COASTAL CONSERVANCY

Staff Recommendation
March 29, 2012

BIO-RAD BAY TRAIL CONSTRUCTION

Project No. 07-063-11
Project Manager: Ann Buell

RECOMMENDED ACTION: Authorization for the Association of Bay Area Governments to disburse up to $198,000 of previously granted Conservancy funds to the East Bay Regional Park District to construct .53 miles of San Francisco Bay Trail in the City of Hercules, Contra Costa County.

LOCATION: Hercules, Contra Costa County (Exhibit 1)

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location and Site Maps
Exhibit 2: Photographs and Graphics
Exhibit 3: Final Environmental Impact Report for the Hercules Intermodal Transit Center (June 2011)
Exhibit 4: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160-31165 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the Association of Bay Area Governments (ABAG) to disburse up to $198,000 (one hundred ninety-eight thousand dollars) of previously granted Conservancy funds to the East Bay Regional Park District to construct .53 miles of San Francisco Bay Trail in the City of Hercules, subject to the following conditions:

1. Prior to the disbursement of funds, ABAG shall submit for the review and approval of the Executive Officer of the Conservancy a final work program, schedule and budget, and a grant agreement between ABAG and the East Bay Regional Park District.

2. ABAG shall ensure installation of signs acknowledging the Conservancy and displaying the Conservancy logo in a manner approved by the Executive Officer.
3. In carrying out the project, ABAG shall ensure that the East Bay Regional Park District complies with all project actions, components, and mitigation measures that are needed to reduce or avoid significant environmental effects of the proposed project as identified in the Final Environmental Impact Report for the Hercules Intermodal Transit Center certified by the City of Hercules on August 9, 2011 pursuant to the California Environmental Quality Act (CEQA), and accompanying the project staff recommendation as Exhibit 3.

4. ABAG shall provide documentation during the course of the project that the required project actions, components and mitigation measures have been implemented.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the current Project Selection Criteria and Guidelines.

2. The proposed authorization is consistent with the purposes and objectives of the San Francisco Bay Area Conservancy Program, Chapter 4.5 of Division 21 of the Public Resources Code, Sections 31160-31165.

3. The Conservancy has independently reviewed the Final Environmental Impact Report (FEIR) for the Hercules Intermodal Transit Center certified by the City of Hercules on August 9, 2011 pursuant to CEQA. With the exception of construction noise impacts, there is no substantial evidence that the proposed project with the identified measures to avoid, reduce or mitigate the possible significant environmental effects, will have a significant effect on the environment.

4. Construction of the proposed project may have a significant, unavoidable noise impact on nearby residential communities.

5. The environmental and social benefits of the project as described in detail in the staff recommendation outweigh its unavoidable adverse environmental effects. Therefore, the Conservancy adopts the Statement of Overriding Considerations set forth in this staff report.”

**PROJECT SUMMARY:**

Staff recommends that the Conservancy authorize the Association of Bay Area Governments (ABAG) to disburse up to $198,000 (one hundred ninety-eight thousand dollars) of previously granted Conservancy funds (known as “San Francisco Bay Trail Block Grant #4”) to the East Bay Regional Park District (EBRPD) to construct .53 miles of the San Francisco Bay Trail (“Bay Trail”) in the City of Hercules (Exhibit 1). The proposed 10-foot wide asphalt trail with two-foot gravel shoulders will be built into the side of a bluff overlooking San Pablo Bay and the shoreline. The proposed project includes the construction of retaining walls and a small bridge across a ravine at the northern end of the new trail to connect it with the existing Bay Trail in the Victoria-by-the-Bay residential development (Exhibit 2). This segment of the Bay Trail will be designated as “spine,” meaning it is part of the main stem of the Bay Trail. Construction is expected to begin in the fall of 2012 and be completed by the end of 2013.
The proposed project, known as the “Bio-Rad Bay Trail” was planned and designed in conjunction with a larger project. The City of Hercules and EBRPD are working together on the planning, design, engineering, funding, coordinating and construction of an Intermodal Transit Center (ITC), which would include train, bus, and ferry service in the waterfront community of the City of Hercules near San Pablo Bay and adjacent to Bayfront Boulevard. The Bay Trail will one day provide a convenient, non-motorized route of travel to the ITC, which is, in turn, part of the Hercules Waterfront District Master Plan Development.

The construction of the ITC has been delayed for a variety of reasons and it is not known exactly when it will be built, but the City of Hercules certified the Final Environmental Impact Report for the Hercules Intermodal Transit Center (2011), which addresses the Bio-Rad Bay Trail, and approved the ITC and Bio-Rad Bay Trail on August 9, 2011. (See “Compliance with CEQA,” below, for details).

Construction of the Bio-Rad Bay Trail is ready to move forward now, and will be managed by the City of Hercules in order to properly integrate its design and construction with the future construction of the ITC. The northeast end of the Bio-Rad Bay Trail will begin at the Victoria-by-the-Bay neighborhood in Hercules, where the existing Bay Trail ends. At this point a small bridge needs to be built over a creek/wetland drainage. The footings of the bridge will not be in the creek or wetland. The trail will then pass through the edge of the Bio-Rad Laboratories, Inc. campus in Hercules (Exhibit 2). EBRPD acquired a trail easement over the Bio-Rad property in order to be able to build this segment of the Bay Trail.

The Bio-Rad Bay Trail will be very expensive to build for several reasons. First, this trail requires construction of a bridge. Second, the trail must be located on the slope of a bluff in order to be both out of the view shed of the Bio-Rad facility (as required by the property owner) and landward of the planned realignment of the train tracks along the shoreline near the bluff. Locating the Bio-Rad Bay Trail on the bluff slope necessitates large retaining walls along the bluff as well as more extensive grading than if the trail were on either the bluff top or along the shore (Exhibit 2). The resulting cost of the Bio-Rad Bay Trail project is $5,322,000 dollars, 96% of which will be provided by matching federal and local district grants. (See “Project Financing,” below).

The Bio-Rad Bay Trail is separated from motor vehicles and all street traffic (Class I trail). Currently, bicyclists and pedestrians must use residential streets and arterial roads to travel along the shoreline. Although many of the large intersections have crosswalks, the 2009 Contra Costa County Countywide Bicycle and Pedestrian Plan indicates that one-third of collisions involving pedestrians happen while a pedestrian is crossing a street in a crosswalk. The Plan also says that the most common accident involves pedestrians walking along the side of the road. The Bio-Rad Bay Trail will enable families with young children and strollers as well as seniors to safely and easily walk along the shoreline rather than following busy roadways. This segment will not, however, completely close the gap between existing Bay Trail segments, so trail users will still need to use existing city streets to reach the next segment of Bay Trail.

In the future, with access to the ITC, the Bio-Rad Bay Trail will be an invaluable resource for commuters. There is potential for high use by the residents, customers, and employees in the nearby residential and business developments, including the North Shore Business Park (Bio-Rad Laboratories, Inc.), and the New Pacific Homes development (Victoria-by-the-Bay).
EBRPD is one of the largest and most successful regional park districts in the country. It has decades of experience building and maintaining segments of the Bay Trail in Contra Costa and Alameda Counties, where it owns and/or manages 91,000 acres of parkland, trails, and historic sites. The City of Hercules has agreed to maintain the trail, but if they fail to do so, EBRPD will carry out the maintenance. The accessibility guidelines for outdoor developed areas apply to the Bay Trail. The project will be ADA-compliant with no grades steeper than 5% and cross slopes no greater than 2%.

**Site Description:** The approximately 47-acre ITC project site is located in the City of Hercules, Contra Costa County. The project site is located on the San Pablo Bay shoreline north of Bayfront Boulevard, approximately one mile northwest of I-80. The Union Pacific Railroad (UPRR) passes through the site, parallel to the shoreline. This area is notable for scenic views of San Pablo Bay from the shore or bluff tops. The site was previously used for the production of explosives and fertilizer by the Hercules Powder Company. Hazardous materials remediation, consisting of excavation and off-site removal of contaminated sediments, was conducted on much of the project site through 1997.

