


East Bay Regional Park District

MLK Regional Shoreline Bay Trail Gap (Doolittle Drive South) and Improvements Project

Initial Study/Proposed Mitigated Negative Declaration

April 13, 2020

MLK Regional Shoreline Bay Trail Gap (Doolittle Drive South) and Improvements Project

Initial Study/Proposed Mitigated Negative Declaration

Prepared for:

East Bay Regional Parks District
2950 Peralta Oaks Court
Oakland, CA 94605

Prepared by:

GHD
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Santa Rosa, California 95407

April 2020

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1. Project Information

Project Title:	MLK Regional Shoreline Bay Trail Gap (Doolittle Drive South) and Improvements Project
Lead Agency Name & Address:	East Bay Regional Parks District 2950 Peralta Oaks Court Oakland, CA 94605
Contact Person:	Toby Perry, Project Manager Telephone: (510) 544-2317
Project Location:	Martin Luther King Jr. Regional Shoreline City of Oakland, Alameda County California
Project Sponsors:	East Bay Regional Parks District 2950 Peralta Oaks Court Oakland, CA 94605
Project Assessor's Parcel Number:	042-4404-001-00; 042-4410-001-13; and Caltrans Right-of-Way (State Highway 61)
General Plan Designation:	Resource Conservation Area
Zoning:	Open Space (majority, Doolittle Drive has no designation)
Description of Project:	Improvements to the existing Martin Luther King Jr. Regional Shoreline, including construction of a new Bay Trail segment, maintenance of existing Bay Trail, removal and replacement of boat launch, removal of boat ramp, and parking lot improvements.
Surrounding Land Uses and Setting:	San Leandro Bay to the north, Oakland International Airport and industrial uses to the south and west, and greater Martin Luther King Jr. Regional Shoreline and industrial uses to the east.

1.1. Introduction

The East Bay Regional Parks District (District) proposes to fill a gap in the San Francisco Bay Trail (Bay Trail) and make improvements within the existing Martin Luther King Jr. (MLK) Regional Shoreline. The MLK Regional Shoreline is a park within the District's system of 73 parks, serving Alameda and Contra Costa counties. The District leases the site from the Port of Oakland. The MLK Regional Shoreline Bay Trail Gap (Doolittle Drive South) and Improvements Project (Project), is subject to the requirements of the California Environmental Quality Act (CEQA). The District is the CEQA Lead Agency. The purpose of this Initial Study is to:

- Provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration;
- Disclose potential project environmental impacts; and

- Inform the CEQA Lead Agency, responsible agencies, trustee agencies, and the public regarding the potential environmental impacts of the project.

This Initial Study has been prepared to satisfy the requirements of the CEQA Statute (Public Resources Code (PRC) Div. 13, Sec 21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

1.2. Project Background and Need

The *East Bay Regional Parks District Master Plan 2013* (EBRPD 2013) defines the overall mission and vision for the District. The goal of the Plan is to maintain a balance between the need to protect and conserve resources and the need to provide opportunities for recreational use of the parklands. The Plan contains broad policies for implementing this goal.

In 1977, EBRPD adopted the *Martin Luther King Jr Regional Shoreline Land Use-Development Plan* (Plan) (EBRPD 1977). Subsequent to the Plan adoption, park improvements were constructed over several years including a boardwalk, fishing dock, several bicycle/pedestrian paths, several parking lots, landscaping, and storm water facilities. Additional improvements in the 80's and 90's included a restroom, viewing platform, concession stand, restored marsh area, and additional bicycle/pedestrian paths.

The 1,220-acre MLK Regional Shoreline hugs the shoreline of San Leandro Bay for 4.5 miles beginning at Doolittle Drive and Harbor Bay Parkway, and continuing down and around to Arrowhead Marsh, then up almost to High Street. Appendix A includes a map showing the extent of the existing park and improvements. The proposed Project improvements would be limited to approximately 4,000 linear feet of shoreline from the boat launch to Swan Way, adjacent to Doolittle Drive.

In 2014, after an extensive analysis and coordination with many agencies, the District finished the Feasibility Study for *San Francisco Bay Trail at Martin Luther King, Jr. Regional Shoreline* (May 2014). The District's goal was to identify a feasible alignment to close two gaps in the Bay Trail along the MLK Regional Shoreline, one north of the MLK Shoreline Center and one south of the boat launch. The Bay Trail is discontinuous in this area due to the difficulty of constructing a trail in a tightly constrained corridor adjacent to a heavily travelled state highway, an environmentally sensitive shoreline area, and the proximity of an intensely urbanized airport industrial complex. Three alignments were considered in the feasibility study (inland alignment - Earhart Road, upland alignment – Doolittle Drive, and coastal alignment - shoreline). For both the northern and southern gap segments, the coastal alignment was identified as the preferred alternative as it satisfied the applicable Bay Trail policies, had no traffic conflicts, was preferred by the Port of Oakland, and the District had existing easement rights to construct the coastal alignment. Within the coastal alignment two construction methods were considered: added embankment and elevated structure. Although the elevated structure would result in less solid fill within the bay, the added embankment was chosen because it would result in fewer environmental concerns from public and private entities. This Initial Study analyzes the "coastal alternative" of the southern Bay Trail gap using the "added embankment" construction type. The northern gap is not being implemented at this time.

The Project also includes the resurfacing of existing Bay Trail just south of the gap segment, resurfacing and widening of existing trail north of the gap segment to better align with current standards, shoreline protection, and replacing the existing boat launch at the southern end of the MLK Shoreline Center. The boat launch is nearing the end of its practical service life, does not meet

current standards, and portions of the launch have begun to fail. In 2016 the southern finger float partially sunk and had to be removed, along with a guide pile.

The Project would increase transportation connectivity along the Bay Trail, connecting residents to shoreline recreation and jobs at the airport and airport industrial complex. Completing an inter-jurisdictional trails network, including the Bay Trail spine, is identified as a priority improvement in the *Alameda Countywide Bicycle Plan* (County of Alameda 2012) and *Alameda Countywide Pedestrian Plan* (County of Alameda 2012). In addition, the Bay Trail is identified as one of three "major regional trails" to be completed in Alameda County.

1.3. Project Location

The project site is located within a portion of the MLK Regional Shoreline, beginning from the south end of the MLK Shoreline Center at the existing boat launch and extending south approximately 4,000 feet to Swan Way (refer to Figure 1, Project Location). The new Bay Trail segment would be situated between Doolittle Drive and San Leandro Bay. Improvements would be made at the boat launch, boat launch parking area, and along the Bay Trail and shoreline. In addition, an existing boat ramp, and associated signage, along the shoreline would be removed.

1.4. Detailed Project Description

The following provides a description of the various individual project components. Project components are also identified in Figures 2A and 2B, Project Improvements.

1.4.1. San Francisco Bay Trail Gap Closure and Existing Bay Trail Improvements

The Project includes construction of approximately 2,300 linear feet of a new trail section of the Bay Trail to close the existing southern Bay Trail gap, as well as resurfacing and/or widening of approximately 1,600 feet of existing Bay Trail to the north and south of the gap segment. Each improvement is described separately below (also see Figures 2A and 2B).

San Francisco Bay Trail Gap Closure

The southern Bay Trail gap closure segment would extend for approximately 2,300 linear feet, beginning at the Port of Oakland pump house (pump house) structure, located just north of Langley Street, and extend to an existing fishing pier located about 700 feet north of Swan Way. The pathway would parallel Doolittle Drive and require a safety barrier wall between the Bay Trail and Doolittle Drive (i.e.: SR 61). See Section 1.4.5 Guardrail Safety Barrier for additional details. The pathway would be 12 feet wide with a one-foot paved shoulder on the west side and a one-foot unpaved shoulder on the eastern side immediately prior to the change in slope leading to the bay. This segment would have two bike pullouts.

Existing Bay Trail Improvements

The proposed southern Bay Trail gap segment would connect to existing trail segments to the north and south. The two existing trail segments consist of asphalt concrete paved paths approximately ten feet wide with no shoulders.

The existing northern segment between the boat launch and the pump house is approximately 925 feet long and would be widened to 12 feet. This trail segment would include a realignment of the trail

connection from the boat launch to the existing Bay Trail. The realignment would cross the top of the reconstructed boat launch (see description below), cross an existing swale, and connect to the existing Bay Trail approximately 45 feet north of the boat launch. The existing trail connection which currently veers to the southwest, crosses the existing swale, and connects to the northwest corner of the parking lot would be removed and a curb installed along the edge of the parking lot. The asphalt trail would be removed and the culvert left in place. At the realigned connection, an 18-inch reinforced concrete culvert would be placed beneath the trail at the crossing of the existing swale.

The existing southern Bay Trail segment is approximately 670 feet long extending from about the southern fishing pier to Swan Way. Improvements for this section would include a 2.5 inch grind and asphalt concrete overlay to the existing trail width. Approximately 250 feet of new 12-foot wide trail would be constructed to straighten out the trail connection to the intersection of Swan Way and Doolittle Drive (See Figure 2B Site Plan). If appropriate, the asphalt would be reused on site as base for the new connector. Otherwise it would be hauled to an appropriate disposal facility.

With these upgrades, the northern and southern portion of the existing Bay Trail, within this segment, would be brought to near current standards, as existing constraints allow, and as outlined in the *San Francisco Bay Trail Design Guidelines and Toolkit* (SF Bay Trail 2016).

1.4.2. Boat Launch Replacement

The existing two-lane boat launch would be replaced (See Figure 2A Site Plan). The new facility would be designed in general accordance with the *California Department of Boating and Waterways Handbook for Small Craft Boat Launching Facilities* (March 1991).

Existing Boat Launch Demolition

Three 12-inch diameter guide piles, one 80-foot long boarding float dock (southern boarding float dock and one guide pile have already been removed), and the approximate 3,000-square-foot concrete boat ramp would be removed. Demolition and removal would be performed either at low tide or alternatively a cofferdam may be constructed and the construction area dewatered. In addition, one ornamental tree at the southwest corner of the boat launch ramp would be removed. To the extent feasible, the concrete would be reused on site as base for the new trail segments. Otherwise it would be hauled to an appropriate disposal facility.

Boat Launch Replacement

Similar to the existing boat launch, the replacement boat launch would have two boat access lanes and two boarding float docks (see Figure 2A Site Plan). The location and orientation of the concrete boat ramp and boarding float dock abutments would be the same as the existing facility. Proposed modifications from the existing launch include improved American with Disabilities Act (ADA) accessibility and extension of the top and bottom of the concrete launch ramp to account for sea level rise and launching at high and low water levels. The new boarding float docks would be lengthened by approximately 30 feet to allow for more boats to access the docks at one time, minimizing queuing in the adjacent channel. The floating docks would be 110 feet long by 8 feet wide, one on either side of the launch ramp, each secured by two 14-inch diameter steel piles, and a 5,015 square-foot concrete launch ramp. The launch ramp and abutments would have a footprint of about 46 feet by 109 feet, of which 3,692 square feet would be below the mean high tide.

The boat ramp and abutments would be constructed with a combination of cast-in-place concrete and precast concrete panels. In general, improvements below tide levels would be constructed using

precast concrete while improvements above typical tide levels would consist of cast-in-place concrete. As indicated above for demolition operations, construction may include use of a cofferdam and dewatering.

Design of the boat launch ramp would be integrated with the Bay Trail which would extend across the top of the ramp. This crossing would be improved as a high visibility crossing with appropriate path markings and advanced signage to promote safety for both pedestrians and motorists. A kayak lay-down area, with a hose-bib, would be located to the southeast of the boat launch (see Figure 2A Site Plan).

1.4.3. Shoreline Protection

An 850-foot length of the shoreline between the boat launch and pump house is eroding due to lack of shoreline protection. The erosion has come within 5 feet of the existing Bay Trail. If left untreated, the erosion would threaten the integrity of the trail especially with the trail widening planned for this segment. Consequently, shoreline protection is proposed along this section of shoreline consistent with the existing shoreline treatments between the pump house and the southern pier. A mix of various-sized rocks ("rip rap"), ranging from 10 inches square to about 18 inches square, would be placed from about elevation +5 feet to elevation +10 feet (mean high water is 5.9 feet), along this length of shoreline (see Figure 2A).

In addition, shoreline protection would be needed along a 600-foot segment of new Bay Trail between the fishing pier and the boat ramp (see Figure 2B). At this location the road is too narrow to accommodate the trail. As with the other shoreline protection location, a mixture of various-sized rocks, ranging from 10 inches square to about 18 inches square, would be used.

1.4.4. Parking Lot Improvements

The existing parking lot associated with the boat launch would be grind and overlayed and restriped (see Figure 2A Site Plan). The new layout would increase vehicle parking spaces from 17 to 20, of which two would be ADA. In addition, there would be 14 boat-trailer spaces, one of which would be ADA. Existing curbs and storm drain infrastructure would be protected during construction and remain unchanged.

1.4.5. Guardrail Safety Barrier

A metal beam guardrail would be installed along Doolittle Drive between the Bay Trail and the road. Existing metal beam guardrail (which currently terminates at the fishing pier) would be extended north to the pump house. The new guardrail would be approximately 32 inches high, generally matching the existing in size and style along the southerly portion of the project, and be in conformance with Caltrans Standards. The metal portion of the guardrail would receive a brown treatment to blend with the wood posts and natural environment.

1.4.6. Modifications to Doolittle Drive

To accommodate the new segment of Bay Trail, Doolittle Drive would need to be reconfigured from Swan Way to just north of Langley Street. Widening of Doolittle Drive would vary from 0 to 4.3 feet to the west. This widening would standardize lane width and shoulders, while also shifting the roadway to minimize trail conflicts. The modifications also include remarking and restriping. These improvements would be contained within the existing Caltrans right-of-way.

1.4.7. Boat Ramp Removed

Approximately 1,300 feet south of the pump house is an old concrete boat ramp of approximately 2,500 square feet that will be demolished and removed from the shoreline (see Figure 2B Site Plan). The ramp is estimated to be approximately 6 inches thick. Demolition and removal would be performed either at low tide or alternatively a cofferdam may be constructed and the construction area dewatered. After removal, the area subject to tidal influence would be allowed to silt in and return to bay mud. To the extent feasible, the concrete would be reused on site as base for the new trail connectors. Otherwise it would be hauled to an appropriate disposal facility. In addition, there are two signs regarding park rules at this location that also would be removed.

1.4.8. Park Maintenance

In addition to existing regularly scheduled maintenance and upkeep of the park, the Project's new facilities would be repaired on an as-needed basis to maintain structures in good working condition and provide a safe environment for park patrons. This could include trail resurfacing, slope protection, or repairs to the proposed trail.

1.4.9. Compensation for Impacts to Jurisdictional Waters

In addition to removing the boat ramp, as described in Section 1.4.7, the Parks District may compensate for solid fill impacts to jurisdictional waters through on-site restoration and/or enhancement activities. On-site restoration opportunities exist adjacent to New Marsh. Enhancement opportunities exist along the shoreline and include removal of derelict creosote piles, concrete debris, or other man-made debris. Whether these restoration and enhancement activities are feasible, is currently under consideration by the Parks District.

1.4.10. Project Construction

Construction Schedule

Construction is expected to begin in April 2021 with a tentative one-year construction timeframe (completion estimate in March 2022). Work within the waterway (San Leandro Bay) would be limited to June to November. In accordance with the City of Oakland Planning Code, construction hours would be 7:00 am to 7:00 pm Monday through Friday.

Construction Staging and Equipment

The primary construction staging area is expected to be located in the boat launch parking lot. Secondary staging may be located in the open area adjacent to the Martin Luther King Jr. Grove parking lot on the northeast corner of Swan Way and Doolittle Drive. It is anticipated that full closure of the boat launch parking lot will occasionally be required on a temporary basis for activities such as slurry-seal and restriping operations as well as boat launch reconstruction efforts. Construction of the replacement boat launch would occur from a barge, as well as the shoreline. These efforts could require short-term lane closures along Doolittle Drive, though the need for this would ultimately be determined by the selected contractor. Other equipment used during construction would include pile driving equipment and related impact hammers, backhoe, compressor, concrete pump, concrete saw, crane, excavator, compaction equipment, grinder saw, scraper, and concrete ready-mix and delivery trucks.

Dewatering

Dewatering of the immediate boat launch area may occur in conjunction with the Project. Upper portions of the ramp, are expected to be above normal tidal fluctuations and not require dewatering. For the lower portion of the ramp, the use of a water-filled rubber dam or a temporary steel sheet pile cofferdam offset a distance from the demolition and installation of the lower portion of the ramp, may be used. Water within the construction zone would be pumped out, treated as necessary, and discharged back to the Bay. Precast concrete panels are proposed for use on the lower portion of the ramp within the tidal zone to minimize the duration of work within the Bay. Construction at the boat launch would require the dewatering structure to remain in place for several weeks.

Demolition at the boat ramp is not anticipated to require dewatering as the bottom of the ramp may be exposed during lower tide events. However, if dewatering is required, demolition would be complete and the dewatering structure removed within a few days.

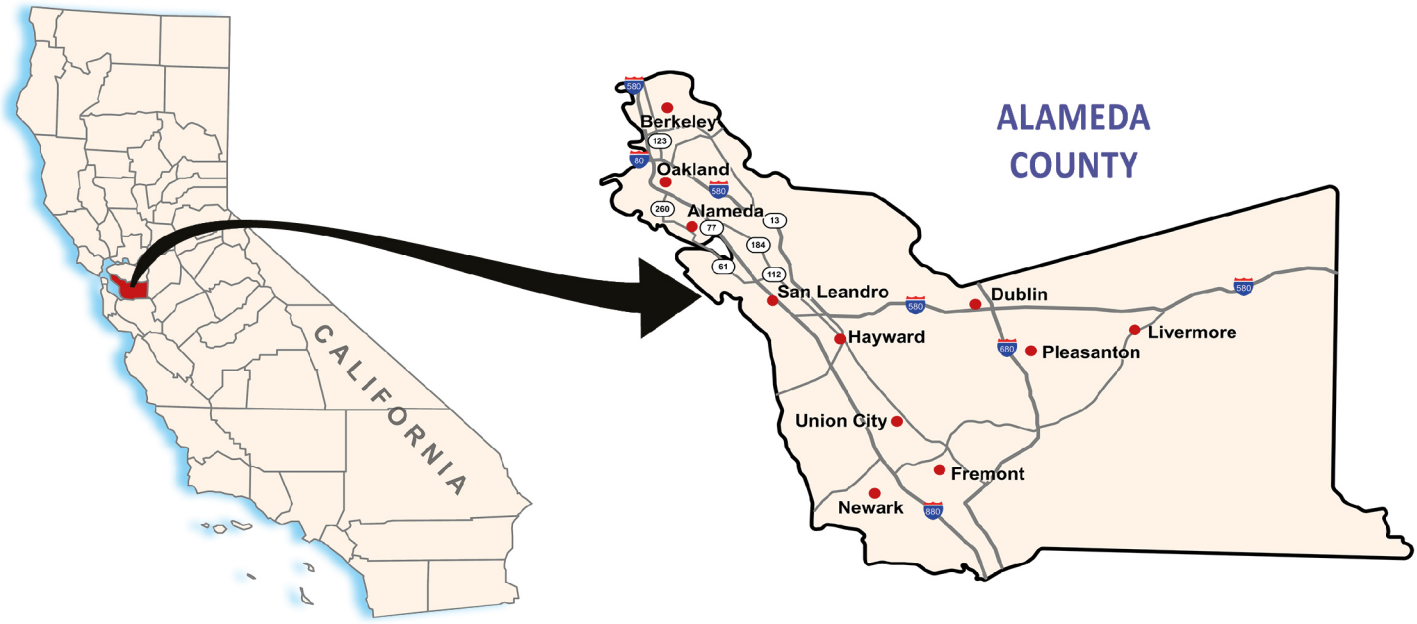
1.5. Required Permits or Approvals

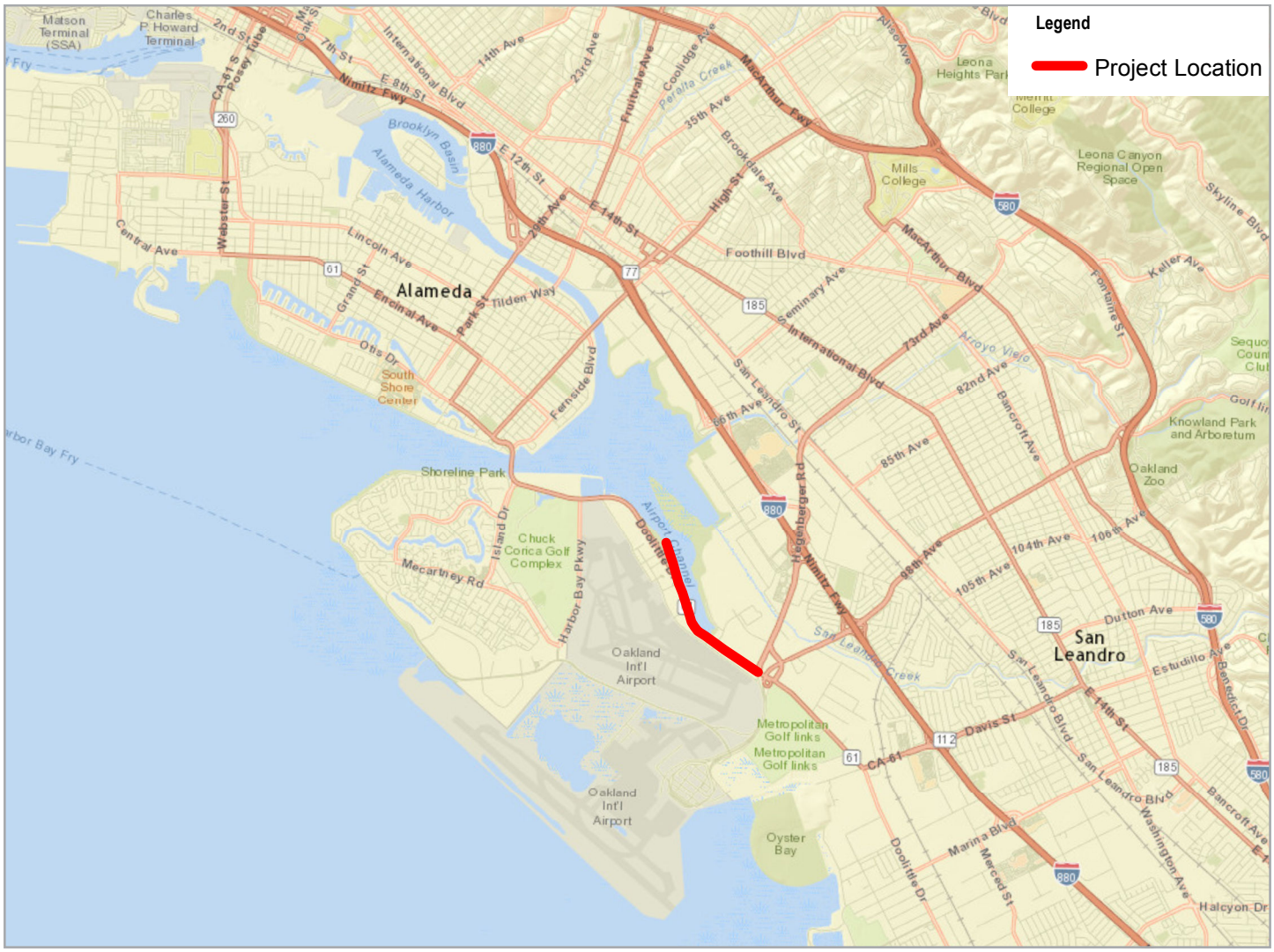
Several agencies would be involved in the consideration of portions of the project. Federal, State and local approvals that may be required for the project include the following:

- U.S. Army Corps of Engineers: The Project would require a Corps Section 10/404 Nationwide Permit for the placement of fill in jurisdictional waters of the U.S.
- San Francisco Bay Regional Water Quality Control Board: A RWQCB Section 401 Water Quality Certification would be required because the Project involves the placement of fill in jurisdictional waters of the U.S. The Certification would support the approval of the Corps Nationwide Permit.
- State Water Resources Control Board: The Project would disturb more than 1 acre, therefore preparation and implementation of a Construction Stormwater Pollution Prevention Plan and Notice of Intent, would be required.
- San Francisco Bay Conservation and Development Commission: The Project would require a Major Permit from the Bay Conservation and Development Commission for development within the bay jurisdiction and within the 100-foot shoreline band.
- California Department of Transportation: The Project is receiving funding through the Active Transportation Program. Caltrans review and approvals would occur in support of the funding and for oversight of work within State right-of-way. Technical studies supporting the funding approval, in compliance with Caltrans standards have been prepared. The Project also would require an Encroachment Permit for the portion of the Bay Trail improvements that encroach on Caltrans right-of-way. Note: Caltrans is not taking lead to apply for any required environmental approvals. The Park District (CEQA lead agency) is the lead permit applicant for all state environmental permits. A federal resource agency working with the Park District will be NEPA lead agency.
- Port of Oakland: Encroachment Permit or right-of-way acquisition.
- City of Oakland: Plan Check, Tree Removal Permit, and Tide Water Creek Protection Plan Permit.

1.6. California Native American Tribe Consultation

One Native American tribe, Wilton Tribe, has requested formal notification of proposed projects from the District per PRC Section 21080.3.1. In February of 2018, the District sent Wilton notification of the Project. The District has not received a request for formal consultation. The District also sent notification letters to six tribal representatives with traditional lands or cultural places located within Alameda County, as provided by the Native American Heritage Commission. A response was not received from these six tribes.





