

FOR CONTRACT NO.: 01-480204

INFORMATION HANDOUT

PERMITS

COASTAL DEVELOPMENT STANDARD PERMIT

ROUTE: 01-MEN-01-PM 59.3

FROM : MENDOCINO CO PLANNING BUILDING FAX NO. : 7079612427

Feb. 08 2010 10:55AM P2



COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
790 SOUTH FRANKLIN STREET • FORT BRAGG • CALIFORNIA • 95437

IGNACIO RON/ALBA, DIRECTOR
Telephone 707-884-5379
FAX 707-961-2427
www.co.mendocino.ca.us/planning

February 8, 2010

COASTAL DEVELOPMENT STANDARD PERMIT

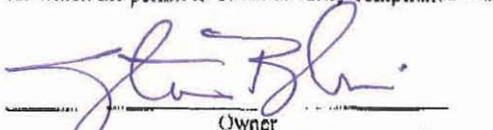
CASE#: CDP #22-2009
OWNER: California Department of Transportation
AGENTS: Darla Tate & Steven Blair
REQUEST: Construct multi-lane roundabout on Highway 1 at its intersection with Simpson Lane. The roundabout would be approx. 140 ft by 180 ft from the outer edge of the travel lane to the opposite outer edge. Highway 1 would be widened to accommodate 8 ft wide shoulders on the northeast and southwest quadrants only. The project would require acquisition of right-of ways from property owners at the intersection, but no business or residential relocations.
LOCATION: In the Coastal Zone, approximately 1/2 mile south of the City of Fort Bragg, at the intersection of Simpson Lane (CR# 414) and Old Coast Highway (CR# 436B) with Highway 1.
PROJECT COORDINATOR: Abbey Stockwell
ACTION: Approved with Conditions.
COASTAL PERMIT EFFECTIVE DATE: January 23, 2010
COASTAL PERMIT EXPIRATION DATE: January 23, 2012
CONDITIONS OF APPROVAL: See Coastal Permit Administrator Action Sheet for conditions.

Department of Planning and Building Services Statement: I hereby certify that all conditions which must be met prior to use or occupancy of this permit have been met and that this permit is deemed by the Department of Planning and Building Services to be a valid permit subject to all conditions of approval.


Coastal Permit Administrator

2/8/10
Date

Owner's Statement: I am the owner of the property subject to this permit (or his/her authorized agent) and I hereby certify that I have reviewed the conditions of approval and will establish and continue the use in compliance with the specified conditions and applicable sections of the Mendocino County Code. I further grant permission for County staff to enter upon the premises for which the permit is issued to verify compliance with the required conditions.


Owner
STEVEN BLAIR

2-10-10
Date

Please sign and return one copy of this permit to the Department of Planning and Building Services at the above address.

OWNER/APPLICANT: Department of Transportation (Caltrans)
District 3, 703 B Street
Marysville, CA 95901

AGENT: Darla Tate – Environmental Manager
District 3, 703 B Street
Marysville, CA 95901

Steve Blair – Project Manager
1656 Union Street
Eureka, CA 95501

REQUEST: Construct multi-lane roundabout on Highway 1 at its intersection with Simpson Lane. The roundabout would be approx. 140 ft by 180 ft from the outer edge of the travel lane to the opposite outer edge. Highway 1 would be widened to accommodate 8 ft wide shoulders on the northeast and southwest quadrants only. The project would require acquisition of right-of ways from property owners at the intersection, but no business or residential relocations.

LOCATION: In the Coastal Zone, approximately ½ mile south of the City of Fort Bragg, at the intersection of Simpson Lane (CR# 414) and Old Coast Highway (CR# 436B) with Highway 1.

APPEALABLE AREA: Yes – ESHA and work west of Highway 1

PERMIT TYPE: Standard

TOTAL ACREAGE: N/A

GENERAL PLAN: Right of Way

ZONING: Right of Way

EXISTING USES: State Highway 1, Right of Way

ADJACENT ZONING: North, East, South, West: Commercial

SURROUNDING LAND USES: North, East, South, West: Commercial

SUPERVISORIAL DISTRICT: 4

PROJECT DESCRIPTION: The applicants propose to construct a multi-lane roundabout on Highway 1 at its intersection with Simpson Lane. The roundabout would be approximately 140 ft by 180 ft from the outer edge of the travel lane to the opposite outer edge, creating an elliptical shaped traffic feature. The center of the roundabout feature would be constructed as an approximately six-foot mound that would be landscaped. The outer edge of the roundabout island would be paved with stamped concrete in a cobblestone pattern, with a dedicated ~12'x 24' area for maintenance truck pullout. Boulders would be

arranged in semi circles to delineate the landscaped areas from two areas dedicated to art sculptures that could be installed in the future. Triangular, stamped concrete, median islands would be constructed at each intersection entering/leaving the roundabout. Shared-use paths, or sidewalks, with marked crossings would be provided for use by both pedestrians and bicyclists. These sidewalks would have a 10 ft width. Separating the sidewalks from the roadway are 3'-4' wide planting strips. Safety lighting (11 lights) would be installed to maintain operations and safety during nighttime hours. Highway 1 would be widened to accommodate 8 ft wide shoulders on the northeast and southwest quadrants only. The project would require acquisition of right-of ways from property owners at the intersection, but no business or residential relocations.

According to the Focused Initial Study submitted by Caltrans, within the project limits traffic is subject to persistent congestion. The project intends to relieve traffic congestion and improve safety. The roundabout was selected as a preferred alternative over a signal, or "no build" alternative, after evaluation, which included identifying environmental impacts and calculating the costs. The roundabout alternative would be approximately \$100,000 less than the signal alternative and would also avoid impacts to waters of the U.S., and riparian habitat. The roundabout would reduce congestion by allowing constant traffic flow through the intersection, reducing stop and go movements and the resulting vehicle back-ups within this intersection of Highway 1, as well as reduce greenhouse gas emissions.

ENVIRONMENTAL REVIEW: The California Department of Transportation (Caltrans) is the lead agency responsible for project compliance with the California Environmental Quality Act (CEQA). Caltrans has prepared a Focused Initial Study with Proposed Negative Declaration (ND) (located in the project file). In reviewing the adopted Negative Declaration, staff has no reason to challenge its conclusions. **Special Condition 1** is included to emphasize that all applicable measures specified in the Negative Declaration are conditions of CDP 22-2009.

LOCAL COASTAL PROGRAM CONSISTENCY RECOMMENDATION: The Negative Declaration prepared by the Department of Transportation describes design features and mitigation measures incorporated into the project to reduce potential impacts to a level of insignificance as required by CEQA. In addition, the project must also comply with policies in the County's Coastal Plan and regulations in the County's Coastal Zoning Code that impose specific requirements which in some cases may exceed those necessary to satisfy CEQA. The following combines the review of the CEQA analysis completed with the adopted negative declaration, with a discussion of requirements found in the County's Local Coastal Plan and Zoning Code, along with conditions recommended where necessary to achieve compliance. The following sections also address any comments received from agencies in response to the County's referrals. With the addition of the recommended conditions, the project is consistent with the applicable goals and policies of the Local Coastal Program as described below.

Summary of Caltrans CEQA Negative Declaration –Both a signalized intersection and the roundabout option were analyzed in the Focused Initial Study. The roundabout option was chosen as the preferred alternative as the benefits outweighed those of the signal alternative. The roundabout's benefits include: safer traffic operations, less traffic delay at each turn on and off the highway, fewer environmental impacts, and fewer environmental permits required, lower project development costs, and fewer greenhouse gas emissions.

The following factors, summarized from the Negative Declaration, focus on the roundabout alternative and have the potential for "less than significant impact" (all other factors have "no impact"):

Hazardous Waste Materials Impacts: The southeast portion of the project site is occupied by a retail gas station where a release of petroleum hydrocarbons occurred in 1989. Clean up and remediation of the contaminant began in 1995 and is ongoing. The area proposed to be acquired from the gas station property for use as right-of-way will not encroach into the area where the

release originally occurred, and there are no feasible alternatives that would avoid acquisition of the property to construct the proposed project.

A Preliminary Site Investigation was conducted in August 2008 and detected no petroleum hydrocarbon in the soil and low levels in the groundwater. The levels found in the groundwater were deemed to pose no threat to human health or the environment as the levels present are well below the North Coast Regional Water Quality Control Board's Environmental Screening Levels.

Aerially Deposited Lead, from historic motor vehicle exhaust, is present in the project area. Excavated soil may be classified as hazardous waste and require disposal at a Class I disposal facility. The shallow soils within the unpaved highway shoulders contain lead at levels that could impact construction worker safety and the public unless appropriate measures (dust control) are implemented.

The signal alternative is more likely to generate higher levels of lead in the waste material since minor shoulder widening for hundreds of feet from the intersection will be necessary. The roundabout alternative will only disturb the roadway shoulders in the immediate vicinity of the intersection, and since the entire intersection (mostly the areas under existing pavement) will be disturbed by the construction, the average concentration of lead in the waste soil will be significantly less, most likely below thresholds for hazardous waste.

Noise Impacts: The project is not considered a Type 1 project, which is defined by 23 Code of Federal Regulations (CFR) 772 as: follows: "A proposed Federal or Federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of traffic lanes..." The project does not meet the Type 1 definition above and therefore does not require a "Traffic Noise Analysis." However, temporary impacts may occur during construction. Noise may be generated from the contractor's equipment and vehicles. Avoidance measure will be incorporated into the construction contract to minimize temporary impacts. No long-term impacts will occur due to the nature of the project.

Climate Change was also analyzed to evaluate greenhouse gas emission relative to each alternative. Caltrans found that the roundabout option would reduce delay time, thus reducing carbon dioxide and nitrous oxide emissions. In addition, the roundabout increases pedestrian and bicycle accessibility, thereby encouraging alternative modes of transportation.

Avoidance, Minimization, and/or Mitigation Measures

Petroleum hydrocarbons

During dewatering for drainage improvements at the south end of the project, the contractor will be required to contain any wastewater in above ground tanks and dispose of it off site at a treatment facility licensed to accept the waste. The contractor would be advised to contact the local Waste Water Treatment Facility to determine whether they accept the waste. Caltrans will develop the appropriate restrictions and requirements for handling of the wastewater in the construction contract.

Aerially Deposited Lead

The existing shoulders of the roadway contain Aerially Deposited Lead (ADL); therefore, a lead compliance plan will be developed for worker and public safety. Soil containing ADL will require special handling during construction. The soil may be stockpiled and retested during construction to characterize the waste or directly hauled off-site. The ADL sample levels detected in the stockpiled material will determine the appropriate disposal method. Bolstered dust control

will be required. No sensitive receptors (such as schools) have been identified in the project area that would require air monitoring.

Noise

Noise generated during construction would be contained if the contractor conforms to the provisions of Caltrans Standard Specifications, **Section 7-1.01 I, "Sound Control Requirements."** This section requires the contractor to comply with all local sound control and noise level rules, regulations and ordinances, which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

Special Condition 1 is recommended to incorporate the above measures regarding hazardous materials and noise abatement.

Land Use

Highway 1 at the Simpson Lane intersection is currently two-lanes with a center left-turn lane. Numerous businesses surround the project site. A gas station is the primary business on the southeast corner of the intersection (See Figure 1).