The area is highly disturbed. There is riprap on the western side of the railroad tracks. Elsewhere near the tracks there are unvegetated, man-made depressions, some wetland plant species, and then bluff tops (Exhibit 2). The Bio-Rad Laboratories, Inc. campus and several residential neighborhoods are just inland, along the bluff tops. The “Waterfront District” has been partially built out with the Bayfront Development, across from Hercules Point. As can be seen in the aerial views provided in Exhibit 2, the entire bluff top is being developed. Two creeks drain to the shore in this area: Refugio Creek and an unnamed creek. Further discussion of site resources is included under “Compliance with CEQA” below.

**Project History:** EBRPD has been instrumental in moving this project forward. The EBRPD Master Plan (2007) identifies regional trails as critical linkages among their park properties. The Master Plan Map shows the Bay Trail alignment along the Contra Costa/San Pablo Bay Shoreline (through Hercules) as a high priority regional trail connection between several EBRPD parks, including at Point Pinole and Lone Tree Point. On May 30, 2007 EBRPD entered into a settlement agreement (eminent domain) with Bio-Rad Laboratories, Inc., a Delaware corporation (“Bio-Rad”) to acquire an easement through a portion of the Bio-Rad property, thus allowing for the desired alignment of the Bay Trail through Bio-Rad.

This project was originally conceived to be integrated into the Intermodal Transit Center (ITC) that is designed to be a hub for bus, rail, and ferry service near Hercules Point. The construction of the ITC has been delayed. At this point in time, only the Bay Trail Bio-Rad component of the ITC project is ready to move forward into construction. Completion of the 500-mile Bay Trail is an important objective for the Coastal Conservancy and strongly supported by ABAG and EBRPD.

The Conservancy authorized a grant of $100,000 to ABAG in 2000 to construct a .5-mile section of Bay Trail over the bridge on Pinole Creek and extending from Pinole into Hercules (Exhibit 2).
PROJECT FINANCING

Coastal Conservancy 198,000.0
STIP-TE (federal funds) 862,000.0
STIP-TE (federal funds) 1,097,000.0
TIGER II (federal funds) 1,465,000.0
Measure WW Bond (EBRPD) 900,000.0
Measure AA Bond (EBRPD) 800,000.0

Total Project Costs $5,322,000.0

The Conservancy’s contribution is proposed as a portion of a $6,000,000 Conservancy grant to ABAG known as San Francisco Bay Trail Block Grant #4, which was first authorized on September 20, 2007 and augmented on December 4, 2008. Funds for Block Grant #4 are derived from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (“Proposition 84”). See Public Resources Code § 75001 et seq. These funds are available for San Francisco Bay Area Conservancy Program projects that promote access to and enjoyment of coastal resources, and are thus appropriate for funding the proposed construction of a segment of the San Francisco Bay Trail spine, which will facilitate public access to and enjoyment of San Francisco Bay. See Public Resources Code § 75060 (c).

Matching funds include both federal sources (STIP-TE and TIGER II) and regional bond measure funds from EBRPD, totaling $5,124,000, or 96% of the total project cost.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project is consistent with Chapter 4.5 of Division 21 of the Public Resources Code, Sections 31160-31165 regarding San Francisco Bay Area projects.

Consistent with Section 31162(a) and (c), the project will improve public access to and around the bay by helping to complete a regional trail system (the San Francisco Bay Trail), without adversely impacting agricultural operations, environmentally sensitive areas, or wildlife. Consistent with Section 31163(c), the proposed authorization will be used to fund an outdoor recreational project that is supported by an adopted regional plan (San Francisco Bay Trail, San Francisco Bay Plan, Contra Costa County Bicycle and Pedestrian Plan (2009), EBRPD Master Plan (2007), the Metropolitan Transportation Commission Regional Bicycle Plan (2009), and Hercules Waterfront District Master Plan (2000, as amended)), serves a regional constituency, can be implemented in a timely way, and includes matching contributions from in-kind sources of funding or assistance.

CONSISTENCY WITH CONSERVANCY’S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with Goal 11, Objective E of the Conservancy’s 2007 Strategic Plan, the proposed project helps to complete a .53-mile segment of San Francisco Bay Trail.

Consistent with Goal 11, Objective L, this segment of the Bay Trail will be ADA-accessible.
CONSISTENCY WITH CONSERVANCY’S 
PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy’s Project Selection Criteria and Guidelines, last updated on November 10, 2011, in the following respects:

**Required Criteria**

1. **Promotion of the Conservancy’s statutory programs and purposes:** See the “Consistency with Conservancy’s Enabling Legislation” section above.
2. **Consistency with purposes of the funding source:** See the “Project Financing” section above.
3. **Support of the public:** See letters in Exhibit 4.
4. **Location:** This project is located along the shoreline and shoreline bluffs of San Pablo Bay in the City of Hercules, Contra Costa County, one of the nine counties in the jurisdiction of the San Francisco Bay Area Conservancy Program.
5. **Need:** Conservancy funding is needed to complete the project.
6. **Greater-than-local interest:** The San Francisco Bay Trail is a regional trail network serving nine Bay Area Counties. The Bay Trail will be approximately 500 miles long when completed. This authorization will help further the completion of the trail, of which approximately 325 miles have been completed to-date. This particular segment will also provide a non-motorized transportation alternative route for commuters using the future Intermodal Transit Center in Hercules (train, rail, bus, and possibly ferry).
7. **Sea level rise vulnerability:** The environmental analysis referred to the California Climate Adaptation Strategy (2009) for sea level rise projections: 20 to 55-inch increases in sea level by the end of this century. This project will be constructed on shoreline bluffs and slopes above expected sea level rise. Potential significant effects from climate change and rising sea level are discussed in the EIR/EIS for the ITC and for the railroad tracks, but not specifically for the Bay Trail. However, this segment of Bay Trail will be at an elevation that is higher than the railroad. The railroad is 11.6 feet above mean sea level (MSL). A 100-year flood at this site would be 7 feet above MSL. If sea level rises by 55 inches (4.58 feet) by the end of the century, the resulting sea level during a 100-year flood would be approximately 11 feet above current MSL, causing some inundation of the railroad during flood events, but not of the Bay Trail.

**Additional Criteria**

8. **Resolution of more than one issue:** Construction of the Bay Trail provides an alternative transportation route, releasing some pressure on regional roadways by encouraging people to get out of their cars, while also providing a recreational amenity.
9. **Leverage:** See the “Project Financing” section above.
10. **Readiness:** All of the matching funds are secured and plans for construction are at the 90% complete stage. Environmental compliance under CEQA is complete.
11. **Realization of prior Conservancy goals**: See “Project History” and “Consistency with Conservancy’s Strategic Plan 2007 Goals and Objectives,” above.

12. **Cooperation**: The EBRPD has been working very closely with the City of Hercules and Bio-Rad Laboratories, Inc. to make this project happen.

13. **Minimization of greenhouse gas emissions**: The Draft BAAQMD guidance (2009 California Environmental Quality Act Air Quality Guidelines) was used to compare the estimated unmitigated project emissions for the ITC project, which includes the Bay Trail, to the thresholds of significance. The threshold of significance for GHG emissions for land use development projects (e.g. residential, commercial, industrial, institutional, and public land uses and facilities) is 1,100 MT/yr of CO2e. The estimated operational GHG emissions from the proposed Hercules ITC project are 934.4 MT/yr of CO2e, which is below the BAAQMD threshold of significance. Therefore, the estimated GHG emissions from the proposed project would result in a less than significant impact. Further, the project will allow people to travel by walking and riding their bikes. Construction BMPS are discussed under “Compliance with CEQA.”

**CONSISTENCY WITH SAN FRANCISCO BAY PLAN:**

The proposed project is consistent with the applicable policies contained in Part IV, Development of the Bay and Shoreline: Findings and Policies, of the San Francisco Bay Plan adopted by the San Francisco Bay Conservation and Development Commission (BCDC) in 1969, as amended.

