

Chapter 4 – Alternatives Analysis

4.1 Introduction

The California Environmental Quality Act (CEQA), §15126.6(a), requires an Environmental Impact Report (EIR) to “describe a reasonable range of alternatives to a project, or to the location of a project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.” The CEQA Guidelines provide direction for the discussion of alternatives to the proposed project. This section also requires:

- A setting forth of alternatives that “...shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.” [15126.6(f)]
- Discussion of the "No Project" alternative, and “...If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” [15126.6(e)(2)]
- Discussion and analysis of alternative locations “...that would avoid or substantially lessen any of the significant effects of the project” only these need to be considered for inclusion in the EIR. [15126.6(f)(2)(A)]
- “Prior to approval of the proposed subsequent project, the lead agency shall incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR and provide notice in the manner required by §15087.” [15177 (d)]

Given the CEQA mandates listed above, this section (1) describes the range of reasonable alternatives to the project; (2) examines and evaluates resource issue areas where significant adverse environmental effects have been identified and compares the impacts of the alternatives to those of the proposed project; and, (3) identifies the Environmentally Superior Alternative.

4.2 Alternatives Selection

In defining feasibility of alternatives the CEQA Guidelines state: “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.” Through the scoping process, if an alternative was found to be infeasible, as defined above, then it was dropped from further consideration. In addition, CEQA states that alternatives should “...attain most of the basic objectives of the project...”

Significant Impacts Resulting from the Proposed Project

Generally, the alternatives analysis considers alternatives that would avoid or reduce, to the maximum extent feasible, the identified unavoidable impacts. However it was determined that the proposed project would not result in any unavoidable impacts. Therefore the alternatives considered focused on avoiding or reducing the significant impacts which require the most intensive mitigation measures. They include:

1. Biological Resources. Impacts to ESHA, jurisdictional features, sensitive plant species, and sensitive wildlife.
2. Cultural Resources. Impacts to intact cultural resources including the Fort Bragg Native American Archaeological District, and the Offshore Monument.
3. Water Quality and Hydrology. Significant potential erosion and hydrologic alteration.

4.3 Alternatives Considered

Potential alternatives to the proposed project are limited due to the relatively narrow corridor available for development and the type of project proposed (i.e., coastal trail). Criteria used to develop potential alternatives included the potential of the project to avoid impacts to sensitive resources and the human environment, whether or not it could generally meet the project objectives, and costs. Specific consideration was given to potential alternatives that appeared to avoid or minimize impacts to ESHAs, cultural resources, and drainage.

At an early stage in the development of alternatives, various “inland realignment” alternatives, which would move the components of the project farther east onto the Mill Site, were considered in an effort to avoid cultural resource impacts and the effects of bluff erosion. However, the heavy distribution of cultural resources which exists at the North and South Parkland are found throughout much of the Mill Site as well; therefore no substantial reduction in cultural resources potential impacts would be achieved. In addition, the Mill Site includes a number of other constraints, including soil contamination and ongoing remediation activities that are expected to continue through at least 2015. An inland alignment would require a more intensive stormwater management system, due to the conditions at the Mill Site. Further, because the project is a coastal trail, trail users would have a high expectation that the trail would provide coastal access; therefore an inland realignment would only invite users to develop a network of unauthorized volunteer trails to the bluff edge and beach, as has happened at the Glass Beach Headlands, thereby directly or indirectly impacting sensitive biological and cultural resources.

Ultimately, only two feasible alternatives, the No Project (No Action) Alternative and the Reduced Trail Alternative, appeared to meet the criteria. The Reduced Trail Alternative shares many of the design features of the proposed project, but are scaled down. Both alternatives are described in more detail below.

4.3.1 No Project Alternative

The No Project Alternative would include none of the components of the proposed project. If the project site were not developed, stormwater erosion and bluff retreat would continue as it does currently, resulting in additional asphalt and other construction materials entering the ocean. Expansion of nonnative invasive species across the Mill Site Parkland areas would continue. Because the Mill Site is nearly completely decommissioned, trespass may increase, and the development of volunteer trails and beach access points would increase. Cultural

resources may benefit from the No Project Alternative as they are currently beneath the asphalt on the Mill Site, somewhat protected from degradation and theft.

4.3.2 Reduced Trail Alternative

4.3.2.1 Glass Beach Drive

To avoid disturbance of an existing drainage swale running along the western edge of Glass Beach Drive, the Reduced Trail Alternative would locate the proposed multi-use trail entirely within the existing paved portion of the existing road. As currently configured, Glass Beach Drive is approximately 34 ft. wide and includes a two travel lanes and approximately 8 ft. of parking along the eastern edge. The Reduced Trail Alternative would include re-striping the pavement to include two 10-ft travel lanes, and an 8-ft wide multi-use trail and a 2-ft recovery zone between the northbound travel lane and the existing sidewalk. The remaining 4 ft. of pavement on the western edge of the road would be removed to accommodate a pedestrian trail. This alternative would not require any stormwater improvements to Glass Beach Drive.

4.3.2.2 Elm Street Extension and Parking Area

The Reduced Trail Alternative would be identical to what is currently proposed.

4.3.2.3 North Parkland

The Reduced Trail Alternative would reduce the trail development on the North Parkland. It would include the 3,455-ft long primary multi-use trail but not the secondary trails. As a result, there would be a reduction in signage and benches necessary. The proposed cable stairs to the beach would remain.

4.3.2.4 South Parkland

As with the North Parkland, the Reduced Trail Alternative would only include the proposed approximately 5,900-ft long multi-use trail, not the secondary trails. Other improvements would remain as proposed, although there would be a corresponding reduction in signage and benches due to the reduced length of the trail system.