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EAST BAY REGIONAL PARKS DISTRICT
MLK REGIONAL SHORELINE BAY TRAIL GAP (DOOLITTLE DRIVE SOUTH) AND IMPROVEMENTS PROJECT

VICINITY MAP

Project No. **11110042**
Revision No. **-**
Date **11/07/2017**

FIGURE 1

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Data source: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community. Created by: rmremillard

LEGEND

- METAL BEAM GUARDRAIL
- FILL LIMITS
- SLOPE PROTECTION LIMITS
- BIKE PATH LIMITS

NOT TO SCALE

PLAN NORTH

East Bay Regional Park District

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EAST BAY REGIONAL PARK DISTRICT
MLK SHORELINE BAY TRAIL GAP (DOOLITTLE DRIVE SOUTH) AND IMPROVEMENTS PROJECT

FIGURE 2A

LEGEND

- METAL BEAM GUARDRAIL
- FILL LIMITS
- SLOPE PROTECTION LIMITS
- BIKE PATH LIMITS

NOT TO SCALE

PLAN NORTH

East Bay Regional Park District

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MLK SHORELINE BAY TRAIL GAP (DOOLITTLE DRIVE SOUTH) AND IMPROVEMENTS PROJECT

FIGURE 2B

2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages:

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agricultural & Forestry Resources	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Air Quality	☐ Hydrology/Water Quality	☐ Transportation/Traffic
☐ Biological Resources	☐ Land Use/Planning	☐ Tribal Cultural Resources
☐ Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Energy	☐ Noise	☐ Wildfire
☐ Geology/Soils	☐ Population/Housing	☐ Mandatory Findings of Significance

DETERMINATION

(To be completed by the Lead Agency) On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.

☐ I find that the proposed MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

EBRPD Signature

April 8, 2020

Date

3. Environmental Analysis

3.1. Aesthetics

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				✓
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

a) Have a substantial adverse effect on a scenic vista? (Less than Significant)

The City of Oakland General Plan identifies San Leandro Bay and the shoreline surrounding San Leandro Bay as a scenic resource. The San Francisco Bay Plan, prepared by BCDC, identifies the length of Doolittle Drive fronting the MLK Regional Shoreline as a scenic drive. San Leandro Bay is located to the north and east of the Project, and provides a scenic vista for pedestrians, cyclists, and motorists on Doolittle Drive and surrounding recreational areas. Most of the project improvements would be to existing facilities and would not change the above-grade mass or sizing that would potentially block views. The exception would be the metal beam guardrail safety barrier to be installed along Doolittle Drive.

The guardrail safety barrier would be installed between the trail and Doolittle Drive starting at the existing guardrail near the fishing pier and continue to the pump station dock. The height of the guardrail would be approximately 32 inches, generally matching the existing 450-foot length of safety barrier that is currently located from Swan Way to the fishing pier. The metal portion of the guardrail would receive a patina treatment to blend with the wood posts and natural environment. The continuation of the guardrail safety barrier would be consistent with the existing barrier, be low to the ground, and would not substantially block views of the shoreline or San Leandro Bay from those

traveling on Doolittle Drive. As seen in Image 1b, View with Proposed Project, the guardrail is low to the ground and has visual gaps between the posts. Vehicular views of San Leandro Bay would not be impeded as car windows would be above the top of the guardrail, while views from the trail would be unimpeded as the trail is on the bay side of the guardrail.

Views of San Leandro Bay, and the hills beyond, would not be substantially obstructed or degraded by the Project. In addition, the metal guardrail would receive a patina treatment to reduce visual conflicts and blend with the environment, and would only occur for approximately 30 seconds of travel along Doolittle Drive (0.5 mile of the over 2 miles of Doolittle Drive along the MLK Regional Shoreline). The impact to scenic vistas would be less than significant.

Image 1a Existing View

Image 1b View with Proposed Project (Bay Trail and Guardrail)

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

There are no State-designated scenic highways in the vicinity of the Project. California State Route 61 follows Doolittle Drive north near the eastern boundary of the Oakland International Airport through Alameda; however, California State Route 61 is not designated as a scenic highway. Therefore, no significant impact within a state scenic highway would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (No Impact)

The Project site is within an urbanized area. To the immediate west and southwest of the Project site are industrial and warehouse type uses. The majority of the Project site is zoned Open Space. The portion that is within the Doolittle Drive right-of-way does not have a zoning designation. In a review of the Oakland Municipal Code, no visual or scenic quality provisions were applicable to the Project site. For example, Chapter 17.90 Scenic Route Combining Zone Regulations, only applies to sites with an S-10 overlay, which the Project site does not have. Chapter 17.11.060 conditionally allows trails within the Opens Space designation, and does not have any scenic-specific regulation that would apply to the Project. With regard to the Project's compliance with General Plan policies regarding scenic vistas, refer to the analysis above under item a).

The Project's improvements would not conflict with applicable zoning or other regulations governing scenic quality.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (No Impact)

The Project does not include any new lighting or materials that would be a source of glare (such as mirrors or highly reflective surfaces); therefore, there would be no impact.

3.2. Agriculture and Forest Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				✓

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (No Impact)

According to the Farmland Mapping and Monitoring Program map for Alameda County (CDC 2014), the project would not occur in areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance; therefore, no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (No Impact)

The project is not located on land designated by the California Department of Conservation as being under a Williamson Act contract (CDC 2014) or on land zoned for agricultural use; therefore, no impact would occur.

c - e) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Result in the loss of forest land or conversion of forest land to non-forest use? Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? (No Impact)

According to the City of Oakland zoning maps, the Project is not located on land zoned for forest land or timberland (City of Oakland 2019). Neither construction nor operation of the Project would conflict with zoning regulations for agricultural use or forest land, result in the loss of forest land, or result in the conversion of farm or forest land. No impact to agriculture or forest resources would occur.

3.3. Air Quality

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		✓		
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				✓

The air quality analysis utilizes the thresholds of significance, screening criteria and levels, and impact assessment methodologies presented in the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017a). As provided by the BAAQMD's CEQA Air Quality Guidelines, if the Project meets the screening criteria for an impact category, and is consistent with the methodology used to develop the screening criteria, then its air quality impact for that category may be considered less than significant.

a) Conflict with or obstruct implementation of the applicable air quality plan? (No Impact)

The BAAQMD Bay Area 2017 Clean Air Plan is the most recently adopted regional air quality plan that pertains to the project (BAAQMD 2017b). The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan. In addition, the 2017 Clean Air Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of $PM_{2.5}$ and toxic air contaminants (TACs). The 2017 Clean Air Plan contains 85 individual control measures in nine economic sectors: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Many of these control measures require action on the part of the BAAQMD, the California Air Resources Board (CARB), or local communities, and are not directly related to the actions undertaken for an individual infrastructure project. The Project would not prevent the BAAQMD from implementing these actions and none apply directly to the Project. In addition, the Project would not result in a growth in population or jobs in the project area; therefore, the project would not exceed the growth assumptions contained in the 2017 Clean Area Plan. Implementation of the project would not conflict with or obstruct the Bay Area 2017 Clean Air Plan. As a result, no impact would occur.

b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Less than Significant with Mitigation)

Under the California standards, the San Francisco Bay Area Air Basin (Air Basin) is currently designated as a nonattainment area for suspended particulate matter ($PM_{2.5}$ and PM_{10}) and ozone (BAAQMD 2017c). Under national standards, the Air Basin is currently designated as nonattainment for 8-hour ozone, and nonattainment for $PM_{2.5}$. The Air Basin is in attainment (or unclassified) for all other air pollutants (BAAQMD 2017c). Therefore, the non-attainment pollutants of concern for this impact are ozone, PM_{10} and $PM_{2.5}$. Impact b), above, analyzed the project's potential for PM_{10} and $PM_{2.5}$ impacts from construction-generated dust, and found the project would be less than significant.

Ozone is not emitted directly into the air, but is a regional pollutant formed by a photochemical reaction in the atmosphere. Ozone precursors, ROG and NOx, react in the atmosphere in the presence of sunlight to form ozone. Therefore, the BAAQMD does not have a recommended ozone threshold, but has regional thresholds of significance for project-emitted NOx and ROG. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD 2017a).

Construction Impacts

Construction activities are anticipated to take approximately one year to complete. The types of air pollutants generated by construction activities are typically nitrogen oxides (NOx) and particulate matter, such as dust and exhaust. Construction activities could temporarily increase levels of $PM_{2.5}$ and PM_{10} downwind of construction activity. These are temporary emissions that vary considerably from day-to-day and by the type of equipment and weather. In addition, carbon monoxide (CO) and reactive organic gases (ROG) are emitted during operation of gas and diesel-powered construction-equipment.

Project construction would result in regional air pollutant and precursor emissions from equipment exhaust and worker trips to the Project site. The BAAQMD's 2017 Air Quality Guidelines provides screening criteria for determining if a Project could potentially result in significant construction-phase impacts from criteria pollutants and precursors. Construction of the Project would result in a less than significant impact to air quality if the following screening criteria are met:

1. The Project is below the applicable screening level size shown in Table 1 [of the BAAQMD 2017 CEQA Air Quality Guidelines].
2. All Basic Construction Mitigation Measures are included in the Project design and implemented during construction.
3. Construction-related activities would not include any of the following:
    - Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
    - Simultaneous occurrence of more than two construction phases;
    - Simultaneous construction of more than one land use type;
    - Extensive site preparation; or

- Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity

The applicable construction criteria pollutant and precursor screening level is 600 acres for a city park. At an estimated construction footprint of less than 1 acre, the Project would be less than the BAAQMD's construction criteria pollutant and precursor screening level.

Demolition activities would not require the removal of asbestos. The Project would not involve the simultaneous occurrence of more than two construction phases, and does not include more than one land-use type. The Project would not involve extensive site preparation or material transport. It is anticipated that the Project would import up to 300 cubic yards of rip rap and export an estimated 300 cubic yards of demolished concrete and paving material, for a total of approximately 600 cubic yards of materials transport.

However, if the Project does not adhere to the basic construction measures recommended by BAAQMD, then the Project is considered to result in significant construction-phase impacts from criteria pollutants and precursors. The potential impact to air quality is considered significant. The Project does not currently incorporate the basic construction measures recommended; therefore, the Project would result in a significant impact. Mitigation Measure AQ-1 requires implementation of the basic construction measures.

Operational Impacts

Following construction, the project would not include any stationary sources of air emissions. Vehicle trips associated with operation and maintenance of the trail system currently occurs under existing conditions. The Project would not result in the need for additional operation and maintenance-related vehicle trips, but would be covered as part of existing routine maintenance activities. The Project would not increase the population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of criteria air pollutants. Therefore, the project's contribution to a cumulative nonattainment criteria pollutant impact would be less than significant.

Mitigation Measure AQ-1: Implement Basic Air Quality Control Measures during Construction

To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, the following Bay Area Air Quality Management District (BAAQMD) recommended Basic Construction Measures will be included in construction contract specifications and required during implementation of 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;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered or shall have at least two feet of freeboard;
- 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 shall be prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;
- All paving shall be completed as soon as possible after trenching work is finished;

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). 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 the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of Mitigation Measure AQ-1 would reduce this impact to a less-than-significant level through controlling emissions during construction in compliance with the BAAQMD CEQA Guidelines.

c) Expose sensitive receptors to substantial pollutant concentrations? (Less than Significant)

Sensitive receptors are defined by the BAAQMD as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. There are no residences, schools, or hospitals in close proximity to the project. The nearest sensitive receptors are residences located approximately 0.7 mile east of the project. The Lighthouse Community Charter School and Brookfield Elementary School are located approximately 0.75 mile and 0.97 mile east of the project, respectively.

Potential localized impacts would be exceedances of State or federal standards for $PM_{2.5}$, PM_{10}, or CO, or other substantial pollutant concentrations. The BAAQMD provides recommended thresholds of significance for construction and operational-generated PM_{10} and $PM_{2.5}$, and operational CO, as described below.

Construction Impacts

Project construction would include resurfacing of existing trail, widening existing trail, replacing the existing boat launch, placement of slope protection, and installation of the new Bay Trail gap closure segment.

As stated in the BAAQMD's Air Quality Guidance, PM_{10} and $PM_{2.5}$ from construction dust are evaluated separately from PM_{10} and $PM_{2.5}$ from exhaust. For construction dust, the BAAQMD recommends incorporation of best management practices (BMPs) to reduce localized dust impacts to less than significant. However, the Project's construction activities do not include mass grading, earthmoving, or other dust-generating activities. Therefore, the Project's potential to generate a localized PM_{10} or $PM_{2.5}$ impact during construction is less than significant.

Additionally, construction equipment and activity would be located more than a half-mile from sensitive receptors. Due to the limited footprint and construction activity, and the distance from the majority of construction activities, the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, exposure of sensitive receptors during construction would be less than significant.

Operational Impacts

Localized high levels of CO (CO hotspot) are associated with traffic congestion and idling or slow-moving vehicles. The BAAQMD recommends a screening analysis to determine if a project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is not necessary. The Project would result in a less than significant impact to air quality for local CO if the following screening criteria are met:

- Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; or
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; or
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Vehicle trips associated with operation and maintenance of the improved MLK Regional Shoreline would be similar to existing conditions. Following construction, the Project would not result in the need for additional operation and maintenance-related vehicle trips, but would be covered as part of existing routine maintenance activities. Therefore, the Project would meet the screening criteria listed above; the project-generated operational emissions would not violate or contribute substantially to an existing or projected air quality violation. The project's potential to generate a localized CO impact is less than significant.

Additionally, the Project would not include any stationary sources of air emissions or new mobile source emissions that would result in substantial long-term operational emissions of criteria air pollutants. Therefore, project operation would not expose nearby sensitive receptors to substantial levels of pollutants. The exposure of sensitive receptors during operation would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (No Impact)

Facilities that typically are considered to potentially create objectionable odors include such uses as wastewater treatment plants, landfills, asphalt plants, coffee roasters, and food processing. The Project involves improvements to an existing regional park and would not emit objectionable odors. Therefore, there would be no impact from odors.

3.4. Biological Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?			✓	
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

The following analysis is based on the *Delineation of Waters of the United States* (ICF 2019) and *Biological Resources Report* (ICF 2018) (Appendix B) prepared for the Project. Site visits in support of these reports and the CEQA analysis were conducted in October 2016 and November 2019.

The site supports five vegetation communities: managed turf grass, ruderal, ornamental woodland, seasonal wetland, and fringe tidal marsh (See Figure 1 in Appendix B Biological Resources Report).

Managed Turfgrass

Managed turfgrass in the site is limited to actively-managed portions of the park uplands, generally between Doolittle Drive and the Bay shoreline. This vegetation community is characterized by sparse to dense cover of planted and irrigated non-native annual grasses. Dominant grass species include ripgut grass (*Bromus diandrus*), rye grass (*Festuca perennis*), soft chess (*Bromus hordeaceus*), wall barley (*Hordeum murinum*), and wild oats (*Avena sp.).* Common forb species observed in the herbaceous layer are the same as those described in the ruderal vegetation community below.

Ruderal

The majority of vegetation along the Bay shoreline and adjacent to Doolittle Drive is composed of ruderal species that thrive in disturbed areas. Representative plant species include Bermuda grass (Cynodon dactylon), bristly ox-tongue (Helminthotheca echioides), bull thistle (Cirsium vulgare), English plantain (Plantago lanceolata), fennel (Foeniculum vulgare), Italian thistle (Carduus pycnocephalus subsp. pycnocephalus), milk thistle (Silybum marianum), prickly lettuce (Lactuca serriola), and stinkwort (Dittrichia graveolens), among others. Common grasses observed in ruderal vegetation include smilo grass (Stipa miliacea var. miliacea), ripgut grass, rye grass, soft chess, wall barley, and wild oats.

Ornamental Woodland

This vegetation community is comprised of trees planted for ornamental landscaping along the edges of the park and associated trails, Doolittle Drive, and next to the pump house. Trees included several large specimens of coast live oak (Quercus agrifolia), ngaio tree (Myoporum laetum), island ironwood (Lyonothamnus floribundus), and sheoak (Casuarina equisetifolia).

Seasonal Wetland

Seasonal wetland vegetation occurs in two topographic swales: one is north of the parking lot at the northern end of the site and the second is to the west of Doolittle Drive. In both swales, the vegetation community is dominated by saltgrass (Distichlis spicata), which co-occurs here with small amounts of alkali heath (Frankenia salina), fat-hen (Atriplex prostrata), and pickleweed (Salicornia pacifica). Seaside arrowgrass (Triglochin maritima) was observed at the east end of the seasonal wetland adjacent to the parking lot. The seasonal wetland vegetation community in both swales also supports a few non-native plant species such as perennial pepperweed (Lepidium latifolium), ripgut grass, rye grass, soft chess, and wall barley.

Fringe Tidal Marsh

This plant community occurs as a narrow band of native tidal salt marsh vegetation along portions of the Bay shoreline. Plant species in this community occur in visually conspicuous zones (Penaido et al. 1994), with pickleweed comprising the “middle marsh zone” at the water’s edge and saltgrass, alkali heath, and fat-hen comprising the “high marsh” or “upland transition” zone adjacent to the ruderal community described above. Because most fringe marshes around San Francisco Bay formed as a result of artificial substrates (e.g., riprap, fill) being deposited into the Bay for shoreline stabilization, they lack the ecological value of larger marshes with well-established marsh soils and extensive networks of tidal channels and sloughs (e.g., Arrowhead Marsh). Growing on the fringe of the Bay below high tide line and on substrate that is not composed of marsh soils or bay mud, these marsh plants, from a federal jurisdictional perspective, are part of the Bay (a tidal water of the United States) and do not meet the criteria of wetlands under Section 404 of the Clean Water Act (ICF 2017;

subject to verification by USACE). The Invasive Spartina Project's annual Ridgway's rail survey reports map the Project area's shoreline as "unsuitable habitat."

Arrowhead Marsh and New Marsh

In addition to the five vegetation communities within the Project site, Arrowhead Marsh is located across the channel to the north of the Project site. Arrowhead Marsh is a relatively young marsh that is home to numerous special-status species including California Ridgway's rail; salt marsh harvest mouse; salt marsh wandering shrew; and burrowing owl. In an 1855 survey the marsh is shown as open water, while in an 1895 survey the marsh is beginning to fill from sediment deposited from San Leandro Creek. By 1939 Arrowhead Marsh had become much of how it appears today. In the ensuing years, the marsh southeast of Arrowhead Marsh was filled for development purposes. In 1998, the Parks District restored tidal flow to 71 acres creating tidal and seasonal wetlands in what is referred to as New Marsh.

Habitat restoration continues to be implemented at the MLK Regional Shoreline including creating new nesting habitat for migrating shorebirds and supporting the US F&W Service's Recover Plan for the Western Snowy Plover. The Park District started enhancing habitat for burrowing owls by constructing artificial burrows at the north side of New Marsh in the winter of 2001/2002. A pair of burrowing owls attempted breeding at this location in 2008 and 2009 but were unsuccessful. The Park District constructed additional artificial burrows in 2014 and continues to maintain them with the goal of establishing a breeding population.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Less than Significant with Mitigation)

Special-status Plants

Four special-status plant species potentially could be present within the fringe tidal marsh at the Project site as follows:

Point Reyes Salty Bird's-Beak (Chloropyron maritimum ssp. *palustre)*: Point Reyes salty bird's-beak is an annual herb in the broomrape family. This species is found in tidal salt marsh below 10 meters. It blooms from June through October. Point Reyes salty bird's-beak is known from coastal northern California from Humboldt to Santa Clara counties. No CNDDB records exist within two miles of the site. This species was not observed during the site visits, but marginal habitat is present in the fringe tidal marsh along the San Leandro Bay shoreline.

Long-styled sand-spurrey (*Spergularia macrotheca* var. *longistyla)*: Long-styled sand-spurrey is a perennial herb in the carnation family. This species is found in alkaline meadows, seeps, and marshes below 255 meters. It blooms from February through May and is known to occur in Napa, Solano, Alameda, and Contra Costa counties. One undated but presumed extant CNDDB record for long-styled sand-spurrey exists within 2 miles of the site (CDFW 2019a). This species was not observed during the site visit.

California Seablite (Suaeda californica): California seablite is a perennial, evergreen shrub in the goosefoot family. This species is found on margins of tidal salt marsh below 15 meters. California seablite blooms from July through October and is known to occur from Morro Bay to San Luis Obispo and San Francisco to Contra Costa Counties. One extirpated (i.e., no longer existing) CNDDB record

exists within 2 miles of the site. This species was not observed during the October 2016 site visit, but marginal habitat is present in the fringe tidal marsh along the San Leandro Bay shoreline.

Saline Clover (Trifolium hydrophilum): Saline clover is known from the Sacramento Valley and central western California. This species is an annual herb in the legume family, commonly found in tidal salt marsh, annual grasslands, vernal pools, and marshes and swamps below 300 meters. It blooms from June through August and is associated with alkaline soils. One extirpated CNDDB record exists within 2 miles of the site. This species was not observed during the site visit, but marginal habitat is present in the fringe tidal marsh along the San Leandro Bay shoreline.

Fringe tidal marsh is present in scattered patches along the edge of San Leandro Bay. The fringe tidal marsh is of artificial origin resulting from riprap and hardscape. While it is unlikely that the above four special-status plant species occur, it could not be entirely ruled out. If present, impacts to these plant species could be significant without mitigation.

Special-status Birds

During the site visit, 21 bird species were detected. All waterbirds were observed foraging or resting on the open waters of the channel, while shorebirds were observed roosting at one location along the rocky shoreline approximately 560 feet north of the fishing pier.

Eleven special-status birds may be present at the Project site. Potential nesting habitat exists for 3 species, and the remaining 8 potentially use the site for foraging only.

White-tailed Kite (Elanus leucurus): White-tailed kite is a California Fully Protected species that occurs throughout California, primarily west of the Sierra Nevada in lowlands and foothills. Although white-tailed kites typically occur in open habitats such as grassland, marsh, and savanna, they will also use marginal habitats such as freeway edges and medians when foraging for voles and mice. Nests are constructed in a variety of trees, with coast live oak perhaps the most common, and placed high in the crown on thin branches. During the site investigation, a single white-tailed kite was observed during the October 2016 site visit, and there are multiple eBird occurrences in the vicinity, including a February 19, 2012 observation of adults mating near the intersection of Doolittle Drive and Hegenberger Road approximately 0.6 mile southeast of the site, and several 2019 and 2020 observation in the vicinity of the Project site. The ornamental trees on the site provide suitable nest sites.

Burrowing Owl (Athene cunicularia): Burrowing owl is a state species of special concern. It is a small owl that lives in burrows created by ground squirrels and pocket gophers. This species forages over grassland and open salt marsh vegetation for small mammals, insects, and lizards and is most active at dawn and dusk. Two CNDDB records of this species occur within two miles of the site, but this species was not observed during the site visit. There are multiple nearby records in eBird (i.e., Arrowhead Marsh, MLK “New” Marsh), but none during the peak breeding season (April to June), suggesting that the species only winters in the area. Suitable foraging habitat for the species occurs in the managed turfgrass and other open areas of the site. The ground squirrel burrows scattered at the margins of managed turfgrass and ruderal communities provide habitat for burrowing owl. Project construction could disturb or directly impact burrowing owls, if present. Potential impacts to burrowing owl are considered significant.

Alameda Song Sparrow (Melospiza melodia pusillula): Alameda song sparrow is a state species of special concern and is found in brackish marshes vegetated with pickleweed along San Francisco Bay. This species is known to nest within tall vegetation or in pickleweed within its marsh habitat.

Three CNDDB records of this species occur within two miles of the study area, but this species was not observed during the site visit. This species has potential to forage in the limited strip of tidal salt marsh along the San Leandro Bay shoreline and nest in ruderal vegetation at the Project site.

In addition, there are 8 special-status species that may use the site for foraging, include Golden Eagle (*Aquila chrysaetos*), Northern harrier (*Circus cyaneus*), American peregrine falcon (*Falco peregrinus anatum*), California black rail (*Laterallus jamaicensis coturniculus*), California Ridgway's rail (*Rallus longirostris obsoletu*s), Black skimmer (*Rynchops niger*), California least tern (*Sternula antillarum browni*), and Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*). Due to its presence in Arrowhead Marsh, additional information is provided below regarding California Ridgway's Rail.

California Ridgway's Rail (Rallus longirostris obsoletus): California Ridgway's rail ranges along the Pacific Coast in Monterey and San Luis Obispo Counties and inhabits tidal mudflats and sloughs. Five CNDDB records occur within two miles of the Project site. Park District staff have surveyed for California Ridgway's Rail since 1995. California Ridgway's rails are known to breed at three sites within the MLK Regional Shoreline: Arrowhead Marsh, New Marsh, and Fan Marsh. Arrowhead Marsh is immediately northeast and across San Leandro Bay (approximately 950 feet) from the existing boat launch where pile-driving would occur. The westernmost tip of New Marsh is approximately 1,030 feet northeast of the central portion of the Project site. New Marsh is isolated from the Project site by the park entrance road, a mixed-use trail, and Airport Channel.

As noted above, the Invasive Spartina Project's annual Ridgway's rail survey reports map the Project area's shoreline as "unsuitable habitat." This species has potential to forage within the fringe tidal marsh along the Bay shoreline, but the narrow width of the marsh and its proximity to disturbed uplands provides little to no protection from land-based predators, likely precluding nesting in or adjacent to the site. The potential impact to California Ridgway's rail would be less than significant.

Ornamental woodland on the site contains trees and shrubs suitable for nesting by white-tailed kite (California fully protected species). Alameda song sparrow (California species of special concern) may nest in denser stands of fringe tidal marsh and adjacent ruderal vegetation. Construction activities could result in the disturbance or loss of these and other native bird nests, if present in or near the work area. Removal or trimming of trees and other vegetation during the nesting season (February 1 to August 31) could result in the destruction of active nests, including eggs, nestling, or juveniles. Construction-related disturbance (e.g., equipment noise, presence of workers) could disrupt normal nesting behavior, resulting in nest abandonment and reproductive failure. The potential impact to nesting birds would potentially be significant without mitigation.