Public Access Policy No. 8 states:

> Access to and along the waterfront should be provided by walkways, trails or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available. Diverse and interesting public access experiences should be provided which would encourage users to remain in the designated access areas to avoid or minimize potential adverse effects on wildlife and their habitat.

Consistent with Public Access Policy No. 8, the proposed project will provide improved access from the Victoria-by-the-Bay neighborhood to Hercules and in the future to the ITC. The natural environment of this area is highly disturbed but the views toward San Pablo Bay are scenic and passing trains should be interesting for many trail users.

Public Access Policy No. 10 states that federal, state, regional and local jurisdictions, special districts and BCDC should cooperate to provide appropriately-sited, designed and managed public access, especially to link the entire series of shoreline parks, regional trail systems and existing public access areas to the extent feasible without additional Bay filling and without significant adverse effects on Bay natural resources. Closing gaps between existing public access areas is a high priority for funding. The proposed project is consistent with this policy because it provides an appropriate and necessary trail segment that will both help complete the San Francisco Bay Trail and will connect the Bay Trail with other modes of regional transportation. Further, both federal and special district funding are being provided for the proposed project, demonstrating federal, regional and local jurisdiction cooperation toward
closing a gap in the Bay Trail. The proposed project will not have significant adverse effects on
Bay natural resources, as explained below under “Compliance with CEQA.”

**COMPLIANCE WITH CEQA:**

The City of Hercules (City) in cooperation with the Federal Transit Administration (FTA)
prepared a joint Draft Environmental Impact Report/Environmental Impact Statement (Draft
EIR/EIS) to provide the public and responsible and trustee agencies with information on the
potential effects of the proposed Hercules Intermodal Transit Center Project under the California
Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The
City of Hercules prepared the Final Environmental Impact Report for the Hercules Intermodal
Transit Center (June 2011) (“FEIR”) under CEQA and certified the FEIR and approved the ITC
project on August 9, 2011. The Notice of Determination filed by the City of Hercules with
Contra Costa County on August 10, 2011 (NOD), under CEQA, described the ITC project in this
way:

“The Project consists of a passenger train station on the existing Capitol Corridor line, a
bus terminal, parking facilities, access roads, drainage improvements, open space, a
multi-use pedestrian trail, improvements to Refugio Creek and, [sic] related
improvements. The Project approved is that described in the EIR as Alternative 1 (train
station to be located west of Refugio Creek), and Track Option B (adding a third
dedicated station track).”

The “multi-use pedestrian trail” referred to in the project description is the Bio-Rad Bay Trail.
The following text aims to adequately describe the CEQA analysis, conclusions, and relevant
mitigation measures for the Bio-Rad Bay Trail without including unnecessary detail about the
much larger ITC project.

The FEIR evaluated two action alternatives and two options for realignment of the Union Pacific
Railroad (UPRR) track design. The two alternatives differ in the location of the transit center
and station building. Alternative 1 locates the transit center west of Refugio Creek and
Alternative 2 locates the transit center east of Refugio Creek. The two Track Options (A and B)
differed in the method to relocate the existing UPRR tracks. Track Option A would utilize
shoofly (temporary) tracks to allow active rail traffic to bypass work areas during construction of
the Hercules ITC. Track Option B would eliminate the need for shoofly tracks and add a third
dedicated station track through the Hercules ITC site, which would reduce freight and passenger
train conflicts and allow freight trains to bypass the site while passenger trains are at the station.
The choice of alternatives does not affect the location of the Bay Trail, nor does either alternative
eliminate the need for the bridge or the retaining wall.

As noted in the NOD, City of Hercules staff recommended Alternative 1 and Track Option B as
the preferred alternative. Construction of the Hercules ITC west of Refugio Creek would: satisfy
engineering and design requirements; be consistent with the Waterfront District Master Plan; and
provide a safe and secure location for emergency vehicle access to the future ferry terminal while
minimizing potential effects to natural resources. Track Option B would simplify construction
staging, shorten the construction duration, reduce the number of piles needed and the duration of
pile driving, reduce construction costs, reduce freight/passenger train conflicts, and improve on-
time train service. This preferred alternative would provide the best location for multi-modal transit to meet the goals and objectives of the project, while minimizing overall impacts to the environment. The design for the Bay Trail segment is consistent with Alternative 1, Track Option B.

As indicated in the NOD, the City of Hercules adopted mitigation measures to mitigate impacts of the ITC project, a Mitigation Monitoring and Reporting Program, and a Statement of Overriding Considerations. Significant and unavoidable impacts were identified by the City for Water Resources (associated with dredging of Refugio Creek and San Pablo Bay and unrelated to Bay Trail construction), Noise (discussed below under “Noise” and again under “Statement of Overriding Considerations”), and Visual and Aesthetic Resources (associated with the blocking of views of the Bay, and light and glare, none of which is associated with the Bay Trail, as discussed below under “Visual and Aesthetic Resources”). The City of Hercules has paid the filing fee for the project.

The following impacts and mitigation measures are among those discussed in the FEIR and have some relation to the construction of the Bay Trail segment. Additional resource issues were discussed as part of the NEPA analysis, but only the potential impacts that were required to be analyzed under CEQA are included in this list, and only resource issues possibly associated with the construction of the Bay Trail segment are summarized in the text following this list.

- Traffic and Transportation Systems
- Cultural Resources
- Visual and Aesthetic Resources
- Noise
- Biological Resources
- Water Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Public Services
- Air Quality

Traffic and Transportation Systems. Construction of the ITC project will introduce additional large (haul) trucks and other related traffic that could result in potentially adverse safety impacts to pedestrians, bicyclist, and/or other motorists. With the implementation of the following (summarized) mitigation measure (TRANS-4), this impact will be less than significant: To reduce hazards to vehicles on local roadways, a traffic safety plan will be developed in coordination with the City and submitted to the City Public Works Department for approval review before the initiation of the construction-related activity that could adversely affect traffic on local roadways. Cumulative effects associated with traffic and transportation systems from other identified projects are not considered significant.

Cultural Resources. The ITC project has the potential to adversely affect previously unidentified archeological resources or human remains during construction; construction of the project may adversely affect unidentified paleontological resources. These potential impacts would be less than significant with the implementation of mitigation measures CULT-1, CULT-2, AND CULT-3. These mitigation measures are similar in nature. Prior to construction,
construction personnel shall be briefed regarding what to do in the event of the discovery of cultural artifacts, human remains, or paleontological resources. If any such remains are discovered, work shall be stopped within a 100-foot wide buffer zone and pertinent personnel shall be notified. Cumulative impacts associated with cultural resources from other identified development projects are not considered significant.

Visual and Aesthetic Resources. The ITC project will have unavoidable significant lighting and glare effects as well as significant cumulative adverse effects on views to the Bay. However, the Bio-Rad Bay Trail alone will not have significant adverse effects on visual and aesthetic resources. The Bio-Rad Bay Trail will be set into the western side of a low bluff running mostly parallel to shore, and thus, by design, will not be visible from the nearby Bio-Rad campus and will not block views of the Bay. The Bay Trail will be visible to passing trains, however it will be flanked by landscaping and a split rail fence. Further, there will be no lighting along the Bio-Rad Bay Trail. Construction activities could temporarily degrade the visual quality of the site and its surroundings. To mitigate the temporary degradation due to construction activities, Measure VAR-2 will be implemented: The City will require the contractor to remove construction debris and dispose of it at a licensed facility on a daily basis, keep mud an soil from roadways, and stage equipment in an orderly manner. With implementation of this mitigation measure, temporary visual degradation would be less than significant.

