San Francisco Bay Trail at Point Molate Mitigation Monitoring and Reporting Plan

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
I. AESTHETICS				
There are no potentially significant impacts related II. AGRICULTURE AND FORESTRY RESOURCES				
There are no potentially significant impacts related		estry resources.		
III. AIR QUALITY				
 Mitigation Measure AQ-1: Consistent with the Basic Construction Mitigation Measures required by the BAAQMD, the following actions shall be incorporated into construction contracts and specifications for the project: All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day with reclaimed water, if available. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. All vehicle speeds on unpaved roads shall be limited to 15 mph. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. 	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	Contractor East Bay Regional Park District	During construction activities On a daily basis during grading activities	Verified by: Date:

Mitigation Measures	Implementation	Mitigation/Monitoring	Timing for	Verified By
	Actions	Responsible Party	Mitigation Measure	and Date
 Structural pads shall be laid as soon as possible after grading unless seeding or soil binders are used. Idling times shall be minimized, specifically near the Point Molate Beach Park, either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. A publicly visible sign shall be posted with the telephone number and person to contact at Contra Costa County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable 				

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
IV. BIOLOGICAL RESOURCES Mitigation Measure BIO-1: Prior to construction, EBRPD or a qualified botanist shall pin flag or mark locations of special-status plant species along the alignment. The Project shall avoid impacts to special-status plant species where possible, however, where impacts cannot be avoided, plants shall be translocated or replanted in the project vicinity or nearest suitable habitat. Prior to the initiation of construction, a qualified botanist shall conduct a focused survey for marsh gumplant and Suisun marsh aster within the construction footprint during the appropriate blooming period (April through November). The survey will be conducted in accordance with the CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009).	Include measure as Condition of Approval Implementation actions are outlined in the measure	 East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction. The botanist is responsible for conducting the survey and, if necessary, salvaging and relocating plants. 	Prior to construction activities, and for 2 years after construction completion.	Verified by: Date:
Mitigation Measure BIO-2: If any construction activities (e.g., grubbing, grading, removal of one tree) are scheduled during the bird nesting season (typically defined by CDFW as February 1 to September 1), a qualified biologist shall conduct a preconstruction survey for nesting birds no more than 14 5 days prior to the start of work,	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	No more than 14 days prior to commencement of construction activities/throughout the construction period.	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
or as otherwise specified by permit conditions. If the project is suspended and delayed for 10 or more days another nesting survey shall be conducted 2 days prior to resuming work. If the survey indicates the presence of nesting birds, a qualified biologist shall delineate a buffer zone where no construction will occur until the biologist has determined that all young have successfully fledged, or until otherwise approved by CDFW. The size of the buffer(s) shall be determined by the project biologist in consultation with CDFW and be based on the nesting species and its sensitivity to disturbance.		 A CDFW-approved biologist is responsible for surveying the site and delineating a buffer zone if necessary. The Construction Contractor is responsible for implementing this measure. 		