Special-status Mammals

The following special-status mammals may occur at the Project site:

Pallid Bat (Antrozous pallidus): Pallid bat is a state species of special concern. In central and northern California, the species is associated with oak, ponderosa pine, redwood, and giant sequoia land cover. Pallid bats forage among vegetation and above the ground surface. Daytime roost sites include rock outcrops, mines, caves, hollow trees, buildings, and bridges. Night roosts are commonly under bridges but are also in caves and mines. Hibernation may occur during late November through March. Pallid bats breed from late October through February, and one or two young are born in May or June. No CNDDB records of pallid bat occur within two miles of the site. This species was not observed during the site visit, but it does have potential to roost in trees and the pump house at the Project site.

Townsend's Big-Eared Bat (Corynorhinus townsendii): Townsend's big-eared bat is listed as a species of special concern and by CDFW and also listed as a species with high regional priority by Western Bat Working Group. Townsend's big-eared bat occurs throughout California in a wide variety of habitats. This species is typically associated with coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Townsend's big-eared bats have been observed utilizing buildings, bridges, rock crevices, and hollow trees as roost sites. Due to relatively cool climate of the San Francisco Bay area, suitable roosts with stable thermal regimes are expected to be found in man-made structures in site. No CNDDB records of Townsend's big-eared bat occur within two miles of the site. This species was not observed during the site visit, but it does have potential to roost in trees and the pump house at the Project site. The Martin Luther King Jr. Regional Shoreline Park bathroom structures are frequently visited by humans, so bats are not expected to roost there.

It is unlikely that any of the special-status bat species roost on the site. Although there presence cannot be entirely ruled out, there are only two places within the Project site that bats would roost: the pump house structure or in tree cavities/hollows. The sycamore tree that would be removed as part of the project does not have any hollows or cavities and the pump house will not be demolished or otherwise disturbed in any fashion. Therefore, potential impact to bats is considered less than significant.

Salt Marsh Harvest Mouse (Reithrodontomys raviventris): Salt marsh harvest mouse is a federally endangered and state endangered and fully protected species that inhabits salt marsh habitat vegetated with pickleweed around the greater San Francisco Bay. One CNDDB record of this species occurs within two miles of the study area. This species was not observed during the site visit, but the reconnaissance-level survey was conducted during daylight hours and the species is nocturnal. Salt marsh harvest mouse, as well as Salt marsh wandering shrew a California Species of Special Concern, have a marginal potential to occur within the limited strip of tidal salt marsh habitat along the San Leandro Bay shoreline.

Fringe tidal marsh vegetation along the Bay shoreline provides very little habitat for Salt marsh harvest mouse and wandering shrew but their potential presence cannot be completely ruled out. To the northwest of the boat launch are larger tidal marsh patches that could provide breeding habitat for salt marsh harvest mouse. Salt marsh harvest mice potentially occurring at these locations could move into the Project site during construction. In addition, some fringe tidal marsh could be directly impacted by project activities from placement of riprap. The potential impact to this species, as well as the habitat it may occupy, would potentially be significant without mitigation.

Marine Mammals

The open waters of San Leandro Bay provide habitat for harbor seals, a common species in the San Francisco Estuary but one that is protected by the Marine Mammal Protection Act (MMPA). Small numbers (1 to 3 individuals) were observed in the Airport Channel portion of San Leandro Bay during both site visits. Their use of the waters within San Leandro Bay is likely limited to occasional foraging and wandering; there are no known haul-outs or suitable haul-out sites in the Project area.

If present in the Project area, harbor seals would be exposed to increased airborne and underwater noise levels produced by pile driving. NMFS recommends specific thresholds for different marine mammal species to evaluate when auditory effects are likely to occur, including different thresholds for physical injury due to peak noise and accumulated sound levels, disturbance due to airborne noise (e.g., noise at haul-out areas), and behavioral effects. Effects resulting in injury of marine

mammals would be considered “Level A” harassment under the MMPA and those resulting in disruption of behavioral patterns (e.g., migration, breathing, nursing, breeding, feeding, sheltering) would be considered “Level B” harassment under the MMPA. As there are no haul-outs in San Leandro Bay Level A harassment is not anticipated.

Table 3.4-1 presents the estimated distance to the adopted thresholds, from impact and vibratory pile driving of between 2 and 4 piles in one day. Given the unattenuated distance for Level B harassment extends the full width of the channel, the potential impact of pile driving to result in disruption of behavioral patterns would potentially be significant.

Table 3.4-1: Predicted Underwater Distances to Adopted PTS Thresholds for Phocid Pinnipeds from Pile Driving

Activity		Piles Installed per Day	Level A injury zone (meters) SEL_{CUM} Threshold	Level B Harassment Zone (meters)
Impact 14-inch steel shell piles in water	Unattenuated	2	92	398
		4	146	398
	Attenuated	2	32	136
		4	50	136

Attenuated assumes 10-dB reduction with use of attenuation system such as a bubble curtain.
SEL = sound exposure level

Special-Status Fish and Essential Fish Habitat

Two special-status fish species may stray into San Leandro Bay and one has suitable habitat:

Green Sturgeon (DPS) (Acipenser medirostris): The southern distinct population segment (DPS) of green sturgeon is federally listed as threatened under Federal Endangered Species Act. The southern DPS includes all populations originating from coastal watersheds south of the Eel River, with the only known spawning population in the Sacramento River. This species could occur in the open waters of San Leandro Bay within the project site. Stray individuals may occasionally venture into these waters from their primary migration route from the Golden Gate north to the Sacramento San Joaquin Delta (an approximate distance of 25 miles).

Central California Coast Steelhead (Oncorhynchus mykiss): Steelhead from San Francisco and San Pablo Bays and their tributaries are included in the Central California Coast (CCC) distinct population segment (DPS), which is listed as threatened under the Federal Endangered Species Act. CCC steelhead enter rivers typically between late December and April after winter and spring rains.. No CNDDB records occur within two miles of the Project site. Suitable general (non-migratory) habitat is present for steelhead within San Leandro Bay, but migratory and spawning habitat is absent due to the lack of a freshwater stream within the portion of the Airport Channel portion of San Leandro Bay, which is immediately adjacent to the site.

Longfin Smelt (Spirinchus thaleichthys): Longfin smelt is a federal candidate, state threatened, and California species of special concern. The San Francisco Bay/Sacramento–San Joaquin River Delta (Bay-Delta) population is the southernmost and largest spawning population in California. Longfin smelt generally spawn at age 2 in fresh water in the Delta from December to April. Longfin smelt do not occupy areas with temperatures greater than 22°C (72°F) in combination with salinities greater than 26 parts per thousand (ppt). These conditions occur between August and September almost annually in South San Francisco Bay and periodically in shallower portions of San Pablo Bay. Longfin smelt in their second year of life are typically distributed from the west Delta through South San

Francisco Bay from January through March. One CNDDB record occurs within two miles of the site. Suitable habitat is present for longfin smelt in the portion of San Leandro Bay within and immediately adjacent to the site.

Impacts from pile-driving to the above described special-status fish species would potentially be significant without mitigation.

NOAA's National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife, use the following criteria to protect fish from pile driving activities: peak 206 dB or cumulative 187 dB SEL. Thus, where underwater pile driving noise exceeds 206 dB or cumulatively exceeds 187 dB SEL it can cause injury to fish in that location. Table 3.4-2 presents the distance to each criteria for impact pile driving associated with installation of the boat launch piles. Exceedance of the threshold at a distance of less than 10 meters (33 feet) is not considered significant.

Table 3.4-2: Estimated Distance (Meters) to dB Thresholds from Impact Pile Driving

Pile Types	Peak 206	187 Cumulative SEL[1]	183 Cumulative SEL[1]
14-inch Steel Piles in Water (4/day)	<10	148	185
14-inch Steel Piles in Water (2/day)	<10	93	173

1. Cumulative assumes 4 piles per day for the steel piles.

As shown in Table 3.4-1, sound levels exceeding the peak 206 dB would be less than 10 meters (33 feet). The in-water piles are expected to exceed the cumulative SEL at between 148 and 185 meters (485 to 607 feet). Sounds levels in exceedance of the criteria may cause injury to fish in that location. Sound levels in exceedance of the threshold, occurring more than 10 meters from the pile driving, and occurring outside the work window, is considered a significant impact without mitigation.

Essential Fish Habitat (EFH): The open waters of San Leandro Bay within the Project site are considered EFH for a variety of fish species covered under the Pacific Groundfish FMP, Coastal Pelagic Species FMP, and Pacific Salmon FMP, including the following species known to occur in San Francisco Bay: northern anchovy, English sole, leopard shark, spiny dogfish, big skate, starry flounder, sand sole, and curlfin sole. Impacts to EFH would occur through: increased turbidity in the water column; disturbance of benthic habitat, including the associated biological community; and increase in shading of aquatic habitat. EFH would also be temporarily impacted by elevated underwater sound levels during pile driving.

Temporary increases in turbidity into the water column associated with pile driving for the new boat launch and demolition of the existing boat launch and boat ramp would result in short-term impacts on EFH. A small amount of disturbance would occur within close proximity of the pile, as it is driven, and would then quickly dissipate. In addition, only four piles would be installed over a one to two-day period. The potential impact would be localized and short term, and is not expected to have a significant impact on EFH. Removal of the boat launch and boat ramp would occur during low tides and be isolated from the bay with a water-filled rubber dam or a temporary steel sheet pile cofferdam thus isolating the construction from the bay. The potential impact during construction, from turbidity to EFH, is considered less than significant.

Removal and installation of piles, as well as replacement of the boat launch ramp, would temporarily disturb soft bottom sediments and associated benthic community in the Project footprint. Benthic invertebrates may be injured or killed. Because green sturgeon are benthic feeders, any that regularly

forage in the project footprint would be affected by a reduction in prey items (e.g., mysid shrimp and amphipods). However, the extent of impacts to the benthic community is expected to be small due to the very small area affected by an individual pile (4.3 square feet for all four piles) and non-continuous distribution of piles across the bay bottom. In addition, construction would be completed within a single construction season and the benthic community is expected to recover within a few months after construction. Given the small portion of the Bay disturbed, the likely availability of food elsewhere in the Bay, and the anticipated recovery of the benthic community, the impact to the benthic community would be less than significant.

The Project would increase the footprint of floating structures (i.e., new boat launch) by 0.03 acre. Overwater structures, such as docks and piers, are known to reduce growth of submerged aquatic vegetation, decrease primary productivity, alter predator-prey interactions, change invertebrate assemblages, and reduce the density of benthic invertebrates; all of which could lead to an overall reduction in the quality of fish habitat. Although the replacement floating docks would be slightly larger than the existing docks, this small increase is not expected to have a substantial effect on the submerged aquatic environment given the small portion of the overall Bay that they would cover. In addition the floating docks would sit above the ramp, so would be "shading" the concrete ramp, and not bay mud. The impact from the floating structures is considered to be less than significant.

Implementation of Mitigation Measure BIO-1, Avoid and Protect Special-Status Plant Species, would require the Parks District to identify potential special-status plants within the project footprint and if found provide a steps for salvage, relocation, or propagation and monitoring. The impact to special-status plant species would be less than significant after mitigation.

Mitigation Measure BIO-1: Avoid and Protect Special-Status Plant Species

Prior to the start of Construction, the District shall hire a qualified botanist to conduct protocol-level surveys in the project site for Point Reyes salty bird's-beak, Long-styled sand-spurrey, California seablite, and saline clover during their appropriate blooming or identification periods in accordance with CDFW protocols. Survey results will be documented in a brief report or technical memorandum. If the survey efforts demonstrate absence of special-status plant species in the improvements area, no further action will be required.

If the protocol-level botanical survey reveals the presence of special-status plant species in the project site, the District will notify USFWS and/or CDFW. If any special-status plants would be directly impacted by construction, a qualified botanist or restoration ecologist will prepare a salvage, relocation, or propagation and monitoring plan for impacted plants in coordination with USFWS and/or CDFW. The plan will include the following components, at a minimum:

- Description of proposed salvage and transplantation techniques.
- Description (e.g., location, soils, existing vegetation and management) of proposed replanting sites.
- Description of proposed monitoring program for newly established plants, including performance criteria (e.g., percent survival of plantings), methodology (e.g., frequency of and timing of visits, sampling techniques), location and condition of reference sites, and remedial actions if performance criteria are not met.

With implementation of Mitigation Measure BIO-2, Protect Nesting Birds, potential impacts to nesting birds would be reduced to less than significant by identifying nesting birds, and if found, implementing avoidance measures.

Mitigation Measure BIO-2: Protect Nesting Birds

The District shall implement the following procedures to protect nesting birds.

- If feasible, remove the sycamore tree adjacent to the boat launch between September and January, to avoid the bird nesting season.
- Prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the project proponent will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds, including white-tailed kite and other raptors. The survey will occur no more than seven days prior to the initiation of demolition and ground-disturbing activities.
- If active nests are found during the survey, the biologist will establish exclusion zones around each nest in which no work will be allowed until he/she has determined that the young have fledged or the nest is no longer active. The size of the exclusion zone(s) will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 300 feet for raptors and 50 feet for other birds.
    - If a lapse in project-related activities of 15 days or longer occurs, another preconstruction survey will be conducted.
    - After all nest surveys and monitoring are completed, the biologist will prepare a memorandum summarizing the survey effort and results and submit to the lead agency within seven days of survey completion.

With implementation of Mitigation Measure BIO-3, Protect Burrowing Owl, potential impacts to burrowing owls would be reduced to less than significant by detecting owls within the Project site, and if found, implementing avoidance measures.

Mitigation Measure BIO-3: Protect Burrowing Owl

Prior to any construction activity, the District shall retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing owls. To maximize the likelihood of detecting owls, the preconstruction survey will last a minimum of three hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total) or begin 2 hours before sunset and continue until 1 hour after sunset. A minimum of two surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped.

Surveys will conclude no more than 2 calendar days prior to construction. Therefore, surveys must begin no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last minute changes in schedule or contracting that may occur if burrowing owls are found, the project proponent may also conduct a preliminary survey up to 14 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction.

If the preconstruction survey identifies burrowing owls using the site during the breeding season (February 1 to August 31), the project proponent will establish a 100-foot non-disturbance buffer around occupied burrows. Construction activities within the non-disturbance buffer may be allowed if:

- A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities will cease within the 100-foot buffer. Construction cannot resume within the buffer until the adults and young have moved out of the work area.
- If the owls are gone for at least one week, the project proponent may request approval from the CDFW that a qualified biologist excavate usable burrows to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.

If preconstruction surveys document burrowing owl presence during the nonbreeding season (September 1 to January 31), the contractor would establish a 50-foot nondisturbance buffer around occupied burrows as determined by a qualified biologist. Construction activities outside of this 50-foot buffer are allowed. Construction activities within the non-disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities would cease within the 50-foot buffer.
- If the owls are gone for at least 1 week, the Authority may request approval from the CDFW that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone would be removed and construction may continue.
- Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

Implementation of Mitigation BIO-4, Protect Salt-Marsh Harvest Mouse, would exclude SMHM from the construction area and therefore reduce the potential impact to less than significant.

Mitigation Measure BIO-4: Protect Salt Marsh Harvest Mouse

To prevent salt-marsh harvest mice and salt-marsh wandering shrews potentially occurring in higher quality tidal marsh habitat northwest of the site from entering the work area during construction, the District shall install temporary exclusion fencing at the northern boundary of the construction footprint prior to the initiation of ground disturbance. In addition, if restoration activities were implemented adjacent to New Marsh, exclusion fencing may be required as well.

The fence will be made of a heavy plastic sheeting material that does not allow salt marsh harvest mice or salt marsh wandering shrew to pass through or climb, and the bottom will be buried to a depth of 4 inches so that mice or shrews cannot crawl under the fence. Fence height will be at least 12 inches higher than the highest adjacent vegetation with a maximum height of 4 feet. All fence supports will be placed on the side facing the construction footprint.

Implementation of Mitigation Measure BIO-5 would require the use of a noise barrier to attenuate sound levels and require pile installation to occur between June 1 and November 30, outside the peak migration period. Assuming all four piles are installed on the same day, the cumulative SEL for the 14-inch steel shell piles would be reduced to 51 to 63 meters (207 feet). Although the noise levels from the 14-inch steel piles would exceed the cumulative SEL beyond 10 meters, installation of the four piles would occur within 1 to 2 days and outside the peak migration period for special-status fish. In addition, the distance at which the cumulative SEL is exceeded is relatively short compared to the width of the entire channel which is approximately 275 meters (900 feet) at the location of the boat launch. The soft-start required by the contractor would allow any fish or marine mammals in the area to disperse to other parts of the channel. The distance for marine mammal threshold would drop to 136 meters (446 feet). The impact from pile-driving is less than significant with mitigation.

Mitigation Measure BIO-5: Avoid and Minimize Impacts to Special-Status Fish Species and Marine Mammals

The District shall implement the following avoidance and minimization measures, in consultation with the resource agencies with jurisdiction over special-status species potentially occurring at the Project site:

- In-water work will be conducted between June 1 and November 30 outside the peak migration period for special-status fish species.
- When pile driving, the contractor will use a "soft start" technique when initiating a prolonged pile-driving session to allow fish to vacate the area.
- Steel pilings will be installed with a vibratory pile driver to the deepest depth practicable. An impact pile driver may be used only where necessary, as determined by the contractor and/or project engineer, to complete installation of the steel pilings, in accordance with seismic safety or other engineering criteria.
- A bubble curtain, air barrier, or other NMFS-approved method will be used to reduce underwater noise levels from impact hammer pile driving, when appropriate and water depth is acceptable for proper function.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service? (Less than Significant)

During the field investigation no riparian habitat was found. Sensitive natural communities are communities (vegetation types) that are of limited distribution statewide or within a county or region. The California Natural Diversity Database includes one record of northern coastal salt marsh as a special-status natural community within 2 miles of the Project site. The *Sarcocornia pacifica* (*Salicornia depressa*) vegetation alliance (pickleweed mats), which is a subtype of northern coastal salt marsh, is considered a sensitive natural community by CDFW. Although a thin strip of this community is present along the shoreline within the Project site, it does not represent a “high-quality

occurrence" of this vegetation type. In addition, the Invasive Spartina Project maps the Project area's shoreline as "unsuitable habitat" for Ridgway's Rail. The community is small in size (perhaps a few feet wide), with scraggly plants sparsely spaced. In addition, the area is a disturbed (e.g., riprap, concrete stormwater outfall structures) setting, intermixed with nonnative species. Therefore, the Project's potential impact on sensitive natural communities from placement of fill along the shoreline is less than significant because the fringe marsh vegetation does not represent a high-quality occurrence of this community.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Less than Significant with Mitigation)

There are four jurisdictional water features at the Project site: two seasonal wetlands, a ditch, and tidal waters (i.e.: San Leandro Bay). Fill impacts to these water features would require a Section 404/10 permit from the US Army Corps and a Section 401 Water Quality Certification from the Regional Water Quality Control Board.

Seasonal Wetlands

Seasonal wetland vegetation occurs in the topographic .023 acre swale north of the parking lot at the northern end of the site and in a .074 acre swale to the west of Doolittle Drive. A portion of this seasonal wetland adjacent to the parking lot (approximately 252 square feet) would be filled by the reinforced concrete culvert that would be placed beneath the Bay Trail. The seasonal wetland adjacent to Doolittle Drive would not be impacted by the Project. However, indirect water quality impacts could occur during construction if the seasonal wetland is not protected.

Ditch

Just east of the seasonal wetland is a jurisdictional ditch of less than 0.001 acre (1.5 feet wide and 8 feet long). The footprint of the Project would not directly impact this ditch. However, given the close proximity to construction indirect water quality impacts could occur during construction if the ditch is not protected.

Tidal Waters (San Leandro Bay)

San Leandro Bay is considered a tidal navigable water. Several components of the Project would impact San Leandro Bay including replacement of the boat launch, placement of shoreline protection, and removal of the boat ramp. Net solid fill, from piles, replacement ramp, and rock slope protection, is anticipated to be 28,996 square feet. Net floating fill, from the replacement boat launch floats, would be approximately 1,406 square feet.

Potential impacts from placement of solid fill in jurisdictional waters could potentially be significant.

Mitigation Measure BIO-6 provides procedures to follow for avoiding indirect impacts to wetlands and providing compensation for direct loss of aquatic features. After implementation of Mitigation Measure BIO-6, the impact to jurisdictional waters would be less than significant.

Mitigation Measure BIO-6: Avoid and Compensate for Impacts to Jurisdictional Waters

The District shall clearly identify wetland areas to be preserved within and abutting the project footprint with high-visibility construction fencing or markers (e.g., lathe or pin flags) before site

preparation. Construction will not encroach upon jurisdictional wetlands as defined in the *Delineation of Waters of the United States* (ICF 2019). No construction activity, traffic, equipment, or materials will be permitted in fenced wetland areas. The fencing will be maintained throughout the construction period. Exclusion fencing and markers will be removed following the completion of construction activities.

All conditions imposed by the project's state and federal permits will be implemented as part of the project construction. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.

Permanent loss of jurisdictional aquatic features shall be mitigated through a mitigation banking option, Coastal Conservancy mitigation project, or an on-site restoration/enhancement mitigation plan. On-site restoration opportunities exist adjacent to, and south of, New Marsh. Enhancement opportunities exist along the shoreline. If an on-site restoration/enhancement mitigation plan is developed, the plan will identify the type and quantity of impacted aquatic resources and a strategy for preservation, enhancement, or re-establishment/restoration of mitigation features suitable for the setting. The plan also will identify monitoring methods and success criteria for the proposed mitigation. Potential mitigation options include pile or other structure removal, man-made debris removal, marsh restoration, and shoreline layback or other shoreline improvements that are compatible with the project. Enhancement and restoration activities will be located as near to the impact location as possible; however, in the event that local mitigation opportunities are not available, such activities could occur elsewhere within the San Francisco Bay. Mitigation ratio for mitigation identified within San Leandro Bay will be 1:1, and would increase the further from the Project site that mitigation was identified or as negotiated with jurisdictional resource agencies.

Mitigation Measure HYD-1: Protect San Leandro Bay Water Quality during Construction Activities

See Section 3.9 Hydrology and Water for the complete text of Mitigation Measure HYD-1.

Mitigation Measure HYD-2: Implement Erosion Control Measures during Construction

See Section 3.9 Hydrology and Water for the complete text of Mitigation Measure HYD-2.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Less than Significant)

Fish Movement

San Leandro Bay is tucked back from San Francisco Bay around the bend of a narrow channel of approximately 700 feet wide, opening up to approximately 3,800 feet across and then narrowing to two channels. San Leandro Bay has suitable salmonid habitat, but San Leandro Bay in the channel south of Arrowhead Marsh, adjacent to the Project site, lacks migratory and spawning habitat. San Leandro Bay at the Project site is essentially a "dead-end" with no upstream waterways. The channel would not be used by salmonids for the purpose of migrating. In addition, the in-water Project footprint (i.e.: boat launch replacement, boat ramp removal, etc.) is along the shoreline of a 500 to 800-foot wide channel and would not impede movement within the channel.

Shorebird Movement

While the project may result in short- (e.g., individuals fleeing from construction activity in the Bay and along the shoreline) and long-term (e.g., loss of open-water habitat) impacts on wintering waterfowl and shorebirds, such impacts would be less than significant. First, based on available evidence (e.g., observations, eBird checklists), the open Bay waters and associated shoreline habitat in the immediate project vicinity do not support the high numbers of waterfowl and shorebirds typical of less disturbed and/or larger sites around San Francisco Bay such as the Don Edwards San Francisco Bay National Wildlife Refuge, Hayward Regional Shoreline, Emeryville Crescent, and Albany Mudflats. eBird (2018) checklists suggest that the main body of San Leandro Bay approximately 0.7 mile northwest of the site supports higher numbers of wintering waterfowl than the narrow channel at the site (i.e., Airport Channel), but even there they are not as numerous as at the sites mentioned above. Second, waterfowl and shorebirds that currently use the Airport Channel and shoreline are already subject to a moderate level of human disturbance (e.g., park users and their pets, anglers, boaters) and it is unlikely that the project would increase disturbance to a level that would cause them to permanently abandon the western shoreline of the Airport Channel where the project would be constructed. The channel is suboptimal for large concentrations of waterfowl on the open water or shorebirds roosting on the shoreline because its relatively narrow width (500 to 600 feet) leaves little room for birds to retreat to from shoreline or in-water disturbance. Construction of the project would not substantially degrade these existing suboptimal habitat conditions. In summary, potential impacts on wintering waterfowl and shorebirds would be less than significant because the project would not substantially alter the existing conditions. Migratory and wintering waterfowl and shorebird species that use the open Bay waters and shoreline habitat in the project vicinity may slightly alter their movement and roosting patterns in response to trail construction, but are unlikely to stop using the southern end of the Airport Channel on a permanent basis.

No native wildlife nurseries were identified at the Project site during the site visit. The potential impact to movement of fish or wildlife species or wildlife nursery sites is less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

The Project would remove one sycamore tree at the southwest corner of the boat launch ramp. The City of Oakland Protected Tree Ordinance, Chapter 12.36, requires that a permit be applied for and approved before removing a protected tree. A permit is also required if work might damage or destroy a protected tree. Protected trees include:

- Any coast live oak 4 inches or larger in diameter, as measured at 4.5 feet above ground
- Any other species of tree (excluding eucalyptus and Monterey pines) that are 9 inches or larger in diameter, as measured at 4.5 feet above ground.

As noted in the Project Description, the District will apply for and secure approval of a tree removal permit from the City of Oakland prior to removing any trees, as required by the City's ordinance. Therefore, tree removal would be conducted consistent with the City's tree ordinance. This impact is less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)

The project area is not located within the boundaries of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, the project would not conflict with the provisions of an applicable plan.

3.5. Cultural Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historic resource pursuant to §15064.5?			✓	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

The CEQA Guidelines define a historical resource as: (1) a resource listed in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in the California Public Resources Code (PRC) Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

A *Cultural Resources Inventory Memorandum* (ICF 2017) was prepared to evaluate the potential effects of the project on the built environment. The memorandum evaluated whether previously documented cultural resources are located within the study area, and also identified age-eligible properties (older than 50 years) that were not previously studied and require evaluation to determine if they are eligible historical resources under CEQA. Built environment historical resources are evaluated in Impact a) below. Historic-period archaeological resources are evaluated in Impact b) below.

a) Cause a substantial adverse change in the significance of a historic resource pursuant to §15064.5? (Less than Significant)

Archival research and review of City of Oakland and Alameda County inventories of historical resources did not identify any known historical properties within the project area.