Noise. Noise-generating construction activities for the ITC project are anticipated to exceed noise level standards set by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25 28) and the 1988 State Building Standards Commission, which are 65 dBA CNEL (Community Noise Equivalent Level) exterior use and 45 dBA CNEL interior. Thus, construction of the ITC project will have significant noise impacts. The FEIR identifies noise mitigation measures that will mitigate these impacts but not reduce them to a level of insignificance. These mitigation measures are:

- Ensure that construction activities (including the loading and unloading of materials and truck movements) are limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and between the hours of 9:00 a.m. and 5:00 p.m. on weekends or holidays.
- Restrict pile driving to the hours of 8:00 a.m. to 5:00 p.m. to ensure that driving occurs when residents are more likely to be away from home or able to leave if necessary to avoid noise effects.
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling of internal combustion engines.
- Utilize “quiet” models of air compressors and other stationary noise sources where technology exists.
- Locate stationary noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.
- Pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
- Where feasible, construct solid plywood fences between the construction noise sources and adjacent noise-sensitive land uses to reduce offsite propagation of construction noise.
· Route construction-related traffic along major roadways and as far as feasible from sensitive receptors.
· Residences or noise-sensitive land uses adjacent to construction sites shall be notified of the construction schedule in writing.
· Designate a “construction liaison” that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem.
· Conspicuously post a telephone number for the liaison at the construction site.

The FEIR does not indicate whether construction activities for the Bio-Rad Bay Trail alone would have the same noise impacts as construction of the entire ITC project. Construction of the Bio-Rad Bay Trail will result in noise associated with grading, paving, landscaping, installing the fence, and building the retaining wall and pedestrian bridge. Because the analysis of Bio-Rad Bay Trail construction was not called out as specifically not causing noise levels above the standards of significance, it is necessary to assume that construction of the Bio-Rad Bay Trail may have unavoidable significant noise effects. The benefits of the proposed project outweigh this significant environmental effect. Therefore, a Statement of Overriding Conservations is provided below.

**Biological Resources.** Construction of the proposed project could potentially result in “take” through harm or harassment of individual California red-legged frogs (CRLF), vernal pool fairy shrimp (VPFS), California clapper rail, salt marsh harvest mouse, or California black rail. Construction of the proposed project could potentially result in disturbance of sensitive bat species, including pallid bat and hoary bat. Construction of the proposed project could potentially impact San Pablo vole and/or salt marsh wandering shrew. Construction of the proposed project could potentially result in disturbance to other sensitive bird species (Cooper’s hawk, tricolored blackbird, northern harrier, white-tailed kite, saltmarsh common yellowthroat, San Pablo song sparrow, burrowing owl) and migratory birds during the nesting season. Construction of the proposed project would result in impacts to northern coastal salt marsh habitat, coastal brackish marsh habitat and brackish stream habitat. Construction of the proposed project could potentially result in loss of eelgrass and/or widgeongrass beds. Construction of the proposed project could potentially result in the spread of invasive species. These potential impacts and their mitigation measures are discussed below.

**Impact BIO-1: Construction of the proposed project could potentially result in “take” through harm or harassment of individual California red-legged frogs (CRLF).**
Several seasonal and perennial wetlands occur within and near the project site. All aquatic habitats within one mile of the ITC project site are unsuitable for CRLF breeding. Potential dispersal corridors identified within one mile of the project site contain barriers, including heavy traffic areas (e.g., I-80, SR-4, city streets), moderate to high-density urban, commercial, and industrial developments, and numerous culverts stretching for long distances. Because habitats on the ITC project site are not suitable for breeding, and potential corridors for dispersal to the site have barriers, CRLF is not expected to occur in the project site or areas adjacent to the project boundaries for Track Option B. In the remote possibility that an individual dispersed
through barriers to the project site, construction activities within and adjacent to Refugio Creek, the North Channel (e.g., creek realignment and restoration, extension of John Muir Parkway), and habitat adjacent to the project boundaries for Track Option B would have the potential to harm or harass the individual. Take of CRLF would be a potentially significant impact. Implementation of the following standard avoidance and minimization measures prior to and during construction would reduce the potential impacts to less than significant.

**Alternatives 1 and 2 and Track Option B.** Construction activities within and adjacent to Refugio Creek, the North Channel (e.g., creek realignment and restoration, extension of John Muir Parkway), and habitat adjacent to the project boundaries for Track Option B have the potential to harm or harass CRLF if individuals entered the project site during construction. Take of CRLF would be a potentially significant impact.

**Mitigation Measure BIO-1:** Preconstruction surveys for CRLF would be conducted in the project site approximately two weeks prior to the initiation of construction activities to ensure that CRLF is not actively using the project site as a dispersal corridor. Preconstruction surveys would be conducted by a qualified biologist familiar with all life stages of the frog and would cover all aquatic habitats on the project site suitable for CRLF dispersal. Prior to conducting the preconstruction surveys, USFWS would be notified of the intent to conduct CRLF preconstruction surveys and the names and qualifications of surveyors. Surveys will not commence until approval is received by USFWS.

If any life stage of CRLF (e.g., egg mass, tadpole, juvenile, or adult) is detected within the project site during surveys, USFWS will be notified regarding the presence of the CRLF. A plan will be developed in consultation with USFWS to relocate the CRLF to the nearest suitable location.

If no CRLF are found in the project site during preconstruction surveys or if CRLF are found and relocated in consultation with USFWS, temporary exclusionary fencing may be installed in Refugio Creek in consultation with USFWS to prevent CRLF from dispersing into the project site from upstream.

Construction personnel would participate in a USFWS-approved worker environmental awareness program. A qualified biologist would inform all construction personnel about the life history of CRLF and its potential presence in the project area and explain the state and federal laws pertaining to protecting this species and its habitat. Construction personnel would be informed of the presence of a biological monitor and receive instruction regarding reporting requirements if a CRLF is found during construction.

A biological monitor would be present during all construction activities within Refugio Creek. The biological monitor will have the authority to stop construction activities if a CRLF is found within the construction area. If a CRLF is found in the project site during construction, work will immediately cease in the vicinity of the CRLF and USFWS will be notified. At the approval of USFWS, the monitor will relocate the CRLF to a suitable location outside of the construction area. If relocation of the CRLF is not permitted, construction activities in the vicinity of the frog will cease until it has passively dispersed away from the construction area.
CEQA Determination: Implementation of the proposed mitigation measure would reduce potential impacts to CRLF to less than significant.

**Impact BIO-2: Construction of the proposed project could potentially result in “take” through harm or harassment of vernal pool fairy shrimp (VPFS).**

Numerous unvegetated ponded depressions occurring within the UPRR ROW and elsewhere within ruderal habitats in the ESL provide potential habitat for fairy shrimp species. However, VPFS are not expected to occur in the project site because it is outside of their known range and because the habitat on-site is marginal. In order to determine presence/absence of federally-listed vernal pool branchiopods, USFWS protocol presence/absence surveys were conducted during the wet season in the southern half of the ESL in winter of 2003/2004 and in the northern half of the ESL in winter 2006/2007. An unlisted species of fairy shrimp (versatile fairy shrimp; *Branchinecta lindahli*) was found in many of the unvegetated season pools during those surveys (Vollmar 2007). HDR commenced wet season surveys of the entire ESL in winter 2009/2010 and has also found versatile fairy shrimp in several seasonally ponded features. No other fairy shrimp have been found in the ESL during any surveys.

**Alternatives 1 and 2 and Track Option B.** VPFS are not expected to occur in the project site and no impacts to VPFS are anticipated. However, if VPFS are found during wet season surveys in 2009/2010, they could be harmed by construction activities. Take of VPFS would be a potentially significant impact.

**Mitigation Measure BIO-2:** Fairy shrimp surveys will be completed in winter 2009/2010 within suitable habitats for VPFS. If VPFS are detected during surveys, the USFWS will be notified and appropriate avoidance and/or mitigation measures will be implemented prior to commencement of construction within or adjacent to VPFS occupied habitat. If no VPFS are found, no further mitigation would be necessary.

CEQA Determination: Implementation of the proposed mitigation measure would reduce potential impacts to VPFS to less than significant.

**Impact BIO-3: Construction of the proposed project could potentially result in “take” through harm or harassment of California clapper rail.**

California clapper rail is not expected to occur in or adjacent to the project site, including areas adjacent to the project boundaries associated with Track Option B, because these areas are isolated from other marshes with established California clapper rail populations. The project site is not likely to be colonized except after years of exceptionally high recruitment when other higher quality marshes are at carrying capacity. A protocol-level survey conducted in 2007 did not detect any California clapper rails at or adjacent to the project site (WWA 2007). However, there is a low potential that the project site may be colonized in any given year.

