt Local Coastal Program.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission DENY the coastal development permit application for the proposed development on the basis that the proposed project is inconsistent with the Coastal Act.

The applicants seek authorization to install various boating, marina, and other improvements within the live waters of Humboldt Bay, an environmentally sensitive area that provides aquatic habitat to a variety of fish and wildlife species and which could be easily disturbed or degraded by human activities and developments. The major issues raised by the application are: (a) whether the proposed development is consistent with Sections 30230 and 30231 of the Coastal Act which require that marine resources be maintained, enhanced, and where feasible, restored, that special protection be given to areas and species of special biological or economic significance, and that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy and optimized populations of all species of marine organisms; (b) whether the proposed development is consistent with Section 30233 of the Coastal Act which limits the allowable uses for the dredging and filling of open coastal waters, wetlands, and estuaries only for certain limited purposes including maintaining existing, or restoring vessel berthing and mooring areas, and boat launching ramps; and (c) whether the proposed vacation of the terminus of Halibut Street

would have significant adverse impacts on public access inconsistent with the policies of the Coastal Act.

Staff recommends that the Commission find that the proposed project is inconsistent with the Coastal Act and deny the proposed application for the following reasons:

- The proposal to renovate the park's existing boat ramp and reconstruct a public boat dock and ramp, will involve the direct removal or covering of environmentally sensitive eelgrass beds. An adequate mitigation and monitoring plan and protocols have not been provided to replace and offset the direct impacts to this highly-valued marine habitat vegetation. Therefore, the development is inconsistent with Sections 30230, 30231, and 30233 of the Coastal Act, as the development would not protect affected marine biological resources, provide all feasible mitigation measures, or be the least environmentally damaging feasible alternative. No further analysis of the proposed project is required to find the development inconsistent with the policies and standards of the Coastal Act and support denial of the project. However, the Commission notes that even if the proposed uses of the site were consistent with the purposes for which Section 30230, 30231, and 30233, which they are not, the project is also inconsistent with other sections of the Coastal Act, as discussed below;
- The fill associated with construction of the proposed renovated sundeck would not be for one of the permissible uses enumerated in Coastal Act Section 30233(a)(1) through (8); and
- The development could interfere with the public's right of access to the sea and water-oriented recreational activities.

Staff believes the Commission cannot make the required findings under Sections 30230, 30231, and 30233, and the public access policies of the Coastal Act. Therefore, staff recommends DENIAL of the application.

Commission staff continue to believe that the applicants could feasibly modify the proposed project to make it consistent with all applicable policies of the Coastal Act. For example, if the proposed mitigation plan were to be revised to provide greater than a minimum 1:1 replacement for the eelgrass that would be lost in constructing the boat launching and docking facilities, and to include modifications to the restoration area layout and propagation methods for establishing the replacement eelgrass beds, as have been suggested by the California Department of Fish and Game, the impacts to environmentally sensitive habitat areas may be shown to have been reduced to less than significant levels, allowing for the development to be found consistent with Coastal Act Section 30233. Alternately, the applicants could scale back the development proposal to exclude those over- and in-water portions that would adversely affect coastal marine biological resources. In addition, if the proposed renovated sundeck were redesigned so

as not to encroach into Humboldt Bay, the conflict with the limitations of Section 30233 on allowable uses of fill in coastal waters would be eliminated. Further, if changes to the site plan were made to obviate the need for vacation of the Halibut Avenue street right-of-way, potential conflicts with public access could similarly be avoided, allowing the development to be found consistent with the Coastal Act's public access policies.

The motion to adopt the Staff Recommendation for Denial is found on pages 5 and 6.

STAFF NOTE:

1. Jurisdiction and Standard of Review

The proposed project is located in the Commission's retained jurisdiction. Humboldt County has a certified LCP, but the site is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION, AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

MOTION:

I move that the Commission approve Coastal Development Permit No. 1-02-034 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF DENIAL

Staff recommends a **NO** vote. Failure of this motion will result in denial of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of the majority of the Commissioners present.

RESOLUTION TO APPROVE PERMIT:

The Commission hereby **denies** a coastal development permit for the proposed development on the ground that the development will not conform to the policies of Chapter 3 of the Coastal Act. Approval of the permit would not comply with the California Environmental Quality Act because there are feasible mitigation measures or alternatives that would substantially lessen the significant adverse impacts of the development on the environment.

II. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

The applicant proposes to undertake various site improvements within EZ Landings RV Park and Marina, an existing special occupancy park consisting of a 79-space combination permanent and transient mobilehome/recreational vehicle facility. The subject property is located at 1875 Buhne Drive, in the unincorporated community of King Salmon, along the Humboldt Bay shoreline approximately two miles south of Eureka in Humboldt County (See Exhibit Nos. 1-3).

A. Site and Project Description.

1. Project Location and Setting

The King Salmon community area consists of former tidelands that were partially filled during the mid-1900s. Much of the area was later subdivided, mostly into 25-foot-wide lots that were originally used for resort cabins. The tidelands were filled in a manner that created interior tidal channels within the subdivision, all of which connect to Fisherman's Channel which ultimately leads to the open waters of Humboldt Bay. The main road serving the community is King Salmon Avenue, which turns into Buhne Drive. Several narrow dead-end streets branch off of Buhne Drive to serve the numerous residential lots, mobilehome/recreational vehicle parks, and coastal-dependent and coastal-related commercial concerns. Buhne Drive flanks the northwest and western sides of the developed portions of the community, separating the residential neighborhood from a reclaimed mudflat and dune area that borders the open waters of Humboldt Bay further to the west. This dune and Humboldt Bay shoreline area is accessible to the public. With the exception of pedestrian (and possibly, portageable water craft, such as kayaks or small canoes) ingress down the steep riprap-revetted banks at some of the non-through street ends within the residential subdivision, very little public access is available to the tidal areas along the King Salmon/Fisherman's Channel side of the community.

The subject property is located along both sides of Halibut Avenue, the southernmost of the dead-end streets that branch off of Buhne Drive (see Exhibit No. 2). The project site consists of three parcels comprising a combined area of approximately five acres. The eastern side of the property abuts Fisherman's Channel. As an intertidal waterway immediately connecting to the open waters of Humboldt Bay, portions of the bottom of the Fisherman's Channel are vegetated with patches of eelgrass (Zostera marina), an important marine plant species that serves as a substrate for epiphytic algae and micro-invertebrates, provides nursery habitat for numerous species of economically important fish and shellfish, and is a food source for various "dabbler" waterfowl, especially brant (Branta bernicla) and widgeon (Anas penelope).

The upland portion of the property is currently developed with 79-unit combination mobilehome/recreational vehicle park complex which includes a dilapidated 70-slip boating marina and various related support facilities, including a caretaker's residence, an apartment, store, office, small boat refueling depot, meeting room, storage buildings, and restrooms. With the exception of small lawn and landscaped areas within the park complex, the majority of the property is denuded of vegetation and is surfaced with either asphalt-concrete or gravel surfaces.

The project site is located in a developed urban area with community water and sewer systems provided by the Humboldt Community Services District. The site is planned for commercial recreational use under the County of Humboldt's *Humboldt Bay Area Plan* segment of its Local Coastal Program, implemented through a Commercial Recreation with Flood Hazard Areas zoning designation (CR/F).

2. Specific Project Description

The proposed project entails various renovations and new development within an existing mobilehome/recreational vehicle special occupancy park. The development represents the second phase of an overall park renovation for which the first phase, replacement of the park's water, sewage, and electrical utilities, was authorized by a waiver *de minimis* in 2003 (see Coastal Development Permit Waiver No. 1-02-144-W). The proposed second phase renovation work consists of the following components:

- Reconstruct the decking, piles, and beams on a 2,400-square-foot sundeck;
- Replace dilapidated segments of the wood-framed pontoon floating dock with poly-encapsulated Styrofoam dock floats;
- Demolish the existing 1,800-square-foot multi-purpose office/store/caretaker residence and replace it with a 3,000-square-foot, two-story multi-use structure housing the park office, meeting room, owners' apartment, and caretaker's residence;
- Demolish an existing 750-square-foot shop building and replace with a 750-square-foot shop building;
- Demolish the existing boat hoist-launch and ramp structures and replace with new 80-foot-long by 15-foot-wide self-launch boat ramp; and
- Vacate the approximately 2,678-square-foot unimproved terminus of the Halibut Avenue street right-of-way and dedicate an approximately 2,700-square-foot upland park area, improved with two picnic tables and two benches, landscaping, a four-space off-street parking area, and reconstructed boat dock and ramp facilities for public coastal access use.

These various project components are further described and illustrated on the site plan attached as Exhibit No. 4.

B. Permit Authority, Exceptional Methods of Repair and Maintenance Activities.

The submitted application includes a request for authorization of various improvements to several existing over-water structures within the King Salmon Slough, an arm of Humboldt Bay. Coastal Act Section 30610(d) generally exempts from Coastal Act permitting requirements the repair or maintenance of structures that does not result in an addition to, or enlargement or expansion of the structure being repaired or maintained. However, the Commission retains authority to review certain extraordinary methods of repair and maintenance of existing structures that involve a risk of substantial adverse environmental impact as enumerated in Section 13252 of the Commission regulations.

Section 30610 of the Coastal Act provides, in relevant part:

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

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

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

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

(3) Any repair or maintenance to facilities or structures or work located in an environmentally sensitive habitat area, any sand area, within 50 feet of the edge of a coastal bluff or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams that include:

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

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

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

(b) Unless destroyed by natural disaster, the replacement of 50 percent or more of a single family residence, seawall, revetment, bluff retaining wall, breakwater, groin, or any other structure is not repair and maintenance under Section 30610(d) but instead constitutes a replacement structure requiring a coastal development permit. [Emphasis added.]

The proposed improvement of the various over-water structures are located within 20 feet of coastal waters and streams and therefore require a coastal development permit because they involve a risk of substantial adverse environmental impact.

Moreover, as directed by Section 13252(b) of the administrative regulations, because the project components to be replaced or renovated, including the boat ramp, sundeck, floating dock, and public dock ramp project segments involve the replacement of greater than fifty percent of the original structures, these portions of the development do not constitute repair and maintenance activities but rather are to be considered as the development of replacement structures. Consequently, a coastal development permit is required for these portions of the project and the applicant has applied for a permit to authorize the replacement of the floating docks, self-launch boat ramp and sundeck. Because these project elements constitute new development, the Commission is not limited solely to considering the method of repair and maintenance, but must comprehensively review the reconstruction of these structures for consistency with the Coastal Act.

C. Protection of Wetlands, Marine Biological Resources and Water Quality.

Section 30107.5 of the Coastal Act defines “environmentally sensitive area” as:

Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in the ecosystem and which could be easily disturbed or degraded by human activities and developments.

Section 30108.2 of the Coastal Act defined “fill” as follows:

‘Fill’ means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

Section 30230 of the Coastal Act states, in applicable part:

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

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

Section 30233 of the Coastal Act provides as follows, in applicable part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other

applicable provisions of this division, where there is no feasible¹ less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (7) Restoration purposes.*
- (8) Nature study, aquaculture, or similar resource dependent activities...*

¹ “Feasible” is defined by Section 30108 of the Coastal Act as, “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.”

(c) *In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...* [Emphasis added.]

The above policies set forth a number of different limitations on what development projects may be allowed in coastal wetlands. For analysis purposes, the limitations can be grouped into four general categories or tests. These tests are:

- The purpose of the filling, diking, or dredging is for one of the uses enumerated in Section 30233(a);
- The project has no feasible less environmentally damaging alternative;
- Feasible mitigation measures have been provided to minimize adverse environmental effects; and
- The biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible.

1. Permissible Use for Fill, Dredging, or Diking of Coastal Waters

The first test for the portions of the proposed project involving fill in coastal waters is whether the fill is for one of the eight allowable uses under Section 30233(a). Among the allowable uses, the use which most closely match the project objectives are enumerated in Section 30233(a)(4) involving dredging, diking, and/or fill for “...*new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*”

The proposed fill associated with the repairs to the self-launch boat ramp and floating dock facilities property would entail the placement of solid material within the submerged areas of the Fisherman’s Channel portions of the King Salmon Slough. This new fill represents a form of “*new or expanded boating facilities.*” The proposed replacement boat ramp entails a combination of both one-to-one replacement of the marina’s floating dock components and redevelopment of the existing 300 square-foot ramp slab with a larger 1,200-square-foot (600 square-feet at and below the mean high tide mark) cast-in-place, launching ramp. Therefore, the Commission finds that the fill associated with the installation of the replacement floating dock components and redeveloped boat ramp structures are for one of the allowable uses for dredging, diking, and filling of coastal waters pursuant to Section 30233(a)(4) of the Coastal Act.

However, with regard to the over-water portions of the proposed replacement sundeck and fish cleaning area, the Commission concludes that the structural fill associated with the decking and piles does not constitute “new or expanded boating facilities,” but rather serves the function of a private, coastal-independent recreational area for the exclusive

use of the park patrons. The proposed replacement sundeck also does not conform with any of the other seven allowable purposes for filling open coastal waters, wetlands, estuaries, and lakes under Section 30233(a). Therefore, this portion of the development's proposed fill is inconsistent with Section 30233(a) of the Coastal Act and must be denied.

Therefore, the Commission concludes that, because portions of the proposed marina improvements would not entail one of the enumerated permissible development types, the proposed filling and dredging does not qualify as an approvable use for dredging, diking, or filling in coastal waters and wetlands pursuant to Section 30233(a) of the Coastal Act. No analysis of the consistency of the proposed development with the other three tests of Section 30233 is required to find that the development is inconsistent with Section 30233. Nonetheless, the Commission notes that, as discussed below, even if the proposed development was consistent with the permissible use test of Section 30233, the proposed development would still be inconsistent with other approval criteria within Section 30233 of the Coastal Act, and must be denied.

2. Inclusion of All Feasible Mitigation Measures

Section 30233 also directs that feasible mitigation measures be provided in the design and siting of projects involving the filling, dredging, and/or diking of coastal waters and wetlands to minimize adverse environmental effects associated with the development. The Commission finds that all feasible mitigation measures have not been provided, particularly, restoration eelgrass planting at a replacement ratio, and utilizing locations and methodologies that would reasonable result in successful establishment of eelgrass beds to offset the direct loss and temporary impacts to this highly valued coastal biological resource.

As detailed within the biological assessment and mitigation plan prepared for the project, the new self-launching boat ramp will entail the direct covering of approximately 50 square-feet of eelgrass, 125 square-feet of suitable eelgrass habitat, and temporary construction phase impacts to an additional 275 square-feet of eelgrass. In addition, an additional approximately 125 square-feet of intertidal mudflat area unsuitable for eelgrass would be covered by the larger ramp. To offset these resource losses and impacts, the applicant is proposing, prior to construction of the new boat ramp, to harvest and replant the eelgrass bed located at the south-western end of the boat ramp to a slough area near the project site at a replacement ratio of 1:1. The applicant's biological consultant identified three potential transplanting sites as follows:

Option 1 – Area F:

Area F, the preferred site for replanting of this eelgrass bed, is located approximately 50 feet to the south-west of where the bed currently resides. The close proximity of this site will make relocation activities practical. This area contains some eelgrass, although the center of this area is currently bare substrate. Replanting the eelgrass at this location will

result in no-net loss of eelgrass. This area is suitable habitat and if left alone eelgrass may colonize this area in time.

Option 2 – Area C:

The second option for transplanting eelgrass occurs within Area C. This area is shallow and currently contains a large amount of eelgrass, although the center of this area is currently bare substrate. This area is suitable eelgrass habitat and if left alone eelgrass may likely colonize the entire area in time.

Option 3 – Area D and G:

Areas D & G, the third option for transplanting eelgrass, is wide and gently slopes into Fisherman's Channel. Currently there are a couple of small, sparse of eelgrass beds in this area just beyond the extent of the rock and rubble (Area D). If eelgrass was replanted, it may further stabilize the bank along the edge of the slough, further decreasing the slope of the bank, eventually creating a wider area of more favorable eelgrass habitat.

The eelgrass would be transplanted in clusters that retain the mud and root wads rather than planting the stem alone to increase the likelihood of transplanting success.

This mitigation proposal was reviewed by California Department of Fish and Game staff and was found to be insufficient for offsetting both the permanent loss of eelgrass and suitable eelgrass habitat, and reducing impacts to eelgrass and its habitat to less than significant levels for the following reasons:

- The proposed 1:1 replacement ratio is too low and would not compensate for the temporal and spatial losses of this marine biological resource during the time the transplantings are reestablishing their growth habit in the replacement area(s) and/or while cleared areas are being colonized by newly propagated growth from adjoining eelgrass beds;
- The Area F revegetation area would likely revegetate itself from surrounding stocks and, thus, would not be the most appropriate replanting location compared to Area C;
- The use of seed buoys to aid in the propagation of new eelgrass shoots through facilitating seed dispersal which, while shown to be successful at Eastern U.S. sites, may not be suitable for west coast conditions.

The applicant's biologist and former agent concurred with these recommendations and advised the applicants to modify the project proposal accordingly. However, citing the added cost associated with the expanded mitigation ratio and monitoring work necessary to assure adequate establishment of the replacement eelgrass, the applicants chose not to

amend the application, either to increase the mitigation ratio and modify the restoration plan layout and strategies, as recommended by CDFG, or to remove those portions of the development involving impact to eelgrass from the permit application.

Thus, notwithstanding the economic implications of providing a minimum 2:1 replacement area for the eelgrass displaced or impacted by the project, the Commission finds that feasible mitigation measures that would minimize adverse environmental effects associated with the development exist and have not been provided. Therefore, the project as proposed is inconsistent with Section 30233(a) and must be denied.

3. Less Environmentally Damaging Alternatives

Section 30233 further requires that any development involving the filling, dredging, and/or diking of coastal waters and wetlands demonstrate that no feasible less environmentally damaging alternative exists. The Commission finds that, insofar as additional mitigation measures exist that would further reduce the development's impacts on marine biological resources, a feasible less environmentally damaging alternative to the project exists. Therefore, the proposed project is inconsistent with Section 30233(a) and must be denied.

4. Maintenance and Enhancement, Where Feasible, of Biological Productivity and Habitat Functional Capacity

Finally, Section 30233(c) requires that for any development involving diking, filling, or dredging in existing estuaries and wetlands, the functional capacity of the wetland or estuary be maintained or enhanced. This requirement is effectively reiterated within the language of Sections 30230 and 30231.

The Commission notes that as eelgrass beds: (1) account for about 20% of the intertidal habitat of Humboldt Bay; (2) play an important role in the ecology of the bay; (3) are highly productive ecosystems, affording habitat to a wide variety of invertebrates, which, in turn, provide direct and indirect food sources for marine food chains; (4) provide habitat and protection, and act as a nursery for many marine species including federally listed juvenile salmonids; and (5) serve as spawning grounds for numerous commercial fish species and a food source to various internationally protected waterfowl, efforts to protect this highly valued biological resource by adequately offsetting direct, cumulative, and indirect impacts to existing eelgrass resources are necessary to the overall functional capacity of Humboldt Bay and maintaining viable and sustainable populations of marine and estuarine fauna therein. Therefore, the Commission finds that without a mitigation program to fully offset these direct, indirect, and cumulative impacts the proposed project would not serve to maintain or enhance the functional capacity of the Humboldt Bay estuary inconsistent with Coastal Act Sections 30233(c), 30230, and 30231, and must be denied.

5. Conclusion

The Commission finds that the proposed over- and in-water private marina and public access improvements are not consistent with the requirements of Section 30233 of the Coastal Act, in that: (1) some of the proposed improvements involving dredging, diking and filling of wetlands are not for one of the allowable uses enumerated within subsections (1) through (8) of Section 30233(a); (2) all feasible mitigation measures to reduce impacts on coastal biological resources have not been included; (3) a feasible, less environmentally damaging alternative to the proposed project exists; and (4) the functional capacity of the wetland or estuary would not be maintained or enhanced. Therefore, the proposed project is inconsistent with the dredging, diking, and filling of coastal waters and wetlands provisions of Coastal Act Section 30233 and the marine biological resource protection directives of Sections 30230 and 30231. The Commission notes that even if the proposed development were to be found fully consistent with the four tests of Section 30233, and with Section 30230 and 30231, the proposed development would still be inconsistent with the public access policies of the Coastal Act as discussed in Findings Section D below, and must be denied.

D. Public Access.

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

The project site is located between the first public road (Highway 101) and the sea (the Fisherman's Channel is considered to be an arm of the sea in this area). Accordingly, a public access finding is required for the project.