Four age-eligible buildings/structures located within the project area limits were identified as including built environment resources that were constructed over 50 year ago: the boat launch; the Port of Oakland pump house; the Port of Oakland dock; and the fishing pier. The Project would not directly impact the Port of Oakland structures or the fishing pier. These structures exist within the park environment and the nearby Project improvements (i.e.: Bay Trail and guardrail) would not change the context of these age-eligible structures. Therefore, impacts to the Port of Oakland structures and fishing pier would be less than significant.

The fourth structure, the boat launch, would be demolished and replaced as part of the Project. To determine the eligibility of the boat launch, an historic resources evaluation was conducted (Archaeological/Historical Consultants 2018). The evaluation found that although the boat launch

was associated with inboard speedboat racing events organized by the California Speedboat Association between 1959 and 1976 and was apparently one of the most important sites for the sport in northern California, the boat launch: 1) has no integrity of setting, feeling, or association with its historic use; 2) does not have enough distinctive qualities to convey its historical significance; 3) is not associated with important people in local, California, or nation history; and 4) is an example of a utilitarian structure common throughout North America in the 20th century and lacks structural or artistic distinction, with no evidence it was constructed by a well-known builder. Therefore, the impact from removing the boat launch is considered less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less than Significant with Mitigation)

The records search at the Northwest Information Center (NWIC) indicates that a total of 10 cultural resource studies have been conducted within 0.5-mile of the project area and one study has been conducted within the project's study area. No prehistoric archaeological materials were observed during the pedestrian survey. Miscellaneous metal fragments, casing and pipes were identified along the southern end of the study area. There were no diagnostic markings on any of this material and they were intermingled with modern debris such as concrete, bricks, roadside trash, and discarded clothing.

The entire study area is within urban land, or heavily disturbed fill. Urban land soils consist of manmade materials such as concrete, plastics, glass, garbage and other debris. This material is used to modify the landscape during development. Prior to development the project area was located within tidal flats between San Leandro Bay and the San Francisco Bay, southwest of Bay Farm Island. These tidal flats were filled in during development post-1915. This type of fill material (urban land) has low potential to contain subsurface cultural deposits. There is a moderate possibility that unrecognized surficial resources or subsurface archaeological deposits are present within the project area. Prehistoric and historic-era resources may be obscured by colluvium, alluvium, vegetation, modern built environment, or other factors. If as-of-yet unknown archaeological materials that qualify as a historical resource or unique archaeological resource as defined by CEQA are encountered during construction activities, a significant impact could occur.

The California Native American Heritage Commission (NAHC) was contacted on July 18, 2017, to identify any areas of concern within the area of potential effect that may be listed in the NAHC's Sacred Land File (SLF). The NAHC responded on July 27 to state that the SLF search results were negative and provided a list of five Native American tribes who may have knowledge of such resources in the project area. Four letters and one email were sent to the five tribes on August 15, 2017. No response to the letters or email were received, and follow-up phone calls were placed on October 31, 2017. A follow-up email was sent on November 2, 2017, to those who could not be reached via telephone. One tribe indicated they had no comments on the project and did not expect that the depth of excavation would extend beyond the level of existing fill. Three tribes requested mitigation to handle inadvertent archaeological discoveries.

Mitigation Measure CR-1 would reduce the impact to archaeological resources to a less-than-significant level because a procedure to address discovery of unanticipated resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

Mitigation Measure CR-1: Protect Archaeological Resources during Construction Activities

In the event that any subsurface archaeological features or deposits, including locally darkened soil, are discovered during construction-related earth-moving activities, all ground-disturbing activity within 50 feet of the resource shall be halted, a District Inspector notified immediately, a qualified professional archaeologist retained to evaluate the find, and the appropriate tribal representative(s) notified. If the find qualifies as a historical resource or unique archaeological resource as defined by CEQA, the archaeologist shall develop appropriate measures to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to avoidance, preservation in place, archival research, subsurface testing, or excavation and data recovery.

Implementation of Mitigation Measure CR-2 would reduce this impact to a less-than-significant level for both construction and operation because a plan to address discovery of unanticipated buried cultural resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

c) Disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant with Mitigation)

Based on field review/investigations, no evidence suggests that any prehistoric or historic-era marked or un-marked human interments are present within or in the immediate project area (ICF 2017). It is unlikely that undiscovered human remains are present within the construction areas given that the majority of the project area has been disturbed by previous development. However, the possibility of encountering human remains during construction cannot be completely discounted, therefore, the impact related to the potential disturbance or damage of previously undiscovered human remains, if present, is considered potentially significant.

Mitigation Measure CR-2: Protect Human Remains if Encountered during Construction

If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, work shall halt within 50 feet of the find and the District Inspector and the County Coroner shall be notified immediately. The following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage Commission shall then notify the Most Likely Descendant (MLD), who has 48 hours to make recommendations to the landowner for the disposition of the remains. A qualified archaeologist, the District and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects.

Implementation of Mitigation Measure CR-2 would reduce the impact of construction activities on potentially unknown human remains to a less-than-significant level by addressing discovery of

unanticipated remains, associated grave goods, or items of cultural patrimony consistent with appropriate laws and requirements. Operational impacts on human remains are not anticipated.

3.6. Energy

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			✓	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

a) Would the Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? (Less than Significant)

Construction Impacts

Temporary energy use in connection with Project construction would entail consumption of diesel fuel and gasoline by construction equipment and by the transportation of earth moving equipment, construction materials, supplies, and construction personnel. Construction equipment would be maintained in proper tune according to manufacturer's specifications as described in Mitigation Measure AQ-1 (see Air Quality section 3.3). In addition, the use of diesel construction equipment meeting current California Air Resources Board (CARB) certification standards for off-road heavy-duty diesel engines would be maximized and unnecessary vehicle idling restricted to five minutes or less. With these measures in place, wasteful, inefficient, or unnecessary use of energy resources is not anticipated during project construction, and impacts would be less than significant.

Operational Impacts

Following construction, operation of the Project would include multi-modal use of the new trail section (gap segment) of the Bay Trail, as well as the improved existing Bay Trail to the north and south of the gap segment. Operation of the Project would not introduce new users of alternative modes of transportation into the Project area.

Project facilities would be repaired on an as-needed basis, consistent with existing regularly scheduled maintenance. This could include trail resurfacing, slope protection, or repairs to the proposed trail. As with construction-period equipment use, the use of diesel construction equipment meeting current CARB certification standards for off-road heavy-duty diesel engines would be maximized and unnecessary vehicle idling restricted to five minutes or less. With these measures in place, wasteful, inefficient, or unnecessary use of energy resources is not anticipated during project operation, and impacts would be less than significant.

b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project would repair and expand existing park facilities, in particular the Bay Trail which is a multi-modal facility and alternative to vehicular travel. The Project does not include buildings or other structures that would use energy or would need to comply with renewable energy regulations such as solar ready buildings and similar State programs. Nor would the Project conflict with the City of Oakland energy programs for residential and businesses. Therefore, there would be no impact from a conflict with a state or local plan for renewable energy

3.7. Geology and Soils

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?		✓		
iii) Seismic related ground failure, including liquefaction?		✓		
iv) Landslides?				✓
b) Result in a substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-, or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		✓		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	

a.i) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of

a known fault? Refer to Division of Mines and Geology Special Publication 42. (No Impact)

The Alquist-Priolo Act (Public Resources Code Sections 2621–2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The purpose of the Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The project does not include structures designed for human occupancy. Additionally, the project does not cross an active Alquist-Priolo fault nor is it located within an Earthquake Fault Zone mapped by the California Geological Survey (CGS) (CGS 2007). The nearest fault is the Hayward fault located approximately 3.5 miles northeast of the Project site. There would be no impact.

a.ii and iii) Strong seismic ground shaking and seismic related ground failure, including liquefaction? (Less than Significant with Mitigation)

The Project is located in the tectonically active San Francisco Bay area, in which a series of faults of the San Andreas fault system form the boundary between the North American and Pacific tectonic plates. The proposed trail segments and associated improvements could be subject to strong seismic ground shaking from active regional faults, including the Hayward fault and other active or potentially active faults in the greater San Francisco Bay Area. However, the Project does not include structures designed for human occupancy. Exposure of people or structures to the risks associated with strong seismic ground shaking would be less than significant.

Liquefaction occurs when excess pore pressures are generated in loose, saturated, generally cohesionless soil (sand, gravel, and some silts) during earthquake shaking, causing the soil to experience a partial to complete loss of shear strength. Such a loss of shear strength can result in settlement and/or horizontal movement (lateral spreading) of the soil mass.

A draft Geotechnical Investigation was prepared for the project (GHD 2017) to evaluate subsurface conditions in the project area through completion of geotechnical borings, laboratory analysis, and literature review. The report concluded that the Project site is underlain by muds and soils known to be susceptible to liquefaction and has a high probability for liquefaction as mapped by CGS (CGS 2003). The potential for settlement due to unstable soils is considered significant.

Mitigation Measure GEO-1: Implement Site-Specific Geotechnical Recommendations

The Parks District shall design and construct the project in conformance with the specific recommendations contained in the geotechnical investigation (GHD 2017), including recommendations for subgrade preparation, engineered fill, compaction, pile considerations, pavements, seismic design, and construction observation. The recommendations contained in the geotechnical study shall be incorporated into the final plans and specifications for the project and implemented during construction. Recommendations include, but are not limited to, the following:

- Stabilize soft, loose, saturated, or unstable soils using a combination of stabilization fabric and compacted Caltrans Class 2 aggregate base.
- Use only engineered fill that meets the recommended specifications.
- Compact engineered fill to the recommended density as determined by ASTM D1557.
- Construct pile foundations using the recommendation material, spacing, and depth specifications.

- Use recommended pavement material, thickness, and compaction rating
- Utilize recommended seismic design parameters.
- Protect the path from erosion by installing rock slope protection to protect against wave action, constructing path drainage to prevent saturation of adjacent soils, and implement Best Management Practices to reduce erosion and transport of soil particles during construction.
- Observe and test subsurface conditions intermittently during construction.

Mitigation Measure GEO-1 would reduce the impact to people and project structures from seismic related ground failure, including liquefaction, by requiring design and construction in conformance with the specific recommendations contained in the geotechnical investigation, which includes seismic design recommendations to mitigate the potential for seismic ground failure.

a.iv) Landslides? (No Impact)

The Project is located on relatively flat land and would not be located within an area of mapped potential landslides (USGS 1997). During construction, the new trail segments and associated improvements would be installed within land that is relatively flat. Following construction, project components would not be located within areas of potential landslides. No landslide related impact would occur.

b) Result in a substantial soil erosion or the loss of topsoil? (Less than Significant)

The Project site is relatively flat. Land-side construction activities would include modifying existing structures and involve only minor earthwork for re-paving the Bay Trail, Doolittle Drive modifications, and installing the culvert. There would be no substantial soil erosion or loss of topsoil; therefore, this impact would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-, or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Less than Significant with Mitigation)

The Project site is underlain by stream deposits over moderately thick (approximately 10 feet) deposits of Bay Mud (GHD 2017). The site-specific data from the geotechnical borings at the Project site did not encounter loose, granular deposits above the groundwater table that would be susceptible to settlement; however, total and differential settlement can occur when new loads are placed over Bay Mud. Therefore, the potential for static settlement due to unstable soils is considered significant.

Lateral spreading may result due to liquefaction of sandy soils along the waterfront. The potential for damage to the boat launch from lateral spreading could be significant, given that the geotechnical borings indicated the presence Bay Mud at the Project site (GHD 2017).

Mitigation Measure GEO-1: Implement Site-Specific Geotechnical Recommendations

Mitigation Measure GEO-1, described under a.ii, will reduce the impact to people and Project structures from unstable soils by requiring design and construction in conformance with the specific recommendations contained in the geotechnical investigation, to mitigate the effect of settlement. Construction of project pile foundations consistent with recommendations in the geotechnical

investigation would provide additional stability to the boat launch, mitigating the potential for damage due to unstable soils to less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Less than Significant)

Expansive soils are defined as soils that undergo large volume changes (shrink or swell) due to variations in moisture content. Such volume changes may cause damaging settlement and/or heave of foundations, slabs-on-grade, and pavements. Materials encountered in the overland portion of the alignment generally consisted of granular or low plasticity clayey fill. The clayey soil encountered near the surface has a low expansion potential and would not create substantial risks to life or property. The impact would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (No Impact)

The project would not involve the use of septic tanks or other alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant)

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California Public Resources Code (CPR) Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (CPR Section 30244).

According to the City of Oakland General Plan Land Use and Transportation Element EIR (City of Oakland 1997), remains of mammoths, bison, bears, ground sloth, field mice, and camels have been discovered within the City. These discoveries have been clustered in certain areas simply because they correspond to specific excavations, such as the Broadway (old Caldecott) Tunnel, the Webster and Posey tubes, Oak Knoll Naval Hospital, and the Coliseum. In fact, fossils are widespread and would be encountered in many places where broad, deep cuts into bedrock take place.

Since the Project does not include any substantial excavation, it is unlikely that project construction would impact potentially significant paleontological resources. Therefore, the potential to impact paleontological resources is considered less than significant.

3.8. Greenhouse Gas Emissions

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓

The greenhouse gas analysis utilizes the screening criteria, thresholds of significance, and impact assessment methodologies presented in the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017a). As provided by the BAAQMD's CEQA Air Quality Guidelines, if the Project meets the screening criteria for an impact category, and is consistent with the methodology used to develop the screening criteria, then its impact for that category may be considered less than significant.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less than Significant)

Project construction activities would result in a temporary increase in greenhouse gas emissions, primarily in the form of carbon dioxide from exhaust emissions associated with haul trucks, construction worker commute vehicles, and construction equipment. There is currently no applicable federal, State, or local standard or significance threshold pertaining to construction-related greenhouse gas emissions, and the BAAQMD CEQA Guidelines do not include screening criteria or significance thresholds for construction-related greenhouse gas emissions. Therefore, this analysis uses a qualitative approach in accordance with Section 15064.4(a)(2) of the CEQA Guidelines. Project construction activities are limited in scope and duration, consisting of improvements to an existing park and lasting less than a year. In addition, the Project does not include construction activities associated with higher greenhouse gas emissions such as use of a significant amount of heavy construction equipment, substantial earth-moving activities, or import/export of a significant amount of material. Therefore, the Project's construction emissions would be less than significant.

The applicable operational greenhouse gas screening level is 67 acres for a city park. At an estimated footprint of less than one acre the Project would be substantially less than the BAAQMD's operational greenhouse gas screening level for a city park. In addition, Project operation does not include any new energy use. Therefore, Project operation would result in a less than significant impact on greenhouse gas emissions.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (No Impact)

The BAAQMD Air Quality Guidelines state that the BAAQMD encourages local governments to adopt a qualified GHG Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG Reduction Strategy that meets the standards laid out below, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent

with the State CEQA Guidelines, Section 15183.5. The standard elements of a GHG reduction strategy identified by the BAAQMD are:

(1) Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.

(2) Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.

(3) Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.

(4) Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.

(5) Monitor the plan's progress.

(6) Adopt the GHG Reduction Strategy in a public process following environmental review.

The East Bay Regional Park District does not, itself, have a "qualified" Climate Action Plan or other qualified greenhouse gas reduction strategy.

The 2017 Climate Change Scoping Plan released by the ARB identifies progress made to meet the near-term (2020) objectives of Assembly Bill (AB) 32. The 2017 Climate Change Scoping Plan identifies strategies for meeting the mid-term emissions limit set by Senate Bill (SB) 32. The plan also identifies how the State can substantially advance toward the 2050 greenhouse gas reduction target of Executive Order S-3-05, which consists of reducing GHG emissions to 80 percent below 1990 levels. The recommendations cover key sectors, including: energy and industry, transportation, natural and working lands, waste management, and water to be implemented by a variety of State agencies. The Project would not conflict with this statewide policy document.

The recommended measures in the 2017 Scoping Plan are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects such as the project. Although Project construction and operation may benefit from some of the state-level regulations and policies that will be implemented, such as the Phase 2 heavy-duty truck GHG standards proposed to be implemented within the transportation sector, the Project would not impede the State developing or implementing the greenhouse gas reduction measures identified in the Updated Scoping Plan. The Project facilities would comply with applicable State requirements. Therefore, the Project would not conflict with AB 32 or the Climate Change Scoping Plan. No impact would occur.

3.9. Hazards and Hazardous Materials

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			✓	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or upset and accident conditions? (Less than Significant)

Construction activities would involve the use of hazardous materials, such as fuels, lubricants, paints and solvents. These materials are commonly used during construction, are not acutely hazardous

and would be used in small quantities. Regular transport of such materials to and from the Project site during construction could result in an incremental increase in the potential for accidents. However, numerous laws and regulations ensure the safe transportation, use, storage and disposal of hazardous materials. For example, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers.

Worker safety regulations cover hazards related to the prevention of exposure to hazardous materials and a release to the environment from hazardous materials use. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees. Because contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use and disposal of hazardous materials, the impacts related to hazardous materials used during Project construction would be less than significant.

Following construction, operation of the Project would not result in the need for new hazardous materials that would need to be transported, used, or disposed, and would not alter wastewater characteristics or increase wastewater flows. No operational impact would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (No Impact)

Operation of the improved Bay Trail and boat launch would not require the use or emission of hazardous materials, substances, or waste. The Project site is not located within one-quarter mile of an existing or proposed school; therefore, no impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (No Impact)

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." A search of the Cortese List was completed to determine if any known hazardous waste sites have been recorded on or adjacent to the Project site. The Project site is not listed on or immediately adjacent to any of the Cortese List database sites (State Water Resources Control Board: Geotracker 2019).

Furthermore, a geotechnical analysis conducted for the project in 2010 found that soil samples taken at the project site contained detectable levels of semi-volatile organic compounds or total petroleum hydrocarbons as gasoline/diesel. Although the samples contained detectable concentrations of total petroleum hydocarbons as motor oil and several CAM-17 analytes, these concentrations were below their respective Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (Engeo 2010).

Therefore, no significant hazard to the public or the environment would occur as a result of the project causing exposure to known hazardous materials. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (Less than Significant)

The Project is located approximately 800 feet to the east of the Oakland International Airport. The Oakland International Airport Airport Land Use Compatibility Plan (ALUCP) indicates the Project site is within the Zone 6, which is described in the ALUCP as "Traffic Pattern Zone". Zone 6 includes areas that are routinely overflown by aircraft and has z lower risk of accidents than Zones 1 through 5 (Alameda County 2010). Project construction would require the presence of workers within the ALUCP Zone 6; however, the temporary nature of the work and the low risk of airport traffic creating a physical or auditory hazard make this hazard less than significant.

The Project would not result in a change of land use, or an increase in population or employment that would expose residents or workers to airport-related safety hazards. Therefore, the Project would not result in a safety hazard during operation.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)

The Project improvements do not interfere with an adopted emergency response plan or emergency evacuation plan. The improvements are located outside the main roadway; therefore, there is no impact.

g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires? (No Impact)

The Project site is within an urban area with no adjacent wildlands (City of Oakland 2012) and would not expose people or structures to wildland fire risk; therefore, there is no impact.

3.10. Hydrology and Water Quality

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		✓		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			✓	
i) Result in substantial erosion or situation on- or off-site?				
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
iv) Impede or redirect flood flows?				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (Less than Significant with Mitigation)

Water quality standards and objectives are achieved primarily through the establishment of NPDES permits and waste discharge requirements. The Construction General Permit applies to public and private construction projects that include one or more acres of soil disturbance. The Project would disturb more than one acre of land and, therefore, compliance under the General Permit for

Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities is required. Implementation of a construction SWPPP would limit offsite erosion and siltation.

Installation of the piles for the boat launch may cause disturbance of bottom sediment and increased turbidity. The piles would be driven with an impact hammer to an approximate depth of 60 feet below mudline. A small amount of disturbance would occur within close proximity of the pile, as it is driven, and would then quickly dissipate. The potential impact would be localized and short term, and is not expected to have a significant impact on water quality. The potential impact from pile installation, to water quality, is considered less than significant.

Demolition of the existing boat launch, installation of the new boat launch, and demolition of the boat ramp may cause disturbance of bottom sediment and increased turbidity. For the purposes of this analysis, it is assumed that these work areas within San Leandro Bay waters would require temporary dewatering. If not properly controlled, the discharge of pumped water from temporary dewatering could result in sediment-laden water being discharged to waterways.

In addition, because construction work would occur immediately adjacent to San Leandro Bay, the potential exists for construction debris or fuels to inadvertently enter the water. The potential for increased turbidity and contamination of the Bay with construction debris or fuels would be a significant impact on water quality.

Mitigation Measure HYD-1: Protect San Leandro Bay Water Quality during Construction Activities

The Park District shall implement the following measures during construction.

1. A sediment curtain shall be installed and utilized around the boat launch and boat ramp during demolition and installation. The curtain shall be inspected daily and maintained to function for its intended purpose.
2. A floating debris barrier (or the sediment curtain installed around the boat launch and boat ramp could be used) shall be placed as needed around and beneath the work areas to capture any debris that could accidentally be released from the work area. The debris boom shall be deployed and maintained to prevent any floating debris from escaping the work area. At the end of each work day, any floating debris within the barrier shall be removed.
3. If dewatering is required, water shall be pumped within the limits of the sediment curtain. Flows shall be monitored during pumping. If dewatering related turbidity expands beyond the boundary of the silt curtain, flows shall be reduced until turbidity is contained.
4. Immediately upon completion of in-water work, sediment curtains, cofferdams, and other in-water structures shall be removed in a manner that minimizes disturbance to sediments.
5. No construction material, including asphalt, concrete, wood, chemicals, or fuels shall be discharged directly or drained indirectly to the San Leandro Bay from the construction or staging areas.
6. Construction equipment shall be cleaned and inspected prior to use. Mechanized construction equipment that will be used on the banks and in the channel will be cleaned and inspected daily prior to use. Servicing and refueling of vehicles and equipment shall be conducted a minimum of 50 feet from the Mean High Tide of San Leandro Bay at

designated staging areas to avoid contamination through accidental drips and spills. If refuelling or servicing of equipment within 50 feet of San Leandro Bay is necessary, secondary containment and absorbent pads shall be used and spill response kits will be available to rapidly respond to accidental spills.

7. Equipment shall be inspected daily by the operator for leaks or spills. If leaks or spills are encountered, they shall be cleaned up, and the cleaning materials shall be collected and shall be properly disposed. The source of the leak shall be identified prior to operating the equipment, and the project foreman shall document the resolution of the leak. Spills shall be cleaned up immediately using spill response equipment.
8. Hazardous materials shall not be stored within 200 feet of San Leandro Bay.
9. The amount of construction-related disturbance shall be limited to the extent feasible.
10. Once the Project construction is completed, water shall be released slowly back into the work area so as to prevent erosion and increased turbidity.

Mitigation Measure HYD-2: Implement Erosion Control Measures during Construction

The Park District shall prevent soil erosion and sedimentation during construction by developing and implementing an Erosion and Sediment Control Plan for the Project. The Plan will address how the Contractor will manage erosion and sediment control measures, general site and materials management, and inspection and maintenance. The Plan shall specifically address how all jurisdictional waters will be protected including San Leandro Bay, the two seasonal wetlands, and the ditch adjacent to the seasonal wetland. These measures may also be incorporated by the Contractor into the construction Stormwater Pollution Prevention Plan, in lieu of preparing a separate Erosion and Sediment Control Plan if appropriate and approved by the Park District. The following minimum measures shall be included in the Plan and incorporated into Project construction to reduce soil erosion and protect water quality.

- Erosion and sediment control measures will be in effect and maintained by the Contractor for the duration of construction.
- Fiber rolls or similar products will be utilized to reduce sediment runoff from disturbed soils.
- Protection shall be installed around the seasonal wetland and ditch.
- A stabilized construction entrance will be maintained to minimize tracking of mud and dirt from construction vehicles onto public roads.
- Storm drain inlets receiving storm water runoff will be equipped with inlet protection.

Mitigation Measures HYD-1 and HYD-2 would reduce potential water quality impacts during Project construction to a less-than-significant level by requiring measures to manage construction dewatering, reduce turbidity, control erosion and sedimentation of receiving water bodies, and to minimize the risk of hazardous material release.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (No Impact)

Construction of the Project may require dewatering during demolition of the existing boat launch and boat ramp. Temporary dewatering would impact surface water but would not involve groundwater. Therefore, no substantial decrease or interference in groundwater supply would be expected to occur during construction.

Following construction, the Project would not utilize groundwater and would not result in an increase in population or employment that would indirectly increase the use of groundwater or impede a sustainable groundwater management. There would be no impact to groundwater supplies from operation of the Project.

c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious services, in a manner which would: result in substantial erosion or siltation or substantially increase the rate or amount of surface runoff in a manner that would result in flooding or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff on- or off- site, or impede or redirect flows? (Less than Significant)

The changes in surface runoff due to the Project would be minimal. As described further below, small changes would occur in the existing parking lot, along the existing Bay Trail, and along the new Bay Trail segment.