**Alternatives 1 and 2 and Track Option B.** If the project site and areas adjacent to the project boundaries associated with Track Option B were colonized by California clapper rail prior to the commencement of construction, construction activities could result in harassment of nesting
birds and potentially cause abandonment of the young or forced fledging. This would be considered a potentially significant impact.

**Mitigation Measure BIO-3:** If construction begins during the breeding season (January 15 to April 15), a USFWS approved biologist will conduct a preconstruction survey of California cordgrass tidal marsh habitat for California clapper rail prior to any construction activities occurring within 500 feet of those habitats. The survey will include searching all accessible California cordgrass tidal marsh habitats in and within 500 feet of the project site for California clapper rail. The surveys shall be conducted within two weeks prior to the commencement of construction activities. If California clapper rail is not found, no further avoidance and minimization measures are necessary. If California clapper rail is found, the biologist will note whether or not a nest was observed and record the behavior of the bird(s) (e.g., exhibiting courtship/nesting behavior, foraging, etc.). If California clapper rail is observed nesting or is determined by the biologist to be potentially intending to utilize the habitat for nesting, construction activities will be delayed within 500 feet of the California cordgrass tidal marsh where the bird(s) is found, and USFWS will be notified of the finding. Work will not commence within 500 feet of California cordgrass tidal marsh occupied by California clapper rail until USFWS is consulted regarding appropriate avoidance measures and permission is granted by USFWS to commence work.

Preconstruction survey(s) will be re-conducted as specified above if a lapse in construction activities of two weeks or more occurs at any time during the breeding season such that no more than two weeks will have elapsed between the last survey and the commencement of construction activities.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to California clapper rail to less than significant.

**Impact BIO-4:** Construction of the proposed project could potentially result in “take” through harm or harassment of salt marsh harvest mouse. Salt marsh harvest mouse is not expected to occur in or adjacent to the project site because the tidal marsh habitat in and adjacent to the project site is expected to be unsuitable to support a viable salt marsh harvest mouse population. However, presence/absence surveys for salt marsh harvest mouse have not been conducted and there is a low potential that salt marsh harvest mouse could occur in the pickleweed tidal marsh habitat in and adjacent to the ESL.

**Alternatives 1 and 2 and Track Option B.** Activities associated with construction of the station building and railroad realignment for Alternative 1 would potentially impact salt marsh harvest mouse if it occurred within the impacted pickleweed tidal marsh. This would be considered a potentially significant impact.

**Mitigation Measure BIO-4:** A USFWS approved biologist will conduct a preconstruction survey of the northern coastal salt marsh habitat in the project site prior to any construction activities occurring within 500 feet of those habitats. If salt marsh harvest mice are found in or adjacent to the project site during preconstruction surveys, USFWS will be notified of the finding and consultation will be initiated. Construction activities within 500 feet of the northern
coastal salt marsh will be delayed until consultation has been completed with USFWS. If no salt marsh harvest mice are found during preconstruction surveys, salt marsh harvest mouse exclusion fencing will be installed around the perimeter of the northern coastal salt marsh to prevent salt marsh harvest mice from entering the project site and being harmed by construction activities. Location and design specifications for the proposed exclusion fencing will be submitted to USFWS for review and approval. A USFWS approved biologist will monitor installation of the fencing in order to ensure that the fencing is installed appropriately to ensure total exclusion of the salt marsh harvest mouse as well as to ensure that no individuals are harmed during installation.

A USFWS approved biological monitor will be present during construction activities within and immediately adjacent to the northern coastal salt marsh habitat. The biological monitor will have the authority to stop construction activities if a salt marsh harvest mouse is found within the construction area. If a salt marsh harvest mouse is found in the project site during construction, work will immediately cease in the vicinity and USFWS will be notified.

Construction personnel would participate in a USFWS-approved worker environmental awareness program. A qualified biologist would inform all construction personnel about the life history of salt marsh harvest mouse and its potential presence in the project area and explain the state and federal laws pertaining to protecting this species and its habitat. Construction personnel would be informed of the presence of a biological monitor and receive instruction regarding reporting requirements if a salt marsh harvest mouse is found during construction.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to salt marsh harvest mouse to less than significant.

**Potential Impacts to State-Listed Threatened or Endangered Wildlife Species**

**Impact BIO-5:** Construction of the proposed project could potentially result in “take” through harm or harassment of California black rail.

California black rail is not expected to occur in or adjacent to the project site because the northern coastal marsh within and adjacent to the project site is of a relatively small acreage and isolated; however, other habitat elements are present. A 2007 protocol-level survey did not detect any black rails (WWA 2007) within the ESL; however, there is some chance that pickleweed tidal marsh or pickleweed brackish marsh in or adjacent to the project site may be occupied by California black rail in some years. Although the species was observed in areas immediately south of the southern-end of the project boundary for Track Option B and could nest in the nearby tidal marsh, potential nesting habitat is separated from this area by a row of trees, the Bay Trail, an unused road, and an actively used railroad right-of-way. Given these factors it is unlikely that the species would occur in this area.

Based on aerial photography, no habitat for this species is present in the northern-end of the project boundary for Track Option B and is assumed that the species does not occupy this portion of the project. Studies are underway to ground-truth aerial photography and support environmental permits prior to construction.
Alternatives 1 and 2 and Track Option B. Construction activities could potentially impact California black rail if it occupied northern coastal marsh habitat or tidal marsh in and adjacent to the project site and areas immediately adjacent to the project boundaries for Track Option B prior to construction. This would be considered a potentially significant impact.

Mitigation Measure BIO-5: If construction begins during the breeding season (February 1 to August 31), a CDFG approved biologist will conduct a preconstruction survey of pickleweed tidal marsh habitat for California black rail prior to any construction activities occurring within 500 feet of those habitats. The survey will be conducted according to CDFG guidelines and will include searching all accessible pickleweed tidal marsh habitats in and within 500 feet of the project site for California black rail. The surveys shall be conducted within two weeks prior to the commencement of construction activities.

If California black rail is found, the biologist will note whether or not a nest was observed and record the behavior of the bird(s) (e.g., exhibiting courtship/nesting behavior, foraging, etc.). If California black rail is observed nesting or is determined by the biologist to be potentially intending to utilize the habitat for nesting, construction activities will be delayed within 500 feet of the pickleweed tidal marsh where the bird(s) is found and CDFG will be notified of the finding. Work will not commence within 500 feet of pickleweed tidal marsh occupied by California black rail until CDFG is consulted regarding appropriate avoidance measures and permission is granted by CDFG to commence work.

Preconstruction survey(s) will be re-conducted as specified above if a lapse in construction activities of two weeks or more occurs at any time during the breeding season such that no more than two weeks will have elapsed between the last survey and the commencement of construction activities.

CEQA Determination: Implementation of the proposed mitigation measure would reduce potential impacts to California black rail to less than significant.

Potential Impacts to Other Sensitive Wildlife Species

Impact BIO-6: Construction of the proposed project could potentially result in disturbance of sensitive bat species, including pallid bat and hoary bat.

While unlikely, sensitive bat species have the potential to forage within the project site or use the large culverts under the railroad tracks or the trees within the willow riparian habitat for roosting.

Alternatives 1 and 2 and Track Option B. Construction activities associated with realignment of Refugio Creek outfall into San Pablo Bay or construction activities within willow riparian habitats could potentially disturb roosting bats. This would be considered a potentially significant impact.

Mitigation Measure BIO-6: Preconstruction bat surveys shall be conducted to inspect inside culverts under the railroad tracks and trees within the willow riparian habitat. If no roosting bats are found, no further mitigation would be necessary. If bats are detected within a roost at the
time of construction, excluding any bats from roosts will be accomplished by a bat specialist prior to the onset of any construction activities. Exclusionary devices, such as plastic sheeting, plastic or wire mesh, can be used to allow for bats to exit but not re-enter any occupied roosts. Expanding foam and plywood sheets can be used to prevent bats from entering unoccupied roosts.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to sensitive bats to less than significant.