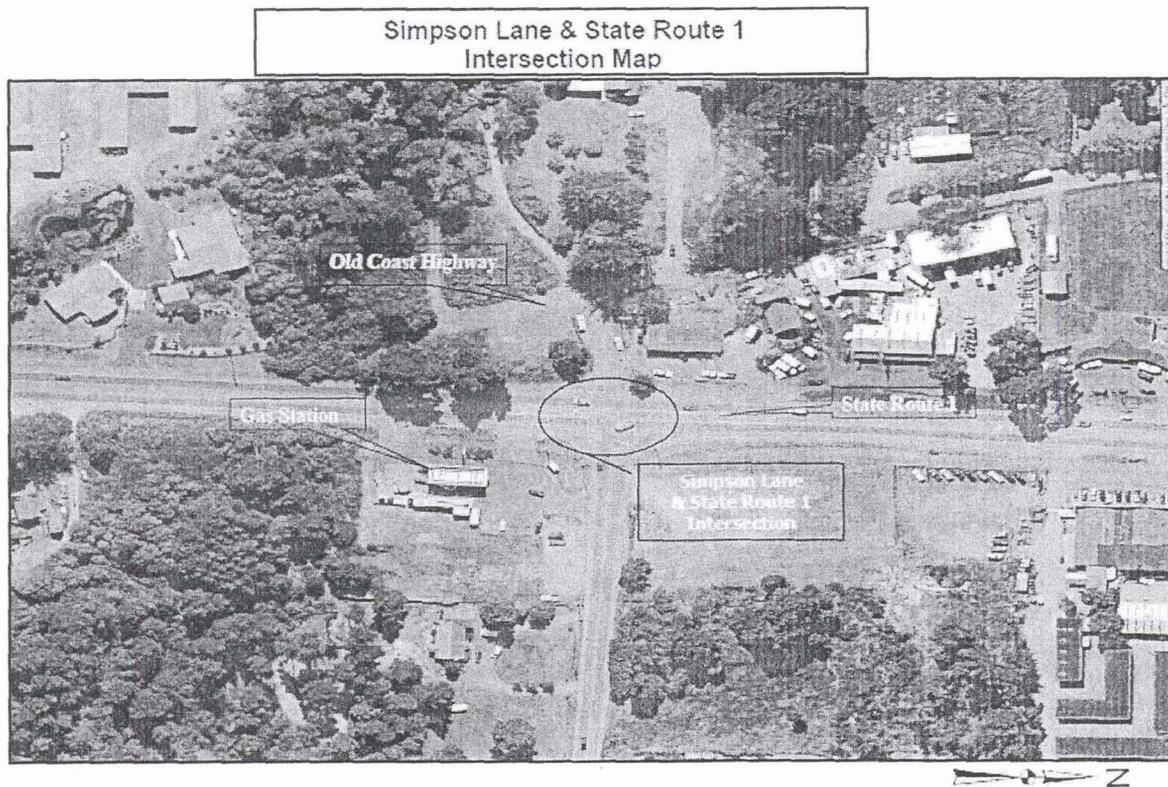


Figure 1. Aerial photo of proposed project site. Source: Caltrans Focused Initial Study, May 2009.

The following policies from Mendocino County's Coastal Element are applicable to the proposed project:

3.8-2 Current studies indicate a need for future improvement to certain stretches of Highway 1 and to major intersections. These improvements shall be encouraged so as to accommodate essential industries vital to the economic health of the County and other priority uses under the Coastal Act.

The Department of Transportation shall be requested and urged as a high priority of public interest and Coastal Act purpose to:

- 1. accelerate highway improvement projects along Highway 1 and those state maintained highway intersections within the Coastal Zone of Mendocino County.*
- 2. develop a long range comprehensive circulation plan for Mendocino County coastal state highways and tributaries consistent with Coastal Act mandates.*

If the objectives of the Coastal Act are to be met, these goals must receive high priority at both local and state levels.

3.8-5 Caltrans shall, in cooperation with the County, set priorities based on safety requirements and existing highway congestion for improving the capacity of impacted segments of Highway 1. Measures to be studied should include minor realignments, width and shoulder improvements, passing lanes, view turnouts and parking areas, and intersection improvements.

The proposed roundabout option was selected as the preferred alternative to relieving traffic congestion. As proposed, the roundabout would be multilane – north and southbound lanes would allow for two-lanes of traffic to enter, with the right lane for right turns and the left lane as a travel through, or left turn lane. The Simpson Lane and Old Coast Highway intersection allow for one lane of traffic to enter and exit the roundabout.

The roundabout option is expected to better relieve traffic congestion when compared with a traffic signal, or a no action alternative. Caltrans calculated future traffic conditions under each alternative. The no action alternative would result in failure at the intersection by 2020; the southbound left-turn movement onto Simpson Lane would result in a back up of approximately 47 vehicles. The roundabout and signal alternative are described using Level of Service (LOS) which is a qualitative measure describing operational conditions within traffic. By 2028, a signal would provide an LOS D, which has a delay time of 35-55 seconds; progression of vehicles is unfavorable and the intersection is showing signs of congestion. The roundabout would provide a LOS B, which describes intersection delay experienced by the driver of 10-20 seconds; progression of vehicles is good.

Safety was also considered in the evaluation of the alternatives provided by Caltrans. The roundabout is found to be the safer alternative as vehicle speeds are reduced with similar speeds between circulating and entering traffic. The advised speed for the proposed roundabout will be 15 mph. Another important safety factor is that the only movement at an entry and an exit of a roundabout is a right turn, thus reducing the potential frequency and severity of accidents compared to accidents typically occurring during left turns and when traffic crosses an intersection in perpendicular directions. Thus, broadside and head-on collisions are rare to non-existent. According to the Federal Highway Administration (FHWA), roundabouts are considered a safer alternative to signal intersections, as vehicle crashes are reduced, specifically those accidents that cause injuries or are fatal. The FHWA also provides documentation on its website that supports Caltrans conclusions regarding congestion relief and safety improvements. Across the country modern roundabout are replacing signalized intersections, as the roundabout is proving to offer a safer alternative.

Signage would be installed to alert drivers that a roundabout is ahead (see discussion under Visual Resources). The road pavement within the roundabout would also be painted with arrows indicating travel direction, and the word yield at all entries.

Public Access

Portions of the project site are located east and west of Highway 1; public access to the shoreline will not be affected by the project. The project would have no effect on public access to the coast.

Hazards

The property is in an area that has a "moderate" fire hazard severity rating as determined by the California Department of Forestry and Fire Prevention (Cal Fire). The proposed project is exempt from Cal Fire safety regulations as no building is proposed. The Fort Bragg Fire District responded to the County's referral with "no comment".

The proposed construction would be located in a flat area, and the development does not present any hazard issues relative to slope failure. There are no known faults, landslides or other geologic hazards in close proximity to the proposed development.

Grading, Erosion and Runoff

The applicants propose to grade more than 50 cubic yards, however at the time of the application the exact amount had not been determined.

Regarding grading standards Sec. 20.492.010 of the Mendocino County Coastal Zoning Code (MCCZC) states:

(A) Grading shall not significantly disrupt natural drainage patterns and shall not significantly increase volumes of surface runoff unless adequate measures are taken to provide for the increase in surface runoff.

(B) Development shall be planned to fit the topography, soils, geology, hydrology, and other conditions existing on the site so that grading is kept to an absolute minimum.

(C) Essential grading shall complement the natural land forms. At the intersection of a manufactured cut or fill slope and a natural slope, a gradual transition or rounding of contours shall be provided.

(D) The cut face of earth excavations and fills shall not be steeper than the safe angle of repose for materials encountered. Where consistent with the recommendations of a soils engineer or engineering geologist, a variety of slope ratios shall be applied to any cut or fill slope in excess of two hundred (200) feet in length or ten (10) feet in height. For individually developed lots, a variety of slope ratios shall be applied to all cut or fill slopes when a building pad area exceeds four thousand five hundred (4,500) square feet, or when the total graded area of the lot exceeds nine thousand (9,000) square feet. The steepest permissible slope ratio shall be two to one (2:1), corresponding to a fifty (50) percent slope.

(E) The permanently exposed faces of earth cuts and fills shall be stabilized and revegetated, or otherwise protected from erosion.

(F) Adjoining property shall be protected from excavation and filling operations and

potential soil erosion.

The project site is relatively flat, however the amount of grading necessary to complete the projects warrants a grading plan. **Special Condition 2** is recommended to require a grading plan that conforms to the standards stated above.

Regarding erosion control, Section 20.492.015 of the MCCZC states in pertinent part:

- (A) The erosion rate shall not exceed the natural or existing level before development.*
- (B) Existing vegetation shall be maintained on the construction site to the maximum extent feasible. Trees shall be protected from damage by proper grading techniques.*
- (C) Areas of disturbed soil shall be reseeded and covered with vegetation as soon as possible after disturbance, but no less than one hundred (100) percent coverage in ninety (90) days after seeding; mulches may be used to cover ground areas temporarily.*
- (G) Erosion control devices shall be installed in coordination with clearing, grubbing, and grading of downstream construction; the plan shall describe the location and timing for the installation of such devices and shall describe the parties responsible for repair and maintenance of such devices. (Ord. No. 3785 (part), adopted 1991)*

Approximately 12 trees with diameters less than 12 inches are proposed to be removed in association with construction activities. In conjunction with Special Condition 2, an erosion control plan is recommended that covers Best Management Practices and a revegetation plan to ensure that disturbed soils are reseeded and covered as soon as possible after disturbance.

Regarding stormwater runoff, Section 20.492.025 of the MCCZC states in pertinent part:

- (A) Water flows in excess of natural flows resulting from project development shall be mitigated.*
- (C) The acceptability of alternative methods of storm water retention shall be based on appropriate engineering studies. Control methods to regulate the rate of storm water discharge that may be acceptable include retention of water on level surfaces, the use of grass areas, underground storage, and oversized storm drains with restricted outlets or energy dissipaters.*
- (D) Retention facilities and drainage structures shall, where possible, use natural topography and natural vegetation. In other situations, planted trees and vegetation such as shrubs and permanent ground cover shall be maintained by the owner.*
- (E) Provisions shall be made to infiltrate and/or safely conduct surface water to storm drains or suitable watercourses and to prevent surface runoff from damaging faces of cut and fill slopes.*

Dennis Slota of Mendocino County Water Agency (MCWA) responded to Planning staff's request for comments. Mr. Slota notes that the project area is within the designated National Pollutant Discharge Elimination System Phase II permit for Mendocino County. The Water Agency had originally requested that the roundabout feature be depressed, rather than a raised central island, to be used as a bioretention area for stormwater runoff from the highway. This feature could treat highway runoff. After learning that the raised roundabout island is designed as a safety feature, MCWA staff revised their comments to request that the central island be redesigned to treat runoff, while still providing Caltrans safety objective. Caltrans staff responded that the grade of the road would not promote runoff to enter the roundabout island, but did incorporate an area of sand (area where potential art features could be displayed) underlain

by drain rock and filter fabric. This area would act as an infiltration basin. Although the roundabout island will not accept road runoff, it is anticipated that this feature will retain rainfall received, and prevent additional runoff from entering the roadway. The stamped concrete perimeter of the island will be sloped back towards the landscaped mound and a small drainage swale that will direct excess runoff to the sand infiltration basins. However, extreme rain events may not be completely retained on the island and may be diverted either through an emergency drain inlet to a culvert in the vicinity, or may be allowed to overflow on to the roadway and into the road drainage system.