The existing 25,400 square-foot parking lot would increase by 870 square feet. This small addition would not alter the existing drainage pattern. Stormwater from the new impervious area would be directed to, and accommodated by, the existing storm drain catch basins within the parking lot. Installation of the slope protection component of the Project would repair the existing eroding shoreline between the boat launch and pump house and provide protection of the proposed Bay Trail segment south of the pump house. The segment of Bay Trail north of the Bay Trail gap would be widened from 10 to 12 feet, and is approximately 925 linear feet, resulting in 1,850 square feet of additional impervious surface. The increase in impervious at this location is not expected to substantially change the existing drainage pattern. Stormwater would continue to sheet flow, into the adjacent permeable surface, at a similar rate given the small increase in width of the trail. To accommodate the new segment of Bay Trail, Doolittle Drive would need to be reconfigured from Swan Way to just north of Langley Street. This portion of the Project would result in increased impervious of 0.6 acre. Along this segment of Doolittle Drive, stormwater either sheet flows to the west into an existing drainage ditch or to the east along the road shoulder to pervious areas, depending on the curvature of the road. Because the widening/increase in impervious is spread over a linear distance of approximately 2,500 feet, and therefore stormwater runoff would not be concentrated in any one area. The capacity of the existing drainage system would not be exceeded.

The Project would not result in a substantial change to drainage patterns, would not alter the course of a stream or river, would not substantially increase surface runoff, or create substantial additional sources of polluted runoff. Erosion, siltation, and flooding would not be substantially altered with implementation of the Project. The impact would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation (Less than Significant)?

The Federal Emergency Management Agency (FEMA) issues Flood Insurance Rate Maps identifying land areas that are subject to flooding. According to FEMA Flood Insurance Rate Map Number 06001C0252G, 100-year flood zones are located within and adjacent to San Leandro Bay (FEMA 2009). The Project is located adjacent to a partially enclosed body of water that may be affected by a seiche, and is located within a tsunami inundation area based on mapping prepared by the California Emergency Management Agency (Cal EMA 2009). However, the Project consists of infrastructure improvements to an existing recreational facility, and would not result in new housing or employment along the shoreline that would be exposed to the hazard of seiche or tsunami nor release pollutants during such an event. Therefore, the impact is less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (No Impact)?

Beneficial uses identified in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) for San Leandro Bay include sport fishing; estuarine habitat; fish migration; preservation of rare and endangered species; wildlife habitat; water contact recreation; noncontact water recreation; and navigation.

The Project's impact on San Leandro Bay is limited to the shoreline from replacement of the boat launch and placement of shoreline protection. These improvements would not impede beneficial uses such as sport fishing, navigation, and recreation, nor would the improvements result in water quality issues such that beneficial uses would be impaired. The replacement boat launch would actually support beneficial uses related to fishing, navigation, and recreation, as the existing facility is in disrepair with one of the boarding float docks having failed, leaving only one side of the boat launch usable. With regard to the Project's impact on habitats, fish migration, and rare and endangered species, refer to the analysis in Section 3.4 Biological Resources. Impacts to special-status fish and wetlands were found to be less than significant after mitigation. Also refer to the analysis above under section a) with regard to protecting the water quality of San Leandro Bay during construction. The Project would not conflict with or obstruct the Bay Basin.

As noted above under b), Project construction would not impact groundwater, and following construction, the Project would not utilize groundwater. The Project would therefore not obstruct or impede a groundwater management plan.

3.11. Land Use and Planning

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

The following is a summary of the land use and planning documents applicable to the Project.

East Bay Regional Parks District Master Plan 2013

The *East Bay Regional Parks District Master Plan 2013* (EBRPD 2013) defines the overall mission and vision for the District. The goal of the Master Plan is to maintain a balance between the need to protect and conserve resources and the need to provide opportunities for recreational use of the parklands. The Master Plan contains broad policies for implementing this goal in the areas of natural resource management, cultural resource management, providing public access and services, and planning for the future.

Martin Luther King Jr Regional Shoreline Land Use-Development Plan

The *Martin Luther King Jr Regional Shoreline Land Use-Development Plan* (Plan) was adopted by EBRPD in 1977. The Plan shows the MLK Regional Shoreline as an important link to the regional bike system. The goals of the Plan are to:

1. Retain the Bay's value as a natural wildlife refuge by preserving, maintaining and expanding, to the extent possible, the various environments necessary to healthy fish, bird and animal life.
2. Protect the Bay and its shoreline from encroachment of use, development and conflicts that would significantly alter the feeling and appearance of open space and the attendant sights, sounds and vistas.
3. Develop maximum opportunities for use of the Shoreline Park which are consistent with goals (1) and (2), and in such a way that they can be enjoyed by the largest possible segment of the East Bay population.

Under Access and Circulation, the Plan indicates that circulation within the park should include all-weather trails, including hard-surfaced, and that trails should generally be built to EBRPD standards with access for maintenance vehicles.

San Francisco Bay Trail Plan

The *San Francisco Bay Trail Plan* is a guide to implementing the Bay Trail, a 500-mile recreation trail around the perimeter of San Francisco Bay, running through nine counties, including Alameda County. Review and approval of Bay Trail design and development is the responsibility of local implementing jurisdictions and agencies. Therefore, the District would be responsible for review of the segment of Bay Trail that traverses the Project site. In addition, the *Bay Trail Design Guidelines and Toolkit* provides goals and direction for site planning and trail design to facilitate the achievement of the overall vision of the Bay Trail.

San Francisco Bay Plan

The *San Francisco Bay Plan* (Bay Plan) (BCDC 2012) provides guidelines and policies for developing the San Francisco Bay and shoreline to their highest potential while protecting the Bay as an irreplaceable natural resource. Policies contained in the Bay Plan guide futures uses of the Bay and shoreline. There are two types of policies in the Bay Plan, those that address protecting natural resources and those that address development of the Bay and shoreline. The following is a summary of those policies related to development of the Bay and shoreline that also are applicable to the Project:

Climate Change: Applicable policies include Climate Change Policy 2 and Policy 5 which require a risk assessment be prepared by a qualified engineer and that feasible and appropriate sea level rise adaption approaches be encouraged.

Safety of Fills: Safety of Fill Policy 4 requires adequate measures to prevent damage from sea level rise and storm activity over the expected life of the project.

Shoreline Protection: Applicable policies include Shoreline Protection Policy 1 which indicate shoreline protection should be authorized when it is necessary to provide erosion protection for proposed development, use or infrastructure that is consistent with other Bay Plan policies, and Policy 2 which stats that riprap revetments should be constructed of properly sized and placed material that meet sound engineering criteria.

Transportation: Transportation Policy 4 promotes the inclusion of pedestrian and bicycle paths that will be part of the Bay Trail, in transportation projects, and calls for projects to be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.

Recreation: Applicable policies include Recreation Policy 1, Policy 3, Policy 4, and Policy 7 which promote diverse and accessible water-oriented recreational facilities throughout the Bay to the broadest segment of the population possible. Recreational facilities should be distributed around the shores of the Bay, providing access to launch ramps and completing segments of the Bay Trail. Bay Trail components should be developed in waterfront parks along the shoreline. Small amounts of Bay fill are allowed for recreational areas that provide substantial public benefits and that cannot be developed without some filling.

Public Access: Applicable policies include Public Access Policy 1, Policy 4, Policy 5, Policy 9, and Policy 12. Public access should be sited and designed to reduce significant adverse effect on wildlife, avoid impacts from sea level rise, use the minimum amount of fill required to develop the project, allow access to the waterfront, and follow the *Public Access Design Guidelines*.

Appearance, Design, and Scenic Views: Applicable policies include Appearance, Design, and Scenic Views Policy 1, Policy 3, and Policy 12. Projects should be developed following the *Public Access*

Design Guidelines, use the minimum amount of fill required to develop the project, and be reviewed by the Design Review Board when applicable.

Fill in Accord with Bay Plan: Proposed project should be approved if the fill is the minimum necessary to achieve its purpose of the project and is in accordance with the Bay Plan.

Enhanced San Francisco Bay Area Water Trail Plan

The San Francisco Bay Area Water Trail Project (Water Trail) strives to create a network of launch and landing sites (i.e.: trail head) to allow people in human-powered boats and beachable sail craft to enjoy San Francisco Bay. The *Enhanced San Francisco Bay Area Water Trail Plan* (Coastal Conservancy 2011) is a guide to implementing that vision. The MLK Regional Shoreline boat launch is a trail head for the Water Trail.

Alameda Countywide Bicycle Plan

The *Alameda Countywide Bicycle Plan* (County of Alameda 2012) was created to identify and prioritize bicycle projects, programs, and planning efforts of countywide significance. Completing an inter-jurisdictional trails network, including the Bay Trail spine, is identified as a priority improvement in the *Alameda Countywide Bicycle Plan*. The Bay Trail, including the gap segment that is included in this Project, is identified as one of three "major regional trails" to be completed in Alameda County.

Alameda Countywide Pedestrian Plan

The *Alameda Countywide Pedestrian Plan* (County of Alameda 2012) was created to identify and prioritize pedestrian projects, programs, and planning efforts of countywide significance. The Plan provides the background, direction and tools needed to increase the number of pedestrians and walking trips in Alameda County while improving pedestrian safety. Completing an inter-jurisdictional pedestrian system, including the Bay Trail spine, is identified as part of the vision in the *Alameda Countywide Pedestrian Plan*.

City of Oakland General Plan

The *City of Oakland General Plan* (City of Oakland 2015) identifies the Bay Trail as a priority trail segment. As stated in the Estuary Policy Plan (City of Oakland 1999) element of the General Plan, there is opportunity to establish a larger and more coherent network of shoreline access and public recreation space through filling in gaps in the Bay Trail. Objective SA-1 aims to create a clear and continuous system of public access along the Estuary shoreline, and Objective SA-2 includes expanding and improving parks and open space facilities along the MLK Regional Shoreline.

The Open Space, Conservation, and Recreation element describes planning area strategies for the airport area, which includes constructing the Bay Trail along its adopted alignment through the Airport Planning Area.

The General Plan Use designation for the project site is Urban Park and Open Space which allows active and passive recreational use.

a) Physically divide an established community? (No Impact)

The Project would implement improvements at an existing regional park. The improvements would not physically divide an established community. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (No Impact)

The Project would implement improvements at an existing park and construct a segment of the Bay Trail. The improvements would be consistent with the allowable uses within the Urban Park and Open Space designation of the Oakland General Plan. As noted in the setting above, many planning documents identify implementation of the Bay Trail as a key component and strategy for providing a network of pedestrian and/or bicycle trail in Alameda County. Implementation of the Bay Trail gap would fulfill the vision of these plans.

East Bay Regional Parks District Master Plan 2013

The Master Plan contains broad, non-park-specific, policies related to the protection of natural and cultural resources, providing public access and a variety of services, and planning for the future of the entire EBRPD park system. The Project would not conflict with the policies outlined in the Master Plan, but would promote the goal to provide opportunities for recreational use of the District's parkland. With regard to protecting and conserving natural and cultural resources at the Project site, refer to section 3.4 Biological Resources and Section 3.5 Cultural Resource.

Martin Luther King Jr Regional Shoreline Land Use-Development Plan

There are no elements of the Project that conflict with the Plan. The Bay Trail improvements would be all-weather, constructed to EBRPD standards, and allow for both maintenance and emergency vehicles. The Plan specifically says that eroded shoreline edges should be repaired when necessary to protect the park facilities. The remaining improvements are essentially maintenance and repair to existing facilities and would not pose a conflict.

San Francisco Bay Trail Plan

In review of the Bay Trail Plan, the Project was not found to conflict with any of the 47 broad trail policies. This includes minimizing impacts and conflicts with sensitive environments, locating the trail close to the shoreline, providing a wide variety of views along the Bay, and siting new trails so that they are physically separated from roadways.

San Francisco Bay Plan

Climate Change and Safety of Fills: As part of the basis of design a risk assessment was prepared to determine the potential flooding associated with a 100-year flood in combination with future sea level rise. The risk assessment was prepared by a qualified engineer and indicates the Project design would reasonably accommodate coastal hazards through 2060 (40-years). In 2060, only the minimum Project elevations are likely to be affected in the low risk aversion projection during 100-year events. The design life would only start to be regularly affected during the high risk aversion scenario when the minimum elevations of the trail may start to be flooded during the daily tidal cycle. Since the Project does not include critical infrastructure, designing for the low risk aversion projections results in adequate physical and functional resiliency.

Shoreline Protection: The shoreline protection being installed as part of the Project is necessary to provide erosion protection and would be constructed of properly sized and placed material that meets sound engineering criteria. The rip rap would generally range from about 10 inches to about 18 inches, and be angular and of varying dimensions.

Transportation: The Project promotes non-motorized transportation and closes a gap in the Bay Trail. This would provide a safe non-motorized alternative to bicycle and pedestrian use of Doolittle Drive, which is currently utilized at the gap location. As noted in Section 3.1, Aesthetics, visual access of San Leandro bay would not be impeded by the design.

Recreation and Public Access: The Project has been designed to enhance access to the Bay and Bay shoreline, not only from the Bay Trail gap closure, but also the boat launch replacement, kayak lay-down area, and two bike pullouts for viewing opportunities. The Bay Trail gap closure allows recreationalists to safely navigate the shoreline by providing a separated path.

Appearance, Design, and Scenic Views: The Project has been designed to comply with the *Public Access Design Guidelines*, where applicable, including shoreline erosion control and trail desing. On August 7, 2017, the Project was presented at the BCDC Design Review Board meeting. The Board asked several questions about the Project design, but did not request any major design changes and did not ask to see the project again. Review by the BCDC Design Review Board is complete.

In addition, please refer to Section 3.1, Aesthetics, and Section 3.4, Biological Resources, with regard to the Project's potential to impact visual resources, scenic vistas, and natural resources. The Project has been designed to minimize fill to the extent feasible, while still achieving the shoreline protection and public access goals of the Project.

The Project is not in conflict with any applicable land use plan, policy or regulation. No impact would occur.

3.12. Mineral Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

a, b) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

Under the Surface Mining and Reclamation Act, the State Geologist classifies areas into Mineral Resource Zones (MRZs). There are no known mineral resources in the project area. According to the California Division of Mines and Geology land classification map prepared for the South San Francisco Bay Production-Consumption (P-C) Region, which includes Alameda County, there are no areas designated as MRZ-2 (Kohler-Antablin 1996). No mining is known to occur in the area. In addition, the general plan does not identify mineral resources in the project area. No impact would occur.

3.13. Noise

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				✓
b) Result in generation of excessive ground borne vibration or noise levels?			✓	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

a) Result in generation of as substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (No Impact)

Noise and Land Use Compatibility

Noise and land use compatibility refers to the development of noise sensitive uses in noisy environments. The City of Oakland General Plan defines noise sensitive land uses as including residences, schools, churches, hospitals, elderly care facilities, hotels and libraries and certain types of passive recreational open space.

The Project site is located outside of the 65 dB CNEL noise contour for the Oakland International Airport, and outside of the 60 Ldn noise contour for the railroads and BART (City of Oakland 2005). However, the Project site is between the 65 Ldn and 60 Ldn noise contours for roadway noise in year 2025. The City's Noise-Land Use Compatibility Matrix identifies an exposure of up to up to 65 dB CNEL or up to 70 dB CNEL as normally acceptable at neighborhood parks and water recreation, respectively. The Project would improve the facilities within an existing recreational open space; however, the Project would not result in the development of new noise sensitive land uses. Therefore, the Project would result in no impact related to noise and land use compatibility.

Noise from Construction Activities

The Project's demolition and construction activities would generate noise. The Noise Ordinance (which is incorporated into the City of Oakland Planning Code) provides that construction grading noise is allowed only during the times of 7:00 am to 9:00 Monday through Friday, and 8:30 am to 6:00 PM on Saturdays. Construction grading noise is prohibited on Sundays and holidays. However, the ordinance does not contain hour restrictions for noise from building activity.

City of Oakland Municipal Code Section 17.120.050 (Performance Standards, Noise) identifies noise level standards for temporary construction or demolition. The applicable standards for long-term construction activities (10 days or longer in duration) with a commercial or industrial receptor are:

- 70 dBA Monday through Friday, between 7 am and 7 pm
- 60 dBA weekends, 9 am to 8 pm

The nighttime noise level received by any land use and produced by any construction or demolition activity between weekday hours of 7 pm and 7 am or between 8 pm and 9 am on weekends and federal holidays shall not exceed the applicable nighttime noise level standards established by the municipal code.

The above standards are applied as the thresholds of significance in this section.

Hourly average outdoor noise levels could reach 105 dBA within 50 feet of activity during impact hammer pile driving. Construction generated noise levels increase or decrease at a rate of about 6 dBA per halving or doubling of distance, respectively, between the source and receptor. Pile driving would result in noise levels of approximately 84 dBA Lmax at the nearest receptor, located approximately 600 feet from the pile driving activity. Noise levels inside the nearest buildings would be about 25 to 30 dBA lower than the exterior levels due to the attenuation provided by the building, which results in a noise exposure of 54 dBA to 59 dBA. Interior noise levels would be below the City of Oakland Municipal Code threshold. Exterior noise levels would temporarily be above the threshold of 70 dBA but only last for 2 days.

Demolition and reconstruction activities at the parking lot, existing north Bay Trail segment, and boat launch are calculated to generate 73 dBA Lmax at the nearest receptor located approximately 300 feet from the edge of construction activity. The calculation assumes a worst-case scenario of concurrent use of a backhoe, compressor, concrete pump truck, concrete saw, concrete mixer truck and an excavator. Noise levels inside the nearest buildings would be about 25 to 30 dBA lower than the exterior levels due to the attenuation provided by the building, which results in a noise exposure of 43 dBA to 48 dBA. This would be below the 70 dBA threshold.

Table 3.12-2: Construction Equipment 50-Foot Noise Emission Levels

Equipment Category	Lmax Level (dBA)[1,2]	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous

Equipment Category	Lmax Level (dBA)[1,2]	Impact/Continuous
Concrete Vibrator	80	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

1 Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.

2 Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

3 Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

The Project’s construction-generated noise would not exceed the applicable noise standards set by the City’s Municipal Code. Therefore, there would be no impact from conflict with the Noise Ordinance relative to construction.

Operational Noise

After the Project is completed, the new trail segment would be open for pedestrian and bicycle use; the existing noise environment would not be significantly changed as a result of the project. The existing noise environment is characterized by vehicle traffic on Doolittle Drive and airplane activities from Oakland International Airport, which influence ambient noise more than pedestrian and bicycle traffic. The Project would not result in an increase in ambient noise. Therefore, no change would occur in the noise environment due to Project operations, and there would be no impact resulting from the Project.

b) Result in generation of excessive ground borne vibration or noise levels? (Less than Significant)

Project construction will require the use of a pile driver for installation of four 14-inch steel guide piles for the floating docks and sheet piles. An impact or vibratory hammer and crane barge would be used to install the pile, which would be a source of groundborne vibration and groundborne noise.

The Federal Transit Agency (FTA) identifies vibration sensitive land-uses into 3 categories: high sensitivity, residential, and institutional. There are no vibration-sensitive land uses in the vicinity of the project. The nearest occupied buildings to where Project pile-driving would occur are located more than 650 feet west of the Project, separated from the Project site by Doolittle Drive. The buildings are at a distance that would not experience feelable vibration from Project pile driving. This is a less than significant impact.

The unoccupied Port of Oakland pump house (pump house) structure is located approximately 800 feet from where pile driving would occur. The building is a wood and steel structure, with metal-sheet cladding. This analysis uses a significance threshold for vibration of 0.5 inches/second, peak particle velocity (in/sec, PPV) for buildings, consistent with FTA's guidance for impact to reinforced-concrete, steel, or timber (with no plaster) and Caltrans' guidance for historic and some old buildings (FTA 2006, Caltrans 2013).

Table 3.12-1 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet.

Table 3.12-1: Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)
Pile Driver (Impact)	upper range	1.158
	typical	0.644
Pile Driver (Sonic/Vibratory)	upper range	0.734
	typical	0.170
Clam shovel drop		0.202
Hydromill (slurry wall)	in soil	0.008
	in rock	0.017
Vibratory Roller		0.210
Hoe Ram		0.089
Large bulldozer		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Federal Transit Agency, Office of Planning and Environment, May 2006.

The only substantial source of ground vibration associated with the Project would result from vibratory or impact pile driving. Pile driving would occur over 1 to 2 days. Vibration levels are highest close to the source, and then attenuate with increasing distance at the rate $PPV_{ref}(25/D)^{1.1}$, where D is the distance from the source in feet and PPV_{ref} is the reference vibration. Given the small size of the piles and the overall range of piles, the "typical" values shown in Table 3.12-1 would provide a credible worst case level for anticipated pile driving vibration.

Using the attenuation calculation provided above, the use of an impact pile driving hammer is calculated to result in approximately 0.25 inch/sec PPV, and vibratory hammer approximately 0.06 inch/sec PPV at a distance of 60 feet. This would be a less than significant impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, public use airport, or private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (No Impact)

While the Project site is located within two miles of the Oakland International Airport it will not result in new residences or businesses which would expose people to excessive noise levels. The project is not sensitive to aircraft noise. No impact would occur.

3.14. Population and Housing

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No Impact)

Completion of the Project improvements would not result in an increase in population growth. Improvements to this existing park facility would not induce growth either directly or indirectly. No impact would occur.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (No Impact)

The Project does not involve the removal of housing. No impact would occur.

3.15. Public Services

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable (No Impact)

As discussed in Section 3.13, the Project would not directly or indirectly induce substantial population growth nor create substantial new demand for services. Therefore, the Project would have no impact on the service ratios, response times, or other performance objectives of schools, parks, and other public facilities that are based on population growth. The Project would not require a new or physically altered government facility to serve the Project site. No impact would occur.

3.16. Recreation

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?		✓		

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Less than Significant)

Filling in the Bay Trail gap is anticipated to increase pedestrian and bicycle use along this portion of the Bay Trail. Additional trail users would be anticipated to use ancillary facilities such as parking and restrooms. However, it would not be to such an extent that deterioration of the facility would occur. The Regional Shoreline is currently maintained by the District and would continue to be maintained to current standards. Impacts related to the deterioration of the facility would be less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (Less than Significant with Mitigation)

The Project itself includes improvements to an existing recreation facility, the impacts from which are addressed throughout this Initial Study under each individual impact topic. Refer to each individual topic section for a discussion of impacts from implementation of the Project. Those with mitigation include air quality, biological resources, cultural resources, geology and soils, hydrology and water quality, and tribal cultural resources. All identified impacts are either less than significant or less than significant with mitigation.

3.17. Transportation/Traffic

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				✓
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				✓
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
d) Result in inadequate emergency access?				✓

Doolittle Drive runs parallel with, and adjacent to, the proposed Project site. Doolittle Drive is a two-lane, State Route 61 (SR 61) highway facility that connect the cities of Alameda, Oakland, and San Leandro. Doolittle Drive has a speed limit of 45 miles per hour (MPH) and operates at Level of Service (LOS) E during the PM peak period, indicating that the roadway is operating at capacity with virtually no gaps in the traffic stream. This road has narrow shoulders on each side and no sidewalks.

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (No Impact)

Construction of the Project would result in short-term increases in construction-related vehicle trips on area roadways, including vehicle trips by construction workers, haul-truck trips associated with disposal of materials, and material and equipment deliveries. Access to the Project site may occur via a combination of regional roadways (Highway 880), local arterials (Hegenberger Road and Doolittle Drive), and collector streets (Swan Way and Pardee Drive).

Doolittle Drive is reported to operate unacceptably at LOS E during the PM peak hour. A project's contribution to an intersection operating at LOS E would be considered significant if it changed the LOS to F. However, the Project's contribution of construction traffic would be temporary and would not substantially affect the baseline traffic levels; therefore, the temporary impact from construction traffic along this roadway segment would be less than significant.

Following construction, operation of the Project would not result in new traffic that would cause congestion or that would affect the performance of the circulation system.

Completing the Bay Trail gap is identified in several adopted planning documents, as described in further detail in Section 3.11 Land Use and Planning, including Alameda Countywide Bicycle Plan, San Francisco Bay Trail Plan, and City of Oakland General Plan. This Project would fulfil the objectives in these plans related to completing the Bay Trail.

Construction activities would not affect public transit because no such facilities exist in the construction area. Active construction on the pathway would cause a temporary obstruction during which the pathway would be blocked and redirected. However, this would be temporary and not conflict with the aforementioned planning documents which call for construction of the gap closure.

For Project operations, improvements to the existing pathways and completion of the Bay Trail gap would improve the pedestrian/bicycle facility and increase the safety for those who currently use Doolittle Drive to travel from the existing southern and northern extents of the Bay Trail. No operational conflict would occur.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (No Impact)

Section 15064.3(b)(2), indicates that transportation projects that have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact. The Project would complete a gap in an existing bicycle/pedestrian trail system, making the system more user friendly and safe as an alternative mode of transportation to the vehicle. No quantitative analysis of VMT is required; no conflict would occur.

c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (No Impact)

By design and intent, the Project would result in improvements to the existing pedestrian pathway to be a safe and functional part of the waterfront in accordance with local planning documents. The Project does not include any improvements to a public roadway or any traffic-related design feature. Therefore, no impact relative to increased traffic hazards due to design features or incompatible uses would occur.

d) Result in inadequate emergency access? (No Impact)

No buildings, facilities or occupied structures would be obstructed during construction and operation of the Project. Emergency access in the Project area would not be obstructed. No impact would occur.

3.18. Tribal Cultural Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)?		✓		
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

a, b) Cause a substantial adverse change in the significance of a tribal cultural resource? (Less than Significant with Mitigation)

CEQA requires lead agencies to determine if a proposed project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in PRC Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in PRC Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

As of the writing of this report, one Native American tribe, Wilton Tribe, has requested formal notification of proposed projects from the District per PRC Section 21080.3.1. In February of 2018, the District sent Wilton notification of the Project. The District has not received a request for formal consultation. The District also sent notification letters to six tribal representatives with traditional lands or cultural places located within Alameda County, as provided by the Native American Heritage Commission. A response was not received from these six tribes.

Although it is unlikely, the potential does exist to encounter as-of-yet unknown tribal cultural resources materials during project-related construction activities. If such resources were to represent “tribal cultural resources” as defined by CEQA, any substantial change to or destruction of these resources would be a potentially significant impact; therefore, the following mitigation is included.