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 these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential public access.

The subject development includes a proposal to vacate a 2,684-square-foot unimproved terminal portion of Halibut Avenue, a public street thoroughfare. Halibut Avenue was dedicated to the County of Humboldt as part of the platting of the King Salmon Subdivision in the 1950s and improved shortly thereafter. This 40-foot-wide right-of-

way intersects with Buhne Drive, the sub-collector serving the King Salmon community, and extends in a general southeasterly direction approximately 500 feet to the waters of King Salmon Slough/Fisherman's Channel (see Exhibit Nos. 2-4). The vacation is being sought primarily so the applicants may construct the new 3,000 square-foot multi-use building in a location proposed within the current right-of-way. To mitigate for the loss of public access to King Salmon Slough/Fisherman's Channel currently available at the end of Halibut Avenue, the applicants are proposing to develop and maintain a 2,700-square-foot public access upland support area, comprising a small park improved with two picnic tables, two benches, a trash receptacle, a four-space off-street parking area, and landscaping. In addition, the applicants propose to reconstruct a previously-existing boat launch and floating dock facility that was destroyed by storm surges off of Humboldt Bay in the early 1990s. The park and boat launch/dock are proposed to be dedicated to the County of Humboldt and maintained by the applicants under contracted agreement with the County.

As discussed in Site and Project Description Findings Section II.A above, while public access is available to the bay shoreline areas to the west of the developed King Salmon community, similar access to King Salmon Slough/Fisherman's channel is very limited. According to the applicants' consultant, public access and water-oriented recreational use currently occur at the foot of Halibut Avenue, primarily in the form of picnicing and fishing. Of the various dead-end roads situated throughout the King Salmon community, Halibut Avenue also has the distinction of having the least onerous conditions with respect to bank steepness and presence of riprap materials that must be traversed to access King Salmon Slough.

The Commission notes that, while the applicants made application to the County of Humboldt for abandonment of the end unimproved portion of Halibut Avenue in 2002, the County has yet to act on the request. Furthermore, as indicated in a memorandum prepared by the County's Department of Public Works during the Community Development Services Department's consideration of the related conditional use permit, the Public Works Department indicated that it would not support vacating portions of the Halibut Avenue right-of-way, specifically those proposed for development of the public park improvements (see Exhibit No. 8).

Moreover, as Fisherman's Channel is a navigable waterway, there is some question as to whether the County may legally vacate public rights within Halibut Avenue. Several provisions of state law exert controls and limitations on the abandonment of public rights-of-way, most particularly, Section 39933 of the Government Code, which states:

All navigable waters situated within or adjacent to city shall remain open to the free and unobstructed navigation of the public. Such waters and the water front of such waters shall remain open to free and unobstructed access by the people from the public streets and highways within the city. Public streets, highways, and other public rights of way shall remain open

to the free and unobstructed use of the public from such waters and water front to the public streets and highways.

In addition, Section 8324 of the Streets and Highways Code requires that the following findings be made by a local agency in any action to vacate a public street right-of-way:

(a) At the hearing, the legislative body shall hear the evidence offered by persons interested.

(b) If the legislative body finds, from all the evidence submitted, that the street, highway, or public service easement described in the notice of hearing or petition is unnecessary for present or prospective public use, the legislative body may adopt a resolution vacating the street, highway, or public service easement.

The resolution of vacation may provide that the vacation occurs only after conditions required by the legislative body have been satisfied and may instruct the clerk that the resolution of vacation not be recorded until the conditions have been satisfied.

Thus, given the status of King Salmon Slough/Fisherman's Channel as navigable waters, the apparent prohibition within state statutes forbidding abandonment of rights-of-way providing access to such locales, and the possibility that the need for present or prospective public use for access to the waters of the slough from the terminal end of Halibut Avenue may exist that might similarly preclude the vacation, the Commission finds that the applicant has failed to demonstrate that the proposed street vacation would not adversely affect public access acquired by legislative authorization (i.e., acceptance of the fee-simple title or easements dedicated for public roads pursuant to an approved land division). The Commission finds that the proposed vacation of public rights and the subsequent development of a private buildings that would block the street right-of-way, as requested in the subject coastal development permit application, would have the result of decreasing coastal access opportunities inconsistent with the access policies of the Coastal Act.

Therefore, for the reasons discussed above, the proposed project would have significant adverse effects on public access. The Commission therefore finds that the project is inconsistent with the public access policies of the Coastal Act and must be denied.

E. Alternatives.

Denial of the proposed permit will not eliminate all economically beneficial or productive use of the applicants' property or unreasonably limit the owners' reasonable investment backed expectations of the subject property. Denial of this application to renovate the various over-water structures, construct new commercial buildings, and provide public access boating and upland support facilities would still leave the applicants available

alternatives to use the property in a manner that would be consistent with the policies of the Coastal Act.

In addition to revising the proposed project in a manner consistent with the Coastal Act, there are existing uses of the property that allow the applicants/owners to have economic uses of the property without performing the proposed site improvements. The project site consists of three parcels comprising a total of approximately five acres. These lands are currently developed with a 79-space combination mobilehome/recreational vehicle park (currently licensed by the California Department of Housing and Community Development for a maximum of 86 spaces) and studio apartment complex, with a 70-slip by-lease small boat docking facilities, small boat refueling facility, and an onsite retail commercial convenience store.

Therefore, the Commission finds that feasible alternatives to the proposed project exist for the applicants to make economically beneficial or productive use of the property in a manner that would be consistent with the policies of the certified LCP.

F. California Environmental Quality Act.

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

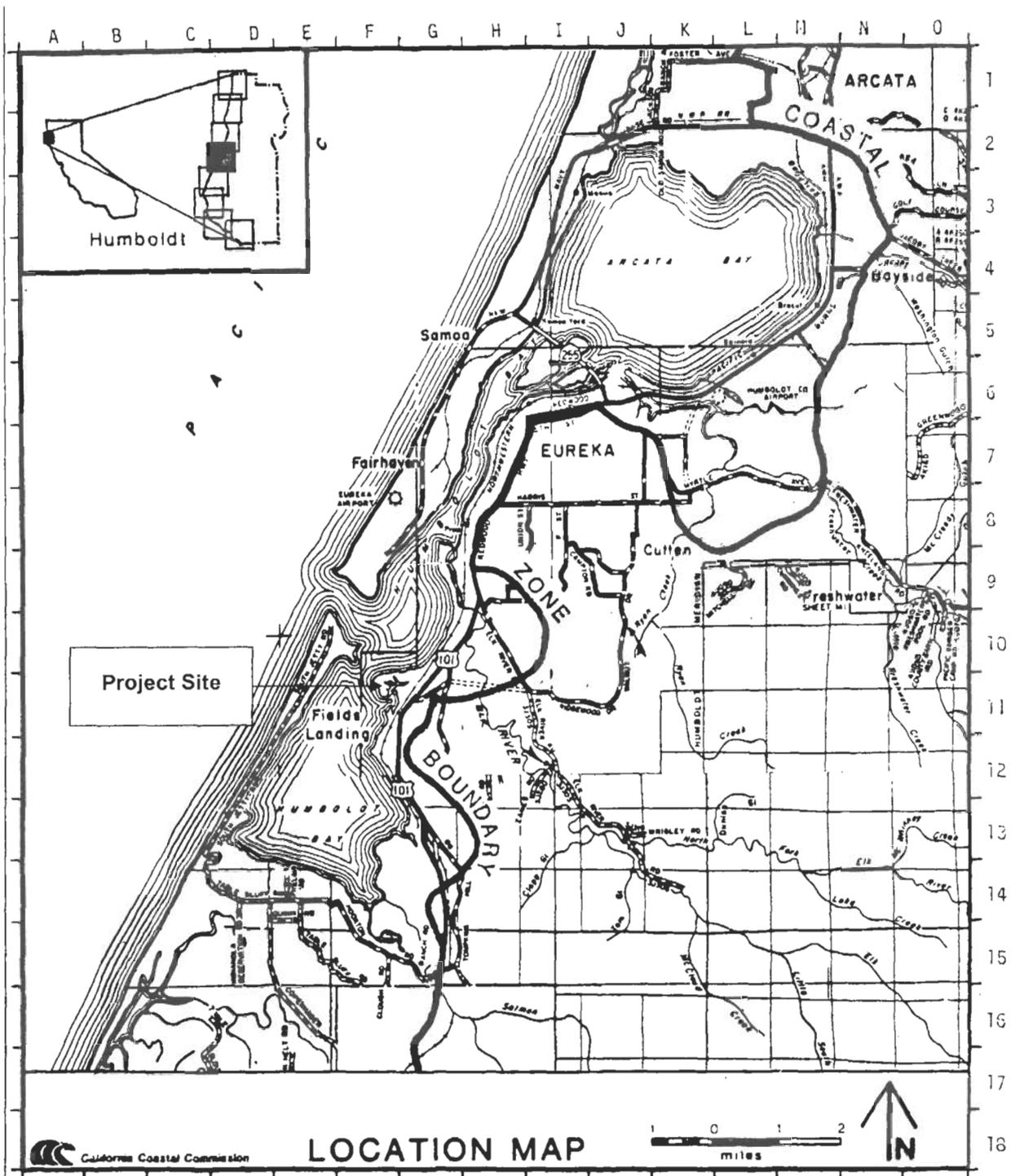
The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report.

As discussed herein, in the findings addressing the consistency of the proposed project with the Chapter 3 policies of the Coastal Act, the proposed project is not consistent with the policies of the Coastal Act that restrict the dredging and filling of coastal waters and wetlands and require that development not adversely affect public access.

As also discussed above in the findings addressing project alternatives, there are feasible mitigation measures and feasible alternatives available which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project cannot be found consistent with the requirements of the Coastal Act to conform to CEQA.

III. EXHIBITS:

1. Location Map
2. Vicinity Map
3. Portion, USGS Aerial Photograph, April 28, 1989
4. Project Narrative and Site Plans
5. *Biological Study and Mitigation Plan* and Addenda, Mad River Biologists, November 18, 2002, December 20, 2002, and March 10, 2004
6. *Geologic/Geotechnical Report*, LACO Associates Consulting Engineers, June 2002
7. *Cultural Resources Investigation*, Roscoe and Associates, November 2002
8. Memorandum from Harless McKinley PE, Humboldt County Department of Public Works – Land Use Division to Community Development Services Department, In re: Conditional Use Permit No. CUP-02-04, dated July 25, 2002



California Coastal Commission

LOCATION MAP

County of Humboldt

EXHIBIT NO. 1
APPLICATION NO.
 1-02-034
 OBEJI, NAIM & LOUISE
 LOCATION MAP

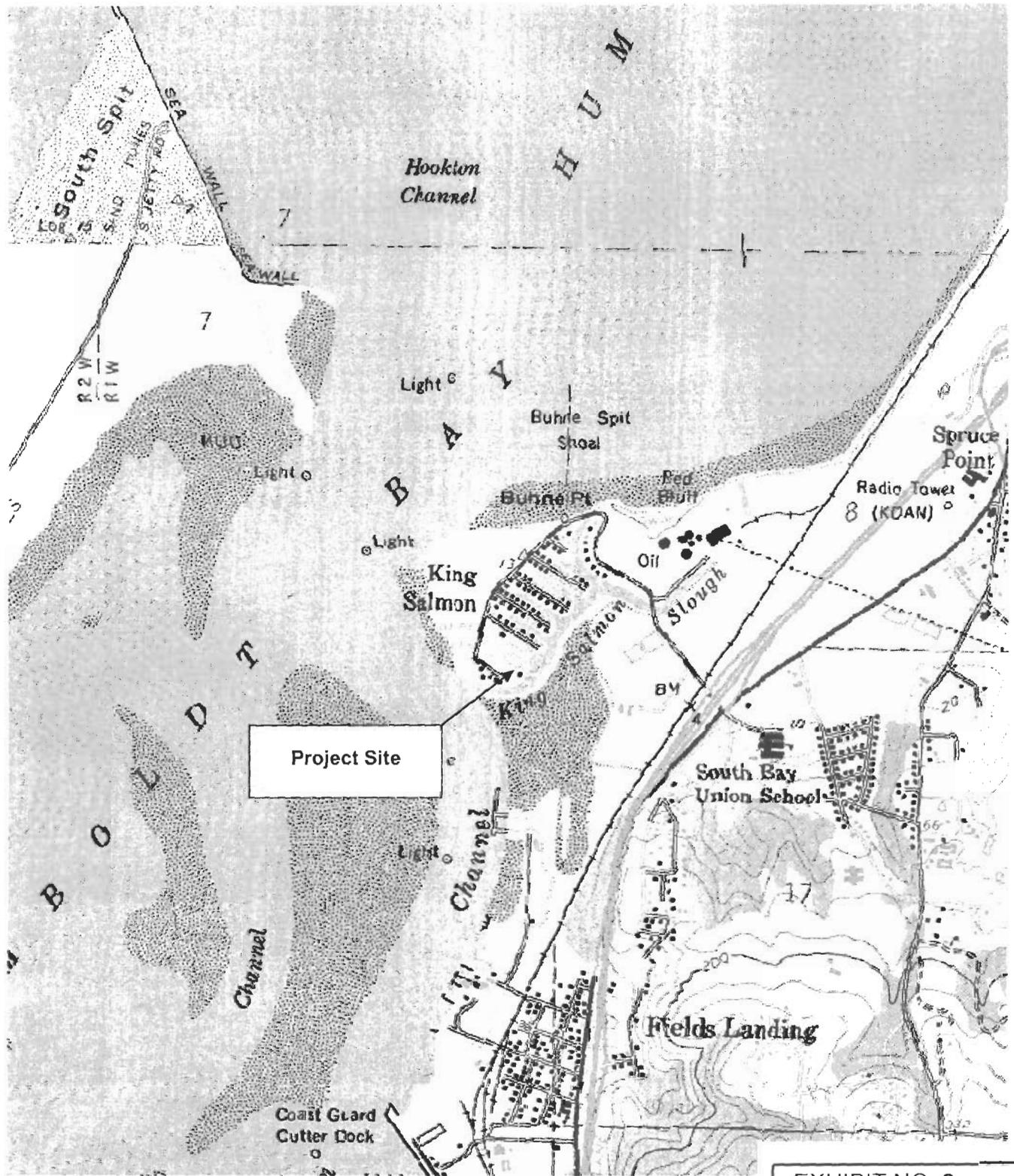
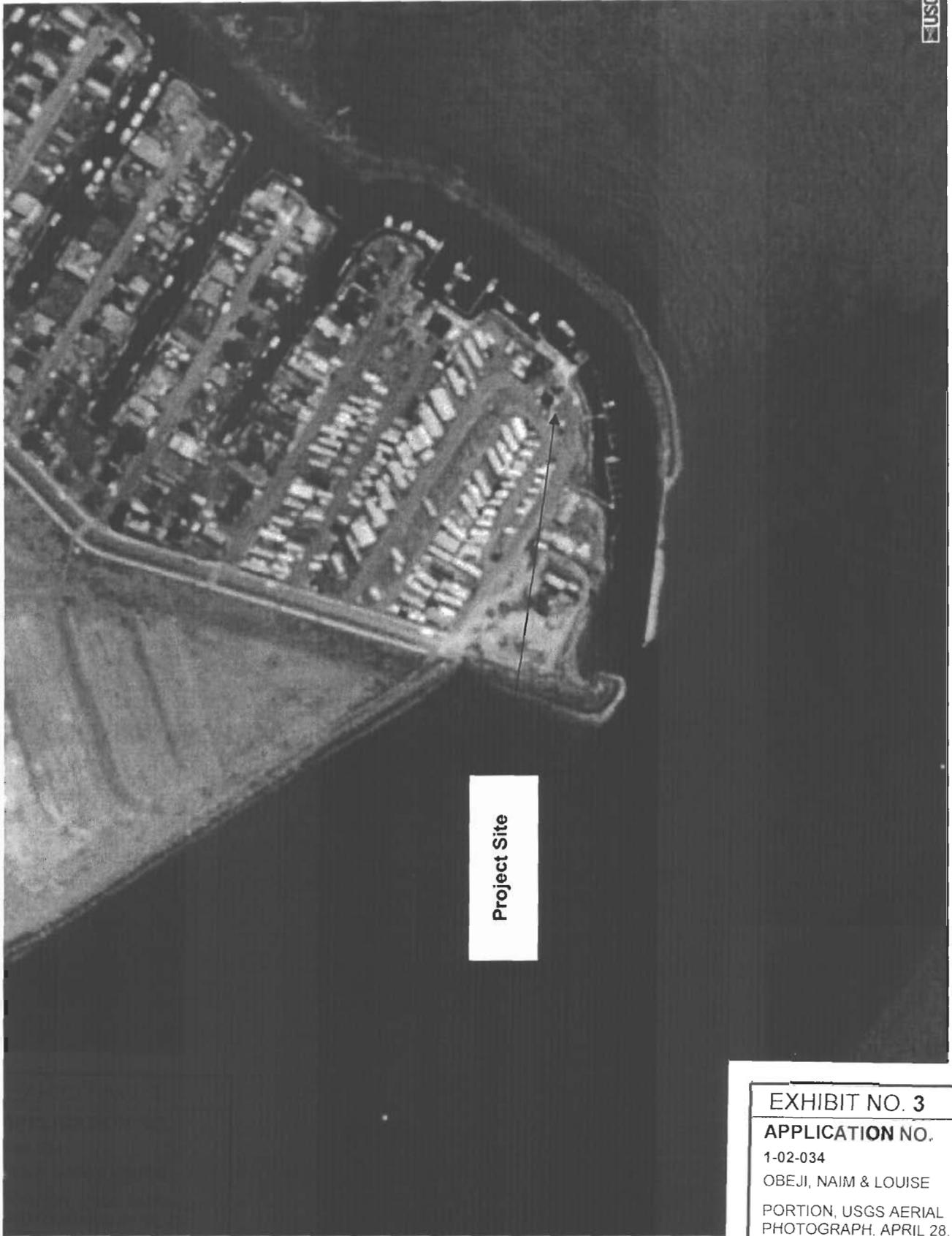


EXHIBIT NO. 2
APPLICATION NO.
 1-02-034
 OBEJI, NAIM & LOUISE
 VICINITY MAP



Project Site

EXHIBIT NO. 3
APPLICATION NO.
1-02-034
OBEJI, NAIM & LOUISE
PORTION, USGS AERIAL
PHOTOGRAPH, APRIL 28,
1989

**ATTACHMENT A
PROJECT DESCRIPTION**

EXHIBIT NO. 4
APPLICATION NO. 1-02-034
OBEJI, NAIM & LOUISE
PROJECT NARRATIVE AND SITE PLANS (1 of 7)

Project Name

EZ Landing RV Park and Marina Renovation Project

Project Location

The project is located on the north side of Halibut Avenue between Buhne Drive and Fisherman's Channel at 1875 Buhne Drive, King Salmon, Eureka, California. See the attached project location map (Figure 1).

Project APN's

305-091-01 305-091-02 305-092-05

Owner Name and Address

Naim and Louise Obeji
P.O. Box 1284
Santa Monica, California 90406-1284

Existing Site Conditions and Land Uses

The subject site consists of three Tax Assessor's Parcels as depicted on Figure 2. Attachment C to this application consists of an existing conditions site plan depicting existing site development.

The three parcels are currently fully developed with 35 mobile home spaces, 46 recreational vehicle spaces, a small marina with docking/mooring facilities for 70 small craft, and gasoline dock. Existing structures include an 1800 square foot store, office, caretakers residence, and a general-purpose meeting room for park resident's use. The two structures to the immediate south of the main structure include a 700 square foot boat launch housing and a 750 square foot shop with restroom facilities. The restroom facilities in this structure are for resident, visitor, and employee use. The shower, restroom, and laundry structure is located between mobile home spaces 12 and 14 toward the western side of the site. The structure is also shown on Attachments C and D as well as on the existing conditions and proposed project site plans. Attached to the existing shower, restroom, and laundry structure is a studio apartment.

Infrastructure

Sewer System – The site is currently served by a sanitary sewer system under the jurisdictional control of Humboldt Community Services District. Individual sewer laterals serve all 35 existing mobile home spaces and 41 of the 46 existing RV spaces. The main structure and the shop structure are also served. Sewer mains located in the access roadways consist of a 6-inch gravity line; the laterals consist of a 4-inch gravity line. The existing sewer system is in a deteriorated condition and will be replaced as part of the Phase I infrastructure repair and replacement project currently underway.