4.3.2.5 Earthwork and Areas of Disturbance

The earthwork required to construct the Reduced Project is less than the proposed project, however considering that the restoration of the Mill Site comprises the bulk of the earthwork, the reductions are relatively limited. The largest reductions in earthwork would be associated with a shorter Elm Street extension and no new improvements along Glass Beach Drive. The areas of permanent disturbance would be reduced compared to the proposed project as the secondary trails within the North and South Parkland would not be included in this alternative.

4.4 Alternatives Impacts Analysis

4.4.1 No Project Alternative

Aesthetic/Visual Resources

Under the No Build Alternative, no physical improvements would occur, including restoration actions. This alternative would not result in adverse impacts; however it would also not result in the beneficial impacts which include increased access to scenic vistas and enhancement of the onsite aesthetic resources.

Air Quality

The No Project Alternative would not include any construction activities and therefore would not result in any adverse effects to air quality.

Biological Resources

Biological resources would not be directly impacted by the No Project Alternative. Bluff retreat would reduce the remnant habitats which exist on the extreme western edges of the North and South Parkland. Access to the North and South Parkland must be permitted, as the Coastal Conservancy funds to acquire the property mandate public access. Public access with no constructed project would likely result in long-term disturbances to wildlife species found at the bluff edge and rocky shorelines of the Mill Site. Impacts would potentially be greater than the proposed project as access would not be directed and controlled by the location of the trail improvements, signage, and resource fencing. Unlike the proposed project, this alternative would not include any restoration, and therefore would not result in beneficial impacts to biological resources.

Climate Change

The No Project Alternative would not result in significant greenhouse gas emissions or require substantial amounts of energy as nothing would be constructed.

Cultural Resources

Because this alternative would not include any ground disturbance, the No Project Alternative would not result in direct or indirect impacts to cultural resources. However, accelerated bluff retreat and erosion at the North and South Parklands, caused by extensive paving and consequential stormwater impacts, would continue to expose and destroy cultural resources which exist there.

Geology and Soils

The No Project Alternative would not include any improvements within the Mill Site and therefore no adverse impacts would occur there. Erosion of the bluff would occur at rates similar to the present rates on the Mill Site because no stormwater runoff controls would be constructed. The existing retreat rates are potentially higher than the proposed project because the proposed project would increase onsite infiltration and better control stormwater runoff.

Hazards and Hazardous Materials

This alternative would not require the use of hazardous materials. No significant impacts would result.

Hydrology and Water Quality

The No Project Alternative would not include the increased impervious surface associated with the proposed Glass Beach Drive component of the project; however, it would also not include the restoration and stormwater improvements of the proposed project which decrease impervious surfaces, such as compacted gravel and asphalt on the Mill Site and allow for more natural “treatment” of stormwater.

Land Use

The No Project Alternative would not include any changes to community connectivity. It would not change land use designations or types, and therefore would not conflict with any applicable policies. No impact to land use would result.

Transportation and Circulation

This alternative would not include construction activities, and therefore would not include short-term impacts. The No Build Alternative would not change existing traffic volumes or distribution. No adverse impacts would result. It would also not include the beneficial impacts associated with the expansion of the alternative transportation network in Fort Bragg. This alternative would not include new improvements or alter existing parking capacities.

4.4.2 Reduced Trail Alternative

Aesthetic/Visual Resources

From a visual resources perspective, this alternative would result in similar impacts as the proposed project. This alternative would result in beneficial impacts similar to the proposed project as it would restore native habitat on the North and South Parklands.

Air Quality

The Reduced Trail Alternative would require less construction; however it would still include the majority of the earthwork and soil hauling described previously for the proposed project. Impacts and mitigation measures would be similar to the proposed project.

Biological Resources

This alternative would reduce direct impacts to biological resources as it would have a smaller area of permanent disturbance. The Reduced Trail Alternative would include the beneficial impacts of the proposed project, such as increasing habitat at the North and South Parkland.

Because trail users would continue to be drawn to the coast, this alternative, which does not include the proposed trails closest to the coast, may result in the development of new volunteer trails throughout the project. This would result in disturbance to sensitive habitats and plant species, perhaps to a greater degree than the proposed project.

Climate Change

Similar to the proposed project, the Reduced Trail Alternative would have less than significant climate change impacts. The production of greenhouse gases (GHG) would occur primarily during construction, and be short-term. The trail system would provide an alternative to using the automobile to get from north of Pudding Creek and the City of Fort Bragg, potentially reducing automobile use to some degree.

Cultural Resources

The Reduced Trail Alternative would not reduce direct permanent impacts to cultural resources associated with side trail development as the project is designed to minimize impacts on native soils and constituent cultural resources. Impacts from construction of the primary multi-use trail would have the same impacts as the proposed project. The development of an informal trail network could result in bluff erosion, potentially exposing cultural resources to looting and erosion.

Geology and Soils

The Reduced Trail Alternative would have impacts similar to the proposed project except in regard to bluff erosion. The North and South Parkland components of the Reduced Trail Alternative would not include the secondary trails or overlooks, and therefore less of the project would potentially be adversely impacted by bluff retreat.

Hazards and Hazardous Materials

This alternative is located within the same project area, and therefore the remediation clearance discussed for the proposed project would also apply to this alternative as would the soil management plan. No adverse impacts would result.

Hydrology and Water Quality

The Reduced Trail Alternative would not include the proposed Glass Beach Drive improvements. The proposed stormwater improvements would be the same. In total, the Reduced Trail Alternative, because of the significant restoration proposed would have similar beneficial impacts to the proposed project.

Land Use

The Reduced Trail Alternative would exist within the same land use designations and include the same land use (i.e., recreation). Similar to the proposed project, this alternative would potentially connect portions of the community, not divide them, and is generally consistent with applicable policy.

Transportation and Circulation

The Reduced Trail Alternative would include the restoration components of the proposed project and therefore the total number of truck trips would be similar. Because this alternative would not include as much trail construction, it may result in marginally fewer employee trips and construction activity. This alternative would include improvements that are likely to affect traffic patterns similar to the proposed project. The reduced trail component would potentially attract fewer users, especially bicyclists, as compared to the proposed project.