The project engineer has submitted preliminary sketch of the proposed drainage plan (Exhibit H). Staff consulted with the project engineer and received clarification on the drainage design plan. The drainage plan incorporates vegetated drainage swales on the northeast and southwest portions of the project site, and culverts to convey runoff away from the roadway. The proposed 3'-4' vegetative planting strips will receive and potentially treat sidewalk runoff. Planning staff and MCWA staff is in support of the proposed project promoting stormwater infiltration and treatment to the maximum extent feasible through landscaped amenities, permeable pavement, or other design options that fit within the project. MCWA staff has reviewed the most recent submittals of the landscape design and the draft drainage plan. MCWA staff commented that they appreciate Caltrans incorporation of stormwater treatment, safety, and aesthetics in this design alternative. However, since it is unclear from the draft drainage plan, MCWA staff requests that the sidewalks be sloped to drain to the sidewalk planting strips. **Special Condition 3** is recommended for review and approval of the final drainage design plans. As proposed, the drainage design offers a rather balanced management style of using landscaped drainage features which help to slow and treat stormwater runoff, and conventional stormwater management practices.

Visual Resources

The proposed project is not located in a designated "Highly Scenic Area." Coastal Element Policy 3.5-1 provides general guidelines for all development in the coastal zone, requiring that:

The scenic and visual qualities of Mendocino County coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting.

As proposed, landscaping would be installed and maintained along the sidewalks and in the center of the roundabout island (Exhibit F). Appropriate landscaping will improve the aesthetics of the intersection. Mendocino County native and drought tolerant plants are recommended for the proposed planting as **Special Condition 4**, as these plants will be most appropriate for the climate, requiring the least amount of maintenance. At the time of this report, a defined maintenance plan was not complete; however, maintenance responsibilities will likely be shared between Caltrans and the County.

The City of Fort Bragg responded to the County's request for comments and stated that the Fort Bragg City Council has a strong preference for the "Art Scape" alternative, which incorporates local art, native plants and shrubs. This is the alternative that was selected by Caltrans. The City Council also recommends that the following issues be addressed:

1. Caltrans should complete a landscaping plan for approval by County Planning staff
2. Caltrans should add landscape treatments to the roundabout approaches
3. An "art deer" should not be included as drivers may mistake this for a real deer and precipitate an accident
4. Caltrans should work with the Mendocino Art Council and install local artists' works

5. Caltrans should either transfer funding to the City of Fort Bragg, which the City would utilize to subcontract maintenance activities for the landscaped areas, or create an Adopt-a-Roundabout program for landscaping maintenance.
6. The City Council is interested in ensuring the roundabout be as permeable as possible and visually interesting, for this reason the stamped concrete alternative is the least preferred design option
7. City Council wants to ensure the entry signage to the Fort Bragg area does not look like the new sign on Highway 20. The welcome sign should be developed with the aid of local artists and should reflect the character of the community (e.g. be constructed of wood with a more natural and rural feel). Council would prefer that the welcome sign be on the northeast side of the road as you leave the roundabout
8. City Council recommends that the design be revised so the bike and pedestrian shared sidewalks terminate onto the roadway with a small ramp rather than ending on the dirt.

City Council received four design alternatives to review for the roundabout, these options were vetted early in the Caltrans design process, and as stated above, Caltrans selected the landscape and art design alternative. However, during the process Caltrans has determined not to add art to the roundabout island, but to leave a space for art sculptures should some entity in the future wish to take on this task. At that point, Caltrans would create specifications for the proposed art features. As the majority of the roundabout island is landscaped leaving this area vacant for the near future would not create a visual impact, while also allowing some local control to select and design the art sculptures. **Special Condition 5** is recommended to allow review by Planning staff of proposed art features prior to installation. This condition would also require Caltrans to conduct outreach to community, either through local public service announcements or through press releases, to disseminate the information that Caltrans will not be installing art as originally proposed during previous outreach events and documents and that a local entity should propose art for the roundabout.

Numerous signs are proposed. Directional signs that explain where turns will lead (e.g Simpson Lane, Fort Bragg etc.), turning lanes, yield signs, and pedestrian signs will all be installed in association with the proposed project. In all, staff tallies approximately 31 signs proposed to be installed, with approximately 10 signs (or utility poles) proposed for removal (Exhibit I). Staff is hesitant to recommend the number of signs be reduced, as driver/pedestrian/cyclist safety is a primary concern. Sign regulations are determined by federal and state requirements to provide drivers with adequate information. However, staff requests that Caltrans critically review the number of signs proposed and reduce any that may be redundant or not essential to traffic operation or safety, or consolidated, as protection of coastal environment is priority of the Mendocino County Coastal Element. Additionally, staff requests that Caltrans install a bicycle safety sign if feasible, so that vehicle drivers may be aware that bicyclist will share the road. **Special Condition 6** is recommended to reflect staff's suggestions. A gateway sign into the City of Fort Bragg is not proposed. Staff had requested a welcome to Fort Bragg sign, but Caltrans responded that such a sign was not included in the budget, and there was concern that a welcome sign would encourage visitors to stop and take photographs with the sign, creating a safety hazard. After further review, staff located two welcome signs north of the intersection – one is a redwood round with Fort Bragg and the founding date carved out, the other is a billboard like sign that welcomes visitors and provides space for local events.

In response to the last comment made by City Council, all sidewalks will transition to the shoulder through use of curb ramps.

Section 20.504.035 of the Coastal Zoning Code (Exterior Lighting Regulations) states:

- (A) *Essential criteria for the development of night lighting for any purpose shall take into consideration the impact of light intrusion upon the sparsely developed region of the highly scenic coastal zone.*
- (2) *Where possible, all lights, whether installed for security, safety, or landscape design purposes, shall be shielded or shall be positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the parcel on which it is placed.*
- (5) *No lights shall be installed so that they distract motorists.*

Lighting is proposed with the installation of 11 standard highway lighting, with either type 15, or type 30 highway lights used. At the time of this report, the final lighting plan was not complete; however, a draft plan that indicates lighting locations was provided (Exhibit J). The draft lighting plan was peer reviewed by roundabout design experts and lights are located for driver safety. Highway lighting is also regulated by federal lighting levels, which requires lights at critical conflict points (e.g. entering or merging traffic locations). **Special Condition 7** is recommended to require shrouds on the light fixtures so that the lighting will be downcast to protect the coast's dark sky environment.

Natural Resources

The County of Mendocino Coastal Element describes an Environmentally Sensitive Habitat Area (ESHA) as follows:

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

A Natural Environment Study dated August 2008, with a Wetlands/ESHA Assessment and Reduced Buffer Analysis dated September 2008 was completed by Caltrans (see Appendix A for Reduced Buffer Analysis). No sensitive animal species were found within the project vicinity. Five ESHA were found in the vicinity of the project area for the signal alternative. In the roundabout alternative, three ESHA are located within the project vicinity, with potentially one more ESHA in the project area depending on utility relocation and sign locations.

Three of the four ESHA are considered riparian corridors, with one Northern Bishop Pine forest ESHA. Chapter 20.496 and Section 20.532.060, et. seq. of the MCCZC contain specific requirements for protection of ESHAs and development within the buffer area of an ESHA. A sufficient buffer area is required to be established and maintained to protect ESHAs from disturbances related to proposed development. Section 20.496.020(A)(1) of the MCCZC states:

The width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred (100) feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width.

Figure 2 illustrates a map of the ESHA areas. This map was recently modified, from the original map created in the Wetlands/ESHA Assessment and Reduced Buffer Analysis dated September 2008 due to a request from staff to see which ESHAs would be affected from the roundabout alternative as the original Assessment included the signal alternative, which has a much larger project footprint. The signal alternative would impact two additional ESHAs, due to lane widening activities – ESHA #2 and #5 – both

riparian habitat. The following is summarized from the ESHA Assessment and focuses on the roundabout alternative. ESHA #2 will no longer be impacted since the roundabout alternative was chosen.

The Northern Bishop Pine forest (ESHA #1 on map) is a small stand found southwest of gas station. There are approximately 25 trees, which cover an area of 0.75 acre. The bases of the pines are covered in English Ivy. No construction activities will occur within 50 feet of the ESHA.

Riparian habitat #3 (ESHA #3 on map) is located west of the highway along a small unnamed creek, south of the gas station, which crosses the highway via a culvert at PM 59.18. There is a canopy of trees shading this area, which would indicate it is a riparian area of higher quality than the others. Signage and utility relocation may occur within the 100-ft. No plants would be removed and minimal impact to this ESHA is expected. The proposed road improvement would minimally encroach further into the buffer than the existing road.

Riparian habitat #4 (ESHA #4 on map) is located east of the highway along a small unnamed creek south of the gas station at PM 59.18. Utility relocation would occur within 100 ft buffer. Any potential disturbed areas will be replanted with native species at a minimum ratio of 3:1. Invasive species will be removed as a part of this mitigation. A bird nesting survey may be necessary if construction or vegetation removal occurs from September 1-February 14. This mitigation measure is reflected as **Special Condition 8**.

Riparian habitat #5 (ESHA #5 on map) is located on both sides of the highway along a small unnamed creek which crosses the highway via a culvert at PM 59.12. Signage and utility relocation may occur within the 100 ft buffer. No plants will be removed and no long-term impacts are expected.

Caltrans consulted with Richard Macedo of Department of Fish and Game in April of 2008. Mr. Macedo spoke with staff regarding this proposed project and stated that there are no issues relating to the Bishop Pine forest, as this forest is already in close proximity to the highway. No major impacts are expected for the riparian areas, as these areas are already heavily modified from the existing highway.

Development that occurs within the buffer areas shall generally be the same as those uses permitted in the adjacent ESHA. Regarding development in a riparian area, Sec. 20.496.035 Riparian Corridors and other Riparian Resource Areas states in pertinent part:

(A) No development or activity which could degrade the riparian area or diminish its value as a natural resource shall be permitted in the riparian corridor or in any area of riparian vegetation except for the following:

(2) Pipelines, utility lines and road and trail crossings when no less environmentally damaging alternative route is feasible;

The existing highway configuration in effect dictates the proposed design layout. The roundabout alternative was selected because its design and construction requirements reduce the impacts to the adjacent ESHAs. The signal alternative would impact not only the riparian areas, some permanently, but would also impact waters of the U.S by requiring work in the stream for lane widening. There are overhead and underground utilities that would require relocation, and shoulder widening on the north and south project limits for the roundabout alternative, this work would occur within the 100 ft buffers to the ESHAs under the roundabout alternative. These ESHAs exist directly adjacent to the highway, impacts relative to the construction or new highway configuration would be similar to current developments. As the roundabout alternative is the least environmentally damaging alternative, the proposed project conforms to MCCZC.

Archaeological/Cultural Resources

The application was reviewed by the Mendocino County Archaeological Commission on October 14, 2009, which accepted the survey, no cultural, historical, or archaeological sites were observed. Standard Condition Number 8 is recommended, advising the applicant of the requirements of the County's Archaeological Ordinance (Chapter 22.12 of the Mendocino County Code) in the event that archaeological or cultural materials are unearthed during site preparation or construction activities.

Groundwater Resources

The site is located within an area designated as a Marginal Water Resources area (MWR) as shown in the 1982 Coastal Groundwater Study prepared by the Department of Water Resources.

Carly Williams of the Division of Environmental Health commented that the project can be approved by Environmental Health. No adverse impacts to groundwater resources are anticipated, with the inclusion of Special Condition 1.

Transportation/Circulation

The application was referred to the Mendocino County Department of Transportation for comment. No response was received.

The project is proposed to reduce traffic congestions and improve safety at the existing intersection, as discussed in detail under the Land Use section.