Water System – The site is currently served by a community water system under jurisdictional control of Humboldt Community Services District. Existing water lines will be replaced as part of the Phase I infrastructure repair and replacement project.

Electrical Power System – The site is currently served by Pacific Gas and Electric (PG&E). The existing system is deteriorated, and has been the subject of numerous code violations issued by the State of California, Department of Housing and Community Development (HCD) that has building authority jurisdiction on the site. The entire electrical system serving the site will be replaced as part of the Phase I infrastructure improvements.

Natural Gas – The site is currently served by PG & E. All 35 existing mobile home units have natural gas hookups. The existing natural gas system will be replaced as part of the Phase I infrastructure improvements.

Phone / Cable Television – Telephone and cable television service is available to all mobile home and RV spaces in the park. Telephone lines and cable television lines will be replaced as part of the Phase I infrastructure improvements.

Storm Drainage – There is an existing drainage inlet (DI) located near RV space number 9. This DI handles storm drainage from a portion of Buhne Drive, Halibut Drive, and a portion of the site. The area immediately surrounding the DI is subject to seasonal flooding during high tides as the outlet is located approximately 70 feet to the south of the DI, draining to Fisherman's Channel. Additionally, the pipe outlet is located approximately 2 feet above low tide and is submerged during high tide. Thus, during periods of heavy rain and high tide, there is standing water in the vicinity of the primary site access from Halibut Drive around the existing DI. Nuisance waters are generally about 2 to 4 inches deep during these periods.

A drainage plan will be prepared that will address the existing drainage problem in this area.

Proposed Development:

Phase I Infrastructure Improvements

The project site has been subject to violation issues by the HCD. These violations have been associated with the existing electrical and sewage disposal systems as well as several setback encroachments of mobile home units. In addition, part of the infrastructure improvement project is the replacement of telephone lines and cable television lines as indicated above. Inspection of the site electrical service by a registered electrical engineer (Travie Westlund, P.E., No. 7212) resulted in a recommendation for replacement of the entire electrical system serving the park. Upon further investigation into the other site utilities, it was determined that since extensive trenching would be required for the electrical improvements. Since there were enough problems with the existing sewer, water, telephone, and cable television systems, the owner decided to have these systems replaced as well.

Existing and Proposed Main Structure

The proposed two-story main structure will consist of approximately 3,000 square feet and will house the new store, office, meeting room, caretakers unit, and owners unit. A floor plan layout of both floors including area calculations is provided as Figure 6 (Proposed Main Structure Floor Plans).

The existing 1800 square foot main structure (see Attachment C – Existing Conditions Site Plan) will be demolished and replaced with a new 3,000 square foot structure. Existing uses will be transferred to the new structure with minimal expansion. However, the new caretakers unit will be approximately 30 percent larger than the existing structure and will include a small owners

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unit. Both the caretaker and owners units will be one bedroom. The owners unit will consist of approximately 720 square feet and will have a deck area of about 350 square feet. The caretakers unit will consist of approximately 760 square feet and will have a deck area of approximately 580 square feet. The owners unit will also include an office (the living room of the unit).

Also proposed for the new main structure is a food preparation area that will be used to prepare deli type foods (sandwiches, salads, and snack items) for sale to tenants and the general public. See Attachment B – Plan of Operation for additional detail on existing and proposed uses.

Existing and Proposed Shop/Restrooms structure

There is an existing single-story, 750 square foot structure that includes a shop used in the maintenance of the park and restroom facilities for park users. This structure is located to the west of the existing boat launch structure. The shop structure also includes some area for miscellaneous storage related to park equipment repair. Please refer to Attachment C – Existing Conditions Site Plan.

The existing shop structure will be replaced with a single-story, 750 square foot structure with proposed uses identical to the current uses in the existing shop structure. The new shop structure will be placed in the location of the existing main structure (see Attachment D – Proposed Project Site Plan).

Existing Boat Launch Structure / Proposed Boat Launch Ramp

There is an existing 700 square foot, two-story structure that houses the existing boat launch facility. This facility consists of a winch and pulleys for lifting boats off trailers and placing them onto an existing concrete ramp structure for launching into Fisherman's Channel. The existing winch and pulley mechanism has been non-functional for the past several years.

The owners are proposing to demolish this existing structure and replace it with a self-serve boat launch ramp. The ramp, shown on Attachment D – Proposed Project Site Plan, will be designed in accordance with the requirements of the State of California, Department of Boating and Waterways.

Construction of the new boat ramp structure will necessitate the removal of a portion of the rock-lined bank of Fisherman's Channel, and the placement of concrete beneath the low tide level. This construction will require review and approval by the Army Corps of Engineers and the State of California, Division of Boating and Waterways.

Site Grading

On-site grading will be minimal. A grading plan has not been prepared for the project at this time. However, grading will be required in the vicinity of the project access, boat ramp, and excavation for foundations for the new main structure.

Halibut Avenue Vacation

Placement of the new main structure in the location proposed will require the vacation of the existing right-of-way of a portion of Halibut Avenue as shown on Attachments C and D (Existing Conditions Site Plan and Proposed Project Site Plan). The existing right-of-way of Halibut Avenue currently extends to the mean low tide level of Fisherman's Channel.

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The applicant is proposing to vacate an approximate 4,400 square feet of public right-of-way, remove the existing point of public access to the bay that this roadway technically provides, and replace it with the dedication and development of APN 305-092-05 for public use.

The vacation request will be processed under a separate application procedure pursuant to Part 3, Chapter 1 of the California Streets and Highways Code (§8300). The right-of-way vacation application will be filed with the Land Use Division of the Humboldt County Public Works Department. The vacation request will ultimately be reviewed by the Humboldt County Board of Supervisors and will require a resolution of the Board for approval.

Proposed Public Use Area

The applicant is proposing to develop and dedicate APN 305-092-05 for public use. This existing parcel consists of approximately 2,700 square feet and is adjacent to Fisherman's Channel and Halibut Avenue (see Attachments C and D). This area will be landscaped and developed with picnic tables and park benches for public use. The adjacent parking lot for the main structure will include two parking spaces for public use and a handicapped parking space for shared use between the park and public users.

The applicant is proposing to develop and maintain the public use area that will be open from dawn to dusk each day. The property owners will post the public use area with signage indicating the hours of public use and a statement regarding liability (such as "Use at Your Own Risk"). The applicant will provide nighttime security for the public use area in the form of lighting and security cameras (see Plan of Operation - Attachment B).

Parking

Section A314-26 of the Humboldt County Code provides parking requirements for specific types of land uses and projects. This fully developed project site is essentially a large parking lot for moveable residences. Each mobile home space and each RV space has at least one parking space available within the area of the space. Depending upon the individual unit size of the mobile home or RV and its placement on its designated space, each space may also provide a second parking space. In addition, on street parking along Halibut Avenue fronting the subject property is available for use by park residents and visitors.

However, the new main structure proposes several different types of uses, with different parking code requirements for each use type. The proposed main structure uses are: store, food preparation for sale, office, general purpose meeting room, caretaker's unit and owner's unit/office. The area of each room and its use within the building is provided on Figure 6 - Proposed Main Structure Floor Plans. The following is our calculation of the required parking for the proposed project based on County Code Section A314-26.

Residential - two 1 bedroom units =	2 parking spaces
Retail - 673 Square Feet =	3 parking spaces
Office - 408 Square Feet =	2 parking spaces
Employees - 2 full-time, 2 part-time	3 parking spaces
<u>Total Required Parking</u>	<u>10 Parking Spaces</u>

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Total Proposed Parking	13 Standard Size Parking Spaces
Loading Zone	1 Standard Loading Zone (10 feet x 60 feet)
Handicapped Parking	1 Standard HC Space (14 feet x 18 feet)
Boat Trailer Parking	3 Onsite Boat Trailer Spaces

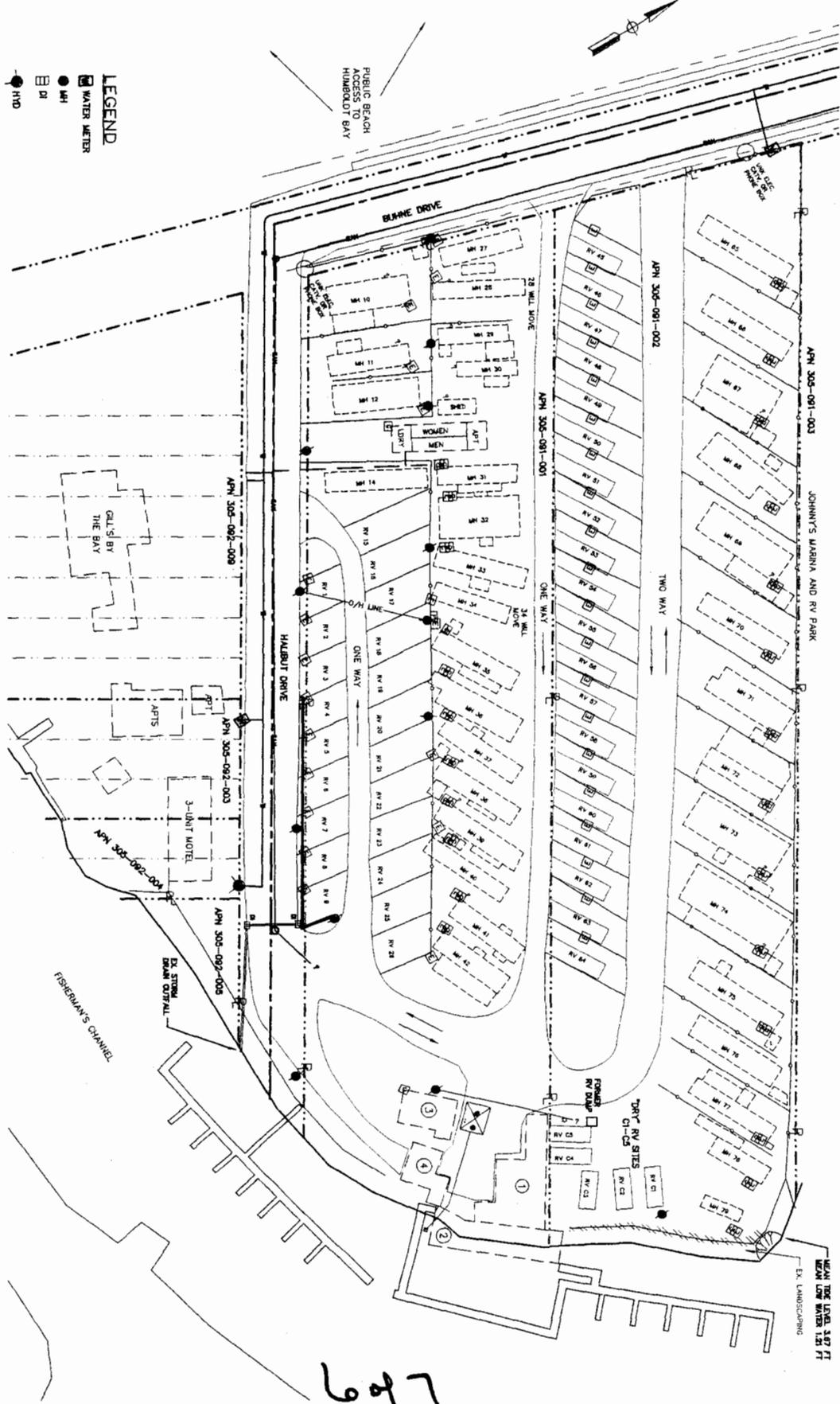
<u>Total Proposed Parking</u>	<u>14 Parking Spaces</u>
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As presented above and on the proposed project site plan (Attachment D) 13 standard size spaces, 1 handicapped space, 3 boat trailer spaces, and one standard loading zone will be provided.

As an explanatory note, the meeting room proposed for the new main structure that will replace the existing meeting room in the existing main building, is and will be utilized primarily for park tenants, visitors and staff. However, the meeting room is utilized for several 12-step programs and thus, is open to members of the general public. However, park management has indicated that regular attendee's to these meetings are generally from the immediate King Salmon neighborhood. In addition, meeting attendance generally ranges from 6 to 12 persons maximum per meeting. The applicant is proposing a total of 14 automobile spaces to compensate for anomalous visitors to the park or to the 12-step program meetings.

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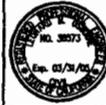
- LEGEND**
- WATER METER
 - MH
 - DI
 - HVD
 - PR LINE
 - WATER MAIN
 - SAINTARY MAIN
 - EX. FENCE
 - GAS METER
 - G VALVE



- KEY TO EXISTING BUILDINGS:**
- 1- EX. STORE, OFFICE, MEETING ROOM, CARETAKER'S UNIT
 - 2- EX. SUNDECK, CLEANING STATION
 - 3- EX. SHOP, STORAGE, RESTROOMS
 - 4- EX. BOAT LAUNCH RAMP, LIFT HOUSING

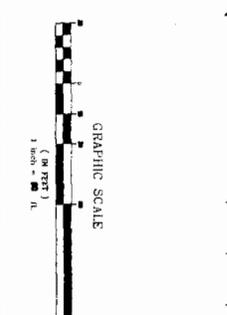
- EXISTING # OF UNITS:**
- 35 MOBILE HOMES (MH)
 - (SINGLE/DOUBLE WIDE)
 - 46 RECREATIONAL VEHICLE (RV)
 - 1 CARETAKER'S UNIT (UPSTAIRS)
 - 1 STUDIO UNIT (BUILDING 'F')
 - 83 TOTAL UNITS

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EZ-LANDING MOBILE HOME PARK		LACO ASSOCIATES	
SITE MAP - EXISTING CONDITIONS		CONSULTING ENGINEERS	
NAIM & LOUISE OBEJI		21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	
LOCATION: 1875 BUHNE DRIVE, EUREKA, CA			
NO.	REVISION	BY	CHK DATE

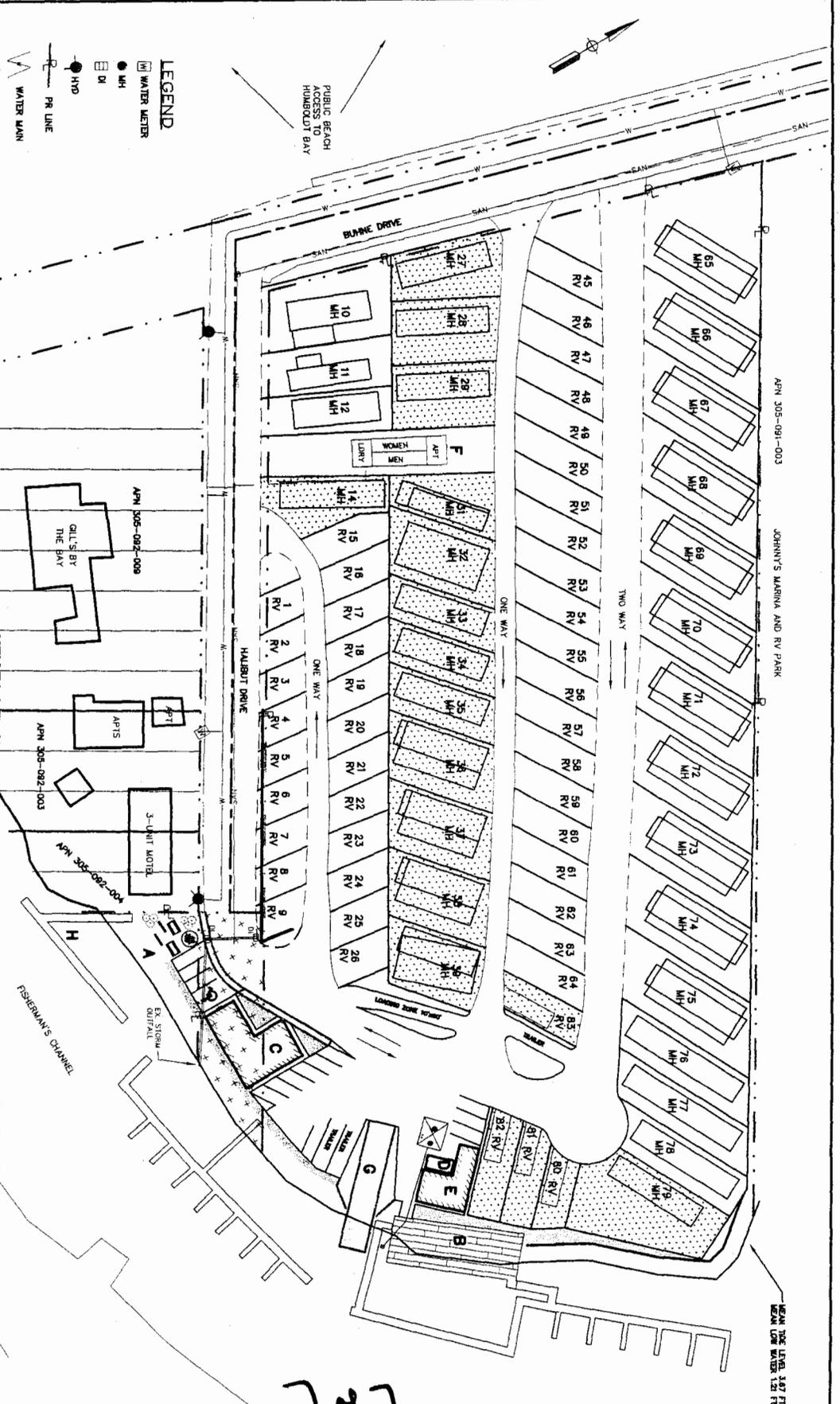
LEGEND

- WATER METER
- MH
- DI
- HYD
- PR LINE
- WATER MAIN
- SANITARY MAIN
- RECREATIONAL SPACES
- PROPOSED STREET
- WALKWAY
- RECONSTRUCTED
- DECK
- LANDSCAPE AREAS
- LANDSCAPE PLANTS
- PUBLIC TABLE PARK BENCH



- KEY TO LETTERS:**
- A - PUBLIC ACCESS (DAY USE)
 - B - SUNDECK AND FISH CLEANING
 - C - PROPOSED STORE OFFICE, MEETING ROOM (downstairs) CARETAKERS APARTMENT, OWNER'S UNIT/OFFICE (upstairs)
 - D - TRASH DUMPSTER
 - E - SHOP, RESTROOMS, STORAGE
 - F - EXISTING LAUNDRY, RESTROOMS/SHOWERS, STUDIO APT.
 - G - REPLACEMENT SELF-SERVE BOAT LAUNCH RAMP
 - H - REPLACE PREVIOUSLY EXISTING DOCK, RAMP

- PROPOSED # OF UNITS:**
- 31 MOBILE HOMES (MH)
 - (SINGLE/DOUBLE WIDE)
 - 45 RECREATIONAL VEHICLE (RV)
 - 1 CARETAKER'S UNIT (UPSTAIRS)
 - 1 OWNER'S UNIT/OFFICE (UPSTAIRS)
 - 1 STUDIO UNIT (BUILDING 'F')
 - 79 TOTAL UNITS



<p>EZ-LANDING MOBILE HOME PARK PROPOSED PROJECT LAYOUT</p> <p>NAIM & LOUISE OBEJI LOCATION: 1875 BUHRNE DRIVE, EUREKA, CA</p>	<p>LACO ASSOCIATES CONSULTING ENGINEERS</p> <p>21 W 4TH ST. EUREKA, CA 95501 (707)443-5054</p>	
SCALE: 1"=40' DRAWN: T. OBEJI CHECKED: N. OBEJI DATE: 6/20/2002 JOB NO.: 0124 SHEET: 2	NO. _____ REVISION _____ BY _____ CHK _____ DATE _____	



1497 Central Avenue • McKinleyville CA • 95519

Voice: 707/839-0900 • Fax: 707/839-0867 • MRB@madriverbio.com • www.madriverbio.com

November 18, 2002

To: John Blodgett
LACO and Associates
21 W. 4TH Street
Eureka, California 95502

RE: EZ Landing RV Park and Marina, 1875 Buhne Drive, King Salmon Eureka,
California.

Dear Mr. Blodgett,

The following document includes a biological study to evaluate effects of the EZ Landing RV Park and Marina Renovation Project. The proposed project is to build a boat ramp on a site that will replace an old disintegrated concrete boat ramp.

This biological study and mitigation plan addresses the areas to be filled including an analysis of existing ecological conditions at the project site and adjacent areas. This document discusses how present ecological conditions would be expected to change following implementation of the project, and includes mitigation measures for impacted eelgrass.

If you have any questions with regard to this reports please call our office.

Sincerely,

A handwritten signature in black ink that reads "Heather Beeler".