This alternative would include the same number of parking spaces as the proposed project. No adverse impacts would result.

4.5 Environmentally Superior Alternative

CEQA requires the alternatives section of an EIR to describe a reasonable range of alternatives to the project that avoid or substantially lessen any of the significant effects identified in the EIR analysis while still attaining most of the basic project objectives. The alternative that most effectively reduces impacts while meeting project objectives should be considered the “environmentally superior alternative.” In the event that the No Project Alternative is considered

the environmentally superior alternative, the EIR should identify an environmentally superior alternative among the other alternatives.

In this EIR the No Project Alternative results in marginally fewer environmental impacts than the proposed project or the project alternatives, although it does not meet any of the project objectives, nor does it produce any of the beneficial impacts of the proposed project, such as habitat restoration, improved stormwater management, or reduced erosion at the North and South Parklands.

Neither the proposed project nor either alternative result in significant, unavoidable impacts. Despite the smaller scale of the Reduced Trail Alternative it only marginally reduces the intensity of impacts. Mitigation for cultural, biological, stormwater resources would still be required. The Reduced Trail Alternative would avoid disturbance of the wetlands along Glass Beach Drive. By removing many of the secondary trails, and the cable stairs, and by placing the parking area closer to the current end of Elm Street, the Reduced Trail Alternative would result in fewer improvements being subject to the effects of bluff retreat.

At the same time, because any coastal trail project inherently suggests that coastal access is provided, removal of the secondary trails and cable stairs in the Reduced Trail Alternative may invite trail users to access the coast through the use of unauthorized trails. This type of activity, which can result in trampling of vegetation, accelerated erosion, and introduction of invasive species, can have significant impacts on sensitive biological resources. The Historic Properties Survey Report (HPSR) (Van Bueren 2011) prepared for the project notes that cultural resources would be impacted from unauthorized trail development as well. It states, “by eliminating some planned trails, for example, informal trails are more likely to be propagated. That would result in uncontrolled impacts to many sites.”

Based strictly on an analysis of the relative environmental impacts, neither the proposed project, the Reduced Trail Alternative, nor the No Project Alternative is clearly an environmentally superior alternative. The proposed project, by default, would more effectively meet all of the project objectives and two of them in particular:

- 1(c). “Establishment of a designated trail system that maximizes the user’s contact with the coastline and ocean views while avoiding or minimizing impacts to sensitive natural and cultural resources; and
3. “Incorporate the trail design and comments from the three-day trails workshop held by the City of Fort Bragg in September 2006 and three follow-up meetings with the City Council.”

As a result, the proposed project is considered the Environmentally Superior Alternative.

Chapter 5 – Mitigation Monitoring Program

5.1 Statutory Requirement

When a Lead Agency makes findings on significant environmental effects identified in an Environmental Impact Report (EIR), the agency must also adopt a “reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment” (Public Resources Code §21081.6(a) and California Environmental Quality Act [CEQA] Guidelines §15091(d) and §15097). The Mitigation Monitoring Program (MMP) is implemented to ensure that the mitigation measures and project revisions identified in the EIR are implemented. Therefore, the MMP must include all changes in the proposed project either adopted by the project proponent or made conditions of approval by the Lead or Responsible Agency.

5.2 Administration of the Mitigation Monitoring Program

The City of Fort Bragg (City) is the Lead Agency responsible for the adoption of the MMP. Until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that the implementation of the measure occurs in accordance with the program. The City will retain responsibility for implementation of all mitigation measures for the City’s portion of the project.

5.3 Mitigation Measures and Monitoring Program

Table 5-1 on the following pages is structured to enable quick reference to mitigation measures and the associated monitoring program based on the environmental resource. The numbering of mitigation measures correlates with numbering of measures found in the analysis chapter of this Subsequent EIR (refer to Chapter 3).

In some cases mitigation measures recommended in the Subsequent EIR are relevant only to particular components of the project. Efforts have been made in Table 5-1 to identify any measures that are only applicable to an individual component.

The Reduced Trail Alternative reduces the scope of the proposed project; however, it does not result in any new impacts. Therefore, the measures below would be applicable to the alternative as well.

Table 5-1 Mitigation and Monitoring Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
<i>Air Quality</i>					
AQ/mm-1	<p>The project contractor, on behalf of the project applicant, shall prepare a dust control plan for construction activities at the project site pursuant to the requirements of the MCAQMD. The project contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of construction and maintenance activities at the project site. The dust control plan shall include the following measures:</p> <ul style="list-style-type: none"> a. Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emissions. b. All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving the property boundaries or causing a public nuisance of an ambient air standard. Watering should occur at least twice daily, however frequency of watering shall be based on the type of operation, soil, and wind exposure. c. All on-site vehicle traffic shall be limited to a speed of 15 miles per hour on unpaved roads. d. All trucks hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard. e. All land clearing, grading, earth moving, and/or excavation activities shall be suspended as necessary, based on site conditions, to prevent excessive windblown dust when winds are expected to exceed 20 miles per hour. f. Excavation and grading activities shall be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads. 	Prepare and implement a dust control plan for construction activities	City of Fort Bragg	Review plan and onsite monitoring	Prior to and during construction