A number of comments received by Caltrans from the public during the public scoping period of the environmental document preferred a signal rather than a roundabout. Many of the concerns raised were in regards to lack of familiarity and understanding in maneuvering a roundabout. Although Caltrans responded to all of the issues received by the public in the environmental document, staff believes that additional outreach may help to raise awareness and understanding in how to maneuver a roundabout and the proper travel techniques. For example, large trucks are to claim both lanes of the roundabout when entering. Additionally, a bicyclist that would prefer to enter the roundabout rather than use the shared use sidewalks should take ownership of one lane and travel through the roundabout. Staff has discussed outreach with the Caltrans agent, and an instructional video has been developed and placed on Caltrans website. **Special Condition 9** is recommended to require that Caltrans, prior to construction, submit local press releases and/or public service announcements which cover navigational instructions for the roundabout and highlight the instructional video as well. The intent of this condition is to raise awareness of this new roundabout feature to local residents and visitors.

At the time of this report, a final traffic management plan was not yet available. However, after consulting with Caltrans agents, staff learned that construction is proposed to begin at the start of summer 2010 and

continue for one season, ideally construction would be complete before the rainy season starts in mid-October or early November. Construction at night will be used due to high traffic volumes at the project site. Two-lanes of traffic will remain open during the day, with lane closures used at night. The preliminary traffic management plan calls for using both one-way reversible road closures and intermittent road closures. The one-way road closure will have a maximum delay of five minutes, and the intermittent road closure would have a maximum 15 minute delay time. Stage two of the construction plan anticipates a detour of southbound traffic to Old Coast Highway. Local businesses would remain accessible during the detour. The detour is expected to last for 10 working days. Emergency services will be contacted in advance, as well as local business, residents, and schools (for bus schedules) to reduce impacts due to construction delays. Staging areas are still being determined.

Zoning Requirements

The project complies with the zoning requirements of Division II of Title 20 of the Mendocino County Code.

PROJECT FINDINGS AND CONDITIONS: Pursuant to the provisions of Chapter 20.532 and Chapter 20.536 of the Mendocino County Code, the Coastal Permit Administrator approves the proposed project, and adopts the following findings and conditions.

FINDINGS:

1. The proposed development is in conformity with the certified Local Coastal Program; and
2. The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities; and
3. The proposed development is consistent with the purpose and intent of the applicable zoning district, as well as all other provisions of Division II, and preserves the integrity of the zoning district; and
4. The proposed development, if constructed in compliance with the conditions of approval, will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act; and
5. The proposed development will not have any adverse impacts on any known archaeological or paleontological resource; and
6. Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development.
7. The proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act and Coastal Element of the General Plan.
8. As conditioned, the following findings can be made for development proposed within Environmentally Sensitive Habitat Areas:
 - (a) The resource as identified will not be significantly degraded by the proposed development.

(b) There is no feasible less environmentally damaging alternative.

(c) All feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted.

STANDARD CONDITIONS:

1. This action shall become final on the 11th day following the decision unless an appeal is filed pursuant to Section 20.544.015 of the Mendocino County Code. The permit shall become effective after the ten working day appeal period to the Coastal Commission has expired and no appeal has been filed with the Coastal Commission. The permit shall expire and become null and void at the expiration of two years after the effective date except where construction and use of the property in reliance on such permit has been initiated prior to its expiration.
2. The use and occupancy of the premises shall be established and maintained in conformance with the provisions of Division II of Title 20 of the Mendocino County Code.
3. The application, along with supplemental exhibits and related material, shall be considered elements of this permit, and that compliance therewith is mandatory, unless an amendment has been approved by the Coastal Permit Administrator.
4. This permit shall be subject to the securing of all necessary permits for the proposed development from County, State and Federal agencies having jurisdiction.
5. The applicant shall secure all required building permits for the proposed project as required by the Building Inspection Division of the Department of Planning and Building Services.
6. This permit shall be subject to revocation or modification upon a finding of any one or more of the following:
 - a. The permit was obtained or extended by fraud.
 - b. One or more of the conditions upon which the permit was granted have been violated.
 - c. The use for which the permit was granted is conducted so as to be detrimental to the public health, welfare or safety, or to be a nuisance.
 - d. A final judgment of a court of competent jurisdiction has declared one or more conditions to be void or ineffective, or has enjoined or otherwise prohibited the enforcement or operation of one or more such conditions.
7. This permit is issued without a legal determination having been made upon the number, size or shape of parcels encompassed within the permit described boundaries. Should, at any time, a legal determination be made that the number, size or shape of parcels within the permit described boundaries are different than that which is legally required by this permit, this permit shall become null and void.

8. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

SPECIAL CONDITIONS:

1. The proposed project shall comply with all measures from the Simpson Lane Intersection Project Focused Initial Study with Negative Declaration, 2009. A copy of this staff report shall be supplied to all contractors and a copy shall be maintained on the job site.

Petroleum hydrocarbons

During dewatering for drainage improvements at the south end of the project, the contractor shall be required to contain any wastewater in above ground tanks and dispose of it off site at a treatment facility licensed to accept the waste. The contractor shall be advised to contact the local Waste Water Treatment Facility to determine whether they accept the waste. Caltrans shall develop the appropriate restrictions and requirements for handling of the wastewater in the construction contract.

Aerially Deposited Lead

The existing shoulders of the roadway contain Aerially Deposited Lead (ADL); therefore, a lead compliance plan shall be developed for worker and public safety. Soil containing ADL shall require special handling during construction. The soil may be stockpiled and retested during construction to characterize the waste or directly hauled off-site. The ADL sample levels detected in the stockpiled material will determine the appropriate disposal method. Bolstered dust control shall be required.

Noise

The contractor shall conform to the provisions of Caltrans Standard Specifications, **Section 7-1.01 I, "Sound Control Requirements."** This section requires the contractor to comply with all local sound control and noise level rules, regulations and ordinances, which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

2. Prior to issuance of the Coastal Development Permit, the applicant shall submit to the satisfaction of the Coastal Development Administrator, an erosion control/grading plan which addresses disturbed earth caused by construction activities. The erosion control plan shall include a list of BMPs to be used, a schedule of when BMPs will be installed, and a revegetation plan. Recommended BMPs include:
 - a. Fiber rolls, a geoweb slope protection system, and/or an erosion control blanket with weed-free straw shall be installed prior to, and maintained throughout, the construction period to contain runoff from construction areas, trap entrained sediment and other pollutants, and prevent discharge of sediment and pollutants to coastal waters;

- b. Any excess excavated material and construction debris resulting from construction activities shall be disposed of at a disposal site outside the coastal zone or within the coastal zone pursuant to a valid coastal development permit;
 - c. On-site vegetation shall be maintained to the maximum extent possible during construction activities;
 - d. All grading activity should be limited to the dry season between April 15th and October 31st;
 - e. All on-site stockpiles of soil and construction debris shall be contained at all times; and
 - f. To the extent feasible, all areas of disturbed soil shall be reseeded and covered with native vegetation as soon as possible after disturbance, but no less than one hundred (100) percent coverage in ninety (90) days after seeding; mulches may be used to cover ground areas temporarily.
 - g. Weed-free erosion control measures shall be used. All straw/hay shall be certified weed-free, and all seed mixes shall be native and certified weed-free.
3. Prior to issuance of the Coastal Development Permit, the applicant shall submit for approval of the Coastal Development Administrator, the final drainage design plans.
 4. Prior to issuance of the Coastal Development Permit, the applicant shall submit for approval of the Coastal Development Administrator, a landscape and maintenance plan. The plan shall utilize drought-tolerant, native vegetation. All landscaping shall be installed within 6 months after construction activities have ceased. All required landscaping shall be irrigated, staked, maintained, and replaced, as necessary, to ensure that landscaping is established and maintained in perpetuity.
 5. Planning staff shall review and approve all proposed art features prior to installation on the roundabout island.
 6. Caltrans shall critically review the number of signs proposed and reduce any that may be consolidated, redundant or not essential to traffic operation or safety, as protection of coastal environment is priority of the Mendocino County Coastal Element. Caltrans shall install a bicycle safety sign (on post or painted on pavement) if feasible, so that drivers may be aware that bicyclist will share the road.
 7. Prior to issuance of the Coastal Development Permit, the applicant shall submit an exterior lighting plan and design details or manufacturer's specifications for all the exterior lighting fixtures. Exterior lighting shall be kept to the minimum necessary for safety and security purposes and shall be downcast and shielded in compliance with Section 20.504.035 of the MCCZC.
 8. Any potential disturbed areas near ESHA habitats (riparian areas: ESHA #3 and 4) shall be replanted with native species at a minimum ration of 3:1. Invasive species will be removed as a part of this mitigation. Prior to construction activities silt fencing or other appropriate erosion control measures shall be installed to protect the ESHAs.

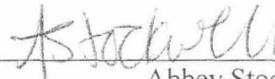
In order to avoid possible effects to nesting birds, vegetation removal shall occur between September 1- February 14. This time period is considered to be outside the bird nesting season. If construction or tree removal takes place at this location during nesting season, the contractor shall be required to supply a qualified biologist. Pre-construction surveys, conducted two weeks prior to removal (and valid for only 30 days) shall be required to determine if the project will have potential effects on nesting birds. If sensitive bird species are found, appropriate protective measures, including postponing work or agency consultation, may be required to prevent negative impacts. If a survey is conducted a report shall be submitted to Planning staff.

9. Prior to construction, Caltrans shall submit local press releases and/or public service announcements which cover navigational instructions for the roundabout and highlight the instructional video as well. In addition, the public announcements shall include information that art will not be installed, and that a local entity shall propose art features instead. The intent of this condition is to raise awareness of this new roundabout feature to local residents and visitors.

Staff Report Prepared By:

12.10.09

Date



Abbey Stockwell
Planner I

Attachments: Exhibit A Location Map
Exhibit B Zoning Map
Exhibit C Ortho Photo 2009
Exhibit D Rare find Map 2009
Exhibit E Right of Way Appraisal Map
Exhibit F Landscape Plan View
Exhibit G Landscape Profile
Exhibit H Draft Drainage Plan
Exhibit I Draft Signage plan
Exhibit J Draft Lighting Plan

Appendix A Reduced Buffer Analysis

Appeal Period: Ten calendar days for the Mendocino County Board of Supervisors, followed by ten working days for the California Coastal Commission following the Commission's receipt of the Notice of Final Action from the County.

Appeal Fee: \$945 (For an appeal to the Mendocino County Board of Supervisors.)