Heather Beeler
Staff Biologist, Mad River Biologists

EXHIBIT NO. 5

APPLICATION NO.

1-02-034 - OBEJI
BIOLOGICAL STUDY AND
MITIGATION PLAN AND
ADDENDA, MAD RIVER
BIOLOGISTS, 11/18/02,
12/20/02 & 3/10/04 (1 of 21)

I. INTRODUCTION

The purpose of this biological study is to evaluate the effects of the proposed EZ Landing RV Park and Marina Renovation Project and outline the mitigation plan for impacts to eelgrass. The EZ Landing RV Park and Marina is located on the north side of Halibut Avenue between Buhne Drive and Fisherman's Channel at 1875 Buhne Drive, King Salmon Eureka, California; adjacent to south Humboldt Bay (Figure 1). The proposed project is to build a boat ramp at low-low tide on a site that will replace an old disintegrated concrete boat ramp following established Best Management Practices (BMP's) to reduce sedimentation.

This biological study and mitigation plan addresses the areas to be filled including an analysis of existing ecological conditions at the project site, as well as (a) discussion of the ecological value of the plants and animals using the site and the adjacent areas, (b) discussion of the present ecological function and values of the project site, (c) discussion of how the present ecological conditions would be expected to change following implementation of the various project elements, and (d) includes mitigation measures for impacted eelgrass.

II. CONSULTATION TO DATE

An informal consultation between Vicki Frey of California Department of Fish and Game, Eureka, California, and Heather Beeler of Mad River Biologists took place on 6 November 2002 to discuss mitigation options and agency procedures for the project.

III. CURRENT MANAGEMENT DIRECTION

Agencies involved in management of Humboldt Bay require no net loss of eelgrass (V. Frey, pers. comm.).

IV. DESCRIPTION OF PROPOSED ACTION

IV a. Existing Conditions

The proposed new boat ramp will replace a deteriorated concrete boat ramp at the EZ Landing RV Park and Marina, adjacent to South Humboldt Bay, on the north side of Halibut Avenue between Buhne Drive and Fisherman's Channel at 1875 Buhne Drive, King Salmon, California (40.7352°N, 124.2178°W). The old ramp extends approximately thirty feet into Fisherman's Channel and is about ten feet wide; although the south-westerly side has deteriorated.

Figure 2 shows the eelgrass beds and sites of interest within the project area, labeled Areas A – G, that are referenced throughout this document. The old concrete boat ramp (Area A) encompasses a 10' x 30' (300 ft²) area. A small eelgrass bed has become established at the southwest corner of the existing boat ramp. This eelgrass bed likely

would not have become established if the existing ramp had been operational during the past five years.

The substrate within approximately four feet immediately west of the ramp consists of muddy, sandy bottom topped with gravel and crumbled concrete and is not suitable eelgrass habitat. Suitable eelgrass habitat occurs in Area F, which begins about four feet west of the ramp, where the substrate consists of muddy, sandy bottom. Some eelgrass has become established along the embankment and dock edges (Area F). Area B is enclosed by dock on three sides; the fourth side is the slough embankment underneath the fish-cleaning deck/sundeck. This area is not accessible to watercraft. Area B is shallow and entirely filled with eelgrass. Similarly, Area C contains eelgrass although this bed is not as dense as in Area B. Area C is potentially accessible to very small lightweight boats (skiffs), this area is also shallow. There is a small amount of eelgrass in the channel near the docks and moorings. Area D and F lack eelgrass in the shallow areas near the embankment. The sandy/muddy substrate is covered by rock and rubble, used in stabilization, which has sloughed off the embankment.

IV b. Proposed Action

The EZ Landing RV Park and Marina renovation project will repair and replace infrastructure systems including sewer and water systems, natural gas lines, phone/cable lines and the storm drainage system. Existing structures will be demolished and new structures built. The mobile home and recreational park includes a small marina with docking/mooring facilities for 70 small craft and a gasoline dock.

There is an existing two-story structure that houses the boat launch facility. This facility consists of a winch and pulleys for lifting boats off trailers and placing them onto the boat launch. An existing concrete ramp structure for launching into Fisherman's Channel is present. The existing winch and pulley mechanism has been nonfunctional for the last several years. The owners are proposing to demolish the existing structure and replace it with a self-serve boat launch ramp. The new structure will be designed in accordance with the requirements of the State of California, Department of Boating and Waterways.

Construction of the new boat ramp structure will necessitate the removal of between 25-35 linear feet of the rock-lined bank of Fisherman's Channel, and the placement of concrete beneath the low tide level. This construction will follow established BMP's, and will require review and approval by the U.S. Army Corps of Engineers and the State of California, Division of Boating and Waterways.

The proposed new boat ramp will extend thirty feet into the channel and will be twenty feet wide. The new ramp will encompass a 600 ft² area, and will be 10 feet wider than the old concrete boat ramp. The old boat ramp comprises half (300 ft²) of this total area, therefore a new 300 ft² area of impact will be permanently filled by construction of the boat ramp. The areas of estimated impact (Table 1) were calculated by assessing the amount of eelgrass, suitable eelgrass habitat, and unsuitable eelgrass habitat at the site of the proposed new boat ramp. The 300 ft² area that consists of the old concrete boat ramp is currently unsuitable habitat for eelgrass and not considered a new impact; therefore it is not considered in the calculations. Temporary impact areas are defined as the area within five feet of the proposed new boat ramp on the southeastern (end of ramp entering into

Fisherman's Channel) and the southwestern sides (borders Area F). The existing boat ramp's northeastern border is a dock and adjacent floating walkway. As sunlight does not penetrate beneath these structures, this area is unsuitable eelgrass habitat and is not considered further.

Table 1. Areas of estimated impacts at site of new proposed boat ramp.

	Permanent impacts:	Temporary impacts:
eelgrass	50 ft ²	175 ft ²
suitable habitat	125 ft ²	90 ft ²
unsuitable habitat	125 ft ²	10 ft ²
totals	300 ft²	275 ft²

V. METHODS

On 24 October 2002 Heather Beeler, Staff Biologist with Mad River Biologists, met John Blodgett from LACO Associates at the project site. Blodgett gave Beeler a tour of the site, providing a detailed project description and maps. The daytime low tide occurred at 7:54 am registering a height of 2.8 ft. At this tidal level, the slough and channel were filled with water. Although it was a foggy morning, the reflection of sunlight on the murky channel water created poor conditions to adequately assess eelgrass in the project area. Beeler surveyed the site, documenting location of eelgrass beds visible under such conditions.

To adequately access the size and location of eelgrass beds in the project area, Beeler returned to the project site on 4 November 2002 at 4:30 pm, taking advantage of a negative low tide at 5:31 pm; height -1.1. The slough and channel were drained, exposing the eelgrass beds and mudflats within the project area. Wildlife and habitat observed during the site visits were documented. The EZ Landing RV Park and Marina managers, Paula Langley and Ruth Motherwell, were interviewed to glean information regarding marine mammal and bird occurrences in the project area. Eelgrass beds were sketched onto a project location map, which had been designed to scale by project engineers. This information was later transferred to an aerial GIS image of the project site (Figure 2).

VI. ACTION AREA

VI a. Humboldt Bay

Humboldt Bay (40.750°N, 124.208°W), one of California's largest coastal estuaries, consists of three arms: South Bay, Entrance Bay and Arcata Bay (Barnhart et al. 1992). South and Arcata bays consist of extensive mud flats intertwined with drainage channels (Barnhart et al. 1992). More than half the surface area of both bays is exposed at low tide. Humboldt Bay provides habitat for many fish and wildlife species. It hosts one of three very large stands of eelgrass known in the Pacific Northwest; Washington hosts the

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others (Phillips 1984). Currently, all areas within Humboldt Bay containing suitable habitat possess eelgrass, and eelgrass quickly colonizes any new habitat that is created (V. Frey, pers. comm. 6 November 2002). Present ecological conditions would not be expected to change within Humboldt Bay following implementation of this project.

VI b. King Salmon Slough

King Salmon Slough (40.736°N, 124.219°W), located in South Bay, dead-ends at the power plant in Fields Landing. Eelgrass can be found colonizing the edges above +1 feet mean lower low water (MLLW), and during low tide of the channels within the slough drain, exposing a diversity of invertebrates (Shapiro & Assoc. 1980, in Pickart 1990). Shorebirds often forage on these exposed mudflats.

This slough contains Fisherman's Channel, which is hydrologically linked to Hookton Channel, also located within South Bay. Although a small eelgrass bed will be permanently impacted at the project site near the mouth of King Salmon Slough, mitigation efforts will result in no net loss of eelgrass habitat within the project area. Present ecological conditions within King Salmon Slough would not be expected to change significantly following implementation of the project.

VI c. Fisherman's Channel

Fisherman's Channel was originally maintained (dredged) by Pacific Gas and Electric (PG&E) to provide water to the former nuclear power plant located at the end of the slough. PG&E is still responsible for maintaining the channel. The channel has not been dredged in a number of years and is beginning to fill with sediment. Even so, Fisherman's Channel supports a substantial level of watercraft traffic. Fish, harbor seals and river otters also utilize this waterway. There is little eelgrass within the channel itself near the EZ Landing Marina docks and moorings. Implementation of the EZ Landing boat ramp renovation project is not expected to significantly change the ecological value of the project area.

VII. SPECIES

VII a. Eelgrass

Eelgrass (*Zostera marina*) is a species of seagrass that is found in near-shore coastal environments and estuaries throughout the Pacific Northwest and worldwide. It is a rooted aquatic species that grows on unconsolidated substrate near the level of mean lower water in Humboldt Bay. According to the Cowardin wetland classification system (Cowardin et al. 1979), eelgrass communities belong to the Estuarine System, Subtidal Subsystem, Aquatic Bed Class, and Submerged Aquatic Subclass. The water regime is Subtidal and the water chemistry is mixohaline. Phillips (1984) suggests that eelgrass forms perennial strands under most conditions, but under certain stresses (i.e. high or low water temperatures, reduced water salinity, and intertidal locations) may act as an annual plant with a very heavy seed production. It produces two lateral branches during a growing season, with the terminal shoot always flowering during the second year following development from a seed. Keller and Harris (1966) reported that the number of

leaves per shoot in Humboldt Bay ranged from two to thirteen but averaged three to four. Depth of growth does not exceed -6.6 m (-22 ft), and salinity is not less than 20 ppt (except near river mouths at low tide) (Phillips 1984).

Eelgrass has horizontal rhizomes and erect leafy shoots extending into the water column (Phillips 1984). Their roots grow in unconsolidated soft substrate and project a forest of leaves into the water column. This 'meadow' creates a structured habitat from an otherwise unstructured one. Eelgrass meadows provide protection and sediment stabilization, resulting in a much greater diversity of animals with the meadow than in adjacent unvegetated areas (Phillips 1984).

Eelgrass beds account for about 20% of the intertidal habitat of Humboldt Bay (Barnhart et al. 1992) and play an important role in the ecology of the bay. Eelgrass beds are highly productive ecosystems, containing a wide variety of invertebrates, which provide direct and indirect food sources for marine food chains (Barnhart et al. 1992). Additionally, they provide habitat and protection, and act as a nursery for many marine species including federally listed juvenile salmonids and serves as a spawning ground for Pacific herring (Phillips 1984). A migratory goose species, Black Brant (*Branta bernicula*), feeds almost exclusively on eelgrass. Eelgrass beds also function to stabilize sediment, thus preventing erosion (Phillips 1984). Humboldt Bay is recognized as having one of the three largest stands of eelgrass in the Pacific Northwest (Phillips 1984). Barnhart (1992) states that eelgrass beds in Arcata Bay (north part of Humboldt Bay) are not as dense as those of South (Humboldt) Bay, which is due in part to impacts associated with dredging in commercial oyster beds in Arcata Bay. Studies indicate that the most important water quality parameter related to eelgrass is turbidity, which can have far-reaching effects on eelgrass (Phillips 1984).

Implementation of this project is likely to adversely affect eelgrass in the project area.

VII b. Anadromous Fish

Three listed anadromous fish species are known to occur within Humboldt Bay (Barnhart et al. 1994, Tauber 2002). Southern Oregon/Northern California Coho salmon (*Oncorhynchus kisutch*) are federally listed as threatened and state listed as a Candidate/Recovery species. This species is expected to be up-listed to Threatened by September 2003 (pers. comm. M. Gilroy). Chinook salmon - California coastal ESU (Ecologically Significant Unit), (*Oncorhynchus tshawytscha*) and Steelhead - Northern California ESU (*Oncorhynchus mykiss*) are federally listed as Threatened. Both juvenile salmonids that are outmigrating to the ocean and adults migrating to freshwater streams to spawn use Humboldt Bay as a corridor. Juvenile salmonids also use Humboldt Bay as foraging habitat (Barnhart et al. 1992, Tauber 2002).

As BMP's will be followed during construction activities to reduce sedimentation, implementation of this project is not likely to adversely affect salmonids in the project area.

VII c. Pacific Herring

Pacific Herring (*Clupea harengus*), an important commercial fish, enter the Humboldt Bay to spawn from December to March (Barnhart et al. 1992). The majority of spawning occurs in eelgrass beds in Arcata Bay. Herring eggs deposited on eelgrass are consumed

by birds, primarily gulls (*Larus* spp.). At sea, herring are a major forage fish for salmon, sharks, long-cod, waterfowl, sea lions and whales (Hart 1973 in Barnhart et al. 1992). As BMP's will be followed during construction activities to reduce sedimentation, implementation of this project is not likely to affect Pacific Herring in the project area.

VII d. Birds

Humboldt Bay is a major wintering area and important stopover site for numerous species of migratory water-birds (Colwell 1994). Many species of shorebird forage for invertebrates on intertidal mudflats, pastures, beach, sandflats, shoreline eelgrass, and in marshes (Barnhart et al. 1992). Black-bellied Plover (*Pluvialis squatarola*), Willet (*Catoptrophorus semipalmatus*), Long-billed Curlew (*Numenius americanus*), Marbled Godwit (*Limosa fedoa*), Dunlin (*Calidris alpina*), Western Sandpiper (*Calidris mauri*) and Least Sandpiper (*Calidris minutilla*) are shorebird species that may occur within the project area at low tide. At extremely low tides when mudflats are exposed, shorebird such as Black bellied Plovers, Willets, and Western and Least sandpipers forage on exposed mudflats within Fisherman's Channel.

Ducks use open-water areas, water-covered mudflat and eelgrass areas (Barnhart et al. 1992). Surf Scoters (*Melanitta perspicillata*), Bufflehead (*Bucephala albeola*), and Greater Scaup (*Aythya marila*) are the most commonly observed waterfowl in the King Salmon vicinity (D.Fix, pers. comm.). Humboldt Bay is an important migratory stopover site for Black Brant (*Branta bernicla nigricans*), a small migratory goose that feeds almost exclusively on eelgrass, principally in the South Bay (Barnhart et al. 1992). Black Brant show up in numbers in late fall to early winter. Brant show up in numbers in late fall to early winter. Thousands of Black Brant are present on South Bay during peak periods of migration, and many over winter until April (D. Fix, pers. comm.).

Diving birds occur primarily in open-water areas of the bay. Double-crested Cormorants (*Phalacrocorax auritus*) are most abundant, followed by Red-throated Loons (*Gavia stellata*) and Common Loons (*Gavia immer*). Western (*Aechmophorus occidentalis*), Clark's (*A. clarkii*), Horned (*Podiceps auritus*), Eared (*P. nigricollis*) and Pied-billed (*Podilymbus podiceps*) grebes occur in South Humboldt Bay. Of these, Western Grebes are generally the most numerous (pers. comm. D. Fix).

Hérons and egrets are regularly seen on Humboldt Bay (Barnhart et al. 1992, Harris 1996). Additionally, Humboldt Bay is important habitat for gulls and terns (Barnhart et al. 1992). In the summer, Western (*Larus occidentalis*) and Heermann's (*Larus heermanni*) gulls are most common. From October to March the following gull species are present on Humboldt Bay (listed in approximate order of decreasing abundance): Western Gull, Glaucous-winged Gull (*L. glaucescens*), Mew Gull (*L. canus*), California Gull (*L. californicus*), and other gull species in small numbers (D. Fix, pers. comm.).

The Brown Pelican (*Pelecanus occidentalis californicus*) is California State and Federally listed as Endangered (CNDDDB 2002). This species is common to locally abundant non-breeding year-round visitor to Humboldt Bay (Harris 1996). Large numbers of Brown Pelicans usually arrive in northern California in late May to spend the summer and fall (Harris 1996). Feeding occurs primarily in shallow estuarine waters with

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the birds seldom venturing more than 20 miles out to sea (USFWS 1995). Sand spits and offshore sand bars are used extensively as daily loafing and nocturnal roost areas (USFWS 1995, Fix and Bezener 2000). Although small numbers of Brown Pelicans may loaf or roost near the project area, King Salmon Slough is not an important site for pelicans (D. Fix pers. comm.). Implementation of the EZ Landing boat ramp renovation project is not likely to affect Brown Pelicans in the project area.

Black-crowned Night-Herons roost in trees on the south side of Fisherman's Channel (H. Beeler, pers. obs.). Gulls roost on structures on the south side of the channel. At extremely low tides when mudflats are exposed, shorebird such as Black bellied Plovers, Willets, and Western and Least sandpipers forage on exposed mudflats within Fisherman's Channel.

The new boat ramp will be constructed at lower low tide when mudflats within the slough are exposed. Marine mammals are not likely to be present in Fisherman's Channel at such low tides. Shorebirds, gulls, herons, Brown Pelicans and other bird species are likely to be temporarily deterred from roosting or foraging in the project area during construction of the new boat ramp. It is likely that the overall effect of this usurpation by human activities will be of negligible significance, and that these species will quickly relocate and resume their activities at a nearby location. Implementation of the EZ Landing boat ramp renovation project is not expected to significantly impact wildlife in the project area.

VII e. Marine Mammals

The Pacific harbor seal (*Phoca vitulina*), a small, non-migratory seal species (Griswold 1985), is the most common marine mammal in Humboldt Bay (Barnhart et al. 1992). Seals haul out on mudflats exposed during ebb tides adjacent to small tidal channels in upper Arcata and South bays (H. Beeler, pers. obs., Barnhart et al. 1992). Harbor seals are present in Fisherman's Channel throughout the year (pers. comm. R. Motherwell and P. Langley). Harbor seals are not expected to occur in the project area at low-low tides (when construction of the new boat ramp will occur). Implementation of the EZ Landing boat ramp renovation project is not likely to affect harbor seals.

California Sea Lion (*Zalophus californianus*) and the Steller Sea Lion (*Eumetopias jubatus*) are rarely observed in the bay. While few California sea lions (*Zalophus californianus*) breed in Northern California, peak abundance occurs during the fall after the breeding season when the males migrate northward (Reeves et al. 2002). Females tend to stay close to the rookeries all year (Whitaker 1998). Although these animals are uncommon visitors in the bay, an adult male hauled-out on a dock at the EZ Landing marina was photographed a few years ago (photo displayed in EZ Landing market). The Federally threatened Steller Sea Lion (*Eumetopias jubatus*) favors the outer coast, preferring to haul-out on offshore rocks and rocky islands (Whitaker 1998). Steller sea lions do not breed in Northern California but may occur in this region during fall, winter and spring (Reeves et al. 2001). Steller sea lions are not often found in river mouths, bays, or estuaries (Reeves et al. 2002).

Sea lions are not expected to occur in the project area. Implementation of the EZ Landing boat ramp renovation project is not likely to affect sea lions in the project area.

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VII f. Northern River Otter

On the North Coast, Northern river otters (*Lutra canadensis brevipilosus*) inhabit streams, rivers, coastal and estuarine environments (Whitaker 1998; H. Beeler, pers. obs.). River otters are common in Humboldt Bay and sometimes forage in Fisherman's Channel. They often appear beneath EZ Landing Marina's sundeck as fisherman clean their catch, taking advantage of a free meal. Northern river otters are most commonly seen in the slough during high tides, but are known to forage on mudflats (H. Beeler, pers. obs.). River otters maybe temporarily deterred from using the project area during construction of the new boat ramp, but will quickly relocate and resume their activities at a nearby location. Implementation of the EZ Landing boat ramp renovation project is not likely to affect river otters in the project area.

VIII. RECOMMENED MITIGATION

VIII a. Mitigation Goal

No net loss of eelgrass in the project area is the mitigation goal.