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>g. All inactive portions of the construction site, including soil stockpiles, shall be covered, seeded, or watered until a suitable cover is established. Alternatively, apply City approved nontoxic soil stabilizers (according to manufacturers' specifications) to all inactive construction areas (previously graded areas that remain inactive for four consecutive days). Acceptable materials that may be used for chemical soil stabilization include petroleum resins, asphaltic emulsions, acrylics, and adhesives that do not violate Regional Water Quality Control Board (RWQCB) or California Air Resources Board (CARB) standards.</p> <p>h. Paved areas adjacent to construction sites (the abandoned runway) shall be swept or washed as required to remove excess accumulations of silt and/or mud, which may have resulted from grading and construction activities at the project site.</p> <p>i. The project proponent shall re-establish ground cover on all disturbed portions of the project site through seeding and watering in accordance with the City of Fort Bragg Grading Ordinance and Local Coastal Program, which requires the application of native seed or terminal seed.</p> <p>j. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24-hours. The telephone number of the MCAQMD shall also be visible to ensure compliance with the Fugitive Dust Emissions requirements.</p> <p>k. Construction workers shall park in designated parking area(s) to help reduce dust emissions.</p>				
Land Use					
LU/mm-2:	LU/mm-2: Site access during the marine mammal pupping season shall be prohibited if marine mammal pups are in evidence, unless the appropriate federal permits have been obtained. During the Marine Mammal Pupping season, City staff shall complete a marine mammal survey to determine if pups are present and shall prohibit all Native American and City Staff access if pups are present and install a sign warning of that condition.	Implement marine mammal survey and institute appropriate access controls during pupping season	City of Fort Bragg Public Works Department	Survey	Survey must occur during pupping season each year.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
LU/mm-3:	In order to protect the botanical resources on the site, access shall be limited to twenty people at one time. No camping, picnicking, games, or other activities that would result in excessive trampling of the vegetation is permitted. Use shall be limited to walking, collecting, gathering and small gatherings of twenty or fewer people. No vehicular access is permitted.	Periodic inspection of the site by City Police to ensure compliance with mitigation measure.	City of Fort Bragg Police Department	Visual survey of site.	Periodic visual survey of site on an ongoing basis
Cultural Resources					
AR/mm- 1	The City shall hire an archaeologist to prepare a Data Collection Plan for unavoidable impacts to cultural resources. The City will consult with Sherwood Valley Rancheria on the Data Collection Plan contents and protective measures. The Data Collection Plan will be followed prior to, during and after construction. All protective measures identified within the Data Collection Plan, including presence of tribal monitors during all data collection activities shall be incorporated into the plans, specifications and estimates for the project. The City and its contractors will follow the Environmentally Sensitive Action Plan Post Discovery Action Plan and the Monitoring Plan prepared for this project as part of the Data Collection Plan.	Hire archaeologist to prepare Data Collection Plan. Implement Data Collection prior to construction of Northern Trail segment in consultation with SVR.	City of Fort Bragg Community Development Department Sherwood Valley Rancheria	Data Collection Plan	Data Collection to occur prior to construction
AR/mm-2	The City of Fort Bragg's cultural resources consultant (archaeologist) shall assist in implementation of all cultural resources mitigation measures.	Hire archaeologist to prepare Data Collection Plan. Implement Data Collection prior to construction of Northern Trail segment.	City of Fort Bragg Community Development Department	Data Collection Plan	Completed by December 2013
AR/mm-3	To protect cultural resources the City of Fort Bragg shall prepare an Environmentally Sensitive Area (ESA) action plan prior to construction. The plan shall be implemented prior to, during and after construction, as applicable. The plan shall include the following measures: Prior to Construction 1) ESA action plans for the significant historic and archaeological resources identified shall be clearly described and illustrated in the final construction plans and specifications prepared to guide construction of the project. Protective measures shall be adequately specified and appropriately scheduled in construction document specifications. The City will consult with SVR at the 90% design stage to ensure that	Prepare and implement ESA Action Plan in consultation with SVR.	City of Fort Bragg Community Development Department	Plan	Prior to and during construction

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>this mitigation measure is carried out.</p> <p>2) A qualified cultural resources consultant shall review all construction plans to ensure ESA locations and protective measures are correctly identified on project plans and specifications.</p> <p>3) Cultural resources specialists, including tribal monitors, shall attend relevant hand-off meetings with construction contractors to ensure that ESA commitments are addressed.</p> <p>4) ESA action plans will be discussed during the preconstruction meeting. The importance of ESA action plans will be discussed with construction personnel and it will be stressed that no native soil disturbing construction activity should occur within the ESAs. Additionally, construction personnel will be informed of historic preservation laws that protect archaeological sites against any disturbance or removal of artifacts.</p> <p>5) The archaeologist will be notified at least three weeks in advance of ground disturbing construction activities within ESAs to ensure they will be available to monitor/review installation of ESA protection and ensure they are in proper locations. A construction schedule will be provided to the archaeological monitor detailing when grading and other excavations will occur within ESAs three weeks before such activities begin.</p> <p>6) One week prior to initiating any native soils disturbance within an ESA, the archaeologist will: 1) perform a field review of completed installation of ESA protections (permanent and/or temporary plastic fencing, chalk marks, staking as feasible); and 2) provide a site tour, project overview and required training (e.g. safety) for Native American Monitors that will work on the project.</p> <p>During Construction</p> <p>7) The archaeologist will be notified when native ground disturbing activities will begin and will inspect the construction area as necessary during excavation work to ensure that the ESAs are not violated. Inspections shall occur at least weekly with reports provided to relevant agencies.</p>				

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>8) Archaeologist will notify the City of Fort Bragg and the State Historic Preservation Officer within 48 hours of any ESA violation or unanticipated discovery to determine how it will be addressed. Consultation with Native Americans shall also be included. After Construction</p> <p>9) The Archaeologist shall supervise removal of the temporary fencing after construction.</p> <p>10) The City of Fort Bragg shall prepare a four year monitoring plan that includes an annual review of the sites in the project ADI to assess cumulative impacts, measures to address impacts, and an annual report of findings, which would be available for review by the public and resource agencies. That plan shall be implemented for at minimum four years, or until it is clear that resources are no longer impacted by the project.</p>				
AR/mm-4:	If cultural materials are discovered during construction, all earth-moving activity within 100 feet of the immediate discovery area will halt until a qualified archaeologist can assess the nature and significance of the find.	Halt construction and determine course of action	Project Archaeologist	Visual	During grading activities
AR/mm-5:	If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the project archaeologist so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	Halt construction and contact NAHC if human remains are found	Project Archaeologist	Visual	During grading activities
AR/mm-6:	The City shall require Native American monitoring of all construction activities that will result in grading or movement of native soils in cultural resource areas as identified in the Data Collection Plan and areas not previously cleared for cultural resources.	Hire Native American monitors and notify of need	Project Archaeologist	Visual	During grading activities within cultural resource areas