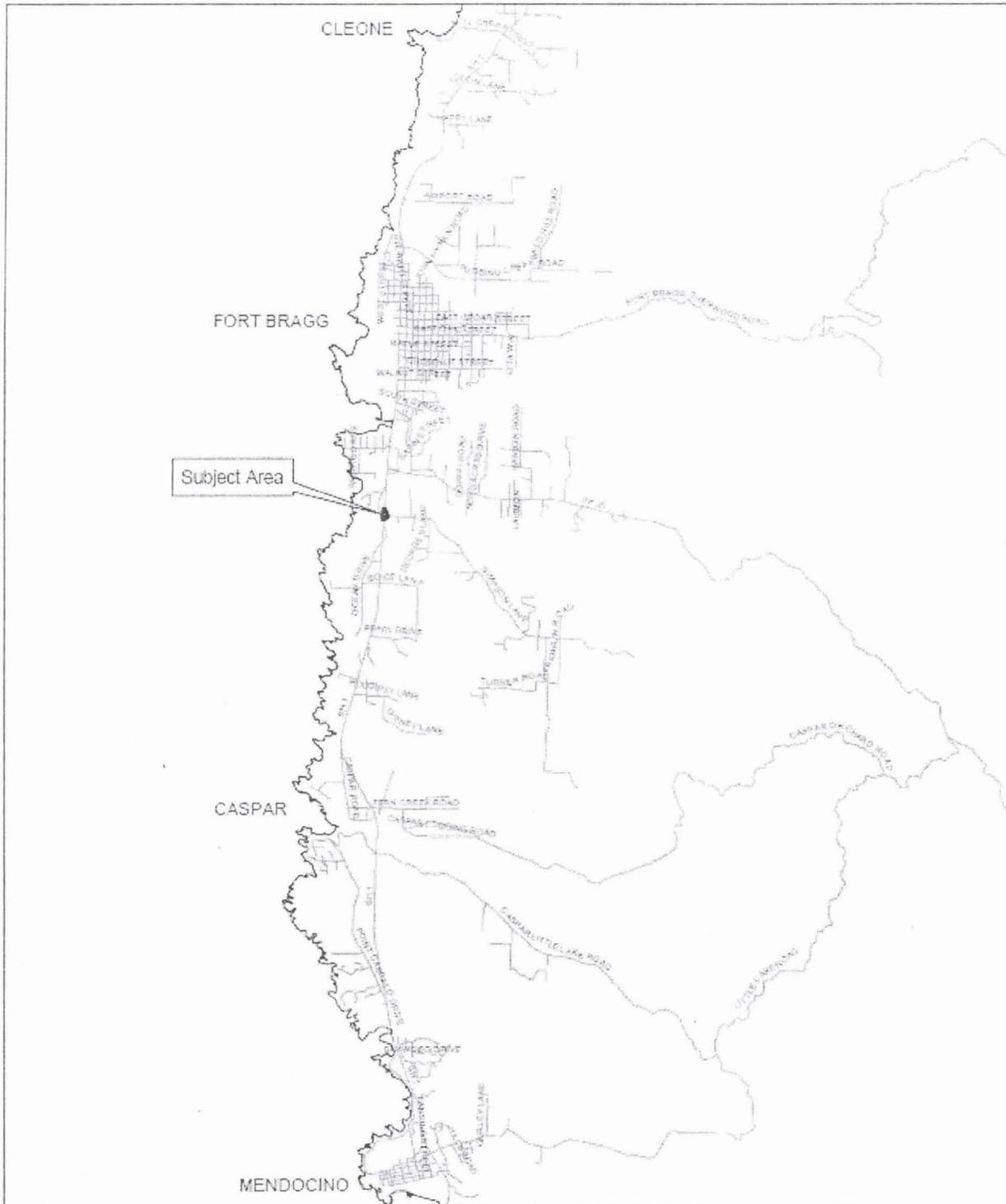
SUMMARY OF REFERRAL AGENCY COMMENTS:

Planning – Ukiah	No comment
Department of Transportation	No response
Environmental Health – Fort Bragg	DEH can give clearance.

STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT

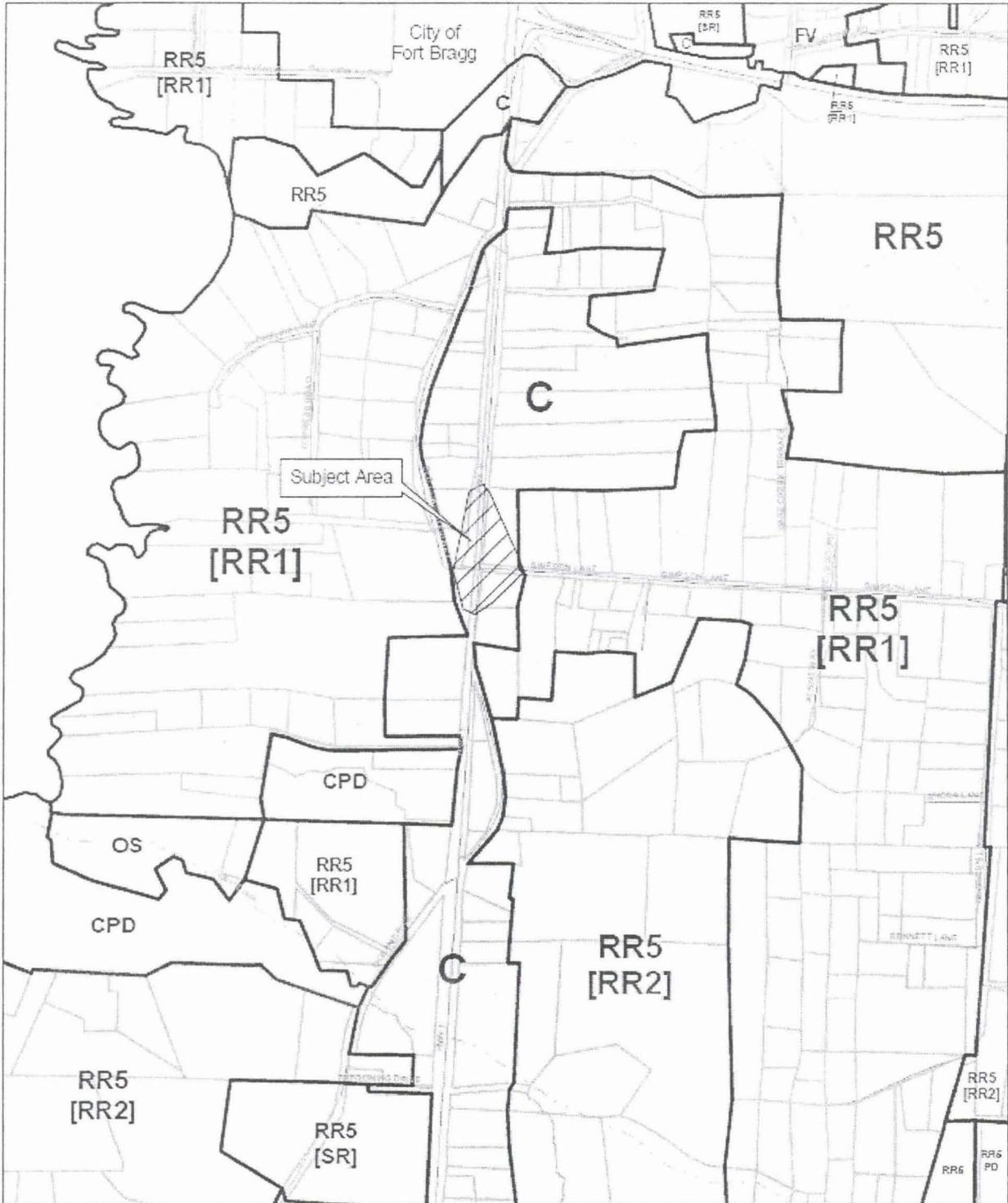
CDP#22-2009 (Caltrans)
December 21, 2009
CPA-19

Building Inspection – Fort Bragg Assessor	No comment.
Department of Fish & Game	No response.
MCWA	See discussion in Natural Resources.
Native Plant Society	See discussion in Grading and Erosion
Coastal Commission	No response.
California Highway Patrol	No response.
Mendocino County Sheriff	No response.
Mendocino Coast District Hospital	No response.
Fort Bragg PD	No response.
Fort Bragg FD	No comment
Fort Bragg City Planning	See discussion in Visual Resources
MCOG	No response