VIII b. Relocation of Eelgrass Bed

To compensate for the permanent loss of eelgrass at the project site we propose the following 1:1 mitigation plan. Prior to construction of the new boat ramp the eelgrass bed located at the south-western end of the boat ramp will be harvested and replanted in an area of appropriate habitat near the project site. The eelgrass will be transplanted in clusters that retain the mud and root wads rather than planting the stem alone to increase the likelihood of transplanting success (Tauber 2002).

VIII b1. Option 1: Area F

Area F, the preferred site for replanting of this eelgrass bed, is located approximately 50 feet to the south-west of where the bed currently resides. The close proximity of this site will make relocation activities practical. This area contains some eelgrass, although the center of this area is currently bare substrate. Replanting the eelgrass at this location will result in no-net loss of eelgrass. This area is suitable habitat and if left alone eelgrass may colonize this area in time.

VIII b2 Option 2: Area C

The second option for transplanting eelgrass occurs within Area C. This area is shallow and currently contains a large amount of eelgrass, although the center of this area is currently bare substrate. This area is suitable eelgrass habitat and if left alone eelgrass may likely colonize the entire area in time.

VII b3. Option 3: Area D & G

Areas D & G, the third option for transplanting eelgrass, is wide and gently slopes into Fisherman's Channel. Currently there are a couple of small, sparse of eelgrass beds in this area just beyond the extent of the rock and rubble (Area D). If eelgrass was replanted, it may further stabilize the bank along the edge of the slough, further decreasing the slope of the bank, eventually creating a wider area of more favorable eelgrass habitat.

VIII c. Eelgrass Habitat Restoration

To mitigate for the permanent loss of approximately 125 ft² of eelgrass habitat at the project site, we propose to restore eelgrass habitat in Areas D and F. Habitat will be created by removing rock and rubble that has sloughed off the embankment. Habitat restoration in this gently sloping area may enable eelgrass to colonize the shallow areas near the embankment at this location. In Area D 1500 ft² of habitat will be restored. Rock and rubble will be removed by employing the construction equipment on site during implementation of the EZ Landing boat ramp renovation project, allowing eelgrass to colonize the restored area. Following restoration, eelgrass is expected to colonize this shallow area near the embankment.

VIII d. Educational/Scientific Value

This mitigation value considers the suitability of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research. A number of special projects, including Masters Thesis work, have focused on the ecological values of eelgrass within Humboldt Bay. The potential exists for more of these projects to study the effects of various mitigation efforts, pollution, oil spills, and the ecological values of eelgrass within Humboldt Bay. The funding of studies intended to contribute to the understanding and appropriate management of eelgrass habitats within Humboldt Bay can be considered mitigation. This option may be considered as an alternate mitigation plan, to be adopted if prior mitigation efforts are unsuccessful (i.e. the relocation of eel grass to be impacted and the creation of additional eel grass habitat).

VIII e. Monitoring Plan

Throughout Humboldt Bay and the project area, sites containing suitable habitat that experience minimal human disturbance possess eelgrass, and eelgrass quickly colonizes any new habitat that is created (pers. comm. V. Frey).

This biological study may be considered an estimate of the preconstruction baseline condition for eelgrass beds within the project area. A preconstruction survey, documenting baseline eelgrass density and cover values in the project area is recommended. Eelgrass surveys will be conducted annually for three consecutive years to monitor eelgrass establishment within mitigation areas. It is recommended that surveys be conducted during the fall to ensure survey conditions are consistent. Mitigation will be considered successful when eelgrass cover achieves pre-construction levels in the project area.

IX. LITERATURE CITED

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X. MAPS AND FIGURES

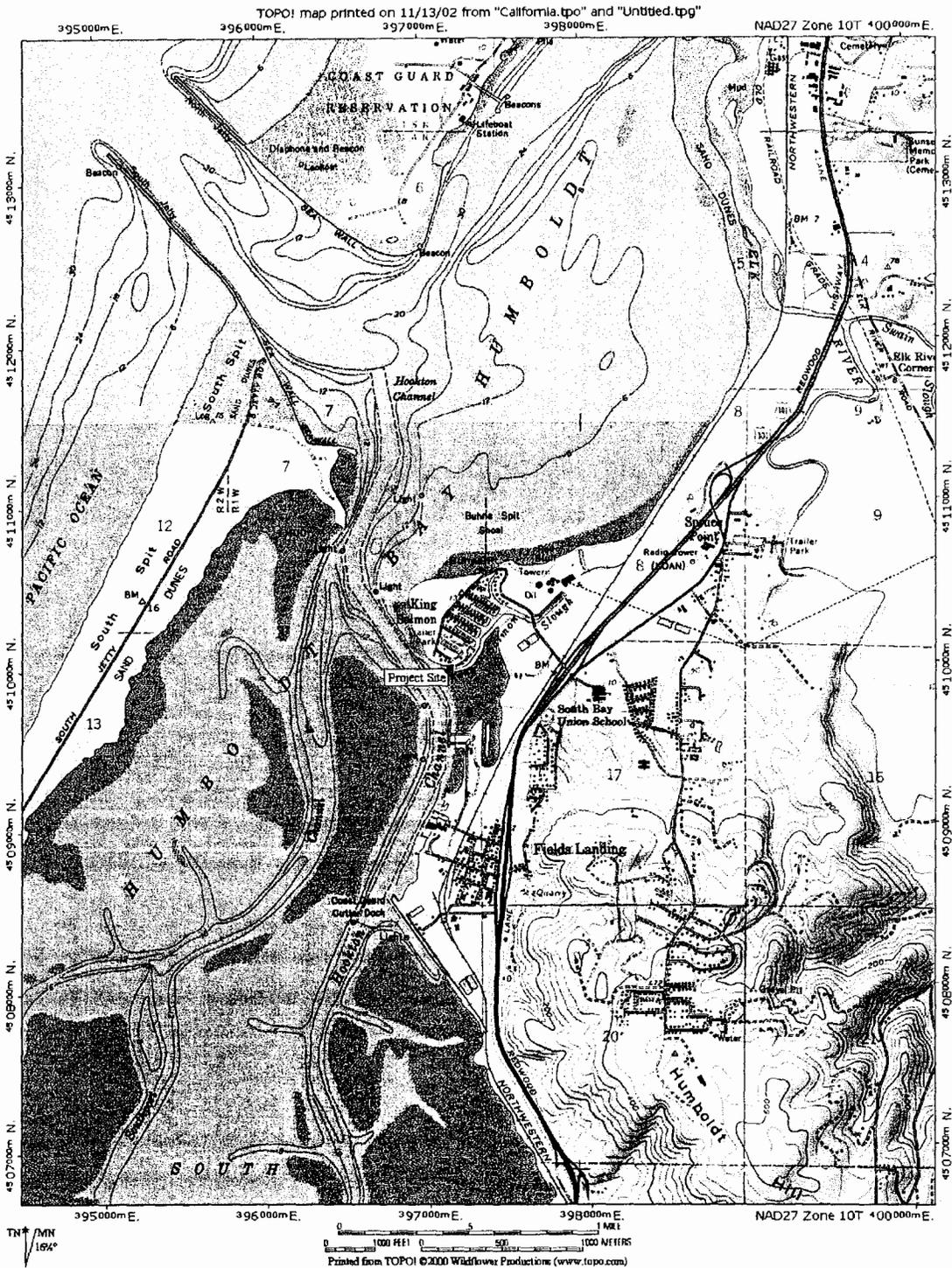


Figure 2. King Salmon Eureka, California; South (Humboldt) Bay. Label indicates location of project site.

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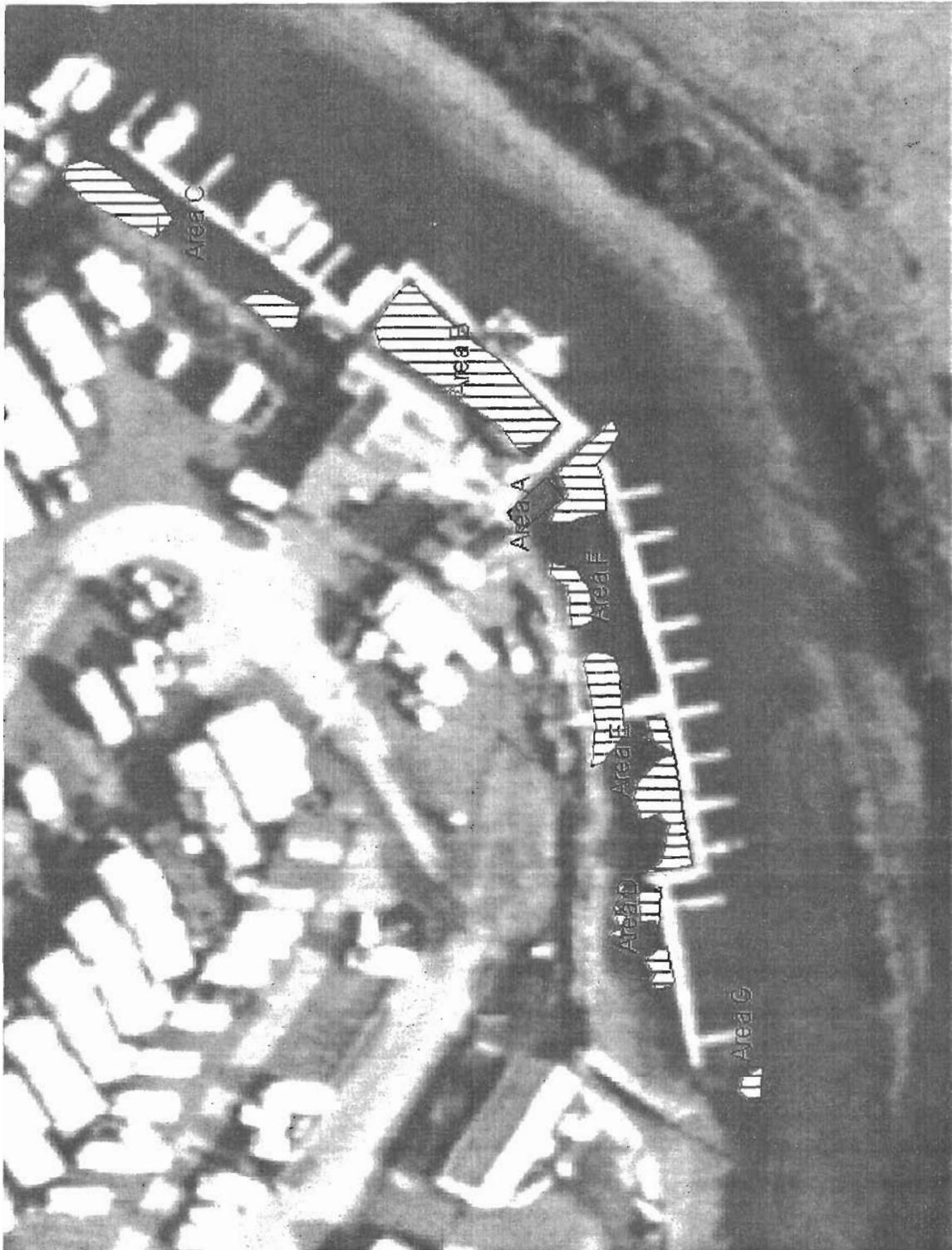


Figure 2. Ariel photo of EZ Landing RV Park and Marina Renovation project site illustrating locations of eelgrass beds within the project area. Sites of interest are labeled (Areas A – G) as referenced in the Biological Study and Mitigation Plan report.

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MAD RIVER BIOLOGISTS

1497 Central Avenue • McKinleyville CA • 95519
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December 20, 2002

To: John Blodgett
LACO and Associates
21 W. 4TH Street
Eureka, California 95502

RE: EZ Landing RV Park and Marina, 1875 Buhne Drive, King Salmon Eureka, California.

Dear Mr. Blodgett,

Following is an addendum to the EZ Landing RV Park and Marina Renovation Project Biological Study and Mitigation plan. Included is a description of the western portion of dock that had deteriorated, and is not currently in existence, which may be replaced during Phase II of this project. Effects to eelgrass in the immediate vicinity are discussed. Survey recommendations and mitigation options are offered.

The time of year recommended for surveying differs from the monitoring plan proposed in the original Biological Study as implementation of Phase II is expected to occur after the peak growing season. Since eelgrass is dynamic, it is important to consider the most current and accurate survey information as a baseline before project implementation. If Phase II were to begin before the next growing season, I would recommend using last falls study as your baseline. As Phase II is not expected to begin until August 2003, after the next growing season, agency biologists will likely require preconstruction surveys.

If you have any questions with regard to this reports please call our office.

Sincerely,



Heather Beeler
Staff Biologist, Mad River Biologists

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JAN 07 2003

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Addendum to
Biological Study and Mitigation Plan
Report to evaluate eelgrass impacts from the
EZ Landing RV Park
And Marina Renovation Project

Submitted to: LACO and Associates
21 W. 4TH Street
Eureka, California 95502
Attn: John Blodgett

Prepared by: Heather Beeler
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CALIFORNIA
COASTAL COMMISSION

Submitted: December 20, 2002

By:

Heather Beeler
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Dock Reconstruction

This addendum to the EZ Landing RV Park and Marina Renovation Project Biological Study and Mitigation plan addresses the western portion of dock that had deteriorated and is not currently in existence. This dock may be rebuilt during Phase II of this project. The old dock is visible in Figure 1 (Figure 2 in original document). Figure 1 shows the eelgrass beds and sites of interest within the project area, labeled Areas A – G, which are referenced throughout this document. The aerial image (Figure 1) was taken before this portion of deteriorated dock was removed. The portion of dock to be rebuilt is visible in Area D and G in Figure 1. Figure 2 precisely illustrates the structures as they currently exist at the project site and Figure 3 illustrates the structures proposed by implementation of this project.

Area D and G lack eelgrass in the shallow areas near the embankment. The sandy/muddy substrate within four meters of the embankment is covered by rock and rubble, used in stabilization, which has sloughed off the embankment. Areas D and G currently contain a few small, sparse patches of eelgrass. The first and smallest lies approximately two meters beyond the extent of the rock and rubble (Area D); this area is not likely to be impacted by project implementation. One sparse eelgrass patch is situated at the western end of Area G; this patch is not expected to be impacted by project implementation. Two patches of eelgrass exist adjacent to the proposed dock in Area D; these patches are not expected to be permanently impacted by project implementation.

Phase I of the project, modernization of the RV Park's infrastructure systems, is proposed to begin in late January 2003. Phase II, modernization of physical structures, is proposed to begin in August 2003; this phase includes construction of the new boat ramp and may include reconstruction of the dock in Areas D and G. Reconstruction of the old dock in Areas D and G will require replacement of two pilings. Pre-cast pilings will be inserted into the channel by cranes operating from the bank; no equipment will enter the channel during dock reconstruction. The expected area of impact will be the diameter (approximately 0.3 m) of each piling. As new pilings will replace old piling, there will be no net loss of suitable substrate. Dock segments, approximately 3-4 meters in length, will be placed into the water manually from shore and subsequently from adjoining dock segments as they are secured.

Recommendation

Eelgrass active growing season is May-August; therefore it is recommended a preconstruction survey be conducted to accurately inventory eelgrass present on the site during the peak eelgrass growing season immediately before project construction. If amounts of eelgrass in the project area differ significantly from those reported in the original study, the mitigation plan will be altered accordingly. If amounts of eelgrass in the project area do not differ significantly, the current mitigation plan will be implemented following approval of appropriate agency biologists.

As no permanent impacts to eelgrass are expected by reconstruction of this portion of dock, further mitigation is not proposed at this time. Furthermore, the original mitigation plan incorporated the maximum amount of onsite eelgrass habitat restoration that is available along the project site frontage.

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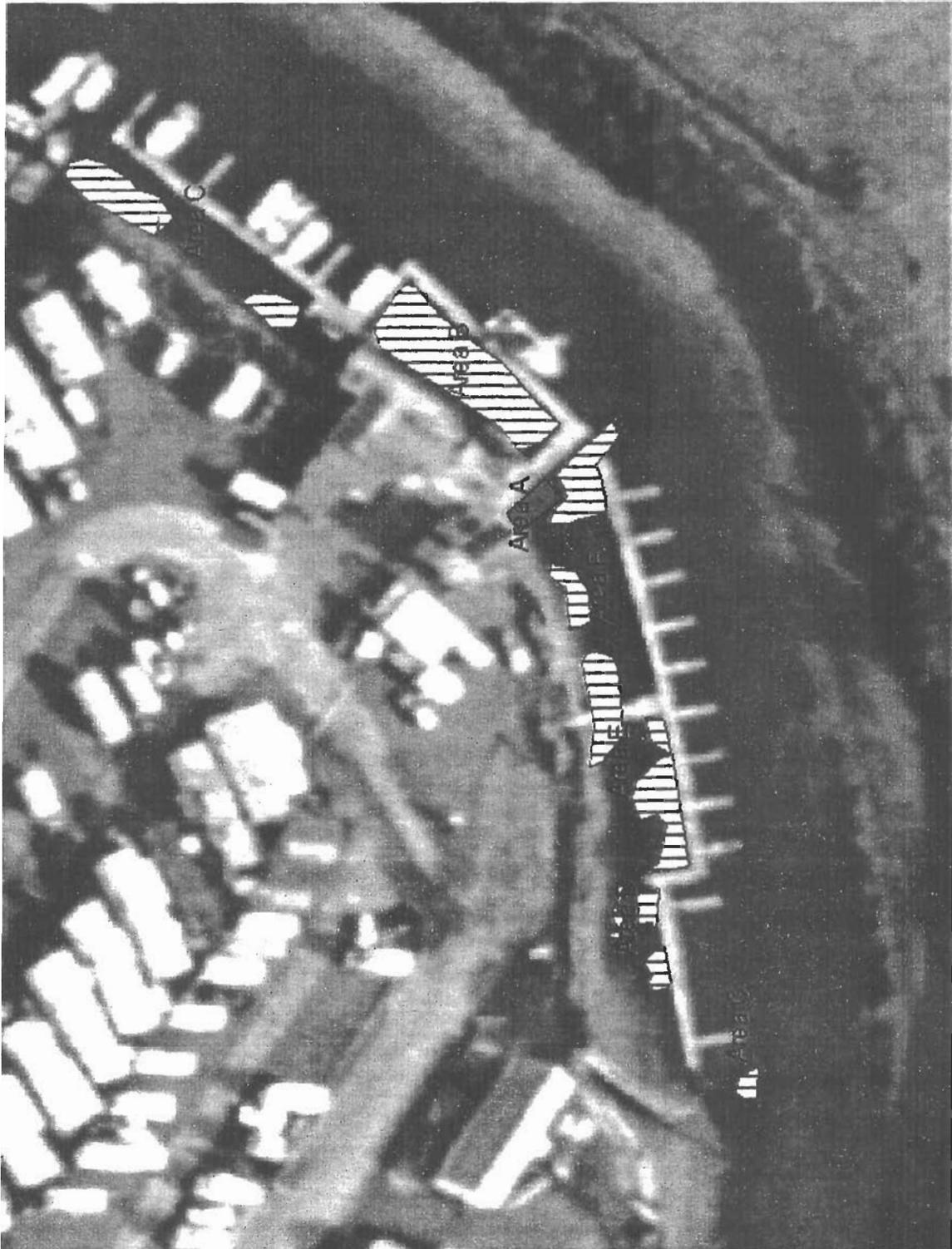


Figure 1. Ariel photo of EZ Landing RV Park and Marina Renovation project site illustrating locations of eelgrass beds within the project area. Sites of interest are labeled (Areas A – G) as referenced in the Biological Study and Mitigation Plan report.