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
AR/mm-7	The City shall complete an ethnographic study of the project site prior to completion of construction to mitigate for non-archaeological impacts of the project to cultural resources and places of cultural significance.	Hire ethnographer	City of Fort Bragg	Ethnographic Study	Prior to conclusion of construction
AR/mm-8	The City shall provide for Native American access of the Noyo Headlands Preserve for cultural activities. General public access of the Noyo Headlands Preserve shall be prohibited through the installation of a fence and signage.	Construct fence & gate	City of Fort Bragg	Visual survey of site.	During and after construction and ongoing
Hazardous Waste/Materials					
HM/mm-1	DTSC requires that any construction projects which involve grading shall comply with the Soil Management Plan (SMP) prepared for the site. Compliance with the SMP will also be a condition of approval for the grading permit for the site. A copy of the SMP is attached in appendix.	Provide SMP to Contractor.	City of Fort Bragg & DTSC	In specifications. Visual analysis during site inspections.	Pre and during construction
Biological Resources					
BR/mm-1	During construction, permanent and temporary impacts to ESHA natural communities shall be avoided/minimized to the extent feasible. The ESHA natural communities which have the potential to be disturbed by the project shall be shown on site plans. Areas in which grading or other disturbance is to occur shall be defined on-site by readily identifiable barriers that will protect the surrounding native habitat areas. Construction equipment and other vehicles shall be prevented from entering ESHA natural communities to be avoided through the use of exclusion zones or other barriers.	Avoid/minimize permanent and temporary ESHA impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
BR/mm-2	During and following construction, drainage control methods shall be incorporated into the project in a manner that minimizes erosion, sedimentation, and the discharge of harmful substances into aquatic habitats during and after construction.	Incorporate drainage control methods into project plans.	City of Fort Bragg	Review construction plans	Prior to, during, and post construction
BRmm-3	Prior to construction, the applicant will prepare a Hazardous Materials Response Plan or equivalent to allow for a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. All project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during	Prepare a Hazardous Materials Response Plan.	City of Fort Bragg		Prior to construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	construction.				
BR/mm-4	During construction, to control erosion during and after project implementation, the applicant and contractors will implement standard Best Management Practices (BMPs).	Implement BMPs.	City of Fort Bragg	Field inspection	During construction.
BR/mm-5	During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 ft. from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.	Avoid discharge of hazardous materials.	City of Fort Bragg	Field inspection	During construction.
BR/mm-6	During construction, trash will be contained, removed from the work site, and disposed of regularly by the contractor. Following construction, all trash and construction debris will be removed from work areas.	Contain and remove trash.	City of Fort Bragg	Field inspection	During construction.
BR/mm-7	To limit unauthorized access into ESHA natural communities on the North and South Parkland, after construction, the City of Fort Bragg shall incorporate an ESHA natural community fencing plan in the final restoration plan. To avoid cultural resource impact and aesthetic resource impacts, the fencing plan shall be limited in scope and focus on those areas of the project where ESHA natural communities would most likely be subject to unauthorized access (i.e. trail termini, the blowhole, etc.).	Prepare ESHA fencing plan.	City of Fort Bragg	Review of plan.	As part of construction.
BR/mm-8	During construction, any disturbance within jurisdictional wetlands or other waters will take place between June 15 and October 31 in any given year, when the surface water is likely to be dry or at seasonal minimum. Deviations from this work window are not permitted by the City's Certified LCP.	Avoid jurisdictional wetlands during rainy season.	City of Fort Bragg	Review of construction schedule/activities.	During construction.
BR/mm-9:	Prior to construction the City of Fort Bragg shall coordinate with CDFW to determine if a Section 2081 Incidental Take Permit (or a Section 2080.1 Consistency Determination) will be required for potential impacts to Menzies' wallflower.	Determine if Permit is required	City of Fort Bragg	Letter from CDFW	Prior to construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-10:	<p>The following measures shall be implemented to avoid/and or minimize impacts to Menzies' wallflower:</p> <p>a) Prior to construction, the applicant shall implement planning to avoid impacts to the Menzies' wallflower populations consistent with State Parks' vegetation management policy. Federally listed plant species in areas to be impacted shall be mapped during the appropriate flowering season prior to construction. Specific areas with federally listed plant species to be avoided shall be mapped and marked with exclusion zones. Brightly colored exclusion fencing shall be implemented and maintained throughout construction to prevent unauthorized access into environmentally sensitive areas.</p> <p>b) Prior to and during construction, the applicant will retain a qualified biological monitor (or monitors) approved by all involved regulatory agencies to ensure compliance with avoidance and minimization measures within the project environmental documents.</p> <p>Monitoring will occur throughout the length of construction or as directed by the regulatory agencies. Full-time monitoring will occur during vegetation removal and erosion control installation. Monitoring may be reduced to part time once construction activities are underway and the potential for additional impacts are reduced. The qualified biological monitor(s) shall have expertise in the botany of the region, be familiar with the identification and distribution of all native and non-native plants within the project area. The biological monitor(s) shall have the authority to halt construction or other ground disturbance in areas where such activity is to be avoided.</p>	Minimize impacts to wallflower.	City of Fort Bragg	Review project plans, consult with bio monitor, field inspection, follow-up monitoring	Prior to, during and post construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>c) Prior to construction, Menzies' wallflower population boundaries will be flagged or fenced by the contractor under the supervision of a qualified biologist to delineate the limits of allowable site access and disturbance. Areas within the designated project site that do not require regular access will be clearly flagged as off-limit areas to avoid/discourage unnecessary damage to sensitive habitats or existing vegetation within the project site. Within the flagged areas, herbicides will only be used by people trained by State Parks personnel in the identification of rare plants.</p> <p>d) During construction, where there is a risk of herbicide being accidentally applied to rare plants, non-native plants/weeds will be pulled by hand or sprayed with a low-emitting spray nozzle used in conjunction with cardboard shields against the rare plants. Care will be given to ensure that root systems of rare plants are not dislodged.</p> <p>e) During construction, work in new areas will commence only after a rare plant survey is completed.</p> <p>f) All people engaged in restoration activities that could harm rare plants will be instructed by State Park personnel in the identification of such rare plants.</p> <p>g) Prior to construction, the applicant will prepare a final Habitat Mitigation and Monitoring Plan (HMMP) to detail restoration methods, success goals, and monitoring criteria for vegetation and natural habitats. The HMMP will be consistent with Federal regulatory requirements and will be amended with any regulatory permit conditions, as required. The applicant will implement the HMMP during construction and following project completion.</p> <p>h) Prior to and during construction, a component including Menzies' wallflower conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard Best Management Practices (BMPs) identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.</p>				