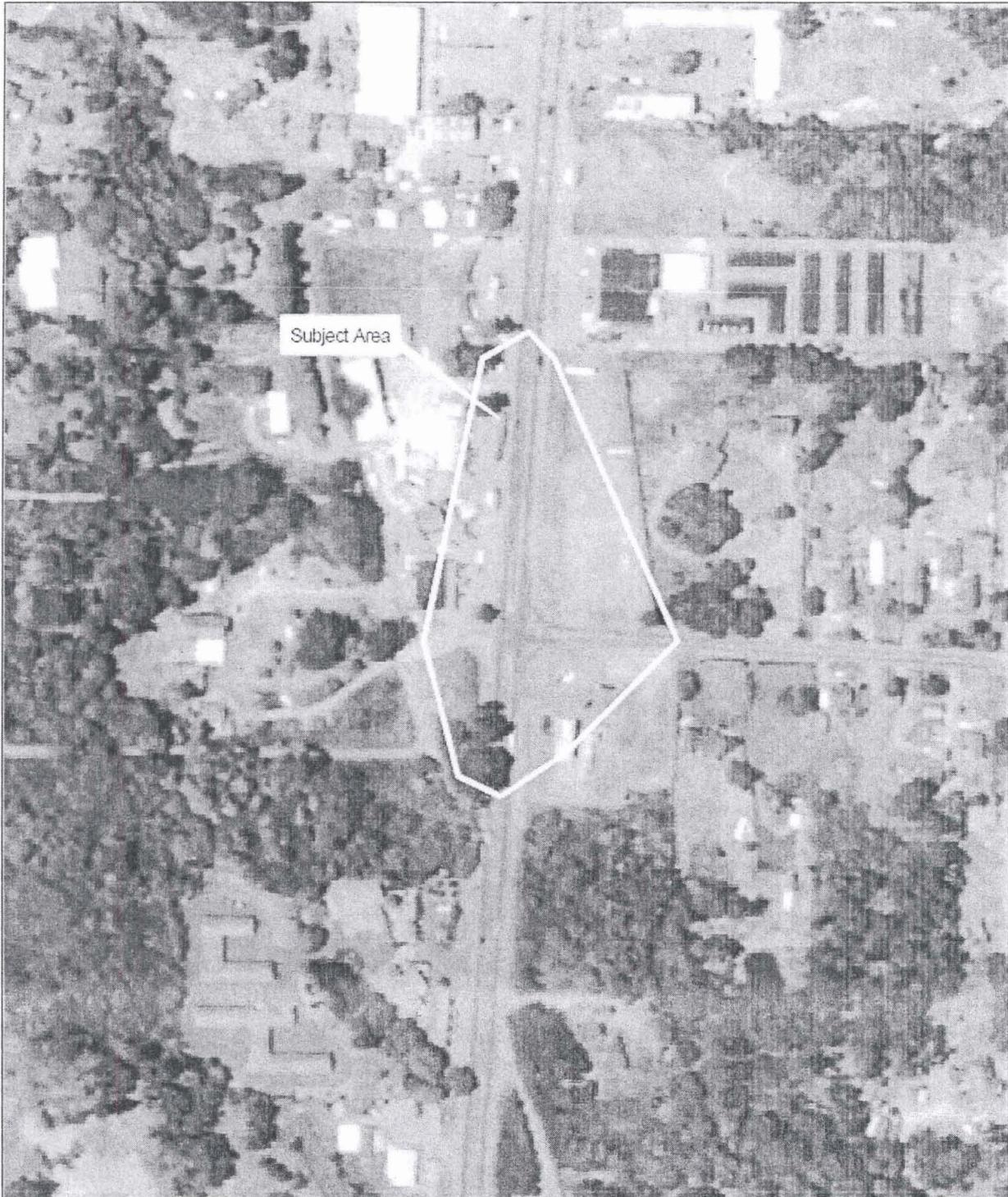
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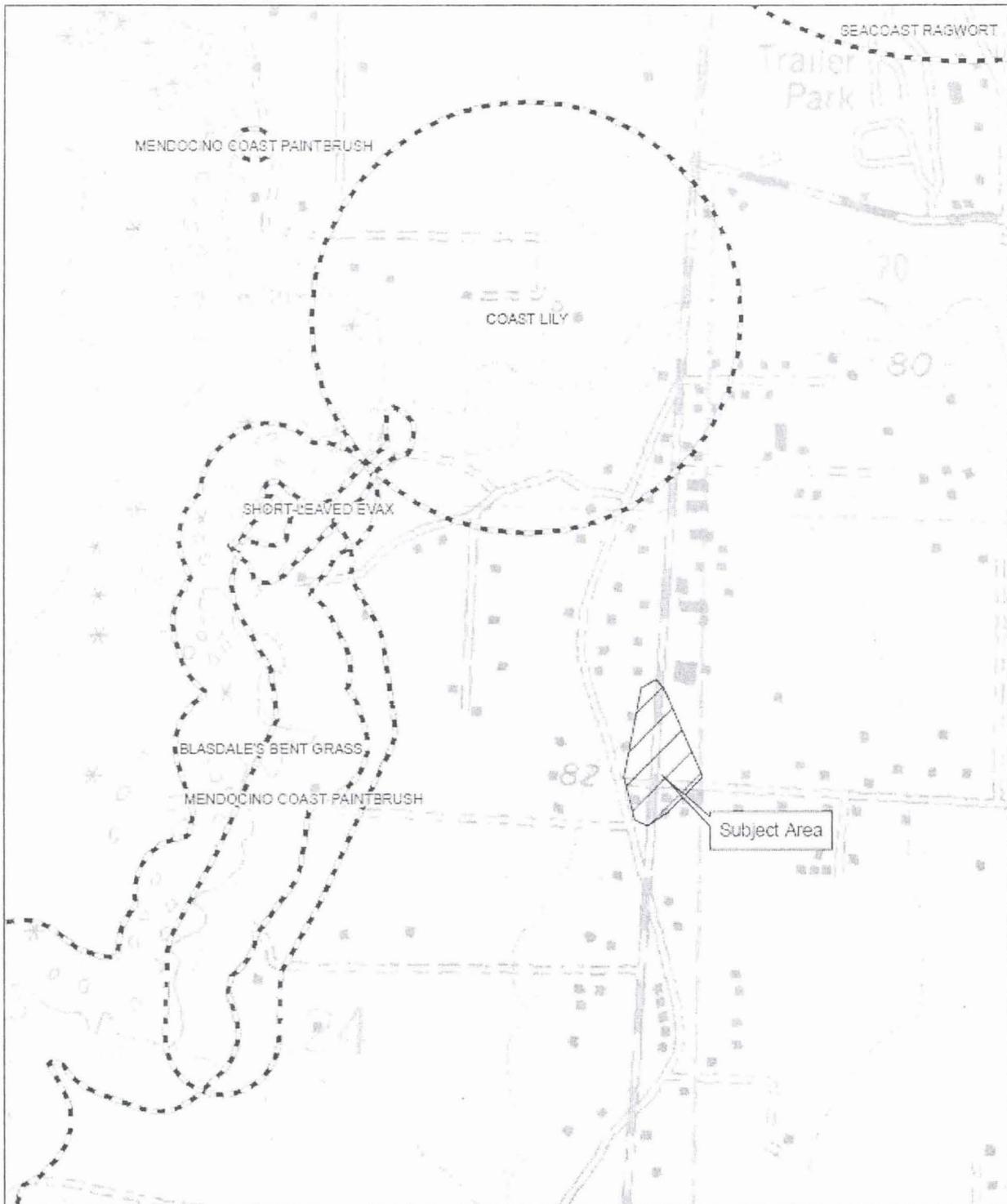
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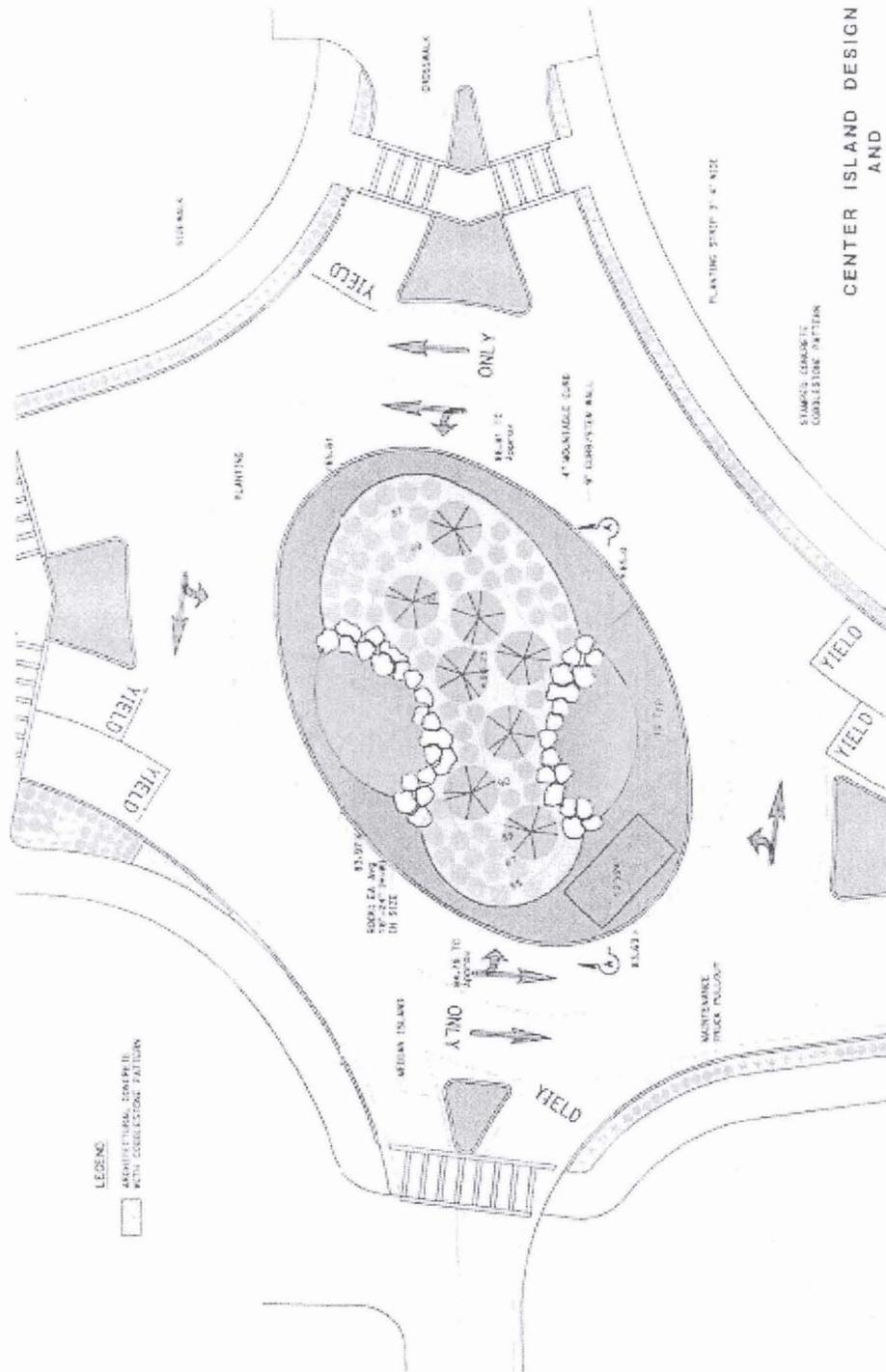
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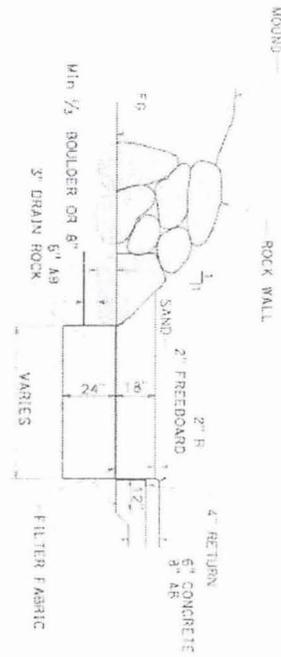
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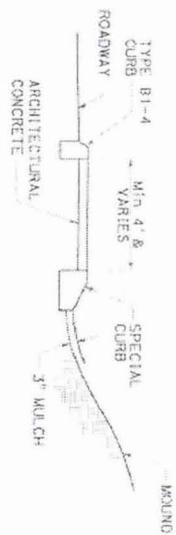


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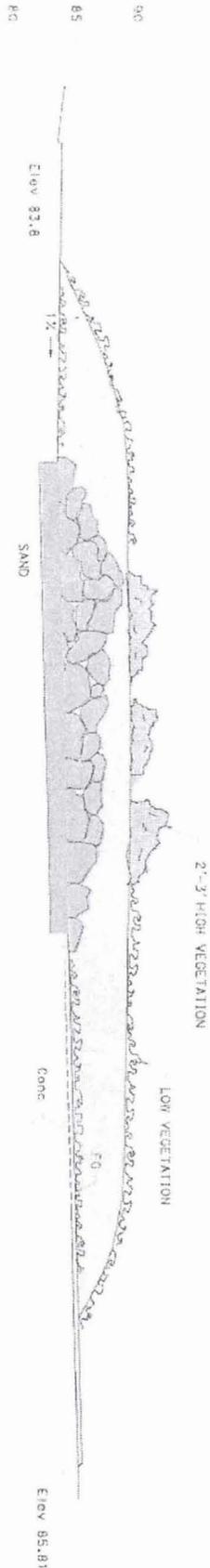