Mitigation Measure TCR-1: Protect Tribal Cultural Resources during Construction Activities

In the event that any potential tribal cultural resources are discovered during construction-related earth-moving activities, the District shall halt all ground-disturbing activity in the vicinity of the resource and an appropriate tribal representative(s)/archaeologist shall be notified. If the find is determined to constitute a tribal cultural resource per Public Resources Code Section 21074, the appropriate tribal representative(s)/archaeologist shall develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to avoidance, preservation in place, archival research, subsurface testing, or excavation and data recovery.

Implementation of Mitigation Measure TCR-1 would reduce this impact to a less-than-significant level because a plan to address discovery of unanticipated buried tribal cultural resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

3.19. Utilities and Service Systems

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities the construction of which could cause significant environmental effects?				✓
c) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal dry and multiple dry years?				✓
d) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

a, b, d) Exceed wastewater treatment requirements of the RWQCB, or require the construction of new water, wastewater treatment facilities, or stormwater facilities, or have adequate wastewater capacity? (No Impact)

The Project does not involve the use or construction of any facilities that would require new water or wastewater infrastructure and would therefore have no impact.

The Project does not include the construction of new stormwater drainage facilities nor result in the need to expand such facilities. Project improvements do not require new stormwater facilities to handle potential additional run-off. This impact is less than significant.

c) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal dry and multiple dry years? (No impact)

During construction, East Bay Municipal Utility District (EBMUD) water supplies could potentially be used for dust control and other activities. Construction-related water demands would be short-term and minimal in volume and would be sufficiently served by existing entitlements. Following construction, the project would not directly or indirectly induce population growth and would not result

in an increased demand for water. Therefore, no new entitlements or facilities would be required. No impact would occur.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (Less than Significant)

The project is not expected to generate a significant increase of services for solid waste disposal needs. The proposed trail would generate limited solid waste during both construction and operation. Construction solid waste would include the one-time temporary generation of construction waste associated with the development of the trail, reconstruction of the boat launch, and reconfiguration of the parking lot. The Project would be subject to the City of Oakland's Construction and Demolition Debris Waste Reduction and Recycling Ordinance, which is part of the City's efforts to meet local and State mandated requirements to divert materials from landfill disposal, including Oakland's goal of Zero Waste by 2020. Post construction, the Project would generate minimal additional waste.

The project would not impede the ability of the City to meet waste diversion requirements or cause the City to violate other applicable federal, state, and local statutes and regulations related to solid waste. The impact is less than significant.

3.20. Wildfire

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✓
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slop instability, or drainage changes?				✓

a - d) Substantially impair an adopted emergency response plan or emergency evacuation plan, expose project occupants to pollutant concentrations, require the installation of infrastructure that may exacerbate fire risk, or expose people or structures to significant fire risk? (No Impact)

The project would make infrastructure improvements to an existing facility, which is located within an urban area and is not located within or near a state responsibility area or lands classified as very high fire hazard severity zones. Therefore the Project would not exacerbate wildfire risk to people or structures and there would be no impact.

3.21. Mandatory Findings of Significance

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a, c) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Less than Significant with Mitigation)

With implementation of the mitigation measures presented herein, the Project does not have the potential to degrade the quality of the environment, including fish or wildlife species or their habitat, plant or animal communities, important examples of the major periods of California history or prehistory, or cause substantial adverse effects on human beings.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (Less than Significant)

Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines

Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The District is currently in the planning stages for the Tidewater Day Use Area which would include improvements to 6 acres of the MLK Regional Shoreline, on the opposite side of the channel from the Bay Trail Gap and Improvements Project. The Tidewater Day Use Area project has not been approved and is unlikely to be constructed at the same time as the Project. There would be no improvements within the bay. This upland site is mostly disturbed, compacted gravel, or landscaped. Caltrans has previously presented plans for improvements along nearby Doodlittle Drive, however the current schedule is uncertain and it is unlikely that construction would occur at the same time as Project construction.

As summarized in Section 3 of this IS/Proposed MND, the project would not result in impacts on aesthetics, agriculture and forest resources, energy, greenhouse gas emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, utilities and service systems, and wildfire. Impacts from geology and soils are site specific and do not accumulate by nature. Therefore, implementation of the project would not significantly contribute to any related cumulative impact on these resources.

As described in Section 3.3, Air Quality, BAAQMD's basic air quality control measures are applied as a mitigation measure so that the BAAQMD's screening criteria for construction-generated criteria pollutant and precursors may be applied. The Project is under the screening criteria and therefore is not considered to have a cumulative significant impact. Therefore, the Project would not significantly contribute to a cumulative impact for air quality.

As described in Section 3.4, Biological Resources, several sensitive and listed species have the potential to occur within the Project site. Loss of habitat or individuals due to Project implementation could contribute to cumulative impacts for these species. Special-status or migratory birds could be nesting on or near the Project at the time of construction. Disturbance of nesting due to the Project could contribute to cumulative impacts for such species.

Implementation of the mitigation measures presented in Section 3.4 would reduce the Project's contribution to cumulative biological resource impacts resulting from completion of the Project. Furthermore, other than San Leandro Bay, the habitats at the Project site consists of either man-made or disturbed, marginal communities. There are no known proposed actions within San Leandro Bay that could potentially amplify the impacts discussed in Section 3,4, resulting in a cumulative concern. Therefore, Project contributions to the potential loss and/or restriction of biological resources in the region would not be considerable.

As described in Section 3.5 Cultural Resources, although the Project site is highly disturbed, it could not be ruled out with 100% certainty that archaeological resources or human remains would not be inadvertently discovered during construction. Implementation of mitigation measures presented in Section 3.5 would reduce the Project's contribution to a cumulative impact, if any, to less than significant.

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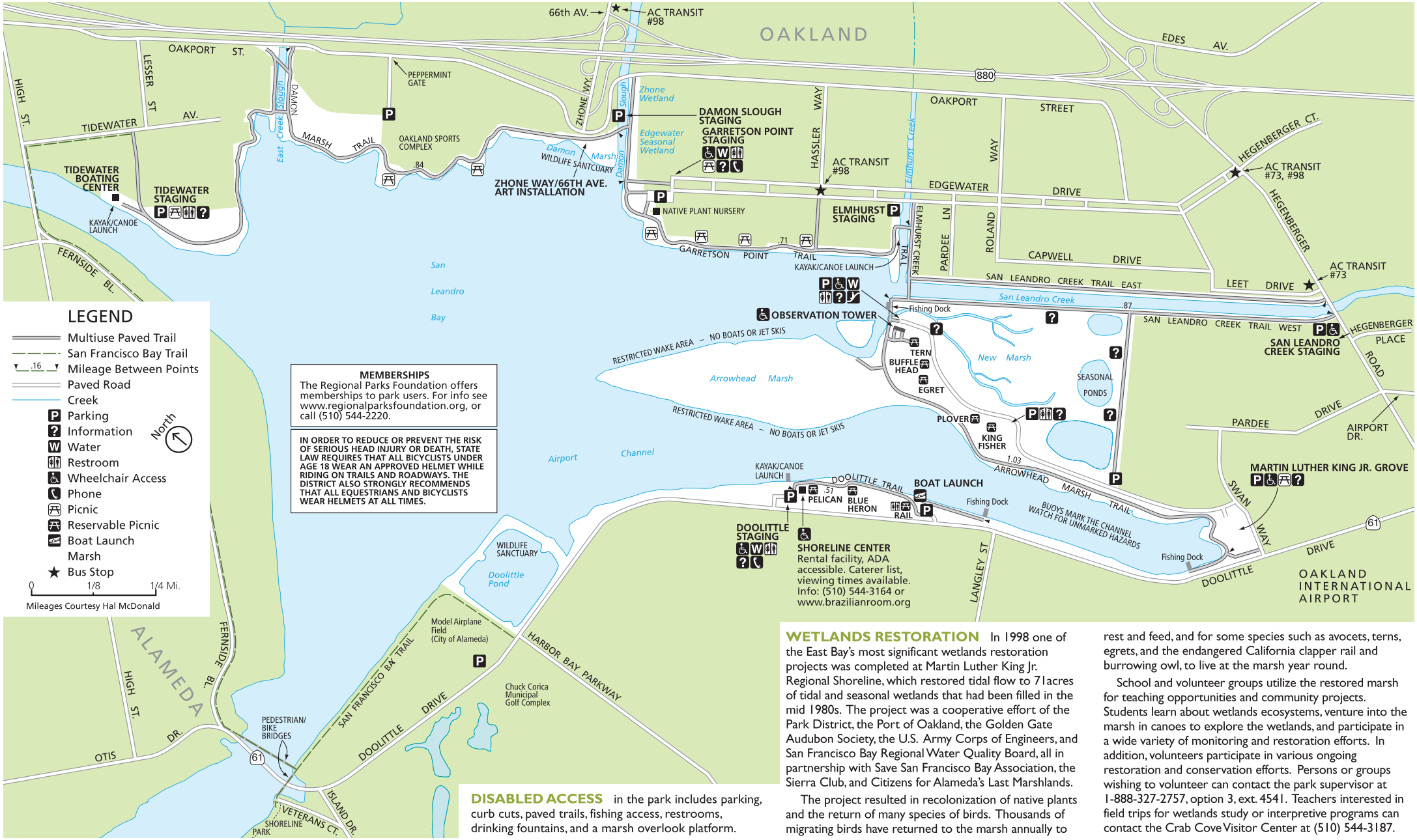
Appendix A – Park Map



DISABLED ACCESS in the park includes parking, curb cuts, paved trails, fishing access, restrooms, drinking fountains, and a marsh overlook platform.

WETLANDS RESTORATION In 1998 one of the East Bay's most significant wetlands restoration projects was completed at Martin Luther King Jr. Regional Shoreline, which restored tidal flow to 71acres of tidal and seasonal wetlands that had been filled in the mid 1980s. The project was a cooperative effort of the Park District, the Port of Oakland, the Golden Gate Audubon Society, the U.S. Army Corps of Engineers, and San Francisco Bay Regional Water Quality Board, all in partnership with Save San Francisco Bay Association, the Sierra Club, and Citizens for Alameda's Last Marshlands.

The project resulted in recolonization of native plants and the return of many species of birds. Thousands of migrating birds have returned to the marsh annually to rest and feed, and for some species such as avocets, terns, egrets, and the endangered California clapper rail and burrowing owl, to live at the marsh year round.

School and volunteer groups utilize the restored marsh for teaching opportunities and community projects. Students learn about wetlands ecosystems, venture into the marsh in canoes to explore the wetlands, and participate in a wide variety of monitoring and restoration efforts. In addition, volunteers participate in various ongoing restoration and conservation efforts. Persons or groups wishing to volunteer can contact the park supervisor at 1-888-327-2757, option 3, ext. 4541. Teachers interested in field trips for wetlands study or interpretive programs can contact the Crab Cove Visitor Center at (510) 544-3187.

Appendix B – Biological Resources Report

BIOLOGICAL RESOURCES REPORT

SAN FRANCISCO BAY TRAIL AT MARTIN LUTHER KING, JR. REGIONAL SHORELINE IMPROVEMENT PROJECT

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February 2018

ICF. 2018. Biological Resources Report, San Francisco Bay Trail at Martin Luther King, Jr. Regional Shoreline Improvement Project**.** February 2018. (ICF 00320.16.) Oakland, CA. Prepared for GHD.

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Acronyms and Abbreviations

Bay-Delta	San Francisco Bay/Sacramento–San Joaquin River Delta
BCDC	San Francisco Bay Conservation and Development Commission
BIOS	Biogeographic Information & Observation System
CCC	Central California Coast
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
CRPR	California Rare Plant Rank
CWA	Clean Water Act
Delta	Sacramento–San Joaquin River Delta
DPS	distinct population segment
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
HTL	high tide line
LSZ	low-salinity zone
MBTA	Migratory Bird Treaty Act
MHW	Mean High Water
Natural Communities List	CDFW's List of Vegetation Alliances and Associations
NMFS	National Marine Fisheries Service
POD	pelagic organism decline
Ppt	parts per thousand
RWQCB	Regional Water Quality Control Board
Shoreline	Martin Luther King, Jr. Regional Shoreline
State Board	State Water Resources Control Board
USC	U.S. Government Code
VegCAMP	Vegetation Classification and Mapping Program
WBWG	Western Bat Working Group

Chapter 1
Introduction

ICF completed a reconnaissance-level field investigation and subsequent analysis of biological resources occurring or potentially occurring on the San Francisco Bay Trail at Martin Luther King, Jr. Regional Shoreline Improvement Project (project) site in the City of Oakland. The park is approximately 28 acres in size and is located between Doolittle Drive and the Airport Channel (an extension of San Leandro Bay) east of the Oakland International Airport. The purpose of the analysis was to identify existing biological resources, evaluate the site's potential to support special-status plant and/or wildlife species, and determine if any natural features potentially subject to regulatory jurisdiction (e.g., wetlands) are present.

This report describes the methods used during the site visit and subsequent analysis; existing vegetation and wildlife habitat values on the site; special-status plants or wildlife, natural communities, and jurisdictional features potentially present; and biological resources that may pose constraints to the project. Federal and state environmental laws and regulations applicable to the project are summarized in Attachment A.

Chapter 2
Methods

Prior to visiting the site, ICF wildlife biologist Matt Ricketts searched the California Natural Diversity Database (CNDDB) (CDFW 2017) for records of special-status species within 5 miles of the site using the California Department of Fish and Wildlife's (CDFW) Biogeographic Information & Observation System (BIOS) online map viewer.[1] ICF biologists Eric Christensen and Matt Ricketts visited the site on October 24, 2016, to assess current habitat conditions and evaluate the site's potential to support special-status plant and/or wildlife species. Observations of dominant vegetation, wildlife species, habitat features, wetlands, and San Leandro Bay characteristics were made with binoculars (Pentax DCP-SF 8 x 43) where necessary. Observations were recorded digitally (e.g., Geo XT Trimble GPS Unit, eBird, and Theodolite for iOS), and in field notebooks. Printed aerial maps and an iPad were also used during fieldwork to record observations and navigate around the site.

For the purposes of this report, *special-status species* are those with one or more of the following characteristics.

- Plants or animals listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA).
- Plants or animals that are candidates for possible future listing as threatened or endangered under the ESA.
- Plants or animals listed or proposed for listing as threatened or endangered under the California Endangered Species Act (CESA).
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 *et seq.*).
- Plants assigned to the following California Rare Plant Ranks (CRPR) by the California Native Plant Society (CNPS) and collaborators.[2]
    - 1A – Presumed extirpated in California and either rare or extinct elsewhere.
    - 1B – Rare, threatened, or endangered in California and elsewhere.
    - 2A – Presumed extirpated in California, but more common elsewhere.
    - 2B – Rare, threatened, or endangered in California, but more common elsewhere.
- Animal species, subspecies, or distinct populations designated as California species of special concern by CDFW.
- Animals designated as Fully Protected under Sections 3511 (birds), 4700 (mammals), 5515 (fish), and 5050 (reptiles and amphibians) of the California Fish and Game Code.
- Plants or animals determined to meet the definitions of rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA) Guidelines.
- Plants or animals with no formal special status but considered by experts to be rare or in serious decline and that may warrant special status based on recent information.

[1] Available at http://www.dfg.ca.gov/biogeodata/bios/.

[2] See http://www.cnps.org/cnps/rareplants/ranking.php for more information.

Chapter 3
Environmental Setting

Location

The site is located at the Martin Luther King, Jr. Regional Shoreline (hereafter referred to as "park") between Doolittle Drive and San Leandro Bay, east of the Oakland International Airport. San Leandro Bay is part of San Francisco Bay; therefore, the term "Bay" as used in this report refers to San Francisco Bay. The site encompasses approximately 3,900 linear feet of the park and adjacent Bay shoreline that includes a paved parking lot, a boat launch, existing Bay Trail segments, and a planned Bay Trail gap closure. The site also includes a portion of the Bay adjacent to the park, as well as two wooden docks; a storm water pump house owned by the Port of Oakland and adjacent to the northernmost dock (pump house), and a concrete boat ramp. Adjacent to the site is approximately 3,500 linear feet of Doolittle Drive, between Swan Way and the parking lot. All or most of the site uplands are composed of imported fill placed within historic bay lands decades ago (Goals Project 1999).

Vegetation

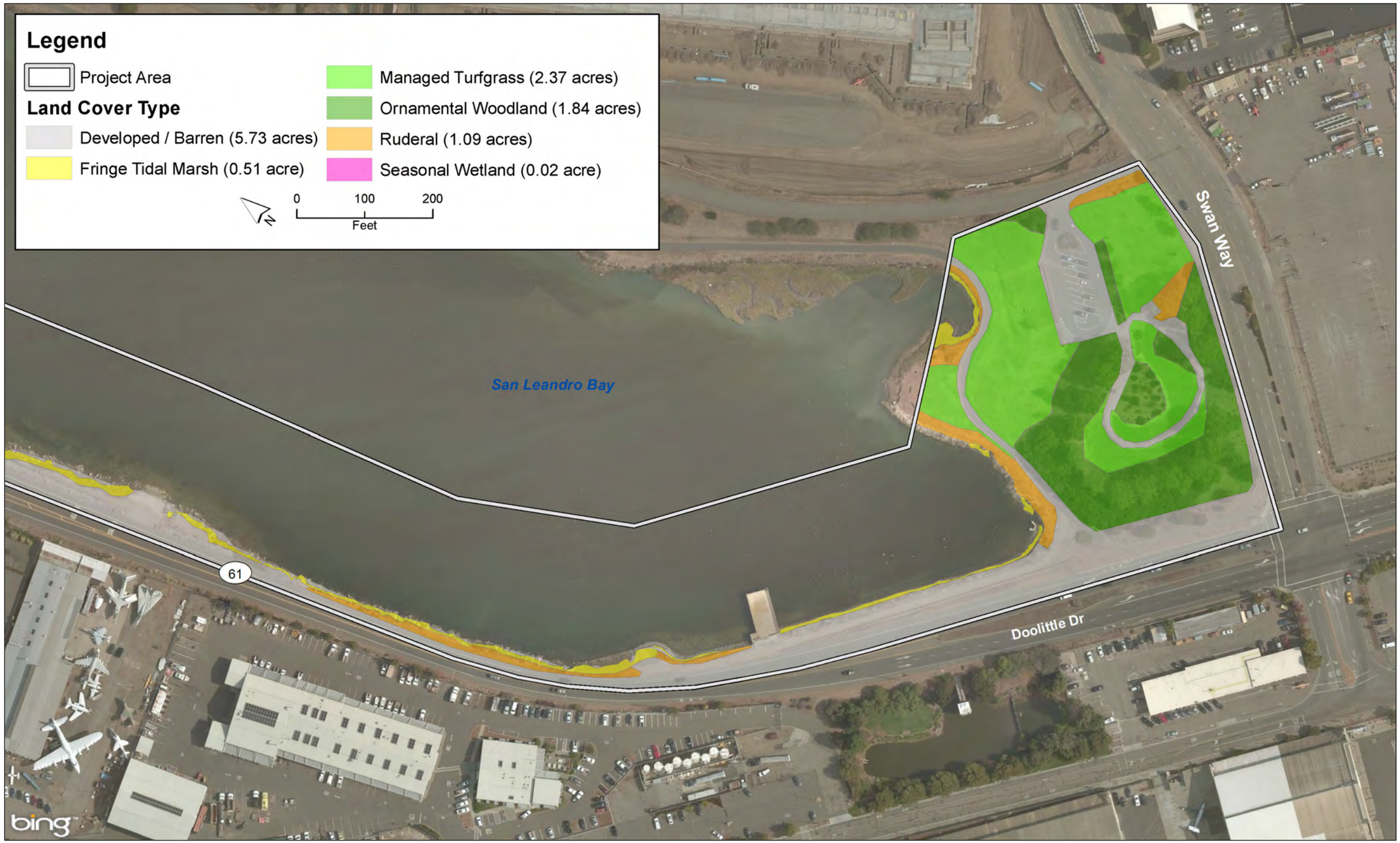
The site is in the Central Coast subregion of the California Floristic Province (Baldwin et al. 2012). Vegetation is either actively managed (e.g., mowed, planted, irrigated) within the park uplands or weedy along the Bay shoreline due to prior disturbance (i.e., shoreline armoring and back fill). The site supports five vegetation communities: managed turfgrass, ruderal, ornamental woodland, seasonal wetland, and fringe tidal marsh (Figure 1). Plant nomenclature in this report follows Baldwin et al. (2012).

Managed Turfgrass

Managed turfgrass in the site is limited to actively-managed portions of the park uplands, generally between Doolittle Drive and the Bay shoreline. This vegetation community is characterized by sparse to dense cover of planted and irrigated non-native annual grasses. Dominant grass species include ripgut grass (*Bromus diandrus*), rye grass (*Festuca perennis*), soft chess (*Bromus hordeaceus*), wall barley (*Hordeum murinum*), and wild oats (*Avena* sp.). Common forb species observed in the herbaceous layer are the same as those described in the ruderal vegetation community below.

Figure 1. Vegetation Communities (Sheet 1 of 2)

Figure 1. Vegetation Communities (Sheet 2 of 2)



Ruderal

The majority of vegetation along the Bay shoreline and adjacent to Doolittle Drive is composed of ruderal species that thrive in disturbed areas. Representative plant species include Bermuda grass (*Cynodon dactylon*), bristly ox-tongue (*Helminthotheca echioides*), bull thistle (*Cirsium vulgare*), English plantain (*Plantago lanceolata*), fennel (*Foeniculum vulgare*), Italian thistle (*Carduus pycnocephalus* subsp. *pycnocephalus*), milk thistle (*Silybum marianum*), prickly lettuce (*Lactuca serriola*), and stinkwort (*Dittrichia graveolens*), among others. Common grasses observed in ruderal vegetation include smilo grass (*Stipa miliacea* var. *miliacea*), ripgut grass, rye grass, soft chess, wall barley, and wild oats.

Ornamental Woodland

This vegetation community is comprised of trees planted for ornamental landscaping along the edges of the park and associated trails, Doolittle Drive, and next to the pump house. Trees included several large specimens of coast live oak (*Quercus agrifolia*), ngaio tree (*Myoporum laetum*), island ironwood (*Lyonothamnus floribundus*), and sheoak (*Casuarina equisetifolia*).

Seasonal Wetland

Seasonal wetland vegetation occurs in a topographic swale north of the parking lot at the northern end of the site. This vegetation community is dominated by saltgrass (*Distichlis spicata*), which co-occurs here with small amounts of alkali heath (*Frankenia salina*), fat-hen (*Atriplex prostrata*), and pickleweed (*Salicornia pacifica*). Seaside arrowgrass (*Triglochin maritima*) was observed at the east end of the seasonal wetland near San Leandro Bay. The seasonal wetland vegetation community here also supports a few non-native plant species such as perennial pepperweed (*Lepidium latifolium*), ripgut grass, rye grass, soft chess, and wall barley.

Fringe Tidal Marsh

This plant community occurs as a narrow band of native tidal salt marsh vegetation along portions of the Bay shoreline. Plant species in this community occur in visually conspicuous zones (Penaido et al. 1994), with pickleweed comprising the "middle marsh zone" at the water's edge and saltgrass, alkali heath, and fat-hen comprising the "high marsh" or "upland transition" zone adjacent to the ruderal community described above. Because most fringe marshes around San Francisco Bay formed as a result of artificial substrates (e.g., riprap, fill) being deposited into the Bay for shoreline stabilization, they lack the ecological value of larger marshes with well-established marsh soils and extensive networks of tidal channels and sloughs (e.g., Arrowhead Marsh). Growing on the fringe of the Bay below high tide line and on substrate that is not composed of marsh soils or bay mud, these marsh plants, from a federal jurisdictional perspective, are part of the Bay (a tidal water of the United States) and do not meet the criteria of wetlands under Section 404 of the Clean Water Act (ICF 2017; subject to verification by USACE).

Wildlife Habitat

Seasonal wetlands and waterbody shorelines often support many wildlife species. Although the site is fragmented by turfgrass and pavement (e.g., paved recreation paths, parking lot), both natural and managed vegetation communities provide foraging, breeding, and/or movement habitat for wildlife.

ICF detected 21 bird species during the October 2016 site visit. Species observed included raptors such as white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), and northern harrier (*Circus cyaneus*); waterbird species such mallard (*Anas platyrhynchos*), great egret (*Ardea alba*), American coot (*Fulica americana*), and double-crested cormorant (*Phalacrocorax auritus*); shorebirds such as least sandpiper (*Calidris minutilla*), black turnstone (*Arenaria melanocephala*), black oystercatcher (*Haematopus bachmani*), and willet (*Tringa semipalmata*); and sparrows such as song sparrows (*Melospiza melodia*), and dark-eyed juncos (*Junco hyemalis*). All waterbirds were observed foraging or resting on the open waters of the Airport Channel and the shorebirds were observed roosting along the rocky shoreline approximately 560 feet north of the southernmost dock.

No reptiles or amphibians were observed during the site visit, but common species such as sierra-tree frog (*Pseudacris sierra*), western fence lizard (*Sceloporus occidentalis*), and common garter snake (*Thamnophis sirtalis*) are expected to occur in natural and adjacent managed portions of the site.

California ground squirrels (*Otospermophilus beecheyi*) were observed in the riprap along the southern half of the San Leandro Bay shoreline and ruderal vegetation during the site visit. Other common species such as western harvest mouse (*Reithrodontomys megalotis*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), house mouse (*Mus musculus*), and Norway rat (*Rattus norvegicus*) are known to occur in a wide variety of vegetation communities, including managed vegetation.

Chapter 4
Results

Special-Status Species

Based on the results of the online data queries and site visit observations, ICF identified 68 special-status species (33 plants, 30 wildlife, 5 fish) as potentially occurring in the site vicinity (Tables 1 and 2). Of these, 30 plants and 17 animals were eliminated from consideration due to the lack of habitat (serpentine soils, chaparral, coastal scrub, vernal pools), existing vegetation management (e.g., mowing) on the site, the disturbed condition of the Bay shoreline (i.e., riprap, hardscape, concrete outfalls), or absence during the October 2016 site visit.