**Impact BIO-7: Construction of the proposed project could potentially impact San Pablo vole and/or salt marsh wandering shrew**
Marginal habitat for San Pablo vole and salt marsh wandering shrew occurs within the tidal marsh habitat within the project site.

**Alternatives 1 and 2 and Track Option B.** If these species were to occur within the project site, they could be impacted by construction activities in and within 500 feet of tidal marsh habitat. This would be considered a potentially significant impact.

**Mitigation Measure BIO-7:** Preconstruction surveys for San Pablo vole and salt marsh wandering shrew will be conducted simultaneously with salt marsh harvest mouse surveys. If these species are detected, CDFG will be contacted regarding appropriate measures to relocate them out of the work area or protect occupied habitat in conjunction with salt marsh harvest mouse avoidance measures. Exclusionary fencing installed for salt marsh harvest mouse would also prevent these species from entering the project site. The salt marsh harvest mouse biological monitor will also report the presence of any San Pablo voles or salt marsh wandering shrews observed during construction activities to CDFG, and appropriate avoidance measures will be implemented prior to commencement of construction activities adjacent to occupied habitat.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to San Pablo vole and salt marsh wandering shrew to less than significant.

**Impact BIO-8: Construction of the proposed project could potentially result in disturbance to other sensitive bird species (Cooper's hawk, tricolored blackbird, northern harrier, whitetailed kite, saltmarsh common yellowthroat, San Pablo song sparrow, Alameda song sparrow, osprey, burrowing owl) and migratory birds during the nesting season.**
San Pablo song sparrow nests have been documented in and adjacent to the project site along Hercules Point. Great egrets, great blue heron, white-tailed kite, osprey, and Alameda songsparrow have been observed either foraging and/or displaying nesting behavior in areas south of the southern-end of the project boundary for Track Option B. Several other migratory bird species were observed in the project site and could potentially begin nesting in the project site prior to construction.

**Alternatives 1 and 2 and Track Option B.** If sensitive bird species began nesting in or adjacent to the project site prior to commencement of construction, work related activities could result in harm or harassment of nesting birds, such as abandonment of the nest by the adult birds...
or forced fledging. This would be considered a potentially significant impact.

**Mitigation Measure BIO-8:** If feasible, ground disturbing activities (e.g., clearing and grubbing) in and within 500 feet of suitable nesting habitat for these species should commence outside of the breeding season (September 1 to January 14). If birds began nesting in and within 500 feet of the project site after construction commenced, it could be assumed that they were not disturbed by construction activities.

If ground disturbing activities (e.g., clearing and grubbing) begin during the breeding season (January 15 to August 31), a qualified biologist will conduct a nesting bird survey in and within 500 feet of the project site for Cooper's hawk, tricolored blackbird, northern harrier, white-tailed kite, saltmarsh common yellowthroat, San Pablo song sparrow, Alameda song sparrow, osprey, burrowing owl, and other migratory birds and nesting birds. The pre-construction surveys shall be conducted within two weeks prior to the commencement of construction activities. If no nesting birds are found, then no further avoidance and minimization measures are necessary. If nesting birds are found, the locations of the nests and/or nesting territories will be mapped and appropriate avoidance measures will be determined in consultation with CDFG to protect the nesting birds during construction.

Preconstruction survey(s) will be re-conducted as specified above if a lapse in construction activities of two weeks or more occurs at any time during the breeding season such that no more than two weeks will have elapsed between the last survey and the commencement of construction activities.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to nesting birds to less than significant.

**Potential Impacts to Sensitive Natural Communities**

**Impact BIO-9: Construction of the proposed project would result in impacts to Northern Coastal Salt Marsh habitat, Coastal Brackish Marsh habitat and brackish stream habitat.**

Construction of the proposed project is expected to impact Northern Coastal Salt Marsh and Coastal Brackish Marsh habitats, which are considered sensitive natural communities and are also waters of the U.S. regulated by the USACE and USEPA under Section 10/404 of the CWA. Realignment of the lower portion of Refugio Creek to its new outfall location into San Pablo Bay is expected to impact disturbed Coastal Brackish Marsh habitat and brackish stream habitat occurring within the banks of the creek, as well as Northern Coastal Salt Marsh bayward of the railroad tracks. Upstream, restoration of Refugio Creek within the project site will impact Coastal Brackish Marsh. A restoration plan is currently being prepared for Refugio Creek. Restoration efforts are expected to result in no net loss of brackish marsh habitat and brackish stream habitat within Refugio Creek. Additionally, restoration and mitigation work at the Chelsea Wetlands would temporarily impact Northern Coastal Salt Marsh habitat, Coastal Brackish Marsh habitat and brackish stream habitat. However, restoration efforts will more than offset temporary impacts to habitats. Construction of the John Muir Parkway Bridge will impact a small portion of Coastal Brackish Marsh Habitat. Construction of the train station building and realignment of railroad tracks will impact small portions of Northern Coastal Salt Marsh habitat.
Alternative 1 and Track Option B. Construction of station building is expected to impact approximately 0.10 acres of Northern Coastal Salt Marsh habitat.

Construction of the Bay Trail, John Muir Parkway, Bayfront Boulevard, Bayfront Bridge, Transit Loop, and Transit Loop Bridge will permanently impact 0.08 acres of Coastal Brackish Marsh habitat (i.e., pickleweed brackish marsh).

Construction of the Bay Trail, John Muir Parkway, Bayfront Boulevard, and Bayfront Bridge, will permanently impact 0.06 acres of brackish stream habitat.

Restoration of Refugio Creek will temporarily impact 0.52 acres of Northern Coastal Salt Marsh habitat. Restoration of the North Channel and Refugio Creek will temporarily impact 0.68 acres of Coastal Brackish Marsh habitat. Approximately 0.47 acres of brackish stream habitat will temporarily be impacted with the restoration of Refugio Creek.

Alternative 2 and Track Option B. Construction of the station building is expected to impact approximately 0.01 acres of Northern Coastal Salt Marsh habitat.

Construction of the Bay Trail, John Muir Parkway, Bayfront Boulevard, and Bayfront Bridge will permanently impact 0.07 acres of Coastal Brackish Marsh habitat, and 0.05 acres of brackish stream habitat.

Restoration of Refugio Creek will temporarily impact 0.52 acres of Northern Coastal Salt Marsh habitat. Restoration of the North Channel and Refugio Creek will temporarily impact 0.68 acres of Coastal Brackish Marsh habitat. Approximately 0.47 acres of brackish stream habitat will temporarily be impacted with the restoration of Refugio Creek.

Mitigation Measure BIO-9: Temporary orange fencing will be erected around the perimeter of Northern Coastal Salt Marsh and Coastal Brackish Marsh habitats that will not be impacted by construction activities; delineating them as environmentally sensitive areas. Environmentally sensitive area fencing will be used that does not prohibit the potential movement of sensitive wildlife species, including, but not limited to the salt marsh harvest mouse, the San Pablo vole, the salt marsh wandering shrew, the California clapper rail, and the California black rail into or out of these marsh habitats. Signs will be placed on the fencing clearly stating that it is a sensitive habitat and that it is to be avoided during construction.

All construction personnel will receive training notifying them of the environmentally sensitive areas on the project site and the potential for these areas to support special-status species. Construction personnel and equipment will not be allowed to enter the environmentally sensitive areas on the project site. Storage of materials and equipment will not be allowed within 100 feet of environmentally sensitive areas.

Prior to commencement of construction activities that have the potential to impact the Northern Coastal Salt Marsh and Coastal Brackish Marsh, a permit will be obtained from the USACE and the BCDC for fill and/or disturbance of this habitat. All permit conditions will be followed. Suitable compensatory mitigation for impacts to Northern Coastal Salt Marsh and Coastal
Brackish Marsh will be determined in conjunction with the USACE and BCDC and implemented to ensure no net loss of Northern Coastal Salt Marsh occurs.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to Northern Coastal Salt Marsh, Coastal Brackish Marsh, and brackish stream habitats to less than significant.