Wall Section



Concrete/Curb/Planting Area



Section A-A

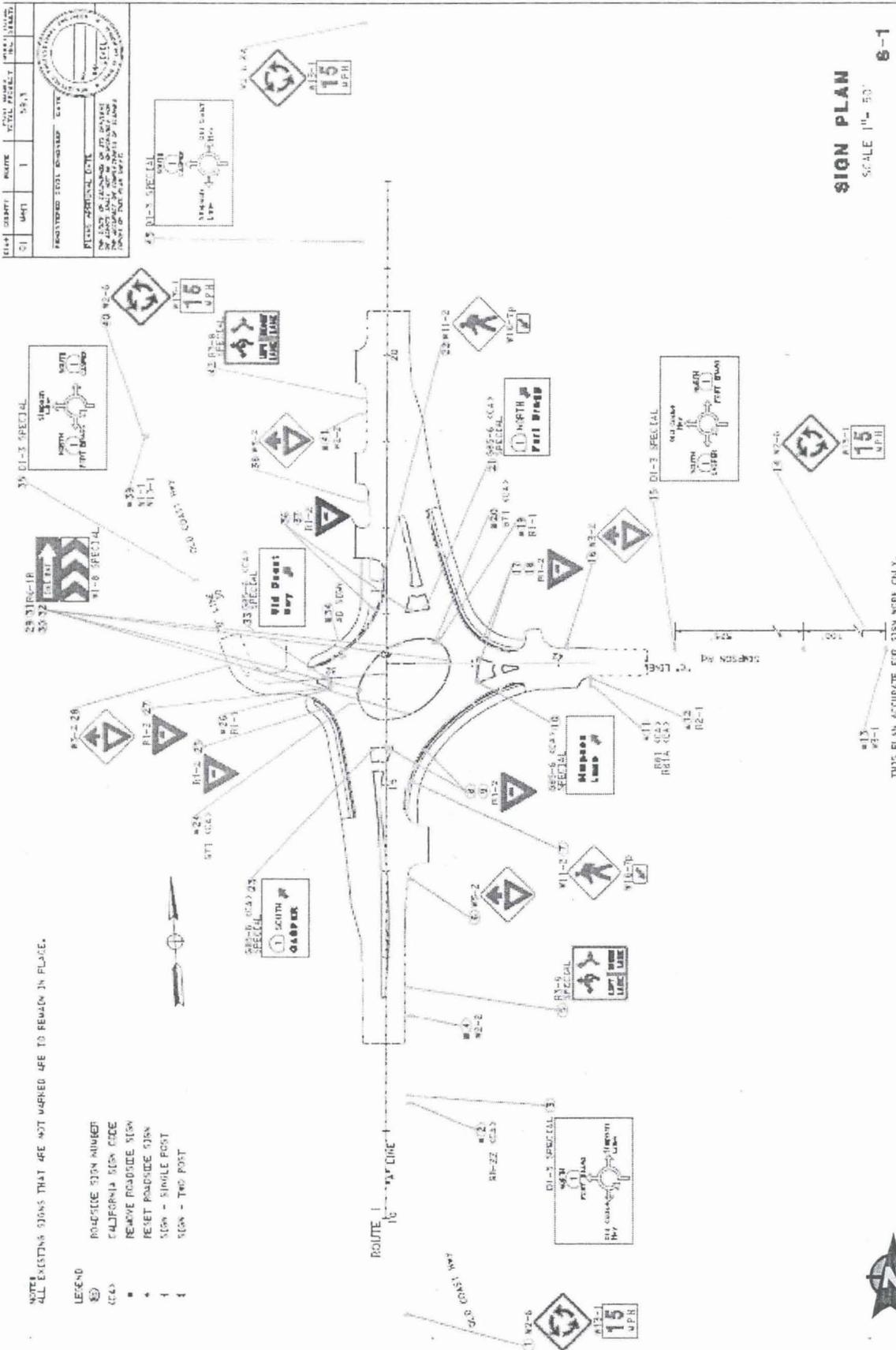
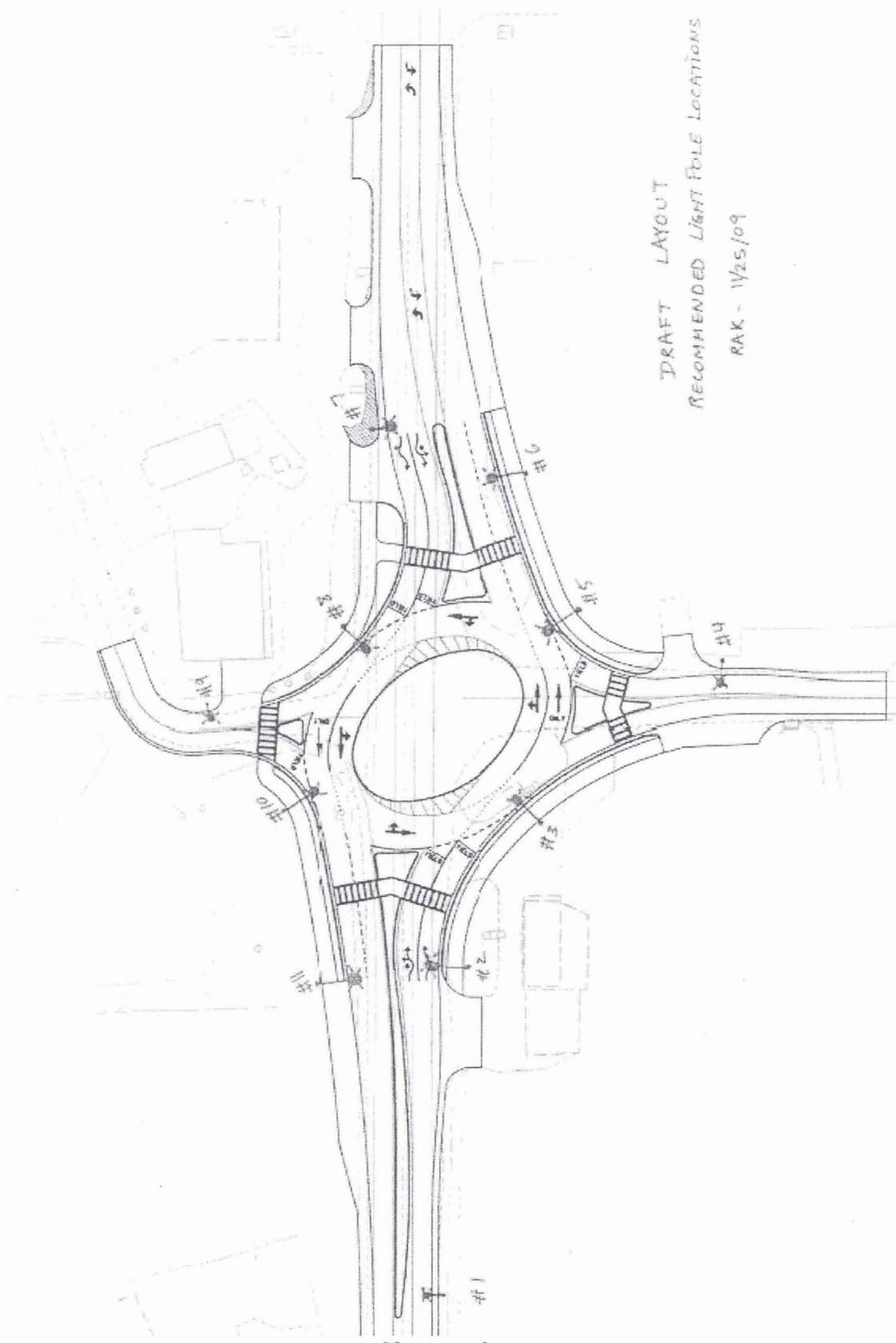


Exhibit I

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Draft Signage Plan



DRAFT LAYOUT
RECOMMENDED LIGHT POLE LOCATIONS
RAK - 11/25/09

Not to scale



Appendix A: Reduced Buffer Analysis
Excerpted from Wetlands/ESHA Assessment and Reduced Buffer Analysis dated September 2008
completed by Caltrans

REDUCED BUFFER ANALYSIS

The following information is a reduced buffer analysis as required by and outlined in Section 20.496.020 (a) through (k) of the Mendocino County Coastal Zoning Code.

Development Criteria	ESHA Site #4 - Riparian Area	ESHA Sites #2, #3, #5 - Riparian Areas	ESHA Site #1 - Bishop Pine Forest
<p>(A) Buffer Areas. A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from future developments and shall be compatible with the continuance of such habitat areas.</p>	<p>As required by this section of code, buffer areas are hereby being established in conjunction with the three onsite ESHAs. ESHA #4 would be the one ESHA most impacted by the project (with signal alternative).</p>	<p>As required by this section of code, buffer areas are hereby being established in conjunction with the three onsite ESHAs.</p>	<p>example: Buffer widths were analyzed based on current habitat conditions and surrounding areas.</p>
<p>(1) Width. The width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred (100) feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area. Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area.</p>	<p>A buffer of 100 feet around the riparian ESHA would be adequate to protect the riparian ESHA from proposed development in conjunction with existing structures. Since the highway and gas station occur within 50 feet of this ESHA, reducing the buffer size will not significantly change the nature of activities within this buffer. No new parcels would be created in this buffer. However, land may be transferred in this ESHA from the existing landowner to the State Highway in order to enable effective mitigation measures.</p>	<p>A buffer of 100 feet around the other riparian ESHAs would be adequate to protect these riparian ESHAs from proposed development. Since the highway occurs within 50 feet of this ESHA, reducing the buffer size will not significantly change the nature of construction activities within this buffer.</p>	<p>A buffer of 100 feet around the bishop pine ESHA would be adequate to protect this ESHA from proposed development. Since the highway occurs within 50 feet of this ESHA, reducing the buffer size will not significantly change the nature of activities within this buffer.</p>

Standards for determining the appropriate width of the buffer area are as follows:			
<p>(a) Biological Significance of Adjacent Lands. Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they are functionally related to these habitat areas. Functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance depends upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding, or resting).</p>	<p>The project vicinity of this riparian area is of relatively low biological value as it is dominated by invasive species. Development already exists in the ESHA buffer due to the highway, its drainage system, and the corner gas station. All drainages within the project vicinity appear to originate east of the project site, beyond the mapped and surveyed area, and are not biologically isolated from the project area.</p>	<p>The project vicinity is of relatively low biological value as it is dominated by invasive or ornamental species. Development already exists in the ESHA buffers due to the highway, its associated structures and nearby residences and businesses. All drainages within the project vicinity appear to originate east of the project site, beyond the mapped and surveyed area, and are not biologically isolated from the project area.</p>	<p>The project vicinity of the bishop pine is of relatively low biological value as it is dominated by invasive species such as Himalaya blackberries, English ivy and pampas grass. Development already exists in the ESHA buffer due to the highway and gas station.</p>
<p>Where a significant functional relationship exists, the land supporting this relationship shall also be considered to be part of the ESHA, and the buffer zone shall be measured from the edge of these lands and be sufficiently wide to protect these functional relationships. Where no significant functional relationships exist, the buffer shall be measured from the edge of the wetland, stream, or riparian habitat that is adjacent to the proposed development.</p>	<p>No significant functional relationship exists between the ESHA and the surrounding area.</p>	<p>No significant functional relationship exists between the ESHAs and the surrounding area.</p>	<p>No significant functional relationship exists between the ESHA and the surrounding area.</p>

<p>(b) Sensitivity of Species to Disturbance. The width of the buffer zone shall be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development. Such a determination shall be based on the following after consultation with the Department of Fish and Game or others with similar expertise:</p> <p>(i) Nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species;</p> <p>(ii) An assessment of the short-term and long-term adaptability of various species to human disturbance;</p> <p>(iii) An assessment of the impact and activity levels of the proposed development on the resource.</p>	<p>The project area does not support any known sensitive plant or animal species of concern, based upon record searches and field surveys by qualified biologists. Species located within the area are common species adapted to human disturbance. Avian species present are highly adaptable to human disturbance. The continued use of the project area by common species is expected to continue after the project is completed and all mitigation measures are in place. Highway development and related ground disturbance have a lengthy history at this location, and activities associated with the proposed development would not substantially change the future use of this area by common species.</p>	<p>The project area does not support any known sensitive plant or animal species of concern, based upon record searches and field surveys by qualified biologists. Species located within the area are common species adapted to human disturbance. Avian species present are highly adaptable to human disturbance. The continued use of the project area by common species is expected to continue after the project is completed and all mitigation measures are in place. Highway development and related ground disturbance have a lengthy history at this location, and activities associated with the proposed development would not substantially change the future use of this area by common species.</p>	<p>The project area does not support any other known sensitive plant or animal species of concern, based upon record searches and field surveys by qualified biologists. Species located within the area are common species adapted to human disturbance. Avian species present are highly adaptable to human disturbance. The continued use of the project area by common species is expected to continue after the project is completed and all mitigation measures are in place. Highway development and related ground disturbance have a lengthy history at this location, and activities associated with the proposed development would not substantially change the future use of this area by common species.</p>
<p>(c) Susceptibility of Parcel to Erosion. The width of the buffer zone shall be based, in part, on an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel and to what degree the development will change the potential for erosion. A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided.</p>	<p>The proposed developments within the buffer would not substantially contribute toward an increase in the potential for erosion. The highway work is slightly downhill from the ESHA in the vicinity of the proposed developments within the buffer.</p>	<p>The proposed developments within the buffers would not substantially contribute toward an increase in the potential for erosion.</p>	<p>The proposed development within the buffer would not substantially contribute toward an increase in the potential for erosion.</p>