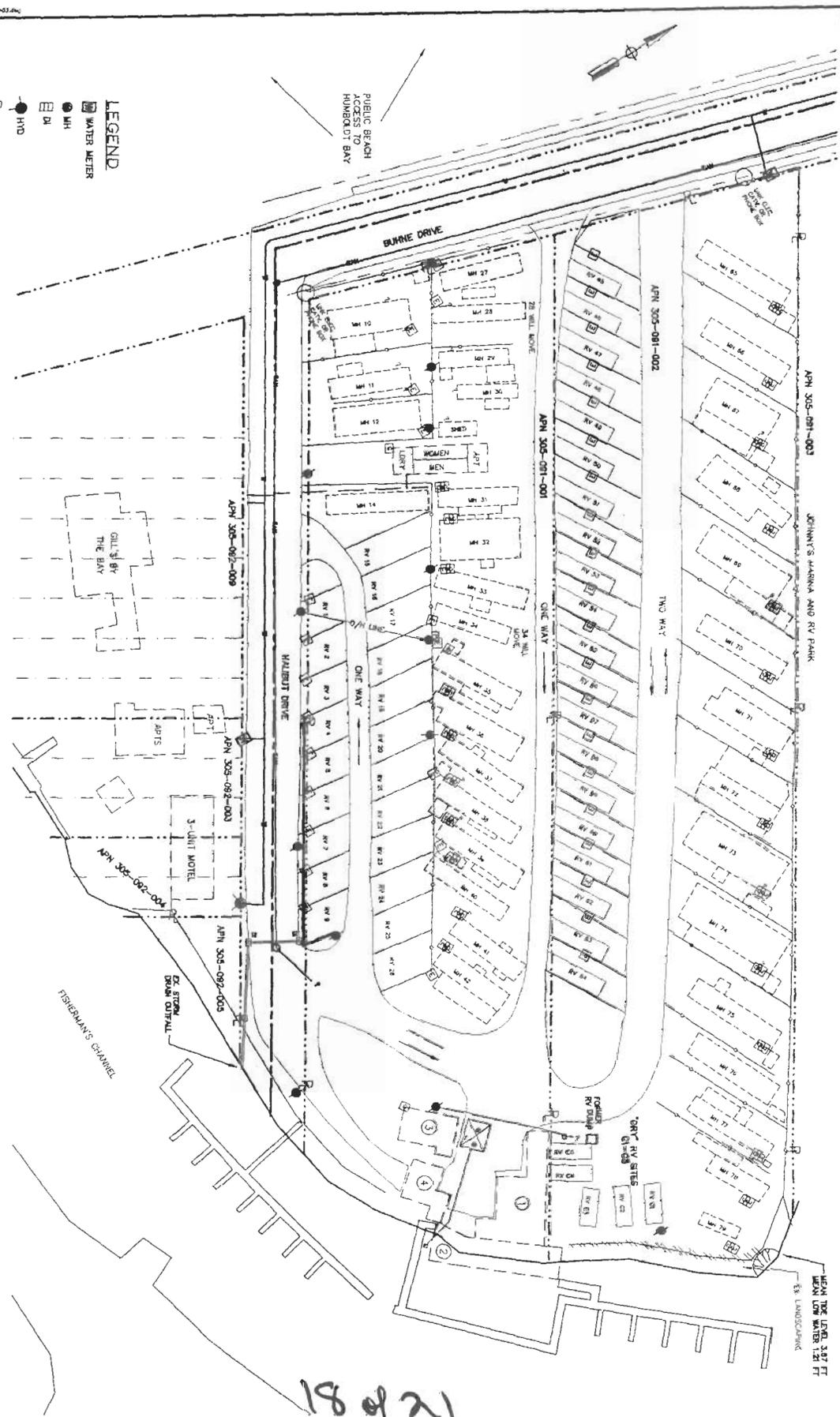
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- LEGEND**
- WATER METER
 - WATER MAIN
 - SAINTARY MAIN
 - EX. FENCE
 - GAS METER
 - G VALVE
 - PR LINE
 - HYD
 - MI
 - MIH
 - MI



- KEY TO EXISTING BUILDINGS:**
- 1- EX. STORE, OFFICE, MEETING ROOM, CARETAKER'S UNIT
 - 2- EX. SUNDECK, CLEANING STATION
 - 3- EX. SHOP, STORAGE, RESTROOMS
 - 4- EX. BOAT LAUNCH RAMP, LIFT HOUSING

- EXISTING # OF UNITS:**
- 35 MOBILE HOMES (MH)
 - (SINGLE/DOUBLE WIDE)
 - 46 RECREATIONAL VEHICLE (RV)
 - 1 CARETAKER'S UNIT (UPSTAIRS)
 - 1 STUDIO UNIT (BUILDING "F")
 - 83 TOTAL UNITS



DATE: 11/13/13

EZ-LANDING MOBILE HOME PARK
 SITE MAP - EXISTING CONDITIONS

NAM & LOUISE OBEJI
 LOCATION: 1875 BUNNE DRIVE, EUREKA, CA

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
 CONSULTING ENGINEERS

21 W 4TH ST. EUREKA, CA 95501 (707)443-5054



Figure 2 - Biology Report Addendum

LEGEND

- WATER METER
- MH
- DI
- H/D
- PR LINE
- WATER MAIN
- SANITARY MAIN
- RECREATED SPACES
- PROPOSED STREET
- RECONSTRUCTED
- EXISTING
- LANDSCAPE AREAS
- LANDSCAPE PLANTS
- PHONE TABLE PARK BENCH



PUBLIC DECK ACCESS TO HUMBOLDT BAY



KEY TO LETTERS:

- A - PUBLIC ACCESS (DAY USE)
- B - SUNDECK AND FISH CLEANING
- C - PROPOSED STORE, OFFICE, MEETING ROOM (downstairs)
- CARETAKER'S APARTMENT, OWNERS UNIT/OFFICE (upstairs)
- D - TRASH DUMPSTER
- E - SHOP, RESTROOMS, STORAGE
- F - EXISTING LAUNDRY, RESTROOM/SHOWERS, STUDIO APT.
- G - REPLACEMENT SELF-SERVE BOAT LAUNCH RAMP
- H - REPLACE PREVIOUSLY EXISTING DOCK, RAMP

PROPOSED # OF UNITS:

- 31 MOBILE HOMES (MH)
- (SINGLE/DOUBLE WIDE)
- 45 RECREATIONAL VEHICLE (RV)
- 1 CARETAKER'S UNIT (UPSTAIRS)
- 1 OWNER'S UNIT/OFFICE (UPSTAIRS)
- 1 STUDIO UNIT (BUILDING 'F')
- 79 TOTAL UNITS

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<p>EZ-LANDING MOBILE HOME PARK PROPOSED PROJECT LAYOUT</p> <p>NAIM & LOUISE OBEJI LOCATION: 1875 BUNNE DRIVE, EUREKA, CA</p>	<p>LACO ASSOCIATES CONSULTING ENGINEERS</p> <p>211 W 4TH ST. EUREKA, CA 95501 (707)443-5054</p>	
SCALE: 1"=40' DRAWN: [Name] CHECKED: [Name] DATE: 4/28/2002 SHEET NO. 2	NO. _____ REVISION _____ BY _____ DATE _____	

Figure 3 - Biology Report Addendum



1497 Central Avenue • McKinleyville CA • 95519

Voice: 707/839-0900 • Fax: 707/839-0867 • MRB@madriverblo.com • www.madriverblo.com

March 10, 2004

To: Jim Baskin
California Coastal Commission
710 E Street, Suite 200
Eureka, CA 95501

RECEIVED

MAR 10 2004

CALIFORNIA
COASTAL COMMISSION

RE: EZ Landing Eelgrass Meeting and Site Visit

Dear Mr. Baskin,

This letter is to update you on the status of the eelgrass mitigation requirements for the EZ Landing Renovation project. I, Heather Beeler, have been in communications with Vicki Frey of California DFG since the initiation of the biological study in early November 2002.

On November 24, 2003 at 4pm an inter-agency site visit/meeting was held to evaluate the *Biological Study and Mitigation Plan: Report to evaluate eelgrass impacts from the EZ Landing RV Park and Marina Renovation Project* conducted and written by Mad River Biologists in November 2002. Present was Heather Beeler, Mad River Biologists, Vicki Frey, California Department of Fish and Game, Carol Heidsiek, Army Corp of Engineers, and Diane Ashton, NOAA Fisheries Biologist. Furthermore, EZ landing manager, Ruth Motherwell, inquired as to whether eelgrass (*Zostera marina*) mitigation would be required at the EZ Landing RV Park and Marina if the boat ramp were repaired and not expanded.

In a previous meeting between the managers/owners of EZ Landing and agency officials, EZ Landing was directed to mitigate for eelgrass impacts at a 2:1 ratio rather than the 1:1 ratio initially proposed in the Eelgrass Study prepared by Mad River Biologists. The agencies also supplied EZ Landing with dock construction guidelines and the Southern California Eelgrass Mitigation Policy with mandatory alterations hand written on the document.

At EZ Landing's request, I consulted with Vicki Frey to discuss what, if any, mitigation would be required if the existing boat ramp was repaired and not expanded. After visiting the site Ms. Frey stated the eelgrass bed at the end of the boat ramp would be negatively impacted (destroyed) by use of the boat ramp and mitigation would be required if the boat ramp were to be utilized.

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We proceeded to tour the site while referencing Figure 2 from the Eelgrass Study (Aerial photo of EZ Landing RV Park and Marina illustrating location of eelgrass beds within the project area). Ms. Frey made the following recommendations to satisfy half the mitigation requirements (the 1:1 ration transplantation of an existing eelgrass bed).

- Eelgrass bed be removed and transplanted prior to construction or reconstruction of the boat ramp.
- Ms Frey recommended Area C as the transplant location as eelgrass Area F is more likely to expand naturally.
- She suggested we investigate Area C at a lower tide to determine if there are any factors restricting eelgrass establishment in the mid section of Area C such as substrate depth or a strong current.

Ms Frey agreed that the remaining mitigation requirements could be met through a combination of the following methods.

- Ms. Frey approved of removing rock and rubble that has sloughed off the embankment in Areas D and F.
- Create additional eelgrass habitat. Install reflective panels on the underside of docks to increase light levels in areas previously shaded would allow eelgrass colonization (Sandy Wyllie-Echeverria pers. comm.).
- Increase genetic diversity. Use Seeding Buoys, a buoy attached to a concrete block with pearl netting containing reproductive shoots. Seeding Buoys have been designed and implemented in the Eastern United States as a low cost method to assist the dispersal of sea grass seeds (Sandy Wyllie-Echeverria pers. comm.).
- Post water vessel speed limit signs to reduce disturbance to eelgrass by wakes.
- Close access to the interior portions of the docks to ensure continued protection of healthy eelgrass beds.

In conclusion, I suggested that EZ Landing RV Park and Marina consider implementing all eelgrass mitigation that may be required for improvements to their marina at the same time. For example, reconstruction of the western portion of dock that had deteriorated; addressed in the *Addendum to Biological Study and Mitigation Plan* written by Mad River Biologists last year may require further mitigation.

Sincerely,

Heather Beeler
Staff Biologist, Mad River Biologists

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GEOLOGIC / GEOTECHNICAL REPORT

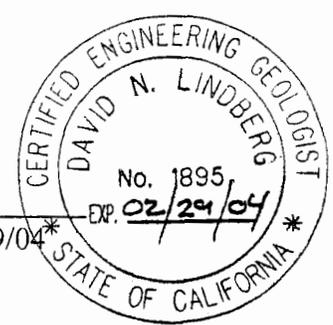
E-Z Landing R.V. Mobile Home Park and Marina
King Salmon, California

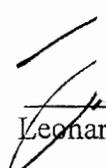
APN 305-091-01, 305-091-02, and 305-092-05

Prepared for:
Naim and Louise Obeji
P.O. Box 1284
Santa Monica, California 90406

EXHIBIT NO. 6
APPLICATION NO.
1-02-034 OBEJI, NAIM & LOUISE GEOLOGIC/GEOTECHNICAL REPORT, LACO ASSOCIATES CONSULTING ENGINEERS. JUNE 2002 (1 of 16)

 Signature on File
David N. Lindberg, CEG 1895, Exp. 02/29/04*



 Signature on File
Leonard M. Osborne, P.E., RCE 38573, Exp. 3/31/05



LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4th St. • PO 1023 • Eureka, CA 95502 • 707.443.5054

June 2002
Project No. 5124.00

Geologic / Geotechnical Report
Proposed New Developments at
E-Z Landing R-V Mobile Home Park and Marina
APN 305-091-01, -02, & 305-092-05, King Salmon, California
LACO Project No. 5124.00

Introduction

This report presents the results of our geologic and geotechnical investigations for the proposed new construction at the E-Z Landing R-V Mobile Home Park and Marina (E-Z Landing), in King Salmon, south of the City of Eureka, California (Figure 1). The new construction will be sited at the eastern end of Halibut Avenue on parcels that are presently developed.

Proposed Project

The E-Z Landing owners are proposing to demolish and replace, or renovate certain existing structures presently on the site. Structures to be replaced include the existing store, office and caretakers unit, the existing shop, and the existing boat-lift housing structure (Figure 2). The new construction will be about 3,000 square feet in area and will include office, commercial retail, shop, storage and residential space. The proposed building sites are located on parcel 305-291-01. Anticipated loads (dead load plus live load) were not available from the project architect at the time this report was prepared.

Scope

LACO ASSOCIATES (LACO) was retained by the owners to conduct a geologic and geotechnical investigation of proposed building sites. The investigation included assessing the suitability of the subgrade soils underlying the site for supporting the foundations of the proposed structures. Field activities included installation of two geotechnical test borings to 20 feet below grade, and one Geoprobe direct-push, macro core boring to a depth of 51 feet. Boring locations are shown on Figure 2. Test borings were located as close as feasible to the anticipated footprints of the proposed replacement buildings. No sampling of soil and groundwater sample from the subsurface on the site was conducted to assess any potential contamination on the site.

Geologic Setting

King Salmon is located on a filled bay-margin former tidal marsh on the shore of Humboldt Bay (Figures 1 & 2). King Salmon is underlain by sands, silts, clays and gravels to a depth of over 50 feet below the site.

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The proposed building sites are adjacent to Humboldt Bay at an elevation of approximately 10 feet above sea level. Historically, dredge spoil fill appears to have been placed on the site, to reclaim the former tidal marsh land to allow for development.

Field Investigation

Two geotechnical test borings were drilled, sampled and logged on March 26, 2002, by a team of LACO geologists. LACO geologists also installed one Geoprobe boring on the site. Soils were logged in the field by LACO geologists in general accordance with ASTM standards. Logs of the geotechnical test borings and the Geoprobe boring are attached to this report as Figures 3 through 5. Upon completion of drilling and sampling, all test borings were abandoned and backfilled with cuttings.

The Geoprobe boring (GP-1, Figure 2) was installed on the site on March 25, 2002, to collect relatively-undisturbed core samples of the soils underlying the property. The core samples were collected, returned to LACO's Materials Testing Laboratory to be examined and logged in detail.

Surface Conditions

The proposed building sites are all within a few hundred feet of the Fisherman's Channel which connects to Humboldt Bay just west of the subject property. The site is essentially flat-lying. Access is by the paved street, Halibut Avenue. Much of the proposed building areas are presently occupied by existing structures or surfaced with asphalt. The asphalt is underlain, in the location of our borings, by a base course of aggregate base rock to a depth of about 1 to 1.5 feet below the existing ground surface.

This site has been filled historically with sand presumably generated spoils generated during harbor and channel dredging operations. Fill, below the pavement structural section, was observed to extend to only a maximum of about 2 feet below the ground surface (bgs). The site appears generally well-drained.

Subsurface Conditions

Soils underlying the proposed building sites consists of imported fill to a depth of about 1.5 feet bgs. Below the fill at the 1.5-foot depth, gray to dark gray, loose, moist to wet, sandy silt (ML/SM), sand (SP) and silt (ML) were encountered to the 10-foot depth.

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Below the 10-foot depth, silty clay (CL) was encountered and continued to a depth of 25 feet. The silty clay was gray, soft and wet, and was estimated to contain 50 percent silt and 50 percent clay.

From 25 feet to about 28.5 feet in the probe boring, clayey silt with sand (CL/ML) was encountered. This clayey silt with sand was gray, loose to medium dense, and wet. The clayey silt with sand was estimated to contain 50 percent silt, 40 percent clay and 10 percent fine sand.

From 28.5 feet to 31.5 feet, gray, loose to medium dense, wet silty sand (SM) was encountered.

From 31.5 feet to about 39 feet, gray, loose to medium dense, wet sandy silt was encountered.

From about 39 feet to about 47 feet, thin, interbedded layers of fine sand (SP) and silty clay (CL/ML) were encountered; these materials were gray and wet. The sand layers were loose to medium dense, and the silty clay layers were soft to firm.

From 47 to 48 feet, the strata encountered consisted of silty sand (SM) which was dark gray, loose and wet. Below 48 feet, to the bottom of the test boring at 51 feet; gray medium dense, wet sandy silt (ML) was encountered.

Thus the soil profile below the site consists of gray sand, silt and clay in varying proportions. These materials are soft and loose to firm and medium dense, and wet to saturated and appear to be deposits from a depositional environment similar to that in Humboldt Bay at present.

Seismic Hazard

The E-Z Landing site is not located within an Alquist Priolo Special Studies Zone, however, such a zone is mapped less than one mile southeast of the subject property (Division of Mines and Geology, 2000). A significant active fault, the Little Salmon fault, is believed to cross under King Salmon. The Little Salmon fault strikes generally west-northwest and dips north-northeast. Assuming a uniform 20 degree dip, the Little Salmon fault is expected to underlie the E-Z Landing site at a shallow depth. Other active and potentially-active faults have been mapped in the region and these seismic sources are also considered capable of producing strong ground shaking at the site.

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King Salmon, and E-Z Landing are in a seismically active area. Strong earthquake ground motion (seismic shaking) can be anticipated to occur at this site during the service life of the proposed new construction (50 years). Significant ground shaking will result from motion on the Little Salmon fault, as well as from other seismic sources in the region. There is no evidence of any hazard of surface fault rupture at this site, however, given that King Salmon is located along the trend of the Little Salmon fault, the potential for surface rupture at this site can not, and should not be ruled out.

A 10 percent probability of peak accelerations being exceeded in 50 years is typically used as the basis for seismic zoning in building codes and design recommendations (Uniform Building Code, 1997 edition). Recent information published by the CDMG indicates that earthquake acceleration at the site, with a 10 percent probability of exceedence in 50 years, is between 0.80g to 0.90g, or 80 to 90 percent of the acceleration due to gravity. This level of acceleration is based on the geologically-youthful deposits of the Humboldt Bay tidal marsh lands and an assumed moment magnitude (Mw) of 7.1 occurring on the Little Salmon fault.

Recent and ongoing research into the seismicity of the Pacific Northwest has shown that the Cascadia Subduction Zone is capable of generating major earthquakes that would affect this site. The Cascadia Subduction Zone marks the boundary between the North American Plate and the subducting Gorda and Juan De Fuca plates. The Cascadia Subduction Zone, which extends from Cape Mendocino in Humboldt County (California) to Victoria Island (British Columbia), is considered capable of generating a maximum credible earthquake with a magnitude of 8.3 on its southern, or Gorda segment.

Flooding

E-Z Landing is about 10 feet above sea level. During periods of intense precipitation and high tides, parts of King Salmon are subject to minor flooding. When winter storms combine with intense precipitation and high tides, flooding can be slightly more significant. In the past, minor flooding events in King Salmon have been short lived. When the tide changes, floodwaters typically recede quickly. The flood hazard can be mitigated during the design process by placing the finished floor elevation of the new construction above the elevation of the potential floodwaters.

Tsunami

The *Planning Scenario, in Humboldt and Del Norte Counties, California for a Great Earthquake on the Cascadia Subduction Zone* (Topozada, et. al., 1995) shows the E-Z

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Landing site to be located within the tsunami runup area. There is a hazard of tsunami inundation at this site. Mitigation of tsunami hazards is beyond the scope of this report.

Liquefaction Potential

Liquefaction is the loss of the soil strength resulting in fluid mobility through the soil. This phenomenon occurs when loose, uniformly-sized saturated sands are subjected to repeated shaking. Liquefaction typically occurs in areas where the groundwater is less than 30 feet below the surface. In addition to the necessary soil and water conditions, the ground accelerations must be high enough, and duration of the ground shaking must be long enough, to result in liquefaction.

Topozada, et. al. (1995) shows the subject property to be located within an area of high liquefaction potential. Standard penetration testing conducted during installation of the geotechnical test borings indicated blow counts of 2 to 3 blows per foot or more in the upper 20 feet of the native soil profile below the static water level (at about 4 feet bgs). These materials are considered liquefiable when subjected to strong seismic ground shaking. Liquefaction features have been observed in the past along the shores of Humboldt Bay following several of the larger historic earthquakes in the region. The hazard of liquefaction can be mitigated by supporting the proposed new structures on driven piles.

Conclusions

Based on the information developed in this investigation, the proposed project site appears acceptable for the planned development, provided that our recommendations are adhered to. This site is subject to significant geologic hazards, however, the in-kind replacement of existing structures will not contribute to increasing the existing geologic hazards appurtenant to this property. Conversely, the replacement of existing structures will not be subject to any greater geologic hazards than the structures to be replaced are subject to at present.