Although unlikely, the following special-status plant species could potentially occur with other native tidal marsh vegetation growing along the Bay shoreline:

- Point Reyes salty bird's beak (*Chloropyron maritimum* ssp. *palustre*)
- California seablite (*Suaeda californica*) – federally endangered, CRPR List 1B.2
- Saline clover (*Trifolium hydrophilum*) – CRPR List 1B.2

The following special-status animal species could potentially occur on or adjacent to the site based on the presence of terrestrial and/or aquatic land cover that provides habitat:

- White-tailed kite (*Elanus leucurus*) – California fully protected species
- Golden Eagle (*Aquila chrysaetos*)– California fully protected species
- Northern harrier (*Circus cyaneus*)– California species of special concern
- American peregrine falcon (*Falco peregrinus anatum*)– California fully protected species
- California black rail (*Laterallus jamaicensis coturniculus*) – state threatened, California fully protected species
- California Ridgway's rail (*Rallus longirostris obsoletus*) – federally and state endangered, California fully protected species
- Black skimmer (*Rynchops niger*) – California species of special concern
- California least tern (*Sternula antillarum browni*) – federally and state endangered, California fully protected species
- Burrowing owl (*Athene cunicularia*) – California species of special concern
- Alameda song sparrow (*Melospiza melodia pusillula*) – California species of special concern
- Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) – California species of special concern
- Pallid bat (*Antrozous pallidus*) – California species of special concern, Western Bat Working Group (WBWG) High Priority species

- Townsend's big-eared bat (*Corynorhinus townsendii*) – California species of special concern, WBWG High Priority species
- Salt marsh harvest mouse (*Reithrodontomys raviventris*)– federally and state endangered, California fully protected species
- Salt-marsh wandering shrew (*Sorex vagrans halicoetes*) – California species of special concern
- Green sturgeon (*Acipenser medirostris*), southern distinct population segment (DPS) – federally threatened, California species of special concern
- Central California coast Steelhead (*Oncorhynchus mykiss*) – federally threatened
- Longfin smelt (*Spirinchus thaleichthys*) – federal candidate, state threatened, California species of special concern

Table 1. Special-Status Plant Species Known or with Potential to Occur in the Project Region

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale
Plants						
Bent-flowered fiddleneck *Amsinckia lunaris*	–/–/1B.1	Inner North Coast Ranges, San Francisco Bay Area, west-central Great Valley	Coastal bluff scrub, valley and foothill grasslands, cismontane woodlands; 3–500 meters	Mar–Jun	Absent	Not expected to occur due to lack of grassland, scrub, and woodland.
Pallid manzanita *Arctostaphylos pallida*	FT/SE/1B.2	Eastern San Francisco Bay area, Sobrante and Huckleberry ridges, Berkeley-Oakland Hills in Alameda and Contra Costa Counties	On siliceous sandy or gravelly shales in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub; 185–465 meters	Dec–Mar	Absent	Not expected to occur due to lack of sandy or gravelly shales substrate; lack of forest, chaparral, woodland, and coastal scrub; and site elevation is outside species elevational range.
Alkali milkvetch *Astragalus tener* var. *tener*	–/–/1B.2	Southern Sacramento Valley, northern San Joaquin Valley, east San Francisco Bay Area	Playas, on adobe clay in valley and foothill grassland, vernal pools on alkaline soils; 1-60 meters	Mar-Jun	Absent	Not expected to occur due to lack of adobe clay and absence of grassland and vernal pools.
Big-scale balsamroot *Balsamorhiza macrolepis*	–/–/1B.2	Scattered occurrences in the Coast Ranges and Sierra Nevada Foothills	Sometimes on serpentine soils in chaparral, cismontane woodland, valley and foothill grassland; 90-1,555 meters	Mar-Jun	Absent	Not expected to occur due to lack of serpentine soils, chaparral, woodland, and grassland.
Round-leaved filaree *California macrophylla*	–/–/1B.1	Scattered occurrences in the Great Valley, southern North Coast Ranges, San Francisco Bay Area, South Coast Ranges, Channel Islands, Transverse Ranges, and Peninsular Ranges	Cismontane woodland, valley and foothill grassland on clay soils; 15–1,200 meters	Mar–May	Absent	Not expected to occur due to lack of clay soils, woodland, grassland, and regular disturbance (mowing).

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	–/–/1B.1	East San Francisco Bay Area, Salinas Valley, Los Osos Valley	Alkaline soils in annual grassland, on lower slopes, flats, and swales, sometimes on saline soils; below 230 meters	May–Oct (Nov)	Absent	Not expected to occur due to lack of grassland.
Point Reyes salty bird's beak *Chloropyron maritimum* ssp. *palustre*	–/–/1B.2	Coastal northern California, from Humboldt to Santa Clara County; Oregon	Coastal salt marsh; below 10 meters	July-Oct	Present	Marginal tidal marsh habitat present at edge of San Leandro Bay, but artificial origin (i.e., fringe marsh resulting from riprap and hardscape) likely precludes occurrence.
Robust spineflower *Chorizanthe robusta* var. *robusta*	FE/–/1B.1	Coastal central California, from Marin to Monterey County	Sandy or gravelly areas in coastal scrub, coastal dunes, and openings in cismontane woodland; 3-300 meters	Apr-Sep	Absent	Not expected to occur due to lack of coastal scrub, dunes, and woodland.
Presidio clarkia *Clarkia franciscana*	FE/SE/1B.1	San Francisco Bay, Presidio, Oakland hills: Alameda and San Francisco Counties	Serpentine grassland, coastal scrub; 25-335 meters	May-Jul	Absent	Not expected to occur due to lack of serpentine grassland and coastal scrub; and site elevation is outside species elevational range.
Western leatherwood *Dirca occidentalis*	–/–/1B.2	San Francisco Bay region, Alameda, Contra Costa, Marin, Santa Clara, San Mateo, and Sonoma Counties	Moist areas in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland; 25–425 meters	Jan–Mar (Apr)	Absent	Not expected to occur due to lack of forest and woodland; and site elevation is outside species elevational range.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale
Tiburon buckwheat *Eriogonum luteolum* var. *caninum*	–/–/1B.2	Central inner north Coast Range, northern Central coast, and northern San Francisco Bay area: Alameda, Contra Costa, Marin, and Sonoma?* Counties	On sandy to gravelly serpentine soils in chaparral, coastal prairie, oak woodland, valley and foothill grassland; below 700 meters	May-Sep	Absent	Not expected to occur due to lack of serpentine soils chaparral, prairie, woodland, and grassland.
Jepson's coyote thistle *Eryngium jepsonii*	–/–/1B.2	Alameda, Amador, Calaveras, Contra Costa, Fresno, Napa, San Mateo, Solano, Stanislaus, Tuolumne, and Yolo Counties	Vernal pools on clay soils in valley and foothill grassland; 3-300 meters	Apr-Aug	Absent	Not expected to occur due to lack of vernal pools.
Minute pocket-moss *Fissidens pauperculus*	–/–/1B.2	Butte, Del Norte, Humboldt, Mendocino, Marin, and Santa Cruz Counties	Damp, coastal soil in North Coast coniferous forest; 10-1024 meters	N/A	Absent	Not expected to occur due to lack of North Coast coniferous forest.
Fragrant fritillary *Fritillaria liliacea*	–/–/1B.2	Coast Ranges from Marin County to San Benito County	Adobe soils of interior foothills, coastal prairie, coastal scrub, valley and foothill grassland, often on serpentine soils; 3–410 meters	Feb–Apr	Absent	Not expected to occur due to lack of adobe and serpentine soils, prairie, scrub, and grassland.
Dark-eyed gilia *Gilia millefoliata*	–/–/1B.2	Northern coastal California from Del Norte to San Francisco County	Coastal dunes; 2-30 meters	Apr-Jul	Absent	Not expected to occur due to lack of coastal dunes.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale
Diablo helianthella *Helianthella castanea*	–/–/1B.2	San Francisco Bay area: Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties	At chaparral/oak woodland ecotone, often in partial shade, on rocky soils, also coastal scrub, riparian woodland, broadleaf upland forest, valley and foothill grassland; 60–1300 meters	Mar–June	Absent	Not expected to occur due to lack of chaparral, woodland, forest, and grassland; and site elevation is outside species elevational range.
Loma Prieta hoita *Hoita strobilina*	–/–/1B.1	Alameda, Contra Costa, Santa Clara, and Santa Cruz Counties	On mesic usually serpentine substrate in chaparral, cismontane woodland, and riparian woodland; 30–860 meters	May–Jul (Aug–Oct)	Absent	Not expected to occur due to lack of serpentine soil, chaparral, and woodland; and site elevation is outside species elevational range.
Kellogg's horkelia *Horkelia cuneata* var. *sericea*	–/–/1B.1	Coastal California from San Mateo to Santa Barbara Counties, formerly further north	Openings in closed-cone coniferous forest, coastal scrub, maritime chaparral, on sandy or gravelly soils; 10-200 meters	Apr-Sep	Absent	Not expected to occur due to lack of chaparral, forest, and coastal scrub.
Contra Costa goldfields *Lasthenia conjugens*	FE/–/1B.1	Scattered occurrences in Coast Range valleys and southwest edge of Sacramento Valley, Alameda, Contra Costa, Mendocino, Monterey, Marin, Napa, Santa Barbara, Santa Clara, Solano, and Sonoma Counties	Wet areas in cismontane woodland, valley and foothill grassland, vernal pools, alkaline playas or saline vernal pools and swales; below 470 meters	Mar–Jun	Absent	Not expected to occur due to lack of vernal pools.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale
Oregon meconella *Meconella oregano*	–/–/1B.1	Known in CA only from five occurrences in Contra Costa and Santa Clara Counties; Oregon, Washington and elsewhere	Coastal prairie, coastal scrub; 250-620 meters	Mar–Apr	Absent	Not expected to occur due to lack of coastal prairie and scrub; and site elevation is outside species elevational range.
Woodland woolythreads *Monolopia gracilens*	–/–/1B.2	Alameda, Contra Costa, Monterey, San Luis Obispo, Santa Clara, Santa Cruz, and San Mateo Counties	Serpentine soils in openings in broadleaf upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland; 100-1200 meters	(Feb) Mar-Jul	Absent	Not expected to occur due to lack of forest, chaparral, woodland, and grassland; and site elevation is outside species elevational range.
San Francisco popcornflower *Plagiobothrys diffusus*	–/SE/1B.1	Alameda, Santa Cruz, and San Mateo Counties	Coastal prairie, valley and foothill grassland; 60-360 meters	Mar-Jun	Absent	Not expected to occur due to lack of coastal prairie and grassland; and site elevation is outside species elevational range.
Adobe sanicle *Sanicula maritima*	–/SR/1B.1	Coastal Monterey and San Luis Obispo Counties; historically known from the San Francisco Bay area in Alameda* and San Francisco* Counties	Moist clay, serpentinite or ultramafic soils, in meadows and seeps, chaparral, coastal prairie, valley and foothill grassland; 30-240 meters	Feb-May	Absent	Not expected to occur due to lack of meadow, seep, chaparral, coastal prairie, and grassland; and site elevation is outside species elevational range.
Most beautiful jewelflower *Streptanthus albidus* ssp. *peramoenus*	–/–/1B.2	Eastern San Francisco Bay area, central outer South Coast Ranges in Alameda, Contra Costa, Monterey, Santa Barbara, Santa Clara, San Luis Obispo, and Stanislaus Counties	On serpentine outcrops in chaparral, cismontane woodland, valley and foothill grassland, on ridges and slopes; 95-1000 meters	(Mar) Apr-Sep (Oct)	Absent	Not expected due to lack of chaparral, woodland, and grassland; and site elevation is outside species elevational range.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale
Slender-leaved pondweed *Stuckenia filiformis* ssp. *alpina*	–/–/2B.2	Scattered locations in California: Contra Costa, El Dorado, Lassen, Merced, Mono, Modoc, Mariposa, Placer, Santa Clara*, and Sierra Counties; Arizona, Nevada, Oregon, Washington	Freshwater marsh, shallow emergent wetlands and freshwater lakes, drainage channels; 300-2150 meters	May-Jul	Absent	Not expected due to lack of freshwater marsh, lakes, drainage channels; and site elevation is outside species elevational range
California seablite *Suaeda californica*	FE/–/1B.1	Morro Bay, San Luis Obispo County, and San Francisco and Contra Costa Counties; historically found in the south San Francisco Bay	Margins of tidal salt marsh; below 15 meters	Jul-Oct	Present	Marginal tidal marsh habitat present at edge of San Leandro Bay, but artificial origin (i.e., fringe marsh resulting from riprap and hardscape) likely precludes occurrence.
Saline clover *Trifolium hydrophilum*	–/–/1B.2	Sacramento Valley, central western California	Salt marsh, mesic alkaline areas in valley and foothill grasslands, vernal pools, marshes and swamps; below 300 meters	Apr-Jun	Present	Marginal habitat present along Bay shoreline and in seasonal wetland north of parking lot, but artificial origin (placement of riprap and hardscape along shoreline, digging of ditch for storm water management) likely precludes occurrence.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Blooming Period	Habitat Present/ Absent	Rationale

* = populations extirpated in the county.

[a] Status explanations:

Federal

FE = listed as endangered under the federal Endangered Species Act (ESA).

FT = listed as threatened under ESA.

– = no listing.

State

SE = listed as endangered under the California Endangered Species Act (CESA).

SR = listed as rare under CESA

– = no listing.

California Native Plant Society (CNPS) California Rare Plant Rank

1A = List 1A species: plants presumed extirpated in California and either rare or extinct elsewhere.

1B = List 1B species: plants rare, threatened, or endangered in California and elsewhere.

2B = List 2B species: plants rare, threatened, or endangered in California, but more common elsewhere.

CNPS Code Extensions:

0.1 = seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).

0.2 = fairly endangered in California (20-80% of occurrences threatened).

0.3 = not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known.)

Table 2. Special-Status Wildlife and Fish Known or with Potential to Occur in the Project Region, or That May Be Affected by the Proposed Project

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Invertebrates					
Vernal pool fairy shrimp *Branchinecta lynchi*	FT/–/–	Central Valley, central and south Coast Ranges from Tehama to Santa Barbara County; isolated populations in Riverside County	Common in vernal pools; also found in sandstone rock outcrop pools	Absent	Not expected to occur due to lack of vernal pools.
San Bruno elfin butterfly *Callophrys mossii bayensis*	FE/–/–	San Bruno Mountains, Montara Mountains, and northern end of Santa Cruz Mountains in San Mateo County	North-facing slopes and ridges facing Pacific Ocean from 600 to 1,100 feet that support *Sedum spathulifolium*	Absent	Not expected to occur due to site elevation outside of species' elevation range.
Monarch butterfly (California overwintering population 1) *Danaus plexippus*	–/–/–	Winter aggregation sites extend along the coast from northern Mendocino County to Baja California	Roosts located in wind-protected tree groves (*Eucalyptus* sp., *Pinus radiata*, *Hesperocyparis macrocarpa*), with nectar and water sources nearby	Absent	Not expected to occur due to lack of wind-protected tree groves.
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT/–/–	Vicinity of San Francisco Bay including San Fracisco peninsula in San Mateo Co., and mountains near San Jose, Santa Clara County	Native grasslands on outcrops of serpentine soil; California plantain (*Plantago erecta*) and owl's clover (*Castilleja densiflorus* or *C. exserta*) are host plants	Absent	Not expected to occur due to lack of serpentine soil and grasslands.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Amphibians					
California tiger salamander *Ambystoma californiense*	FT/ST/–	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Butte County south to northeastern San Luis Obispo County	Grassland and oak woodland with seasonal ponds and/or pools for breeding; small mammal burrows in vicinity of breeding sites for underground retreats during the dry season	Absent	Not expected to occur due to lack of breeding habitat (seasonal ponds or vernal pools), upland habitat, and developed surroundings.
Foothill yellow-legged frog *Rana boylii*	–/–/SSC	Coastal and foothill drainages of Coast Range from Oregon border to Transverse Ranges. West slope drainages of Sierra Nevada and Southern Cascades	Small to moderate-sized streams with shallow water and at least some cobble-sized substrate in woodland, chaparral, and forest; infrequent or absent in streams where introduced aquatic predators (i.e., various fish and bullfrogs) are present	Absent	Not expected to occur due to lack of freshwater streams and developed surroundings.
California red-legged frog *Rana draytonii*	FT/SSC/–	Coastal drainages and coastal mountain ranges of California from Marin County south to San Diego County, and in the Sierra Nevada from Tehama County to Fresno County	Permanent and semi-permanent water bodies (e.g., streams, ponds) with deep, still, and/or slow-moving water for breeding; may estivate in rodent burrows or soil cracks during dry periods	Absent	Not expected to occur due to due to lack of freshwater streams or ponds, and developed surroundings.
Reptiles					
Western pond turtle *Actinemys (=Emys) marmorata*	–/–/SSC	California range includes Oregon border of Del Norte and Siskiyou Counties south along the coast to San Francisco Bay, inland through the Sacramento Valley, and on the western slope of Sierra Nevada	Ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and aquatic vegetation in woodland, grassland, and open forest	Absent	Not expected to occur due to lack of freshwater stream, pond, or marsh; and developed surroundings.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Alameda whipsnake (=striped racer) *Masticophis lateralis euryxanthus*	FT/ST/–	Contra Costa County, most of Alameda County, and portions of northern Santa Clara and western San Joaquin Counties	Small to large patches of chaparral or coastal scrub, interspersed with other native vegetation types (e.g., grassland, oak woodland, oak-bay woodland) and rock outcrops	Absent	Not expected to occur as site is outside of species' known range and lacks chaparral and coastal scrub, rock outcrops, woodland, and grassland.
Birds					
White-tailed kite *Elanus leucurus*	–/FP/–	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border.	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging.	Present	Observed during October 2016 site visit. More likely to forage than nest on site due to disturbance from Doolittle Drive but trees are suitable for nesting and nesting cannot be ruled out.
Golden Eagle *Aquila chrysaetos*	–/FP/–	Foothills and mountains throughout California. Uncommon nonbreeding visitor to lowlands such as the Central Valley	Nest on cliffs and escarpments or in tall trees overlooking open country. Forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals	Present (foraging only)	Marginal foraging habitat occurs in managed turfgrass and other open areas. Nesting habitat absent.
Northern harrier *Circus cyaneus*	–/SSC/–	Occurs throughout lowland California. Recorded in fall at high elevations	Grasslands, meadows, marshes, and seasonal and agricultural wetlands; nests on the ground within a thicket of vegetation	Present (foraging only)	Observed foraging over managed turfgrass and shoreline during site visit. Suitable foraging habitat occurs in managed turfgrass and other open areas. Suitable nesting substrate present within clearings in ruderal vegetation.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
American peregrine falcon *Falco peregrinus anatum*	–/FP/–	Permanent resident along the north and south Coast Ranges. May summer in the Cascade and Klamath Ranges and through the Sierra Nevada to Madera County. Winters in the Central Valley south through the Transverse and Peninsular Ranges and the plains east of the Cascade Range	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers, or marshes that support large prey populations	Present (foraging only)	Suitable foraging habitat occurs over managed turfgrass and other open areas. Nesting habitat absent due to lack of cliffs or ledges.
California black rail *Laterallus jamaicensis coturniculus*	–/ST, FP/–	Permanent resident in the San Francisco Bay and east-ward through the Delta into Sacramento and San Joaquin Counties; small populations in Marin, Santa Cruz, San Luis Obispo, Orange, Riverside, and Imperial Counties	Tidal salt marshes associated with heavy growth of pickleweed; also occurs in brackish marshes or freshwater marshes at low elevations	Present (foraging only)	Limited foraging habitat in seasonal wetland and along shoreline, but nesting habitat (dense salt marsh vegetation) absent.
California Ridgway's rail *Rallus longirostris obsoletus*	FE/FE, FP/–	Marshes around the San Francisco Bay and east through the Delta to Suisun Marsh	Restricted to salt marshes and tidal sloughs; usually associated with heavy growth of pickle-weed; feeds on mollusks removed from the mud in sloughs	Present (foraging only)	Limited suitable foraging habitat along shoreline, but nesting habitat (dense salt marsh vegetation) absent.
Western snowy plover *Charadrius alexandrinus nivosus*	FT/SSC/–	Nests at inland lakes throughout northeastern, central, and southern California, including Mono Lake and Salton Sea	Nests on coastal beaches above the normal high tide limit in flat, open areas with sandy or saline substrates; vegetation and driftwood are usually sparse or absent	Absent	Not expected to occur due to routine human presence and lack of barren substrate or sandy beaches.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Black skimmer *Rynchops niger* (nesting colony)	–/SSC/–	Common summer resident at the Salton Sea; colony of permanent residents on the south end of San Diego Bay	Nests on gravel bars and sandy beaches; forages in shallow, calm waters	Present (foraging only)	May occasionally fly and forage over site but not expected to nest due to lack of habitat. Has been observed nearby at Arrowhead Marsh and MLK Regional Shoreline "New" Marsh (eBird 2017).
California least tern *Sternula antillarum browni* (nesting colony)	FE/SE, FP/–	Nests on beaches along the San Francisco Bay and along the southern California coast from southern San Luis Obispo County south to San Diego County	Nests on sandy, upper ocean beaches, and occasionally uses mudflats; forages on adjacent surf line, estuaries, or the open ocean	Present (foraging only)	Not expected to nest due to lack of sandy beach and mudflat nesting habitat. Individuals from the known colony on Alameda Island may occasionally forage over Bay waters.
Western yellow-billed cuckoo *Coccyzus americanus*	FT/SE/–	Nests along upper Sacramento, lower Feather, south fork of the Kern, Amargosa, Santa Ana, and Colorado Rivers	Wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstory are preferred for foraging; may avoid valley-oak riparian habitats where scrub jays are abundant	Absent	Not expected to occur due to lack of mature riparian habitat and site outside of species known range.
Burrowing owl *Athene cunicularia*	–/SSC/–	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. Rare along south coast	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows	Present	Suitable foraging habitat occurs in managed turfgrass and other open areas. Limited ground squirrel burrows present along margins of turfgrass and ruderal vegetation.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Alameda song sparrow *Melospiza melodia pusillula*	–/SSC/–	Found only in marshes along the southern portion of the San Francisco Bay	Brackish marshes associated with pickleweed; may nest in tall vegetation or among the pickleweed	Present	Limited suitable foraging habitat along shoreline. Suitable nesting habitat in ruderal vegetation.
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	–/SSC/–	Found only in the San Francisco Bay Area in Marin, Napa, Sonoma, Solano, San Francisco, San Mateo, Santa Clara, and Alameda Counties	Freshwater marshes in summer and salt or brackish marshes in fall and winter; requires tall grasses, tules, and willow thickets for nesting and cover	Present (foraging only)	Limited suitable foraging habitat in seasonal wetland and along shoreline, but nesting habitat (tall vegetation) absent.
Mammals					
Pallid bat *Antrozous pallidus*	–/SSC/ WBWG: High	Occurs throughout California, except the high Sierra, from Shasta to Kern County and the northwest coast, primarily at lower and mid elevations	Occurs in a variety of habitats but most common in dry, rocky areas; day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, tree hollows, and various human structures (e.g., bridges, barns, porches)	Present	Suitable roosting habitat occurs in trees and the stormwater pump house, but park structures experience routine human presence.
Townsend's big-eared bat *Corynorhinus townsendii*	–/SSC/ WBWG: High	Throughout most of state.	Coniferous forests, deserts, riparian communities, and agricultural lands; primarily roosts in caves and abandoned mines, but has also been observed roosting under bridges and in rock crevices and tree cavities	Present	Suitable roosting habitat occurs in trees and the stormwater pump house, but park structures experience routine human presence.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	–/SSC/–	West side of Mount Diablo to coast and San Francisco Bay	Present in chaparral habitat and in forest habitats with a moderate understory	Absent	Not expected to occur due to lack of chaparral or forest habitat.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Salt marsh harvest mouse *Reithrodontomys raviventris*	FE/SE, FP/–	San Francisco, San Pablo, and Suisun Bays; the Delta	Salt marshes with a dense plant cover of pickle-weed and fat hen; adjacent to an upland site	Present	Marginal potential to occur in limited salt marsh at edge of San Leandro Bay.
Alameda Island mole *Scapanus latimanus parvus*	–/SSC/–	Only known from Alameda Island	Friable soil in primarily grasslands but also multiple habitat types	Absent	Not expected to occur as site is outside of known range and majority of site is managed or developed.
Salt marsh wandering shrew *Sorex vagrans halicoetes*	–/SSC/–	Restricted to southern and northwestern San Francisco Bay	Mid-elevation salt marsh habitats with dense growths of pickleweed (*Salicornia* sp.); requires driftwood and other objects for nesting cover	Present	Marginal potential to occur in limited salt marsh at edge of San Leandro Bay.
Fish					
Green sturgeon (southern distinct population segment) *Acipenser medirostris*	FT/SSC/–	Open waters of San Francisco Estuary, Sacramento-San Joaquin Delta, and Sacramento River.	Adults spawn in cool sections of upper Sacramento River with deep, turbulent flows and hard substrates.	Present	Individuals straying from main migratory path between Golden Gate and Sacramento River may occasionally venture into Bay waters on the site.
Tidewater goby *Eucyclogobius newberryi*	FE/SSC/–	Del Norte County along coast to northern San Diego County, and Sacramento/San Joaquin Delta	Coastal lagoons, estuaries, and marshes with brackish, non-stagnant water ranging from 8-25° Celsius	Absent	Not expected to occur due to lack of brackish, non-stagnant water with freshwater input.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale
Central California coast steelhead *Oncorhynchus mykiss*	FT/–/– (spring run)	Coastal drainages along the central California coast	Cold, clear water with clean gravel of appropriate size for spawning; most spawning occurs in headwater streams	Present, migratory stream and spawning habitat absent	Individuals straying from main migratory path may occasionally venture into San Leandro Bay, but migratory and spawning habitat (e.g, freshwater input, clear water, clean gravel) absent.
Delta smelt *Hypomesus transpacificus*	FT/SE/–	Primarily in the Sacramento–San Joaquin Estuary, but has been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River; range extends downstream to San Pablo Bay	Occurs in estuary habitat in the Delta where fresh and brackish water mix in the salinity range of 2–7 parts per thousand (Moyle 2002)	Absent	Not expected to occur as site is outside of species' range and lacks required salinity conditions.
Longfin smelt *Spirinchus thaleichthys*	FC/ST, SSC/–	San Francisco Bay-Delta to north of the Cook Inlet in Alaska	Salt or brackish estuary waters with freshwater inputs for spawning	Present	Suitable habitat present in San Leandro Bay.