**Impact BIO-10:** Construction of the proposed project could potentially result in loss of eelgrass and/or widgeongrass beds.

**Alternatives 1 and 2.** Elgrass surveys within the ESL and vicinity were completed in 2007 (WWR 2007b) and in 2010 (HDR 2010c), and no eelgrass or widgeongrass beds were found. However, eelgrass and widgeongrass beds expand and contract seasonally and populations could establish in the project site prior to construction and be impacted by dredging activities. Impacts to these special aquatic sites would be a potentially significant impact.

**Mitigation Measure BIO-10:** A valid preconstruction eelgrass survey will be completed during the period of active growth of eelgrass (typically March through October). The preconstruction survey will be completed prior to the beginning of construction and shall be valid until the next period of active growth. If any eelgrass is identified in the project area, post-construction eelgrass surveys will be conducted to determine if any eelgrass was adversely impacted. The survey will be prepared in consultation with CDFG and/or NMFS. If any eelgrass has been impacted, the impacted eelgrass will be mitigated for in consultation with CDFG and/or NMFS (e.g., at a ratio of 1.2:1).

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts to eelgrass and/or widgeongrass beds to less than significant.

**Invasive Species**

**Impact BIO-12:** Construction of the proposed project could potentially result in the spread of invasive species.

**Alternatives 1 and 2 and Track Option B.** The upland habitats on the project site are currently dominated by non-native invasive species. These species are abundant in disturbed habitats in the region. No mitigation is necessary for nonnative upland species. However, there is a potential that non-native cordgrass or other non-native species could be introduced to the project site as a result of construction disturbance to salt marsh and intertidal mudflats. If non-native cordgrass was introduced to the project site, it could spread and potentially competitively displace or hybridize with the existing native cordgrass. Additionally, any aquatic habitats disturbed by construction could become rapidly colonized by non-native species. This would be a potentially significant impact.

**Mitigation Measure BIO-12:** In order to prevent the introduction of non-native cordgrass and/or other non-native aquatic plant species to the project site, the following measures will be implemented:
All construction equipment to be utilized in or adjacent to the intertidal mudflats and salt marsh habitats shall be thoroughly cleaned to remove dirt and weed seeds prior to being transported or driven to or from the project site.

If any borrow soil or other stockpiled material (e.g., rock slope protection) to be placed in or adjacent to the intertidal mudflats and salt marsh habitats is transported to the project site from an offsite location, it shall be inspected for the presence of noxious weeds or invasive plants.

If noxious weeds or invasive plants are present in imported materials, the contractor shall remove approximately five inches of the surface of the material from the borrow site before transporting to the project site.

Before removal, this material will be chemically or mechanically treated to kill the existing noxious weeds and invasive plants, and will not be used for the project without approval.

**CEQA Determination:** Implementation of the proposed mitigation measure would reduce potential impacts associated with the spread of non-native species to less than significant.

With the implementation of Mitigation Measures BIO-1 through BIO-12, cumulative effects associated with biological resources from other identified development projects are not considered significant.

**Water Resources.** Construction of Hercules ITC facilities, roadways, and associated structures could potentially adversely degrade water quality. With implementation of Mitigation Measure WR-2, this potential impact would be less than significant:

Impacts to surface water from erosion are expected to be minimal during construction. Erosion will be controlled in accordance with an approved Erosion Control Plan. In addition, all construction activities will be performed in accordance with the California National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities, 2009-009-DWQ (effective July 1, 2010), requiring the implementation of BMPs to control sediment and other pollutants mobilized from construction activities.

BMPs may include, but would not be limited to:

- Excavation and grading activities in areas with steep slopes or directly adjacent to open water shall be scheduled for the dry season only (April 15 to October 15), to the extent possible. This will reduce the chance of severe erosion from intense rainfall and surface runoff.

If excavation occurs during the rainy season, storm runoff from the construction area shall be regulated through a storm water management/erosion control plan that shall include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material shall be covered and runoff diverted away from exposed soil material. If work stops due to rain, a positive grading away from slopes shall be provided to carry the surface runoff to areas where flow would be controlled, such as the temporary silt basins. Sediment basins/traps shall be located and operated to minimize the amount of off-site
sediment transport. Any trapped sediment shall be removed from the basin or trap and placed at a suitable location onsite, away from concentrated flows, or removed to an approved disposal site.

Temporary erosion control measures shall be provided until perennial revegetation or landscaping is established and can minimize discharge of sediment into nearby waterways. For construction within 500 feet of a water body, appropriate erosion control measures shall be placed upstream adjacent to the water body.

Erosion protection shall be provided on all cut-and-fill slopes. Revegetation shall be facilitated by mulching, hydroseeding, or other methods and shall be initiated as soon as possible after completion of grading and prior to the onset of the rainy season (by October 15).

BMPs selected and implemented for the project shall be in place and operational prior to the onset of major earthwork on the site. The construction phase facilities shall be maintained regularly and cleared of accumulated sediment as necessary. Effective mechanical and structural BMPs that would be implemented at the project site include the following:

- Mechanical storm water filtration measures, including oil and sediment separators or absorbent filter systems such as the Stormceptor® system, can be installed within the storm drainage system to provide filtration of storm water prior to discharge.
- Vegetative strips, high infiltration substrates, and grassy swales can be used where feasible throughout the development to reduce runoff and provide initial storm water treatment.
- Roof drains shall discharge to natural surfaces or swales where possible to avoid excessive concentration and channelization of storm water.
- Permanent energy dissipaters can be included for drainage outlets.
- The water quality detention basins can be designed to provide effective water quality control measures including the following:
  - Maximize detention time for settling of fine particles;
  - Establish maintenance schedules for periodic removal of sedimentation, excessive vegetation, and debris that may clog basin inlets and outlets;
  - Maximize the detention basin elevation to allow the highest amount of infiltration and settling prior to discharge.

Hazardous materials such as fuels and solvents used on the construction sites shall be stored in covered containers and protected from rainfall, runoff, vandalism, and accidental release to the environment. All stored fuels and solvents will be contained in an area of impervious surface with containment capacity equal to the volume of materials stored. A stockpile of spill cleanup materials shall be readily available at all construction sites. Employees shall be trained in spill prevention and cleanup, and individuals shall be designated as responsible for prevention and cleanup activities.

Equipment shall be properly maintained in designated areas with runoff and erosion control measures to minimize accidental release of pollutants.
These measures will be developed and described in the SWPPP that is prepared before construction begins. With proper implementation of BMPs, no significant impacts to surface or groundwater quality are anticipated during construction.

With implementation of the proposed mitigation measure WR-2, the potential water quality impact would be less than significant. With the implementation of Mitigation Measure WR-2, cumulative effects associated with water resources from other identified development projects are not considered significant.

Potential significant effects from climate change and rising sea level are discussed in the EIR/EIS for the ITC and for the railroad tracks, but not for the Bay Trail, which will be at an elevation that is higher than the railroad. With regard to the railroad, it is 11.6 feet above mean sea level. A 100-year flood at this site would be 7 feet above MSL. If 55 inches of sea level rise by the end of the century were added to this number, the resulting sea level would be approximately 11 feet, causing some inundation of the railroad but not of the Bay Trail.

**Geology and Soils.** Potentially significant impacts analyzed and with some relevant to the Bay Trail segment include: seismic activity could damage facilities and/or injure people; the proposed project could result in substantial soil erosion of topsoil; liquefaction, landslides, or lateral spreading could damage facilities and/or injure people and structures; subsidence could damage facilities. Although these potential impacts would likely not apply to asphalt-surfaced Bay Trail, it will be partially supported on piles and thus could be affected by the natural events listed above. Mitigation measures for these potential impacts are discussed below.

**Mitigation Measure GEO-1:** A site-specific geotechnical investigation shall be required for this project. The project will conform to provisions of current building codes and to the recommendations of the geotechnical investigations performed for the proposed project. Facilities shall be designed and constructed at a minimum to “Essential Structure” standards as well as the seismic design requirements for ground shaking specified in the Uniform Building Code for Seismic Zone 4. Additionally, to satisfy the provisions of the 2007 CBC, these facilities shall be designed to withstand ground motions equating to approximately a 500-year return period (10 percent probability of exceedance in 50 years). For design purposes, site-specific ground motions shall be calculated for the chosen project site.