Our foundation design recommendations may be utilized by the project structural engineer to reduce the exposure of the proposed structure to damage. The in-place native soils appear marginal for use as bearing material for foundation support, especially given the potential seismic events which may be anticipated to occur at the site. Pile-supported foundation systems are therefore recommended for use at this site. The proposed structures should be supported with grade beams tied to the pile caps and a reinforced concrete floor slab. General recommendations for wood pile construction are attached to this report as Appendix II.

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Recommendations

General: We recommend that construction on this site proceed during the dry season. During the wet season, grading and foundation construction are quite likely to be adversely impacted by wet conditions, surface runoff and perched groundwater, and it may prove difficult to keep the building envelopes dry.

Because of the potential for minor flooding at this site, we recommend that the finished floors of any new construction be placed at least 2 feet above existing grade to minimize the potential for damage associated with minor winter flooding resulting from intense precipitation combined with storms and high tides.

Due to the loose and soft soils underlying this site, and the potential for liquefaction as a result of an earthquake, we recommend that the foundation system for this project should consist of driven piles supporting grade beams. The foundation system should be designed by a structural engineer working closely with a geotechnical engineer. Piles will have to be driven to depths greater than 30 feet, based on our interpretation of the upper 20 feet of the soil profile. We recommend that a program of test piles, designed by the project geotechnical and structural engineers should be conducted at the site to determine bearing capacity and depth parameters.

Seismic Recommendations: A preliminary estimate of the peak ground acceleration, which may be expected to occur at the subject property with a 10 percent probability of exceedance in 50 years (475-year return), is 0.8g to 0.9g (80 to 90 percent of the gravitational acceleration), based on the *Seismic Shaking Hazard Maps of California* (Petersen, et. al., 1999). Design and construction in accordance with these data, and the 1998 edition of the California Building Code (CBC), should adequately mitigate the seismic hazards at this site.

The 1998 CBC shows this site to be in Seismic Zone 4, therefore the seismic zone factor (Z) is 0.40 (Table 16-I, 1997 UBC). For design purposes the soil profile is characterized as a "Soft Soil Profile" (S_E ; Table 16-J, and Section 1629A.3.1 1998 CBC). The Seismic Coefficient C_a (CBC Table 16-Q) for an S_E soil profile is $0.36N_a$. The seismic coefficient C_v (CBC Table 16A-R) for an S_E soil profile is $0.96N_v$.

The Near-Source Factor N_a (CBC Table 16A-S) is 1.5, because the site is located within 2 kilometers from the near-source area of a Type A fault, as presented on Map A-6 in the *Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada*

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(ICBO, 1998). Near-Source factor N_v (CBC Table 16A-T) is also 2.0, because the site is located less than 2 kilometers from the near-source area of a Type A Seismic Source (the Little Salmon fault).

The Little Salmon fault is a Type A fault with its near-source area less than 2 kilometers from the subject property. Table 16A-U (CBC, 1998 edition) defines Type A seismic sources as faults that are capable of producing earthquakes with a magnitude range greater than 7.0 and a slip rate of 5 mm per year, or more.

Site Preparation: All significant pavement, turf, debris and vegetation within, and three feet beyond, the footprints of the proposed replacement construction should be removed and disposed of off-site at an approved, appropriate location. Clean topsoil (if any) may be stockpiled on-site for later use as landscaping material or non-structural fill.

Excavations: Beneath the footprint of the proposed structures the uppermost 2 feet (as measured from lowest adjacent grade) of material should be removed. Stripped soils exclusive of the topsoil should be disposed of off-site. Any unsuitable materials, which may be encountered in the foundation excavations, should also be removed. Where voids are left after the removal of unsuitable material, they should be filled with suitably-compacted, tested and approved backfill material.

Following removal of the surface material, piles should be driven in accordance with the recommendations of the structural and geotechnical engineer. Pile caps and grade beams should then be cast of reinforced concrete. A reinforced slab foundation may be placed on the recommended grade beams.

Fills: In place fill soils on the site appear only suitable for use as non-structural fill. For structural fill, these soils should not be utilized. We recommend that select imported material (river-run gravel and/or aggregate base) be utilized for structural fill. Select imported fill material should consist of well-graded, crushed quarry rock or river-run gravels with 100 percent passing the 3-inch sieve. Materials proposed for use as structural fill should be approved by the LACO project engineer prior to placement or importing to the site. Samples of any proposed native or imported fill should be submitted to the LACO materials testing laboratory for testing at least 48 hours before placement or importing to the site.

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All fills should be placed in loose lifts not exceeding eight inches, with a uniform moisture content at or near optimum and should be compacted mechanically, with sufficient observation and testing performed to confirm compliance.

Compaction Standard: All materials utilized as compacted fill should be based on CAL 231 in-situ measurement of dry unit weight (Caltrans Standard Specifications, 1988). The maximum dry unit weight should be determined using ASTM Laboratory Test Method D1557.

Utility Trench Backfill: Backfill and compaction of utility trenches in and immediately adjacent to building pads, driveways, and other flat work areas should be such that no settlement will occur. Backfill material for all such utility trenches should be placed in accordance with the pipe manufacturer's requirements, or in loose lifts not exceeding 8 inches, and should be compacted to at least 90 percent relative compaction (ASTM D1557/CAL 231) for depths below 2 feet from finished grade. For depths above 2 feet below finished grade, utility trench backfill should be compacted to 95 percent relative compaction (ASTM D1557/CAL 231) with sufficient observation and testing performed for confirmation. Utility trenches under landscaped areas need be compacted to only 85 percent relative compaction.

Concrete sand, or other approved granular material used for backfill, should be placed at near-optimum moisture content and compacted mechanically. Flooding of granular material is not allowed to consolidate backfill in trenches.

Sidewalk and Pedestrian Ramps: Sidewalks and pedestrian ramps should have a minimum thickness of 4 inches, and should be underlain by 6 inches of Class 2 aggregate base compacted to 95 percent relative compaction. The existing subgrade should be scarified, moisture conditioned and re-compacted to at least 90 percent relative compaction.

Foundation Design Criteria: To mitigate the potential for the potential loss of soil support resulting from liquefaction caused by strong seismic ground shaking, we recommend a foundation system consisting of driven piles, pile caps and grade beams be utilized for supporting the proposed structures. Grade beams for the new construction should be tied to the pile caps with a positive connection.

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Floor Slab Design: If used, floor slabs-on-grade should be reinforced, and should have a minimum thickness of six inches. Any floor slabs should be connected positively to the grade beams. Between the grade beams, the floor slab should be supported by the recommended compacted aggregate base. The compacted aggregate base should be overlain by a suitable vapor barrier. To provide for cracking control, a concrete saw-cut plan for the floor slab should be provided by the architect or structural engineer.

Vapor Barrier: To reduce the possibility of moisture migration through any floor slab-on-grade (if called for in the design), a plastic membrane (such as Moistop or equivalent) should be placed over the graded aggregate base. To help protect the membrane during steel and concrete placement, and to provide a better concrete finish, the membrane should be placed on, and covered by, at least one inch of clean sand both above and beneath the vapor barrier. Joints between the plastic sheets and openings for utility piping should be lapped and taped. Care must be taken during construction to protect the plastic membrane against punctures.

Settlement: Settlement due to structural loading associated with the weight of the proposed new structure should be minimal and is not expected to affect structural integrity, provided our recommendations (i.e. pile-supported foundations) are adhered to. Settlement should occur closely with the application of the structural component loads.

Expansion: Expansion of the subgrade is not expected to be excessive and should not create any structural problems if the recommendations in this report are adhered to.

Cut and Fill: No significant cuts or fills, aside from the foundation excavations and utility trenches, are anticipated for this project.

Drainage and General Landscaping: The finished ground surfaces surrounding the new construction should be graded such that rain, irrigation and roof runoff water is directed away from all structure foundations. Final site grading and landscape design should be such that no water is permitted to pond anywhere on-site, or to migrate beneath the structure.

All roof storm runoff should be controlled with the installation of gutters and downspouts. Roof storm runoff should be tight-lined, or otherwise drained away from the building to some appropriate outlet point, such as an existing storm drain system.

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Final site grading and landscape design should include provisions for draining site runoff away from building foundations. Any bare soil areas created during construction should be re-seeded promptly upon completion of site grading to allow vegetation to re-establish itself prior to the next wet season.

Driveways and Parking Areas: For construction of the anticipated driveways and parking areas, one foot (as measured from lowest adjacent grade) of the surficial soil materials (and any pavement) should be removed. Stripped soils may be disposed of at a suitable location off-site. Any unsuitable materials, which may be encountered in the driveway or parking area excavations should also be removed. If any voids are left after the removal of unsuitable material, they should be filled with suitably-compacted, tested and approved backfill material. The exposed soil in the bottom of the excavation should be scarified, moisture conditioned as necessary and recompacted to at least 90 percent relative compaction.

For “ordinary” traffic loads (i.e. not heavy trucks), construct the driveways and parking lot by backfilling with engineered fill. Fill the lower portion of the roadway with compacted river-run gravels (or equivalent), and the uppermost 0.25 feet with Class-2 aggregate base. The driveways and parking areas should be built up in lifts of 6-inches or less, to an elevation equal to the highest adjacent existing ground surface. The engineered roadway section compacted to 95 percent relative compaction as specified under “Compaction Standard,” with sufficient observation and testing to assure compliance with these recommendations.

Review of Grading, Foundation and Landscaping Plans

The conclusions and recommendations presented above are based on the presumption that soil conditions encountered during grading and foundation construction will be essentially as exposed during our evaluation. The grading and foundation plans should be reviewed and approved by the project engineering geologist or engineer.

Observation and Testing

To assure that our recommendations are appropriately implemented, LACO should be retained to provide construction management, observation and testing services. Grading at the site should be performed in accordance with the code requirements of the State of California, the County of Humboldt and the recommendations presented above. Observation and testing should be conducted by LACO to assure that the quality of materials and construction is in conformance with our recommendations.

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Limitations

This report has been prepared for the exclusive use of the E-Z Landing R-V Mobile Home Park and Marina, their consultants and appropriate public authorities for specific application to the proposed new construction. LACO has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. LACO makes no other warranty, express or implied.

The analyses and recommendations contained in this report are based on data obtained from subsurface exploration. The methods used indicate subsurface conditions only at specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect strata variations that commonly exist between sampling locations, nor do they necessarily represent conditions at another time.

The recommendations included in this report are based in part on assumptions about subsurface conditions that may only be tested during earthwork. Accordingly, the validity of these recommendations is contingent upon LACO being retained to provide a complete professional service. LACO cannot assume responsibility or liability for the adequacy of the recommendations when they are applied in the field unless LACO is retained to observe construction. We will be glad to discuss the extent of such observation required to provide assurance of the validity of our recommendations.

Do not apply any of this report's conclusions or recommendations if nature, design, or location of the new construction is changed. If changes are contemplated, LACO should be consulted to review their impact on the applicability of the recommendations in this report. Also note that LACO is not responsible for any claims, damages, or liability associated with any other party's interpretation of the subsurface data or reuse of this report for other projects or at other locations without our express written authorization.

The scope of our services did not include an environmental assessment or an investigation for the presence or absence of hazardous, toxic or corrosive materials. Although we have explored subsurface conditions as part of this investigation, we have not conducted any analytical laboratory testing of samples obtained.

If the planned project changes from that described herein, or if conditions are encountered that are different than those described, the findings and recommendations should be reviewed to

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confirm applicability. This report should be reviewed by LACO for changed conditions if the project is not begun within a period of one year from the date of this report.

Additional Services

LACO should review the plans and specifications for this project to confirm that our recommendations are adhered to. LACO should also provide the engineering services necessary to assure that the quality of materials and compaction of fill are in accordance with the plans and specifications.

References

Caltrans, 1988, Standard Specifications.

Clarke, S. H., 1992, Geology of the Eel River Basin and Adjacent Region: Implications for Late Cenozoic Tectonics of the Southern Cascadia Subduction Zone and Mendocino Triple Junction: American Association of Petroleum Geologists Bulletin, V. 76, pp. 199-221.

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International Conference of Building Officials (ICBO), 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada; Map A-5.

McLaughlin, R. J., S. D. Ellen, M. C. Blake, A. S. Jayko, W. P. Irwin, K. R. Aalto, G. A. Carver, and S. H. Clarke, 2000, Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern Part of the Hayfork 30 x 60 Minute Quadrangles and Adjacent Offshore Area, Northern California; U.S. Geological Survey, MF-2336, Sheet 1 of 6.

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13 of 16

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Uniform Building Code (UBC), 1997, Volume 2, Chapter 16.

Attachments

Figure 1 - Location Map

Figure 2 - Site Map

Figure 3 - 5 Logs of the Test Borings

Appendixes

Appendix I – Laboratory Analytical Results

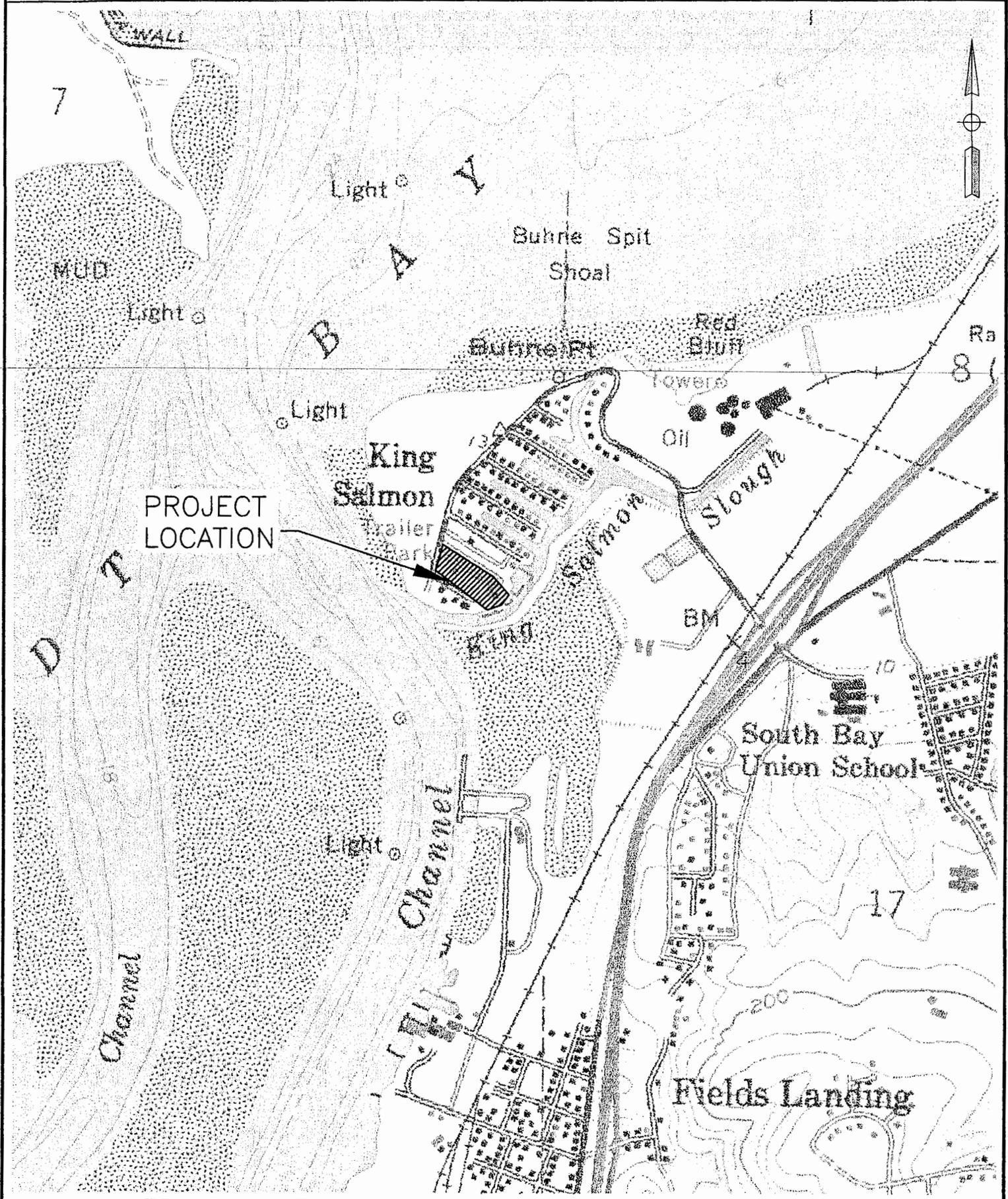
Appendix II - Wood Pile Recommendations

14 of 14



LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	E-Z- LANDING R.V. PARK & MARINA	BY	DAD	1
AGENT	OBEJI	DATE	5/15/02	
LOCATION	KING SALMON, CALIFORNIA	CHECK	DNL	JOB NO.
	LOCATION MAP	SCALE	1"=100'	5124.00



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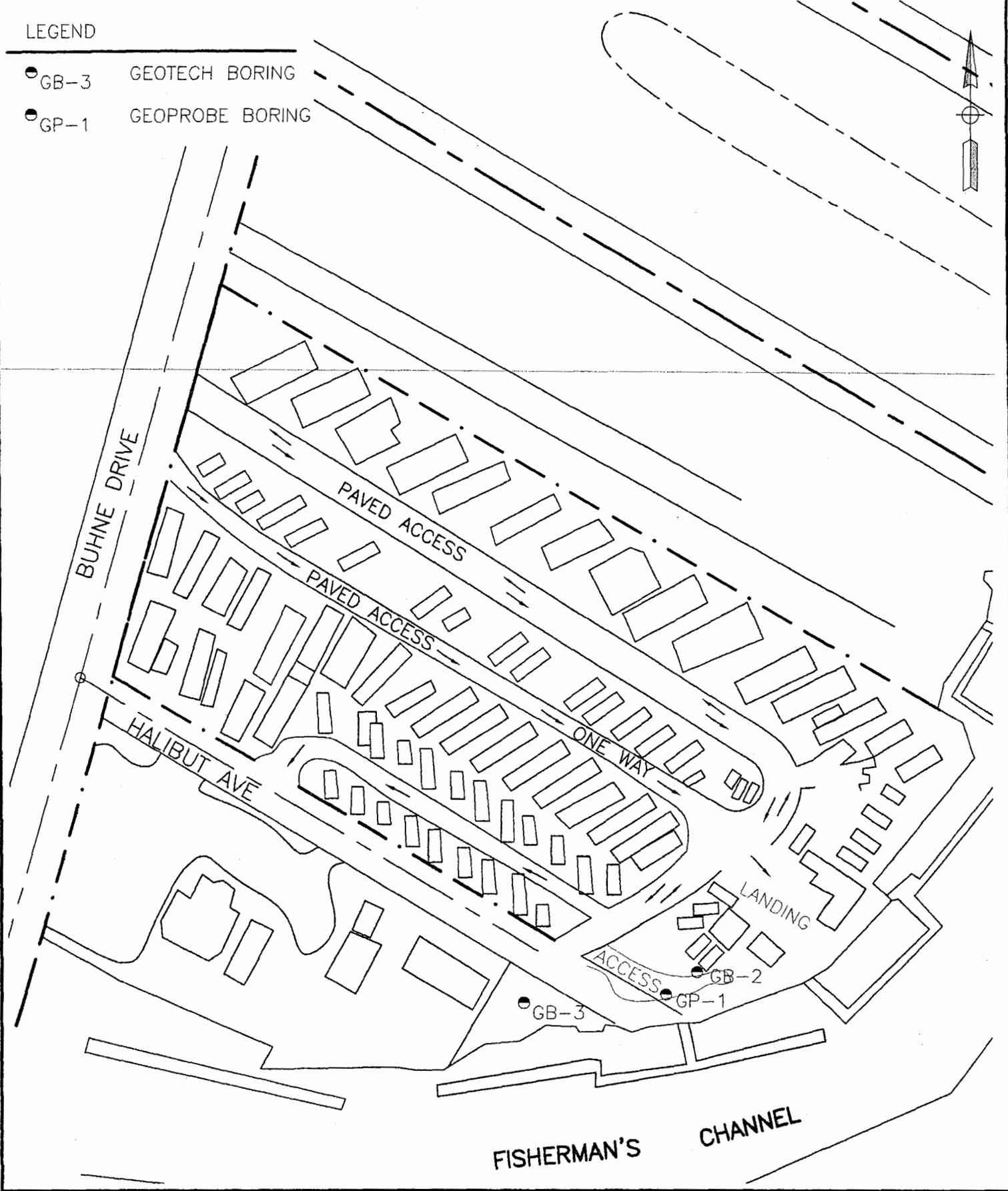


LACO ASSOCIATES
 CONSULTING ENGINEERS
 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	E-Z LANDING R.V. & MARINA RENOVATION PROJECT	BY	RJM/ DAD	2
NT	OBEJI	DATE	5/31/02	
LOCATION	KING SALMON, CALIFORNIA	CHECK	DM	JOB NO.
	SITE PLAN MAP	SCALE	1"=100'	5124.00

LEGEND

- GB-3 GEOTECH BORING
- GP-1 GEOPROBE BORING



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A Cultural Resources Investigation of the E-Z Landing R.V. Mobile
Park and Marina, APN 305-091-01, 305-091-02, and 305-092-05,
Located in King Salmon, Humboldt County, California

Prepared By

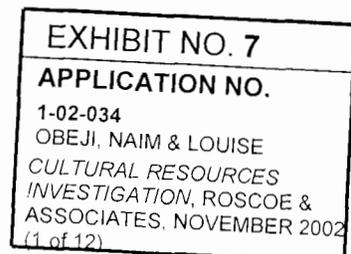
James Roscoe M.A.