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>i) During construction, the applicant shall appropriately sequester topsoil in areas of proposed disturbance to preserve the seed bank. The topsoil shall be redistributed during revegetation efforts. These activities shall be conducted under the direction of qualified biologists.</p> <p>j) During construction, erosion control measures will be implemented by the contractor. Silt fencing, fiber rolls, and barriers (e.g., hay bales) will be installed between the project site and adjacent wetlands and other waters. At a minimum, silt fencing will be checked and maintained on a daily basis throughout the construction period. The contractor will also apply adequate dust control techniques, such as site watering, during construction.</p> <p>k) During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 feet from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.</p> <p>l) During construction, all project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during construction.</p> <p>m) During construction, the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed by the contractor, under direction of the biological monitor(s). All vegetation removed from the construction site shall be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas (such as areas with poison hemlock or other invasive exotic plant species) must be removed offsite, the top six inches containing the seed layer in areas with weedy species shall be disposed of at a certified landfill.</p>				

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>n) After construction, mitigation for impacts to Menzies' wallflower and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be accompanied by a qualified botanist at least twice a year (once in the spring and once in the summer) for a minimum of five years. Monitoring shall include counts of numbers of both species with projections of survival rates, along with the supervision of removal of invasive exotics that may encroach on habitat for either species.</p> <p>o) After construction, the applicant shall, under direction of qualified biologists, conduct weeding in areas disturbed by the original removal of non-native species on a regular basis (at least twice a year for five years).</p>				
BR/mm-11:	<p>Prior to construction, the applicant shall implement planning to avoid impacts to special-status plant species to the extent feasible. Where possible, avoidance can include delay of construction/restoration until after the blooming season for special-status annual plants, to ensure that the seed bank for special status plants is retained on site. Special-status plant species in areas to be impacted shall be mapped during the appropriate flowering season prior to construction. An estimate shall be made of special-status plants that will be impacted. Specific areas with special-status plant species to be avoided shall be mapped and marked with fencing, flagging, or exclusion zones to minimize the potential for unnecessarily impacting plants.</p>	<p>Avoid impacts to special-status plant species to the extent feasible</p>	<p>City of Fort Bragg</p>	<p>Review construction plans, construction schedule, HMMP, field inspections.</p>	<p>Prior to and during construction.</p>

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-12	<p>Prior to construction, if special-status plants cannot be avoided and must be impacted, seed of special-status plants onsite shall be gathered from areas to be impacted for eventual reseeded after ground disturbance has been completed. If feasible, special-status plants in areas proposed for ground disturbance may be salvaged by digging up individual plants (including roots/rhizomes) for immediate transplanting and/or planting in containers for eventual replanting. Revegetation success criteria/goals for special-status plants shall be at a minimum 2:1 ratio (i.e., two plants established for each plant lost or two acres of absolute cover established for each acre of absolute cover lost) or a ratio negotiated between the City and permitting agencies based on City proposals. Reseeding or transplanting of special-status plant taxa shall be conducted by a qualified botanist or revegetation firm. Specific methods for revegetation of special-status plants shall be detailed in the final HMMP prepared during the permitting process for the project. If transplanting or reseeded is not appropriate for a given species, a combination of habitat protection and/or improvement shall be completed by a qualified botanist and will serve as mitigation.</p>	<p>Prepare plan to describe sensitive plant species restoration efforts. Re-vegetate impacted plants at a 2:1 ratio.</p>	<p>City of Fort Bragg</p>	<p>4-year monitoring.</p>	<p>Prior to, during, and post construction.</p>
BR/mm-13	<p>Prior to and during construction, a component including special-status plants and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site-specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.</p>	<p>Perform environmental training session for construction personnel working on the project - conducted by a qualified biologist.</p>	<p>City of Fort Bragg</p>	<p>Contract with biologist. Field notes, inspection reports.</p>	<p>Prior to construction. Ongoing, as necessary.</p>