<p>(d) Use of Natural Topographic Features to Locate Development. Hills and bluffs adjacent to ESHA's shall be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from ESHA's. Similarly, bluff faces should not be developed, but shall be included in the buffer zone.</p>	<p>The use of topographic features to buffer the proposed development is not an option. The development areas within the buffer are already existing. Additionally, there are no significant topographic features situated in between the proposed development and the ESHA.</p>	<p>The use of topographic features to buffer the proposed development is not an option. The development areas within the buffers are already existing.</p>	<p>The use of topographic features to buffer the proposed development is not an option. The development areas within the buffer are already existing.</p>
<p>(e) Use of Existing Cultural Features to Locate Buffer Zones. Cultural features (e.g., roads and dikes) shall be used, where feasible, to buffer habitat areas. Where feasible, development shall be located on the side of roads, dikes, irrigation canals, flood control channels, etc., away from the ESHA.</p>	<p>The use of existing cultural features to buffer the habitat area from the proposed development within the buffer is not an option. The development areas are already existing.</p>	<p>The use of existing cultural features to buffer the habitat areas from the proposed development within the buffer is not an option. The development areas are already existing.</p>	<p>The use of existing cultural features to buffer the habitat area from the proposed development within the buffer is not an option. The development areas are already existing.</p>
<p>(f) Lot Configuration and Location of Existing Development. Where an existing subdivision or other development is largely built-out and the buildings are a uniform distance from a habitat area, at least that same distance shall be required as a buffer zone for any new development permitted. However, if that distance is less than one hundred (100) feet, additional mitigation measures (e.g., planting of native vegetation) shall be provided to ensure additional protection. Where development is proposed in an area that is largely undeveloped, the widest and most protective buffer zone feasible shall be required.</p>	<p>The proposed developments within the buffer area are in existing development areas. All new development not associated with existing structures is proposed to be located outside the 100 foot buffer area, as is required.</p>	<p>The proposed developments within the buffer area are in existing development areas. All new development not associated with existing structures is proposed to be located outside the 100 foot buffer area, as is required.</p>	<p>The proposed developments within the buffer area are in existing development areas. All new development not associated with existing structures is proposed to be located outside the 100 foot buffer area, as is required.</p>

<p>(g) Type and Scale of Development Proposed. The type and scale of the proposed development will, to a large degree, determine the size of the buffer zone necessary to protect the ESHA. Such evaluations shall be made on a case-by-case basis depending upon the resources involved, the degree to which adjacent lands are already developed, and the type of development already existing in the area.</p>	<p>The proposed project consists of highway work including road widening and drainage improvements. With the signalization alternative, while there will be substantial impacts to ESHA buffer areas, the proposed mitigation and restoration measures will, at a minimum, return the site to its current condition. The roundabout alternative will have much less impact in the ESHA buffer. Utility relocations may cause minor impacts with either alternative.</p>	<p>The proposed project consists of highway work including road widening and drainage improvements. With the signalization alternative, there will be minor temporary impacts to these ESHA buffer areas. The roundabout alternative will have even less impact in the ESHA buffers.</p>	<p>The proposed project consists of highway work including road widening and drainage improvements. Under both alternatives, there will be minor temporary impacts to the ESHA buffer area.</p>
<p>(2) Configuration. The buffer area shall be measured from the nearest outside edge of the ESHA (e.g., for a wetland from the landward edge of the wetland; for a stream from the landward edge of riparian vegetation or the top of the bluff).</p>	<p>The buffer is measured from the nearest outside edge of the ESHA.</p>	<p>The buffer is measured from the nearest outside edge of the ESHA.</p>	<p>The buffer is measured from the nearest outside edge of the ESHA.</p>
<p>(3) Land Division. New subdivisions or boundary line adjustments shall not be allowed which will create or provide for new parcels entirely within a buffer area.</p>	<p>No new subdivisions are proposed in conjunction with this development. The boundary line between the highway and the adjacent landowner may be adjusted to accommodate on-site mitigation needs.</p>	<p>No new subdivisions or boundary line adjustments are proposed in conjunction with this development which would affect these ESHAs.</p>	<p>No new subdivisions or boundary line adjustments are proposed in conjunction with this development which would affect this ESHA.</p>
<p>(4) Permitted Development. Development permitted within the buffer area shall comply at a minimum with the following standards:</p>			

<p>(a) Development shall be compatible with the continuance of the adjacent habitat areas by maintaining the functional capacity, their ability to be self-sustaining and maintain natural species diversity.</p>	<p>The proposed development would not significantly impact the functional capacity of the habitat area or the habitat areas ability to be self-sustaining and maintain species diversity.</p>	<p>The proposed development would not significantly impact the functional capacity of the habitat area or the habitat areas ability to be self-sustaining and maintain species diversity.</p>	<p>The proposed development would not significantly impact the functional capacity of the habitat area or the habitat areas ability to be self-sustaining and maintain species diversity.</p>
<p>(b) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.</p>	<p>Development already exists in the vicinity of the proposed buffer area developments. Alternative siting is not an option.</p>	<p>Development already exists in the vicinity of the proposed buffer area developments. Alternative siting is not an option.</p>	<p>Development already exists in the vicinity of the proposed buffer area developments. Alternative siting is not an option.</p>
<p>(c) Development shall be sited and designed to prevent impacts which would degrade adjacent habitat areas. The determination of the best site shall include consideration of drainage, access, soil type, vegetation, hydrological characteristics, elevation, topography, and distance from natural stream channels. The term "best site" shall be defined as the site having the least impact on the maintenance of the biological and physical integrity of the buffer strip or critical habitat protection area and on the maintenance of the hydrologic capacity of these areas to pass a one hundred (100) year flood without increased damage to the coastal zone natural environment or human systems.</p>	<p>The proposed developments within the buffer would not have a significant impact on the adjacent habitat area. The "best site" with the least environmental impact for these developments is the areas in which the developments already exists. Re-siting the proposed developments would result in a greater impact the the environment than allowing developmental improvements to happen in place.</p>	<p>The proposed developments within the buffer would not have a significant impact on the adjacent habitat area. The "best site" with the least environmental impact for these developments is the areas in which the developments already exists. Re-siting the proposed developments would result in a greater impact the the environment than allowing developmental improvements to happen in place.</p>	<p>The proposed developments within the buffer would not have a significant impact on the adjacent habitat area. The "best site" with the least environmental impact for these developments is the areas in which the developments already exists. Re-siting the proposed developments would result in a greater impact the the environment than allowing developmental improvements to happen in place.</p>
<p>(d) Development shall be compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.</p>	<p>The developments would compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.</p>	<p>The developments would compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.</p>	<p>The developments would compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.</p>

<p>(e) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1, which are lost as a result of development under this solution.</p>	<p>The project proposes to replace existing highway facilities. No other feasible location is available for development. If needed, mitigation shall include re-vegetation of native species currently found on-site at a minimum ratio of 2:1.</p>	<p>The project proposes to replace existing highway facilities. No other feasible location is available for development. If needed, mitigation shall include re-vegetation of native species currently found on-site at a minimum ratio of 2:1.</p>	<p>The project proposes to replace existing highway facilities. No other feasible location is available for development. If needed, mitigation shall include re-vegetation of native species currently found on-site at a minimum ratio of 2:1.</p>
<p>(f) Development shall minimize the following: impervious surfaces, removal of vegetation, amount of bare soil, noise, dust, artificial light, nutrient runoff, air pollution, and human intrusion into the wetland and minimize alteration of natural landforms.</p>	<p>The proposed development would minimize the amount of added impervious surface area, limit the removal of vegetation to only those areas requiring grading, treat all bare soil with erosion control, limit most construction noise to daytime hours and utilize equipment equipped with appropriate mufflers, and utilize dust palliatives whenever necessary. The proposed development would cause no increase in artificial light, or nutrient runoff, or air pollution.</p>	<p>The proposed development would minimize the amount of added impervious surface area, limit the removal of vegetation to only those areas requiring grading, treat all bare soil with erosion control, limit most construction noise to daytime hours and utilize equipment equipped with appropriate mufflers, and utilize dust palliatives whenever necessary. The proposed development would cause no increase in artificial light, or nutrient runoff, or air pollution.</p>	<p>The proposed development would minimize the amount of added impervious surface area, limit the removal of vegetation to only those areas requiring grading, treat all bare soil with erosion control, limit most construction noise to daytime hours and utilize equipment equipped with appropriate mufflers, and utilize dust palliatives whenever necessary. The proposed development would cause no increase in artificial light, or nutrient runoff, or air pollution.</p>
<p>(g) Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.</p>	<p>If needed, mitigation for loss of riparian vegetation shall include re-vegetation of native species currently found on-site at a minimum ratio of 2:1.</p>	<p>No riparian or wetland vegetation would be lost in these buffer areas as a result of this development.</p>	<p>No riparian or wetland vegetation would be lost in this buffer area.</p>
<p>(h) Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.</p>	<p>The proposed developments within the buffer would not present a significant impediment to surface water flows.</p>	<p>The proposed developments within the buffer would not present a significant impediment to surface water flows.</p>	<p>The proposed developments within the buffer would not present a significant impediment to surface water flows.</p>

<p>(i) Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.</p>	<p>Upon completion of the proposed project and associated mitigation, there should be no interference with the hydrologic processes or biological diversity on site. Hydraulic capacity should improve with the proposed drainage system repairs</p>	<p>Upon completion of the proposed project and associated mitigation, there should be no interference with the hydrologic processes or biological diversity on site. Hydraulic capacity should improve with the proposed drainage system repairs</p>	<p>Upon completion of the proposed project and associated mitigation, there should be no interference with the hydrologic processes or biological diversity on site. Hydraulic capacity should improve with the proposed drainage system repairs</p>
<p>(j) Priority for drainage conveyance from a development site shall be through the natural stream environment zones, if any exist, in the development area. In the drainage system design report or development plan, the capacity of natural stream environment zones to convey runoff from the completed development shall be evaluated and integrated with the drainage system wherever possible. No structure shall interrupt the flow of groundwater within a buffer strip. Foundations shall be situated with the long axis of interrupted impermeable vertical surfaces oriented parallel to the groundwater flow direction. Piers may be allowed on a case by case basis.</p>	<p>The proposed development would not change or impact any drainage patterns or flow.</p>	<p>The proposed development would not change or impact any drainage patterns or flow.</p>	<p>The proposed development would not change or impact any drainage patterns or flow</p>

<p>(k) If findings are made that the effects of developing an ESHA buffer area may result in significant adverse impacts to the ESHA, mitigation measures will be required as a condition of project approval. Noise barriers, buffer areas in permanent open space, land dedication for erosion control, and wetland restoration, including off-site drainage improvements, may be required as mitigation measures for developments adjacent to environmentally sensitive habitats. (Ord. No. 3785 (part), adopted 1991)</p>	<p>The proposed developments within the 100 foot buffer of the ESHA would not result in any significant adverse impacts to the ESHA. Mitigation required in association with the proposed developments proposed within the 100 foot buffer of the ESHA will further ensure that the ESHA is adequately protected.</p>	<p>The proposed developments within the 100 foot buffer of the ESHAs would not result in any significant adverse impacts to the ESHA. Mitigation required in association with the proposed developments proposed within the 100 foot buffer of the ESHA will further ensure that the ESHA is adequately protected.</p>	<p>The proposed developments within the 100 foot buffer of the ESHA would not result in any significant adverse impacts to the ESHA. Mitigation required in association with the proposed developments proposed within the 100 foot buffer of the ESHA will further ensure that the ESHA is adequately protected.</p>
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CONCLUSIONS

Temporary impacts to ESHA #4 may occur due to utility relocations with either alternative, which would be mitigated with revegetation. Permanent impacts to ESHA #4 will occur if the signalization alternative is selected. This would be mitigated with extensive native revegetation on site. The roundabout alternative should not have any permanent impact on ESHA #4. There will be no permanent impacts to any other ESHA detailed within this report as a consequence of the proposed highway project.