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Prepared For

LACO Associates
Consulting Engineers
21 W 4th St.
Eureka, CA 95502

November, 2002



INTRODUCTION

This report presents the findings of a cultural resources investigation of the proposed new construction at the E-Z Landing R-V Mobile Home Park and Marina located at the end of Halibut Avenue in King Salmon, California. This investigation was requested by John Blodgett, Project Manager, LACO Associates, in order for the project to be in compliance with the California Environmental Quality Act (CEQA).

The cultural resources study was designed to (1) identify all cultural resources or sites of ethnic significance; (2) to perform preliminary evaluations of site significance; (3) to consider the potential adverse effects to cultural resources resulting from project implementation; and (4) to advance recommendations aimed at reduction or elimination of adverse impacts to significant cultural resources as needed.

One prehistoric Wiyot village (CA-HUM-79) was located in close proximity to the project area. Although no surface evidence of this potentially significant cultural resource was discovered during this investigation, it is possible that buried archaeological deposits associated with the village may have survived historic erosion and construction activities within the project area. It is therefore recommended that as a mitigation measure for potential project related construction impacts to this cultural resource that a cultural resource monitor be present during initial subsurface excavations within the project area.

PROJECT AREA LOCATION AND DESCRIPTION

The project area is located at the eastern end of Halibut Avenue in the community of King Salmon south of the City of Eureka, California. The project area is shown below on the 7.5 Eureka topographic quadrangle and project layout map (see Maps 1 and 2). The topography of the parcel was flat to gently sloping.

The E-Z Landing owners are proposing to demolish and replace, or renovate certain existing structures presently on the site. Structures to be replaced include the existing store, office and

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caretakers unit, the existing ship, and the existing boatlift housing structure. The new construction will be about 3,000 square feet in area and will include office, commercial retail, shop, storage and residential space. The proposed building sites are located on parcel 305-291-01 (see Map 2)

SURVEY PROCEDURES AND RESEARCH METHODS

The background research for this project included an examination of the archaeological site records, maps, and project files of the Northwest Coast Regional Information Center of the California Archaeological Inventory, located at the Yurok Tribal Offices in Klamath, California. The California Office of Historic Preservation has established the Regional Information Centers as the local repository for all archaeological reports, which are prepared under cultural resource management regulations. State guidelines and current professional standards require the background literature search at the appropriate Regional Information Center. Following completion of this archaeological study, a copy of this report also must be deposited with that organization. The literature search is undertaken to (1) determine if there are any previously recorded archaeological resources or historic structures within the project area (2) whether the area has been included within any previous archaeological research or reconnaissance projects and (3) to obtain data about nearby known archaeological and historical resources. The records search which updated the author's files for the King Salmon area was completed on October 23, 2002 (File No. 2002 Roscoe-4).

Following the records search the project area was surveyed intensively by a two-person crew consisting of James Roscoe and Danny Roscoe. The entire project area was walked in a series of transects spaced 10 to 20 meters apart. The survey was equivalent to an "intensive archaeological field reconnaissance" as defined in the Society for California Archaeology's Recommended Procedures for Archaeological Impact Evaluation (King, Moratto, and Leonard, 1973). Nearly the entire project area had been heavily impacted by historic construction activities. Most of the area was covered with

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imported fill, mostly in the form of bay dredgings. The field survey was completed on October 13 and 21, 2002.

On October 16, 2002, the author met with Marnie Atkins, Cultural Liaison, Table Bluff Reservation, Wiyot Tribe, at the project site to: 1) review the proposed development within the project area, 2) consult about historic and prehistoric land use, and 3) find out if there were any Wiyot concerns regarding project implementation.

Ms. Atkins mentioned that a Wiyot village with associated cemetery was known to be located at the end of Buhne Point and she suggested that research was needed to document that the project area was not in the vicinity of the reported village site.

On October 25, the author met with Marnie Atkins and Nelson Rossig, a 94 year old member of the Table Bluff Reservation who was raised in Bucksport, in south Eureka. Nelson was very knowledgeable about the historic land use of the project area and surrounding portions of Humboldt Bay. He related how as a boy he used to spear Salmon at the mouth of Elk River and how he used to hunt ducks in the south bay and sell them to a buyer who would ship them by train down south. Mr. Rossig said that prior to the development of the King Salmon Community in the late 1940's and 1950's he used to dig clams on the mudflats where the project area is now.

INVESTIGATION RESULTS

The records search at the Northwest Regional Information Center of the California Archaeological Inventory determined that the study area had never been included in an archaeological survey.

One prehistoric Wiyot habitation and burial site (CA-HUM-79) were located at Buhne Point. Loud's informants called this village djorokegochkok (Loud 1918). Marni Atkins of the Table Bluff Reservation, Wiyot Tribe confirmed that this had been an important village with reported burials.

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ETHNOGRAPHIC BACKGROUND

The Wiyot Indians prehistorically occupied the project area. Wiyot settlements lay along Humboldt Bay and along the banks of many of the streams and sloughs in this area. The Wiyot at the time of White contact were divided into three principal groups. Speaking a mutually intelligible language, which differed markedly from the Athabascan languages to the east and south, and the Yurok language to the north. Although Yurok and Wiyot are both considered by linguists to be Algic languages, they are not closely related. A speaker of Wiyot can not understand the speech of a Yurok. The three subdivisions of the Wiyot were (1) the Patawat, who lived in the villages on the lower Mad River, (2) the Wiki on Humboldt Bay, and (3) the Wiyot along the lower Eel River (Elsasser 1978). It is the name of the Eel River division that is now used exclusively in accounts pertaining to the entire group.

With a population numbering somewhere between a low estimate of 1,000 by Kroeber (1925) and a high estimate of 3,300 by Cook (1956), the Wiyot lived almost exclusively in villages along the protected shores of Humboldt Bay and near the mouths of the Eel and Mad Rivers. Villages consisted of dwellings that were rectangular in plan, made from split redwood planks. Associated with most Wiyot villages was a sweathouse used by Wiyot men for sleeping, gambling, and ceremony. With these villages as their base, the Wiyot were able to hunt and gather a wide variety of plant and animal resources within their territory. Mollusks, sea lions, and stranded whales were among the ocean resources utilized by the Wiyot, while deer, elk, and acorns constituted more important land resources. Perhaps the most important protein source for the Wiyot were the yearly anadromous fish runs on the Eel and Mad Rivers, during which the Wiyot were able to smoke and store enough salmon to last through the winters when other food resources were not as abundant.

Although the Wiyot had contacts with White explorers and fur trappers prior to the California Gold Rush, it was this monumental event that was to change the character of northwestern California forever and lead to the decimation and displacement of the Wiyot in the short course of 15 years. From 1850 to 1865, the territory of

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the Wiyot became the center for the largest concentration of Whites in California north of San Francisco, due to the use of Humboldt Bay as a shipping point to the mines, the establishment of a redwood timber industry, and the homesteading of the Eel River and Arcata bottoms for ranching and farming purposes. The whites that came into Humboldt County in the 1850's and 1860's were not known for their tolerance toward cultures other than own. Soon after the first White settlements were established on Humboldt Bay, the Wiyot population was decimated by Euro-American violence and introduced diseases. Those who did not die from these causes were displaced from their villages (often located on the best plots of land) and driven to distant reservations or marginal lands within the Humboldt Bay region.

Marine and riverine resources were heavily relied upon for subsistence. In addition, terrestrial game and vegetal resources, particularly acorns, were exploited. The Wiyot people were some of the primary manufacturers of the large redwood dugout canoes, which were used extensively in this area and traded to neighboring Indian groups. Additionally the Wiyot are known for their fine twined basketry products.

Prominent published sources describing the Wiyot include Loud (1918), Kroeber (1925), and Elsasser (1937).

HISTORIC BACKGROUND

Buhne's Point is located opposite the bay's entrance and was once a prominent red bluff which, from a point off shore, could have made the north and south spits appear continuous thus delaying discovery of the outlet. It was named for H.H. Buhne, second officer of the Laura Virginia, whose company established the bay's first settlement, known as Humboldt City, on the point in April 1850 (Lewis, 1966).

Red Bluff is the one marked feature of the entrance to this bay. It is a small hillock with two faces visible from seaward. The northwest face is one-third of a mile long, and the southeast face the same. It is nearly flat-topped with the highest part ninety-six feet above the sea at the

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seaward extremity, with a gentle slope thence towards the northeast. The northwest face is steep and waterworn, presenting a reddish appearance from the oxidation of iron ore in the gravel. Humboldt Point, one-third of a mile long, stretches southeastwardly on the line of the northwest face of the bluff. It is low, reaches the deep water leading to the south arm of the bay, and has a few houses upon it. These houses are seen over the outer spits at the entrance (Davidson, 1889).

George Gibbs, cartographer and journal-keeper for the Redick McKee expedition of 1851 recorded the party's experience at Humboldt City:

Monday, Sept 15, 1851 - Today the camp was broken up and we moved down to Humboldt City. The road for the greater part of the distance ran over hills covered with low brush. It is passable for wagons from the settlement near Van Dusen's Fork to an embarcadero on a slough putting up from the bay, whence produce is taken by water. The town, if it may be called so, is situated upon a little plateau of a bout forty acres, nearly opposite the entrance and under a bluff, rising from the midst of a tract of low ground. It contains only about a dozen houses and was at this time nearly deserted; Uniontown at the head of the bay having proved a more successful rival in the packing trade. Vessels of considerable size can be close to the shore here, but the place is not destined to any importance, at least until the settlement and cultivation of the adjoining country shall make it a point of export for provisions. (Schoolcraft, 1853)

Humboldt City disappeared and the land it was on washed away during high tide winter storms.

H.H. Buhne developed a dairy ranch at and around the area of Buhne Point and the land remained undeveloped until after World War II. Then the area's possibilities as a tourist and recreational center gave some local men an idea.

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In June 1948 a subdivision map for the King Salmon Resort was filed and the following month, the Board of Supervisors gave the project its "official blessing" at the request of promoter, LaMone Call (Maps 12:57; Humboldt Times, 13 July 1948). Developed by Eureka Shipbuilders, Inc., which owned over 400 acres along the bay between Fields Landing and Eureka, the King Salmon Resort consisted of thirty acres of lots and dredged boat channels (Humboldt Times, 25 July 1948; Schwarzkopf, 22 May 1949)

Chet Schwarzkopf wrote about "Humboldt Bay's New Attraction" in 1949:

What started it all was the fact that king and silver salmon come into Humboldt Bay to feed on anchovies and other small fish. And those salmon will bite!They are prime salmon that come in from the sea and go out again, as they follow the schools of food fish.

Just since the war's end, the world at large has begun to discover Humboldt Bay as a sports fishermen's eldorado....Thus, the idea of a resort along the bay took shape....

Needed soon will be a motel. And there are several good trailer camps here now, or developing. People from the hot interior valleys of California especially seem interested in Humboldt Bay, not alone for its great fishing, but for its coolness. (Schwarzkopf, 22 May 1949)

The community's setting, at the edge of the bay, directly across from its entrance, provides a fishing-village atmosphere with unique views of the breakers rolling along the jetties, the Coast Guard Station, and the north and south spits. The nine-million-dollar erosion control project, undertaken in the early 1980's, currently protects King Salmon from the force of the waves washing in from the entrance and has allowed reestablishment of a vegetated beach (Corps of Engineers, 1986. Adjacent to the community is Humboldt Bay Power Plant, whose conventional units were dedicated in 1956 with the nuclear unit added in 1963.

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King Salmon still caters to summer visitors at Johnny's and EZ Landing RV and mobile home parks and there is a charter boat business, marine supply place and Gills by the Bay Restaurant for their accommodation. A permanent population lives in the subdivision, consisting of small one-story houses, a few more substantial, two-story houses that have been constructed in later years, and the mobile home parks.

CONCLUSIONS

No surface evidence of prehistoric or historic resources were discovered during this investigation. The buildings within the project area are associated with the trailer park and are of comparatively recent manufacture (since the 1950's). None of the standing structures are of historic or architectural significance.

The Wiyot habitation and burial site recorded by Loud in 1913 (CA-HUM-79) was reportedly located in the vicinity of Buhne Point. Because the exact location of the former Wiyot village of Djorokegockok is unknown at this time it is recommended that a cultural monitor be present during any heavy equipment excavations, particularly at the southern end of the project area along the Bay where the proposed boat ramp will be constructed. The monitor would be present during the initial excavations and be empowered to halt the heavy equipment in the event prehistoric cultural materials are uncovered. The monitor would evaluate the find(s) and determine if they are significant. If significant, the find(s) would be excavated and removed for further analysis and preservation. In the find is not significant, excavations could resume immediately. The monitor need only be present till the total depth of the excavation is reached.

Should human remains be encountered during future ground disturbing activities within the project area, State laws require that the County Coroner be contacted immediately. Should the Coroner determine that the remains are likely those of a Native American, he or she must contact the California Native American Heritage Commission. The Heritage Commission consults with the most likely

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Indian descendents from the area to determine appropriate treatment of the remains.

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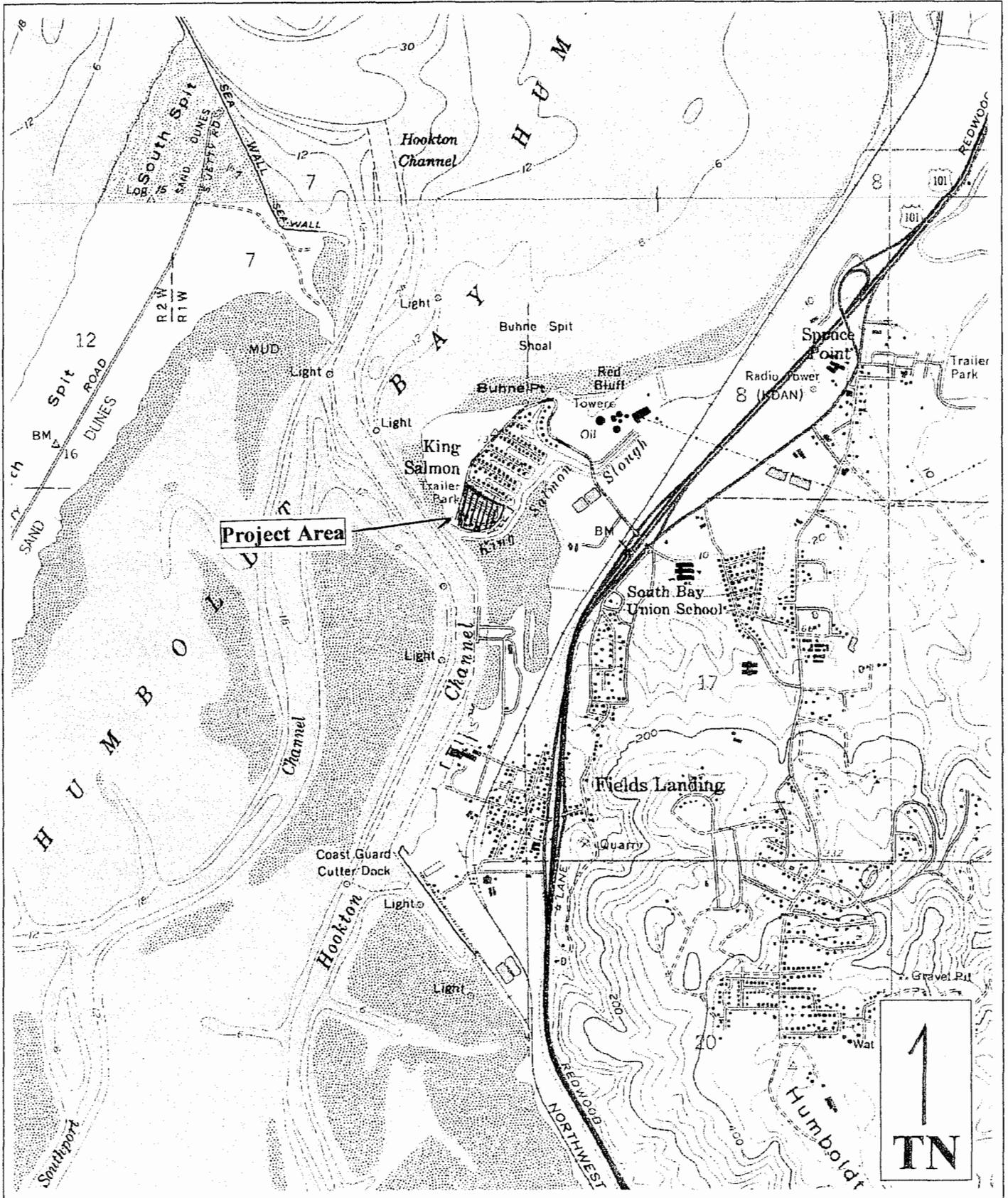
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Map 1: Archaeological Survey Coverage Map
EZ Landing Trailer Park
November 2002

U.S.G.S. 7.5' Eureka, Calif. Topographic Quadrangle

Scale: 1 inch = 2000 feet

Date of map: 1959

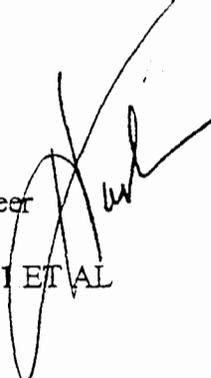


Roscoe and Associates
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MEMO
HUMBOLDT COUNTY
DEPARTMENT OF PUBLIC WORKS
LAND USE DIVISION

EXHIBIT NO. 8
APPLICATION NO. 1-02-034 - OBEJI MEMORANDUM FROM HARLESS McKINLEY PE, HUMBOLDT CO. DEPT. OF PUBLIC WORKS -- LAND USE DIV. TO COMM. DEVELOP. SERVICES DEPT, IN RE: CONDITIONAL USE PERMIT NO. CUP-02-04 DATED 2/25/02

DATE: 7/25/02
TO: Alyson Hunter, Planner II
FROM: Harless McKinley, Associate Engineer
RE: OBEJI CUP-02-04, APN 305-091-01 ET AL



25 2002
HUMBOLDT COUNTY
PLANNING COMMISSION

I have read the referral and visited the site. The following is requested and noted.

- a. The project description states that water, sewer, and power lines are to be replaced or repaired. The plot plan does not indicate where these facilities are located. It is, therefore, unclear whether the public road will be affected by this repair replacement plan. The applicant should show the location of the facilities if they will affect the public road.
- b. The project discusses drainage and makes reference to a future drainage plan. This plan may affect the public road system. It is requested that this plan be submitted as part of the review process.
- c. The project shows the possible vacation of a portion of Halibut Street. It also states that a portion of land is to be dedicated for public use and 2 parking spaces are proposed to serve the public space. The application should include to whom the area will be dedicated, how it is to be developed, and how it is to be maintained. Four parking spaces is the minimum number that should be set aside to serve the public area.
- d. There are no pedestrian corridors that serve the project. It will be recommended that a sidewalk be constructed from Buhne Drive along the north side of Halibut Drive to the public area.
- e. The applicant must apply for the vacation of the end of Halibut Drive in order for him to develop his project as shown. This vacation must be processed in conformance with the Streets and Highways Code of the State of California. This vacation must occur and be approved prior to any building shown as "C" being constructed. This office will not support the vacation of any portion of the right of way that will serve the proposed public area and its parking.
- f. Any construction within the public right of way will require an encroachment permit from this office prior to start of construction.

c: Kenneth Freed, Engineering Technician I