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-14	During construction, a biological monitor (or monitors) shall be present during all construction work in or near sensitive habitat areas or areas supporting special-status plant species. Monitoring will occur throughout the length of construction or as directed by the regulatory agencies. Full-time monitoring will occur during vegetation removal and erosion control installation. Monitoring may be reduced to part time with agency approval once vegetation removal has been completed and the potential for additional impacts are reduced. The qualified biological monitor(s) shall have expertise in the botany of the region, be aware of the identification and distribution of all sensitive plants within the BSA, and shall be familiar with the identification of all native and non-native species in the work area. The biological monitor(s) shall have the authority to halt construction or other ground disturbance in areas where such activity is to be avoided.	Monitor construction activities occurring within or near sensitive habitat.	City of Fort Bragg	Review inspection and monitoring reports.	Prior to and during construction.
BR/mm-15	During herbicide application, a 15-foot buffer zone shall be established around areas with special-status plant species. No herbicide application shall occur within the buffer zone. Invasive plants within the buffer area shall be removed by hand.	Avoid herbicide application to special status plants.	City of Fort Bragg	Site inspection	During Construction
BR/mm-16	During herbicide application, special-status plant species shall be covered with appropriate shielding, such as plastic sheeting, 5-gallon buckets, or 20-gallon plastic tubs (depending on size of plants) to protect them during herbicide applications occurring in their vicinity. Plants shall be covered for no more than two hours.	Avoid herbicide application to special status plants.	City of Fort Bragg	Site inspection	During Construction
BR/mm-17	After construction, mitigation for impacts to special-status plant taxa and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be conducted by a qualified botanist at least twice a year (once in the spring and once in the summer) for a minimum of four years. Monitoring shall include counts of numbers of sensitive species with projections of survival rates, along with the supervision of removal of invasive exotics that may encroach on rare plant habitat.	Prepare and implement monitoring program.	City of Fort Bragg	Prepare monitoring reports.	Post construction.
BR/mm-18	After construction, the applicant shall, under direction of qualified biologists, conduct weeding in areas disturbed by the original removal of non-native species on a regular basis (at least twice a year for four years).	Conduct weeding as necessary.	City of Fort Bragg	Prepare monitoring reports.	Post construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-19	Prior to construction, qualified biologists shall collect seed from Blasdale's bent grass and grow out enough plants to transplant a minimum of 100 plants in the areas disturbed by construction. Any remaining seed shall be redistributed in suitable habitat within the Study Area.	Collect seed from Blasdale's bent grass for restoration.	City of Fort Bragg	Contract with biologist.	Prior to construction.
BR/mm-20	During construction and implementation of the restoration activities proposed, the applicant shall establish potential habitat for Blasdale's bentgrass by removing ice plant (Carpobrotus spp.), wild radish (Raphanus spp.) and by removing asphalt covered areas. The areas shall be created or restored and seeded with excess Blasdale's bentgrass seed. The restoration plan shall include a performance measure that a self-sustaining population of at least 446 new individual Blasdale's bentgrass plants (including the 100 noted above) would exist within the project area at the conclusion of restoration.	Establish potential habitat for Blasdale's bent grass by removing ice plant (Carpobrotus spp.), wild radish (Raphanus spp.) and by removing asphalt covered areas.	City of Fort Bragg	Review of final restoration plan. Review monitoring reports.	During and post construction.
BR/mm-21	The project will remove asphalt and compacted gravel in locations suitable for Mendocino paintbrush and re-vegetate with Mendocino paintbrush in combination with its host plant(s). Revegetation aspects of the proposed restoration will include the planting of suitable host plants for Mendocino paintbrush.				
BR/mm-22	If any native shoulderband snails are observed during ground disturbance activities in suitable habitat, such snails shall be relocated to suitable habitat outside of the area of disturbance to avoid/minimize injury or mortality.	Relocate shoulderband snails observed in area of disturbance.	City of Fort Bragg	Biological monitoring reports.	During construction.
BR/mm-23	Prior to construction, the City shall obtain a letter of permission or equivalent authorization from CDFG to relocate NRLF and other SSC species from work areas encountered during construction within the ADI as necessary. Qualified biologists shall capture and relocate any NRLF (if present) or other SSC species to suitable habitat outside of the area of impact. Observations of SSC species or other special-status species shall be documented on CNDDDB forms and submitted to CDFG upon project completion.	Obtain a letter of permission or equivalent authorization from CDFG to relocate NRLF and other SSC species from work areas encountered during construction	City of Fort Bragg	Letter on file. Biological monitoring reports.	Prior to and during construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-24	Prior to construction, nest surveys for double-crested cormorant and oyster catchers shall be conducted by a qualified biologist in areas where construction is proposed to occur within 200 ft. of tidal and bluff habitats.	Perform nesting surveys.	City of Fort Bragg	Biological monitoring reports.	Prior to construction.
BR/mm-25	Prior to and during construction, if active double-crested cormorant nests are observed, a minimum 200-ft (61-m) buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged; a 100-ft (30.5-m) exclusion zone is required for active black oystercatcher nests.	Establish nest buffer zone as necessary.	City of Fort Bragg	Biological monitoring reports.	Prior to and during construction.
BR/mm-26	Prior to construction, vegetation removal along Glass Beach Drive shall be scheduled to avoid the typical nesting bird season (defined as occurring from March 15 to July 31 for most bird species), if feasible.	Avoid vegetation removal during nest season as feasible.	City of Fort Bragg	Review construction schedule.	Prior to construction.
BR/mm-27	Prior to and during construction, if project activities cannot feasibly avoid the typical nesting bird season (from March 15 to July 31 for most bird species), weekly bird surveys of the project areas that will be under construction shall be conducted by a qualified biologist with experience in conducting breeding bird surveys, beginning 30 days prior to the disturbance of suitable nesting habitat. If a <u>protected</u> native bird nest is found, clearance/construction will not occur within an appropriate buffer/exclusion zone (determined by a qualified biologist) delineated by highly visible flagging/stakes until August 1, or until any active nests are vacated.	Perform weekly bird surveys.	City of Fort Bragg	Review monitoring reports.	Prior to and during construction.
BR/mm-28	Prior to and during construction, if active northern harrier nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 300 ft. of grassland and freshwater marsh habitats during the northern harrier breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed.	Establish buffer zone for harrier nests.	City of Fort Bragg	Review monitoring reports.	Prior to and during construction.
BR/mm-29	Prior to and during construction, if active white-tailed kite nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged.	Perform surveys for white-tailed kite.	City of Fort Bragg.	Review monitoring reports.	Prior to and during construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-30	Prior to construction, nest surveys for Bryant’s savannah sparrow shall be conducted by a qualified biologist if construction is proposed to occur within 100 ft. of potential grassland and freshwater marsh nesting habitat during the breeding season for the species (April to July).	Perform surveys for savannah sparrow.	City of Fort Bragg.	Review monitoring reports.	Prior to and during construction.
BR/mm-31	Prior to and during construction, if active Bryant’s savannah sparrow nests are observed, a minimum 100-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 100 ft. of grassland and freshwater marsh habitats during the Bryant’s savannah sparrow breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed.	Establish buffer zone for savannah sparrow nests.	City of Fort Bragg	Review monitoring reports.	Prior to and during construction.
BR/mm-32	Prior to and during construction, a training component regarding general nesting bird protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	Integrate bird protection into environmental training session for construction personnel.	City of Fort Bragg	Biological monitoring reports.	Prior to and during construction.
BR/mm-33	Prior to construction, nest surveys for Burrowing Owls shall be conducted by a qualified biologist if construction is proposed to occur within 100 ft. of burrowing owl nesting habitat during the breeding season for the species.	Burrowing Owl Nest Survey.	City of Fort Bragg	Biological monitoring reports.	Prior to construction.
BR/mm-34	Based on the proposed location of project-related disturbance, the one previously occupied burrow (2009) will not be impacted; however, if it is determined during the preconstruction survey that occupied burrows could be impacted, the applicant shall implement the following mitigation measures: Burrows, occupied by burrowing owls, shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through noninvasive methods that either:	Avoid disturbance within 160 ft. of the occupied burrows.	City of Fort Bragg (existing burrows only at Glass Beach Headlands.)	Review construction and restoration plans. Field inspection.	Prior to and during construction.