Mitigation Measure BIO-3: Prior to ground-disturbing activities, a biologist shall conduct visual pre-construction surveys for California Ridgway's (formerly Clapper) rail, and California black rail within suitable habitat and surrounding areas. Suitable habitat on site is limited to marsh and mud flat areas near Castro Point. If the rails or other sensitive species are observed on or near the site, the biologist will establish buffers around which no disturbance can occur until the biologist determines a work can proceed within the area or the species do not occur within the area.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	 East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction. The biologist is responsible for conducting the survey. 	One time prior to ground disturbing activities, and during construction if species are observed after the pre-construction survey is completed.	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
Mitigation Measure BIO-4: Measures shall be taken to avoid impacts to monarch butterflies if present on site. If eucalyptus trees at the northern end of the trail are proposed for removal, a biologist shall conduct a survey for monarch butterflies during the winter roosting season when monarch butterfly roosting colonies would be expected to occur (typically October to February). If present, an avoidance plan will be developed by a biologist for implementation during construction. If monarch butterflies are present, grading, excavation, and eucalyptus tree removal shall be restricted from August 1 through March 31.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	 East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction. The biologist is responsible for conducting the pre- construction survey and, if found, developing an avoidance plan during construction. 	During construction and as deemed necessary by a qualified biologist.	Verified by: Date:
Mitigation Measure BIO-5: After construction is complete, EBRPD or the construction contractor shall replant native trees and native shrubs in the immediate vicinity of the Project at a 3:1 mitigation ratio, or a replacement ratio as determined by regulatory agencies and specified in environmental permits obtained through the Joint Aquatic Resources Permit Application (JARPA) if it results in a greater number of replacement trees.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	During construction activities deemed necessary by a qualified biologist	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
Mitigation Measure BIO-6: During construction, the contractor shall avoid and minimize the spread of invasive or noxious weed species. Equipment shall be cleaned and free of weeds, and seeds prior to being used on site. The EBPRD or a qualified contractor will write a site-specific Invasive Plant Plan to specify how the plan shall be implemented to avoid and minimize the introduction and spread of invasive plant species and seeds.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	During construction activities deemed necessary by EBRPD	Verified by: Date:
 Mitigation Measure BIO-7: To reduce potential short-term impacts to the upland wetland, the contractor shall implement the following avoidance measures and BMPs: Install temporary silt fencing beyond the outer edge of the wetland boundary to prevent entry of fill into the wetland during construction. Temporary silt fencing will also reduce the likelihood of wildlife from entering the work area. Place temporary Environmentally Sensitive Area (ESA) fencing where needed to prevent construction equipment and workers from entering the upland wetland. 	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	Prior to project construction	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
Mitigation Measure BIO-8: Fencing and other structures shall be designed and constructed in a manner that shall not impede wildlife movement.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	Prior to and during construction activities deemed necessary by East Bay Regional Park District/ Contractor	Verified by: Date:
Mitigation Measure BIO-9: The EBRPD or its construction contractor shall obtain a permit from the City of Richmond superintendent, or equivalent, for removal or pruning of trees at least three days prior to when work shall occur. Proposed tree removal shall be completed within 30 days of obtaining the permit.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	During construction activities within 30 days of obtaining the permit	Verified by: Date:
Mitigation Measure BIO-10: The construction contractor shall be responsible for providing, installing, and maintaining tree and shrub protection in active work areas for the duration of construction.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction.	During construction activities, as deemed necessary by Contractor	Verified by: Date:

Mitigation Measures	Implementation	Mitigation/Monitoring	Timing for	Verified By
	Actions	Responsible Party	Mitigation Measure	and Date
Mitigation Measure CUL-1: The contractor shall be required to limit the depth of grading and subsurface activities within P-07-000277 to the depth of the Belt Line ballast (approximately 2 feet). If it is determined that the depth of subsurface activities would exceed the depth of the Belt Line ballast through P-07-000277, then a qualified archaeologist should be retained to monitor Project ground-disturbing activities through Site P-07-000277. Archaeological monitors should be empowered to halt construction activities at the location of a discovery to review possible archaeological material and to protect the resource while the finds are being evaluated. Monitoring should continue until, in the archaeologist's judgment, cultural resources are not likely to be encountered. If deposits of prehistoric or historical archaeological materials are encountered during project monitoring, all work within 25 feet of the discovery should be redirected until the archaeologist assesses the finds, consults with agencies as appropriate, and makes recommendations for the treatment of the discovery. If avoidance of the archaeological deposit is not feasible, the archaeological deposits should be evaluated for	Include measure as Condition of Approval Implementation actions are outlined in the measure	 East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance during construction, and hiring a qualified archaeologist. The Construction Contractor is responsible for redirecting construction if resources are discovered and contacting the qualified archaeologist. The qualified archaeologist is responsible for identifying appropriate mitigation measures. 	During construction activities or within 14 days prior to subsurface activities below the Belt Line Ballast are scheduled	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
their eligibility for listing in the California Register of Historical Resources. If the deposits are eligible, impacts to the deposits should be mitigated. Mitigation may include excavation of the archaeological deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and a technical data recovery report at a curation facility. Upon completion of the assessment, the archaeologist should prepare a report to document the methods and results of the assessment. The report should be submitted to the EBRPD, the City of Richmond, and the Northwest Information Center at Sonoma State University upon completion of the resource assessment.				
Mitigation Measure CUL-2: Subsurface disturbance related to the construction of the trail shall be limited to the depth of asphalt and fill associated with Burma Road. If it is determined that the depth of trail construction will exceed the depth of asphalt and fill of Burma Road (2 feet), then it is	 Include measure as Condition of Approval Implementation actions are 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for ensuring compliance	During construction activities or within 14 days prior to subsurface activities near site P-07-000162	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
recommended that an archaeological and/or Native American monitor be present during subsurface activities through Site P-07-000162.	outlined in the measure	during construction, and hiring a qualified archaeologist and/or Native American monitor The Construction Contractor is responsible for redirecting construction if resources are discovered and contacting the qualified archaeologist and/or Native American monitor. The qualified archaeologist and/or Native American monitor is responsible for identifying appropriate mitigation measures.		
Mitigation Measure CUL-3: Any human remains encountered during project ground disturbing activities should be treated in accordance with California Health and Safety Code Section 7050.5. The District and the County of Contra Costa should verify that the	 Include measure as Condition of Approval Implementation actions are 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for	Within 24 hours in the event of discovery of human remains	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
following directive has been included in the appropriate contract documents: "If human remains are uncovered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted—if one is not already on site—to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains or associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods."	outlined in the measure	ensuring compliance during construction. The qualified archaeologist and/or Native American monitor is responsible for identifying appropriate mitigation measures.		
VI. GEOLOGY AND SOILS				
Mitigation Measure GEO-1: EBRPD or a qualified contractor shall develop a SWPPP and obtain coverage under the CGP. To obtain coverage, EBRPD shall be required to submit and certify the SWPPP and Permit Registration Documents (PRDs) in the Stormwater Multiple Application Tracking and	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District is responsible for incorporating this measure into contract specifications and for	Prior to issuance of a grading permit and throughout the construction period.	Verified by: Date:

Mitigation Measures Reporting System (SMARTS) at least 14 days	Implementation Actions	Mitigation/Monitoring Responsible Party ensuring compliance	Timing for Mitigation Measure	Verified By and Date
prior to any ground disturbance.		during construction.		
Mitigation Measure GEO-2: The Contractor shall be required to implement the SWPPP throughout construction of the project until stabilization criteria have been met and a Notice of Termination (NOT) of coverage under the CGP has been filed in SMARTS.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	 East Bay Regional Park District is responsible for incorporating this measure into contract specifications. Construction Contractor is responsible for implementing the SWPPP. 	During construction	Verified by: Date:

VII. TRIBAL CULTURAL RESOURCES

There are no potentially significant impacts related to tribal cultural resources

VIII. GREENHOUSE GAS EMMISSIONS

There are no potentially significant impacts related to greenhouse gas emissions

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
IX. HAZARDS AND HAZARDOUS MATERIALS				
Mitigation Measure HAZ-1: Exclusionary fencing shall be installed to keep users from accessing abandoned buildings and other structures. Fencing shall also be installed in areas where HBMs may be present and where contaminated soils occur near the proposed alignment and would not be capped. This may include areas along the eastern edge of Burma Road, the perimeter of buildings at the drum lot, and the inside perimeter of the drum lot.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District/ Contractor	Prior to project construction	Verified by: Date:
Mitigation Measure HAZ-2: The final Plan, Specification and Estimate (PS&E) for the Project shall identify areas where arsenic shall be addressed and require the contractor to comply with the NFD SGWMP. The contractor shall prepare a project-specific soil management plan, air monitoring plan, and Health and Safety Plan. During construction, areas of known arsenic, lead, or PAHs shall be either capped in place, relocated and capped, or access discouraged to prohibit users. Areas where soils containing arsenic above background occur beneath the footprint of the trail shall be covered with a minimum of 1-foot of clean fill material. Soils shall not be transported between City and	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District/ Contractor	Prior to project construction	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
Chevron properties (i.e. between Segment A and Segment B).				
Mitigation Measure HAZ-3: A boardwalk over the wetland area shall be constructed with railings designed to inhibit trail users from accessing the wetland. The boardwalk shall be included in the final PS&E to be reviewed and approved by the Lead Agency.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District/ Contractor	Prior to project construction	Verified by: Date:
Mitigation Measure HAZ-4: To protect construction personnel from potential exposure to undiscovered hazardous materials, the contractor shall be required to follow the NFD SGWMP. The NFD SGWMP defines protocols to be implemented if suspected contamination is found during mass grading and excavation activities associated with site development. These protocols shall include identification of how soils and affected groundwater are to be managed and requiring hourly field measurements within active excavation areas. Hourly field measurements shall also be required within active soil stockpile areas and confined spaces. The Plan shall be implemented by a professional engineer registered in the State of	Include measure as Condition of Approval Implementation actions are outlined in the measure	East Bay Regional Park District/ Contractor	Prior to project construction	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
California and shall include hourly field				
measurements for undiscovered contaminants				
using a photo ionization detector (PID) for				
measuring volatile organic compounds (VOCs),				
confined space monitor (oxygen, carbon monoxide, hydrogen sulfide, and, lower				
explosive limit), and any other monitor deemed				
appropriate by the registered engineer. If				
deemed necessary by the engineer, soil samples				
shall be collected and analyzed for petroleum				
hydrocarbons in areas of suspected				
contamination. If suspected contamination is				
found during construction activities, all work				
shall stop in the immediate area and a safe zone				
for construction personnel shall be established.				
The extent of contamination shall be assessed to				
determine whether there is a significant health				
risk to construction personnel working on-site.				
The SMP would also include construction				
personnel safety protocols according to				
Occupational Safety and Health Administration				
(OSHA) guidelines to be implemented as part of				
the SMP. The contractor shall ensure through				
contractual obligations with the RWQCB that				
OSHA guidelines are followed during construction activity and any potential removal of affected				
soils.				
SOIIS.				

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date
Mitigation Measure HAZ-54: The contractor shall adhere to and incorporate the relevant conditions contained in the 2012 NFD SGWMP. Prior to Project construction, a project specific soils management plan and or equivalent health and safety plan shall be prepared by the contractor under the direction of a certified industrial hygienist, and reviewed by the City of Richmond for consistency with existing contractual requirements.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	Contractor approved plans required by RWQCB and City of Richmond	Prior to construction	Verified by: Date:
X. HYDROLOGY AND WATER QUALITY Mitigation Measure HYD-1: Implement GEO -1 and GEO-2	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District/ Contractor	Prior to project construction	Verified by: Date:

Mitigation Measures	Implementation Actions	Mitigation/Monitoring Responsible Party	Timing for Mitigation Measure	Verified By and Date	
Mitigation Measure HYD-2: The Lead Agency shall obtain permits from RWQCB to ensure compliance with Clean Water Act Section 401.	 Include measure as Condition of Approval Implementation actions are outlined in the measure 	East Bay Regional Park District	Prior to project construction	Verified by: Date:	

XI. LAND USE AND PLANNING

There are no potentially significant impacts related to land use and planning.

XII. MINERAL RESOURCES

There are no potentially significant impacts related to mineral resources.

XIII. NOISE

There are no potentially significant impacts related to noise

XIV. POPULATION AND HOUSING

There are no potentially significant impacts related to population and housing.

XV. PUBLIC SERVICES

There are no potentially significant impacts related to public services.

XVI. RECREATION

There are no potentially significant impacts related to recreation.

XVII. TRANSPORATION/TRAFFIC

There are no potentially significant impacts related to transportation and traffic.

XVIII. UTILITIES AND SERVICE SYSTEMS

There are no potentially significant impacts related to utilities and service systems.