With the implementation of Mitigation Measure GEO-1, the potential impact would be less than significant.

With the required compliance with the NPDES, as well as implementation of Mitigation Measure WR-2, the proposed project would not cause significant impacts related to erosion.

**Mitigation Measure GEO-3:** Design-level analyses of the liquefaction hazard shall be required for the project. Specifically, a program of site-specific exploratory borings and accompanying laboratory testing will be required to delineate any potentially liquefiable materials underneath proposed facilities. These geotechnical investigations will also be required for consideration prior to foundation design. Potentially liquefiable deposits will either have to be removed or
engineered (dewatered or densified) to reduce their liquefaction potential. This has been performed with success within areas of liquefaction risk in the Bay Area. For example, densified fill materials in areas of Foster City and Redwood Shores survived the 1989 Mw 6.9 Loma Prieta earthquake without liquefying (Benuska 1990 as cited in URS 2003). The commercial and residential developments situated on these areas of engineered fill suffered no major structural damage during the earthquake.

With the implementation of Mitigation Measure GEO-3, the potential impact would be less than significant.

Mitigation Measure GEO-4: A number of approaches are available to mitigate total and differential settlement associated with compressible Bay Mud. One or more of these shall be implemented in the design and construction of the proposed Hercules ITC structures, in compliance with the recommendations of the design-level geotechnical report:

- Careful grading design that incorporates anticipated total and differential settlements. This generally requires use of minimal fill thickness wherever practical, careful estimation of future settlements, and proper settlement monitoring during construction.
- Surcharging to eliminate or reduce total and differential settlement. Surcharging can be staged to allow reusing import fills in various areas, depending on the project phasing.
- Use of deep foundations that derive support below the Bay Mud. This generally involves driven concrete piles commonly used for heavy structures.

The project alternative selected should depend on the approach selected, the ability to phase developments and allow settlement to occur prior to construction, and the potential future settlement as identified in the design-level geotechnical report that could adversely impact structures and related site improvements.

With the implementation of Mitigation Measure GEO-4, the potential impact would be less than significant. With the implementation of Mitigation Measure WR-2, cumulative effects associated with geology and soils from other identified development projects are not considered significant.

Hazards and Hazardous Materials. The proposed project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through the accidental upset or release of hazardous materials. The proposed project would be located on a site that is included on a list of hazardous materials sites and could, as a result, create a significant hazard to the public or the environment. Mitigation Measures HAZ 1 (a-d), summarized here, reduce these potential impacts to a less than significant level and cumulative effects are not considered significant: the construction contractor shall develop a project-specific Health and Safety Plan; if affected or potentially affected soil and/or sediments are encountered during construction activities, these materials would be excavated, stockpiled, and reused or disposed of appropriately; the construction contractor shall develop a Spill Prevention and Response Plan and provide copies to all contractors working on the proposed project; and construction contractors and employees shall immediately control the source of any leak and contain any spill using appropriate spill containment and countermeasures.
Public Services. Construction traffic and other activities have the potential to adversely disrupt police and fire department emergency response times in the project area. Mitigation Measure PUB SVC-1 reduces this potential impact to a less than significant level and cumulative effects are not considered significant: Prior to the start of construction activities, the City shall consult with the emergency service providers who have jurisdiction in the immediate vicinity of the Hercules ITC site to develop a Construction Emergency Response Access Plan that would identify appropriate routes and access points that would be available to police and fire services to use during the construction phase.

Air Quality. Construction of the proposed project would create emissions of fugitive dust from excavation and grading, and emissions of criteria pollutants from construction equipment exhaust, as follows:

Alternatives 1 and 2 and Track Option B: Construction of either action alternative of the proposed project (Alternative 1 or Alternative 2) will result in short-term impacts to air quality in the project area. These impacts include temporary increases in emissions of CO, carbon dioxide ($CO_2$), NO$_x$, PM$_{10}$, PM$_{2.5}$, ROG, oxides of sulfur (SO$_x$), and TACs (Toxic Air Contaminants). Once the proposed project has been completed, construction emissions would cease. The Bay Area Air Quality Management District (BAAQMD) does not currently require full quantification of construction emissions for a project. The District considers implementation of all feasible control measures to be sufficient to reduce any air quality impacts from construction activities to less than significant.

Mitigation Measure AIR-1a: During construction of the proposed project, the contractors shall implement the following control measures from Table 2 of the BAAQMD CEQA Guidelines to control fugitive dust emissions from excavation:

**Basic Control Measures:**
- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction site.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at the construction site.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

**Enhanced Control Measures:**
- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This shall apply to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds of hauling and non-earth moving equipment on unpaved roads to 15
mph and earth moving equipment to 10 mph.
- Install wind fencing and phase grading operations, where appropriate, and operate water trucks to stabilize unpaved surfaces under windy conditions.
- Install sandbags or erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

**Mitigation Measure AIR-1b:** During construction of the proposed project, in order to reduce emissions and TACs from construction equipment exhaust, the developer shall implement Best Available Control Technologies (BACTs), which may include the following:

- Use alternative fuel or ultra-low sulfur fuel for construction equipment, as feasible;
- Employ catalyst-equipped diesel construction equipment and other add-on emission control measures, as feasible;
- Minimize equipment idling time to a maximum of 5 minutes, or other appropriate limit;
- Limit the hours of operation of heavy equipment and/or the amount of equipment in use;
- Ensure that all construction equipment used on the project is maintained in good working order and properly tuned according to manufacturers’ specifications; and
- Implement periodic spot checks by construction managers to ensure that emission control mitigations are maintained.

In addition, consistent with Coastal Conservancy guidance for addressing Climate Change, contract/specifications for work items will include preference being given, to the extent possible, to contractors that maximize fuel efficiency by using engines on off-road construction equipment that are no more than 10 years old or have equivalent carbon dioxide emissions of an engine 10 years old or newer. Contract/specifications will also require at least a 50% diversion of recyclable or reusable construction and demolition waste from disposal, including, but not limited to, concrete, lumber, metal, and cardboard. Finally, contract/specifications will require that preference be given to the use of sustainable and environmentally friendly building materials, including, but not limited to, materials with high post-consumer recycled content.

Implementation of the above mitigations will reduce the impacts of construction emissions to less than significant.

**Statement of Overriding Considerations**

Staff recommends that in conjunction with authorizing the disbursement of funds for the construction of the Bio-Rad Bay Trail segment in the City of Hercules the Coastal Conservancy adopt the following statement of overriding considerations consistent with Section 15093 of the CEQA guidelines:

1. The ITC project and possibly the proposed project cannot be constructed without resulting in the significant and unavoidable environmental effects of noise as summarized above. The mitigation measures for noise impacts associated with construction of the ITC project will reduce impacts but not to a level of insignificance for nearby sensitive receptors in the
residential and business complexes. There are no long-term noise impacts associated with the construction of the Bio-Rad Bay Trail.

2. The Bio-Rad Bay Trail will provide the following public benefits:
   a. Increase local and regional recreational amenities, thereby encouraging healthy activities,
   b. Provide an incentive to walk or ride a bike instead of drive a motor vehicle, thus helping to reduce GHG emissions,
   c. Extend the Bay Trail by another .53 miles, bringing the 500-mile trail closer to completion and reducing the gap between Hercules and Pinole,
   d. Connect local residential neighborhoods to the future Intermodal Transit Center, thus enhancing the potential to commute by train or ferry without driving to the ITC,
   e. Bring the Bay Trail closer to the Bay itself, and
   f. Increase the connectivity of East Bay Regional Park District parks through regional trail connections.

3. On balance, the environmental and social benefits of the Bio-Rad Bay Trail project outweigh its unavoidable adverse environmental effects.

Upon the Conservancy’s approval of the proposed authorization, staff will file a CEQA Notice of Determination.