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	<p>a. Birds have not begun egg-laying and incubation; or,</p> <p>b. Juveniles from the occupied burrows are foraging independently and are capable of independent survival.</p> <p>When destruction of occupied burrows is unavoidable, existing unsuitable burrows shall be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on protected lands.</p> <p>If avoidance requirements cannot be met and owls must be moved away from the disturbance area, passive relocation techniques shall be used rather than trapping. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 160 ft. from the impact zone and that are within or contiguous to a minimum of 6.5 ac of foraging habitat for each pair of relocated owls. Relocation of owls shall only be implemented during the non-breeding season. On-site habitat shall be preserved in a conservation easement and managed to promote burrowing owl use of the site.</p> <p>a. Passive Relocation with One-way Doors -- Owls shall be excluded from burrows in the immediate impact zone and within a 160-ft buffer zone by installing one-way doors in burrow entrances. One-way doors (e.g., modified dryer vents) shall be left in place 48 hours to ensure owls have left the burrow before excavation. Two natural or artificial burrows shall be provided for each burrow in the project area that will be rendered biologically unsuitable. The project area shall be monitored daily for one week to confirm owl use of burrows before excavating burrows in the immediate impact zone. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.</p> <p>b. Passive Relocation without One-way Doors -- Two natural or artificial burrows shall be provided for each burrow in the project area that will be rendered biologically unsuitable. The project area shall be monitored daily until the owls have relocated to the new burrows. The formerly occupied burrows may then be excavated. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into burrows during excavation to maintain an escape route for any animals inside the burrow.</p>				

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR/mm-35	Prior to construction, a component including general marine mammal protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	Integrate marine mammal protection into environmental training.	City of Fort Bragg	Review of biological monitoring reports.	Prior to construction.
BR/mm-36	Prior to construction, a qualified biologist shall conduct surveys to identify potential marine mammal haul-out sites in the vicinity of the BSA. Binoculars or a spotting scope shall be used for surveying potential haul-out locations, with implementation of exclusion zones as appropriate by a qualified biologist. If project activities will occur within designated exclusion zones, the qualified biologist shall survey potentially affected beach areas for presence of marine mammals. The surveys shall occur the day before work activities are scheduled to commence, with both a morning and afternoon count. If a marine mammal is found to be hauled out within a defined exclusion zone, project construction shall not occur within that exclusion zone until the marine mammal has departed. The condition of any marine mammal observed shall be noted. Marine Mammal Center personnel shall be contacted if the animal appears to be injured or in distress.	Conduct surveys for potential haul-out sites.	City of Fort Bragg	Review biological monitoring reports.	Prior to construction.
BR/mm-37	During construction, monitoring by a qualified biologist shall occur every morning work is scheduled to occur for the proposed project within designated exclusion zones. The qualified biologist shall have the authority to halt work if it is determined that project activities are impacting marine mammals.	Monitor exclusion zones.	City of Fort Bragg	Review biological monitoring reports.	During construction.
Water Quality					

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
WQ/mm-1	Prior to construction, final Drainage plans shall be prepared which incorporate recommendation from the Drainage Report and Technical memo. Changes to the proposed Drainage Plan shall include, but not be limited to constructing bioswales with side slopes shall be no steeper than 3:1, constructing them in existing compacted gravel and/or native soil to the maximum extent feasible, maximizing onsite infiltration as feasible and required by the City's Coastal General Plan.	Prepare final Drainage plans which incorporate recommendation from the original Drainage Report and Technical memo.	City of Fort Bragg	Review of Final Drainage Plan.	Prior to construction.
WQ/mm-2	Development of the Final Drainage plans shall be coordinated and consistent with the final Restoration Plan, the Cultural Resources Data Recovery Plan, and biological resource and cultural resource avoidance, minimization, and mitigation measures in this EIR.	Coordinate Final Drainage Plan with other necessary plans and mitigation measures.	City of Fort Bragg	Review of final plans.	Prior to construction.