Common Name Scientific Name	Status[1] (Federal/ State/Other)	Distribution in California	Habitat Requirements	Habitat Presence/ Absence in Project Site	Rationale

n/a = not applicable

[1] Status codes:

Federal

FE = Federally listed as Endangered under federal Endangered Species Act (ESA)

FT = Federally listed as Threatened under ESA

State

SE = State listed as Endangered under California Endangered Species Act (CESA)

ST = State listed as Threatened under CESA

SCE= State candidate for listing as Threatened under CESA

SSC = Species of Special Concern

FP = Fully protected

Other

WBWG = Western Bat Working Group (WBWG) priority species (http://wbwg.org/matrices/species-matrix/):

High = species imperiled or at high risk of imperilment

Medium = more research and closer attention needed to adequately assess species' status and needed conservation actions

Brief descriptions of the biology and status of the federally and/or state listed species listed above and other special-status species with potential to occur or **breed** (not just forage) on the site are provided below. Plants are discussed first, followed by fish, birds, and mammals (no special-status amphibians or reptiles are expected to occur).

Point Reyes Salty Bird's-Beak

Point Reyes salty bird's-beak is an annual herb in the broomrape family. This species is found in tidal salt marsh below 10 meters. It blooms from June through October. Point Reyes salty bird's-beak is known from coastal northern California from Humboldt to Santa Clara counties. No CNDDB records exist within two miles of the site (CDFW 2017). This species was not observed during the site visit, but marginal habitat is present in the fringe tidal marsh along the San Leandro Bay shoreline.

California Seablite

California seablite is a perennial, evergreen shrub in the goosefoot family. This species is found on margins of tidal salt marsh below 15 meters. California seablite blooms from July through October and is known to occur from Morro Bay to San Luis Obispo and San Francisco to Contra Costa Counties. One extirpated (i.e., no longer existing) CNDDB record exists within 2 miles of the site (CDFW 2017). This species was not observed during the October 2016 site visit, but marginal habitat is present in the fringe tidal marsh along the San Leandro Bay shoreline.

Saline Clover

Saline clover is known from the Sacramento Valley and central western California. This species is an annual herb in the legume family, commonly found in tidal salt marsh, annual grasslands, vernal pools, and marshes and swamps below 300 meters. It blooms from June through August and is associated with alkaline soils. One extirpated CNDDB record exists within 2 miles of the site (CDFW 2017). This species was not observed during the site visit, but marginal habitat is present in the fringe tidal marsh along the San Leandro Bay shoreline.

California Black Rail

California black rail is a permanent resident of the San Francisco Bay and the Sacramento Delta in San Joaquin and Sacramento Counties. This species also occurs within small populations in Marin, Santa Cruz, San Luis Obispo, Orange, Riverside, and Imperial Counties. California black rail inhabits tidal salt marshes densely vegetated with pickleweed, brackish marshes, freshwater marshes at low elevations. One CNDDB record exists within 2 miles of the site (CDFW 2017). Very marginal habitat for this species is present in the fringe tidal marsh along the Bay shoreline, but the lack of tall, dense vegetation precludes the species from nesting in or adjacent to the site.

California Ridgway's Rail

California Ridgway's rail ranges along the Pacific Coast in Monterey and San Luis Obispo Counties and inhabits tidal mudflats and sloughs. Five CNDDB records occur within two miles of the site, and the species is known to occur at Arrowhead Marsh immediately northeast and across San Leandro

Bay (approximately 955 feet) from the site. This species has potential to forage within the fringe tidal marsh along the Bay shoreline, but the narrow width of the marsh and its proximity to disturbed uplands provides little to no protection from land-based predators, likely precluding nesting in or adjacent to the site.

California Least Tern

California least tern is the smallest of the North American terns and occurs along the Pacific Coast from San Francisco south to Baja California. It nests in large colonies discontinuously throughout its range, with most concentrated in southern California. Only three colonies are located north of San Luis Obispo County, and the largest of these is at Alameda Point in Oakland (Elliott et al. 2007). Least terns nest on bare or sparsely vegetated substrates (e.g., beaches, river bars, shell islands, gravel and sand pits) where they lay their eggs in a simple scrape in the sand or shell fragments. Least terns forage for small fish (e.g., silversides [family Atherinopsidae], northern anchovy [*Engraulis mordax*]) in nearshore ocean waters and in shallow estuaries and lagoons.

California least tern is expected to forage over the open waters of the project site during the breeding season (April through August) but is not expected to nest due to the lack of suitable nesting substrates. There are nine eBird (2017) locations in the project vicinity where the species has been observed, including five individuals over the project site on May 8, 2010 (Perry 2010). Nearby observations are almost certainly of individuals from the Alameda Point nest colony, located approximately 6.5 miles northwest of the site.

White-tailed Kite

White-tailed kite is a California Fully Protected species that occurs throughout California, primarily west of the Sierra Nevada in lowlands and foothills. Although white-tailed kites typically occur in open habitats such as grassland, marsh, and savanna, they will also use marginal habitats such as freeway edges and medians when foraging for voles and mice. Nests are constructed in a variety of trees, with coast live oak perhaps the most common, and placed high in the crown on thin branches (Peeters and Peeters 2005).

ICF observed a single white-tailed kite during the October 2016 site visit, and there are multiple eBird occurrences in the vicinity, including a February 19, 2012 observation of adults mating near the intersection of Doolittle Drive and Hegenberger Road approximately 0.6 mile southeast of the site (eBird 2017). The ornamental trees on the site provide suitable nest sites.

Burrowing Owl

Burrowing owl is a small owl that lives in burrows created by ground squirrels and pocket gophers. This species forages over grassland and open salt marsh vegetation for small mammals, insects, and lizards and is most active at dawn and dusk. This species ranges throughout lowland portions of California, but is absent from the southern coastal areas of the state. Two CNDDB records of this species occur within two miles of the site (CDFW 2017), but this species was not observed during the site visit. There are multiple nearby records in eBird (2017) (i.e., Arrowhead Marsh, MLK "New" Marsh), but none during the peak breeding season (April–June), suggesting that the species only winters in the area. Suitable foraging habitat for the species occurs in the managed turfgrass and other open areas of the site, and suitable burrows occur along the margins of the managed turfgrass and ruderal vegetation.

Alameda Song Sparrow

Alameda song sparrow is found in brackish marshes vegetated with pickleweed along San Francisco Bay. This species is known to nest within tall vegetation or in pickleweed within its marsh habitat. Three CNDDB records of this species occur within two miles of the study area (CDFW 2017), but this species was not observed during the site visit. This species has potential to forage in the limited strip of tidal salt marsh along the San Leandro Bay shoreline and nest in adjacent ruderal vegetation.

Pallid Bat

Pallid bat is found throughout most of California at low to middle elevations (6,000 feet). Pallid bats are found in a variety of habitats, including desert, brushy terrain, coniferous forest, and non-coniferous woodlands. In central and northern California, the species is associated with oak, ponderosa pine, redwood, and giant sequoia land cover. Pallid bats forage among vegetation and above the ground surface, eating large ground-dwelling arthropods and large moths. Daytime roost sites include rock outcrops, mines, caves, hollow trees, buildings, and bridges. Night roosts are commonly under bridges but are also in caves and mines (Brown and Pierson 1996). Hibernation may occur during late November through March. Pallid bats breed from late October through February (Zeiner et al. 1990b:70), and one or two young are born in May or June (Brown and Pierson 1996).

No CNDDB records of pallid bat occur within two miles of the site (CDFW 2017). This species was not observed during the site visit, but it does have potential to roost in trees and the pump house in the site. The Martin Luther King Jr. Regional Shoreline Park bathroom structures are frequently visited by humans, so bats are not expected to roost there.

Townsend's Big-Eared Bat

Townsend's big-eared bat is currently listed as a species of special concern and by CDFW and also listed as a species with high regional priority by Western Bat Working Group (Western Bat Working Group 2017). Townsend's big-eared bat occurs throughout California in a wide variety of habitats ranging from sea level to 10,800 feet above MSL from Del Norte County to Santa Barbara County. This species is typically associated with coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Species distribution is also strongly correlated with availability of caves or cave-like roosting habitat. Townsend's big-eared bats have been observed utilizing buildings, bridges, rock crevices, and hollow trees as roost sites (Western Bat Working Group 2017). Due to relatively cool climate of the San Francisco Bay area, suitable roosts with stable thermal regimes are expected to be found in man-made structures in site. Townsend's big-eared bats are highly sensitive to disturbance and therefore are highly unlikely to roost within suitable habitat along highly developed portions of the site.

No CNDDB records of Townsend's big-eared bat occur within two miles of the site (CDFW 2017). This species was not observed during the site visit, but it does have potential to roost in trees and the pump house in the site. The Martin Luther King Jr. Regional Shoreline Park bathroom structures are frequently visited by humans, so bats are not expected to roost there.

Salt Marsh Harvest Mouse

Salt marsh harvest mouse inhabits salt marsh habitat vegetated with pickleweed around the greater San Francisco Bay. One CNDDB record of this species occurs within two miles of the study area (CDFW 2017). This species was not observed during the site visit, but the reconnaissance-level survey was conducted during daylight hours and the species is nocturnal. Salt marsh harvest mouse has potential to occur within the limited strip of tidal salt marsh habitat along the San Leandro Bay shoreline.

Central California Coast Steelhead

Steelhead from San Francisco and San Pablo Bays and their tributaries are included in the Central California Coast (CCC) distinct population segment (DPS), which is listed as threatened under the Endangered Species Act. CCC steelhead enter rivers typically between late December and April after winter and spring rains. Steelhead enter rivers and spawn soon after reaching spawning grounds. Most spawning occurs during late spring, avoiding damaging effects of winter floods, common to the coastal watersheds along California's central coast. Like other salmonids, CCC steelhead require cool water, though these fish manage to grow in warmer water conditions (Moyle et al 2008). The optimal temperature range for juvenile steelhead growth is 15-18ºC (Moyle 2002). Lagoon habitat presumably provides heterogeneous thermal habitats, where steelhead can move between cooler and warmer habitats. Generally, CCC steelhead juveniles are absent from waters that exceed 25-26°C for even short periods. For adult steelhead, lethal temperatures are 23-24°C (Moyle 2002).

No CNDDB records occur within two miles of the site (CDFW 2017). Suitable general (non-migratory) habitat is present for steelhead within San Leandro Bay, but migratory and spawning habitat is absent due to the lack of a freshwater stream within and immediately adjacent to the site.

Longfin Smelt

Longfin smelt is a small, euryhaline, anadromous, and semelparous fish with a life cycle of approximately two years (Rosenfield 2010). Young longfin smelt occur from the estuary's low-salinity zone (LSZ), where brackish and fresh waters meet, seaward and into the coastal ocean. The San Francisco Bay/Sacramento–San Joaquin River Delta (Bay-Delta) population is the southernmost and largest spawning population in California. Longfin smelt have been historically sampled at numerous locations in the Sacramento–San Joaquin River Delta (Delta). The population has shown extremely low abundance in recent years as part of the pelagic organism decline (POD) (Sommer et al. 2007; Baxter et al. 2010). On June 26, 2009, the California Fish and Game Commission ruled to list the status of longfin smelt as threatened under the CESA.

Longfin smelt generally spawn at age 2 in fresh water in the Delta from December to April (Moyle 2002; Rosenfield and Baxter 2007), with some individuals possibly spawning at age 1 and some at age 3 (reviewed by California Department of Fish and Game 2009a). Spawning occurs at temperatures that range from 7.0 to 14.5°C, with larvae hatching in 40 days at 7°C (Moyle 2002). Movement patterns based on catches in CDFW fishery sampling suggest that longfin smelt actively avoid water temperatures greater than 22°C (72°F) (California Department of Fish and Game 2009a). Longfin smelt do not occupy areas with temperatures greater than 22°C (72°F) in combination with salinities greater than 26 parts per thousand (ppt). These conditions occur between August and September almost annually in South San Francisco Bay and periodically in

shallower portions of San Pablo Bay. Larval longfin smelt have been found concentrated off the mouth of Coyote Creek, indicating that spawning can take place in tributaries of South San Francisco Bay when runoff and Delta outflow are high, such as conditions that occurred in 1982 and 1983 (Baxter 1999). Longfin smelt in their second year of life (age 1) are typically distributed from the west Delta through South San Francisco Bay from January through March. Their distribution then moves toward the central San Francisco Bay, such that by August and September few, if any, are collected outside of central San Francisco Bay (Baxter 1999).

One CNDDB record occurs within two miles of the site (CDFW 2017). Suitable habitat is present for longfin smelt in the portion of San Leandro Bay within and immediately adjacent to the site.

Green Sturgeon (Southern Distinct Population Segment)

The southern distinct population segment[3] (DPS) of green sturgeon is federally listed as threatened under FESA. The southern DPS includes all populations originating from coastal watersheds south of the Eel River, with the only known spawning population in the Sacramento River. Critical habitat for the southern DPS of green sturgeon was designated by NMFS on October 9, 2009 (74 FR 52300) and took effect on November 9, 2009. This designation includes all waters of San Francisco Bay. Green sturgeon is uncommon in the San Francisco Estuary, although records exist for Central and South San Francisco Bay (Leidy 2007).

Green sturgeon spend the majority of their lives in nearshore oceanic waters, bays, and estuaries. Adults and juveniles are benthic feeders, with juveniles in the San Francisco Estuary known to feed on opossum shrimp (*Neomysis mercedis*) and amphipods (*Corophium* sp.). Spawning occurs in deep, fast water within the main stem of the Sacramento River and some of its larger tributaries. Juveniles spend one to four years in fresh and estuarine waters before dispersing to saltwater.

This species could occur in the open waters of San Leandro Bay within the project site. Stray individuals may occasionally venture into these waters from their primary migration route from the Golden Gate north to the Sacramento San Joaquin Delta (an approximate distance of 25 miles).

Sensitive Natural Communities

Special-status or *sensitive natural communities* are communities (vegetation types) that are of limited distribution statewide or within a county or region. CDFW's Vegetation Classification and Mapping Program (VegCAMP) works to classify and map the vegetation of California and determine the rarity of vegetation types. Vegetation types with a state rarity ranking of S1 through S3 in CDFW's *List of Vegetation Alliances and Associations* (Natural Communities List) (California Department of Fish and Wildlife 2010) are considered to be highly imperiled, and project impacts on high-quality occurrences of these vegetation types are typically considered significant under CEQA.

The CNDDB includes one record of northern coastal salt marsh as a special-status natural community within 2 miles of the site. The *Sarcocornia pacifica* (*Salicornia depressa*) vegetation alliance (pickleweed mats), which is a subtype of northern coastal salt marsh, is considered a sensitive natural community by CDFW (California Department of Fish and Wildlife 2010), and a thin

[3] A distinct population segment (DPS) is a vertebrate population or group of populations that is discrete from other populations of the same species. FESA provides for listing species, subspecies, or DPS's of vertebrates.

strip of this species is present along the San Leandro Bay shoreline in the project site. However, given the alliance's small size, disturbed (e.g., riprap, concrete stormwater outfall structures) setting, and presence of nonnative species, it is not a "high-quality occurrence" of this vegetation type. None of the other vegetation types on the site (e.g., managed turfgrass, seasonal wetland) are considered sensitive natural communities.

Jurisdictional Features

Waters of the United States and Waters of the State

A ditch and a seasonal wetland on the site are considered waters of the United States under Section 404 of the federal Clean Water Act (CWA), which is regulated by the U.S. Army Corps of Engineers (USACE). San Leandro Bay, a tidal navigable water, also is subject to federal jurisdiction under the CWA and Section 10 of the Rivers and Harbors Act. A total of 16.447 acres of waters of the United States was identified in the delineation study area (ICF 2017; subject to verification by USACE). The types and dimensions of the wetlands and non-wetland waters located in the delineation study area are listed in Table 3. Descriptions of the wetlands and non-wetland waters are provided below.

Table 3. Waters of the United States Identified in the Delineation Study Area

Feature ID	Feature Type	Width (feet)	Length (feet)	Area (acres)
Wetlands				
SW-1	Seasonal Wetland	N/A	N/A	0.023
D-1	Ditch	1.5	8	<0.001
			Total Wetland Waters	*0.024*
Non-wetland Waters				
San Leandro Bay	Tidal Waters	N/A	N/A	16.423
			Total Non-wetland Waters	*16.423*
			Total	**16.447**

These features are also considered waters of the state under the California Porter-Cologne Water Quality Control Act administered by the San Francisco Bay Regional Water Quality Control Board (RWQCB) (see Attachment A). The RWQCB and State Water Resources Control Board (State Board) also administer Section 401 of the federal CWA, which grants states the authority to certify federal permits for discharges to waters under state jurisdiction for the purposes of ensuring that state water quality standards are upheld. The preliminary delineation map (ICF 2017; subject to verification by USACE) is attached to this report as Attachment B.

BCDC Bay Jurisdiction

Under the McAteer-Petris Act, the San Francisco Bay Conservation and Development Commission (BCDC) has jurisdiction over San Francisco Bay (including San Leandro Bay). Its jurisdiction includes:

- The Bay itself (all areas subject to tidal action, including sloughs, from the south end of the Bay to the Golden Gate to the Sacramento River)

- A shoreline band of land extending inland for 100 feet from the shoreline of the Bay
- Salt ponds
- Managed wetlands, and
- Certain waterways consisting of all areas that are subject to tidal action on named tributaries that flow into the Bay

BCDC jurisdiction of the Bay and certain waterways "extends to the mean high tide line in areas that do not contain tidal marsh and up to five feet above mean sea level in areas of tidal marsh" (BCDC 2015). The entire site is within BCDC jurisdiction, with the "Bay shoreline" corresponding with the MHW or 5 feet inland of the MHW where fringe tidal marsh is present, and the 100-foot "shoreline band" inland of the Bay shoreline.

Chapter 5
Biological Constraints

This section provides a brief overview of biological resources on the site that may constrain future project activities, including installation of structures in San Leandro Bay. Where applicable, avoidance and minimization measures that could be implemented prior to and during construction to reduce impacts are identified in the appropriate section.

Special-Status Species

Plants

Three special-status plant species have low potential to occur in the fringe tidal marsh and/or seasonal wetland on the site and could be impacted by project construction, if present. Point Reyes salty bird's-beak and California seablite could occur in the fringe tidal marsh along the Bay shoreline and saline clover could occur in the fringe tidal marsh as well as seasonal wetland.

Potential project impacts on special-status plants are typically avoided through the implementation of one or multiple preconstruction surveys required by mitigation measures incorporated into the project's CEQA documentation. If found within the project during such surveys, further subsequent mitigation involving Section 7 ESA consultation and relocation or compensation of affected species, also included in the project's CEQA documentation, are typically implemented. Examples of mitigation includes focused surveys to determine if the species are present are recommended to avoid impacts to them. If one or more of these species is present they could be avoided if practical, or transplanted. Monitoring of impacted species' compensation locations would be required by the project's CEQA document and, if a federally protected species is affected, by the project's Section 7 ESA Biological Opinion. The prevention of introducing or spreading invasive plant species would also be required by the project's CEQA document. Common mitigation practices are included below.

- Prior to the initiation of ground disturbance, a qualified botanist will conduct protocol-level surveys of suitable habitat in the project site for the target species during their appropriate blooming or identification periods in accordance with CDFW protocols (California Department of Fish and Game 2009b). Survey results will be documented in a brief report or technical memorandum. If the survey efforts demonstrate absence of special-status plant species in the improvements area, no further actions will be required.
- If the protocol-level botanical survey reveals the presence of special-status plant species in the project site, EBRPD will notify USFWS and/or CDFW. If any special-status plants would be directly impacted by construction, a qualified botanist or restoration ecologist will prepare a salvage, relocation, or propagation and monitoring plan for impacted plants in coordination with USFWS and/or CDFW. The plan will include the following components, at a minimum:
    - Description of proposed salvage and transplantation techniques
    - Description (e.g., location, soils, existing vegetation and management) of proposed replanting sites

- Description of proposed monitoring program for newly established plants, including performance criteria (e.g., percent survival of plantings), methodology (e.g., frequency of and timing of visits, sampling techniques), location and condition of reference sites, and remedial actions if performance criteria are not met.

Wildlife

California Ridgway's Rail, California Black Rail, Salt Marsh Harvest Mouse, and Salt Marsh Wandering Shrew

Fringe tidal marsh vegetation along the Bay shoreline provides very little habitat for special-status wildlife species but their potential presence cannot be completely ruled out. This vegetation is not suitable for nesting by California Ridgway's rail or California black rail and is unlikely to support salt marsh harvest mouse or salt-marsh wandering shrew breeding due to its narrow configuration, lack of cover, and proximity to human disturbance (i.e., park and Doolittle Drive). However, to the northwest of the boat launch are a larger tidal marsh patches that could provide breeding habitat for salt marsh harvest mouse. Salt marsh harvest mice potentially occurring at these locations move into the project site during construction. Ridgway's rails from the nearby breeding population at Arrowhead Marsh may occasionally forage along the shoreline, as may any black rails that occur at Arrowhead Marsh.

Project construction could disturb foraging rails or directly impact salt marsh harvest mouse or salt marsh wandering shrew, if present. Therefore, measures to avoid take of listed species will be necessary to reduce impacts to "less than significant" under CEQA for all species and obtain incidental take authorization for Ridgway's rail and salt marsh harvest mouse under the ESA. Examples of avoidance and minimization measures to avoid take of listed species include the following:

- To avoid injuring or killing of salt marsh harvest mouse and salt marsh wandering shrew potentially occurring in fringe tidal marsh vegetation that will be permanently impacted by construction, the project proponent or its contractor will remove any vegetation in and within 2 feet of the construction footprint where it intersects fringe tidal marsh. Vegetation will be removed by hand using only non-mechanized hand tools (i.e., trowel, hoe, rake, and shovel) prior to the initiation of subsequent ground disturbance (e.g., grubbing or excavating with mechanical equipment). Vegetation will be removed to bare ground or stubble no higher than 4 inches under the supervision of a biological monitor.
- To prevent salt-marsh harvest mice and salt-marsh wandering shrews potentially occurring in higher quality tidal marsh habitat northwest of the site from entering the work area during construction, the project proponent or its contractor will install temporary exclusion fencing at the northern boundary of the construction footprint prior to the initiation of ground disturbance (e.g., grubbing or excavating with mechanical equipment). The fence will be made of a heavy plastic sheeting material that does not allow salt marsh harvest mice or salt marsh wandering shrew to pass through or climb, and the bottom will be buried to a depth of 4 inches so that mice or shrews cannot crawl under the fence. Fence height will be at least 12 inches higher than the highest adjacent vegetation with a maximum height of 4 feet. All fence supports will be placed on the side facing the construction footprint.

White-tailed Kite and Alameda Song Sparrow

Ornamental woodland on the site contains trees and shrubs suitable for nesting by white-tailed kite (California fully protected species) and Alameda song sparrow (California species of special concern) may nest in denser stands of fringe tidal marsh and adjacent ruderal vegetation. Construction activities could result in the disturbance or loss of these and other native bird nests, if present in or near the work area. Removal or trimming of trees and other vegetation during the nesting season (February 1 to August 31) could result in the destruction of active nests, including eggs, nestling, or juveniles, and construction-related disturbance (e.g., equipment noise, presence of workers) could disrupt normal nesting behavior, resulting in nest abandonment and reproductive failure.

Potential project impacts on nesting birds are typically avoided through the implementation of one or multiple preconstruction nest surveys required by mitigation measures incorporated into the project's CEQA documentation. Examples of preconstruction survey requirements include the following.

- Prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the project proponent will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds, including white-tailed kite and other raptors. The survey will occur no more than seven days prior to the initiation of ground-disturbing activities (including clearing, grubbing, and staging).
- If active nests are found during the survey, the biologist will establish exclusion zones around each nest in which no work will be allowed until he/she has determined that the young have fledged or the nest is no longer active. The size of the exclusion zone(s) will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds.
- If a lapse in project-related activities of 15 days or longer occurs, another preconstruction survey will be conducted.
- After all nest surveys and monitoring are completed, the biologist will prepare a memorandum summarizing the survey effort and results and submit to the lead agency within seven days of survey completion.

Burrowing Owl

The ground squirrel burrows scattered at the margins of managed turfgrass and ruderal communities provide habitat for burrowing owl. Project construction could disturb or directly impact burrowing owls, if present. Since burrowing owl is a species of special concern, avoidance and minimization measures to avoid impacts on occupied burrows would be required to reduce impacts to less-than-significant under CEQA. Avoidance and minimization measures may include the following:

- Prior to any construction activity, the project proponent will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing owls. To maximize the likelihood of detecting owls, the preconstruction survey will last a minimum of three hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total) or begin 2 hours before sunset and continue until 1 hour after sunset. A minimum of two surveys will be

conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped.

Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the project proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last minute changes in schedule or contracting that may occur if burrowing owls are found, the project proponent may also conduct a preliminary survey up to 14 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction. This survey protocol is consistent with other accepted protocols for this species (California Department of Fish and Game 2012).

- If the preconstruction survey identifies burrowing owls using the site during the breeding season (February 1 to August 31), the project proponent will establish a 100-foot non-disturbance buffer around occupied burrows. Construction activities within the non-disturbance buffer may be allowed if:
    - A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
    - The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
    - If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities will cease within the 100-foot buffer. Construction cannot resume within the buffer until the adults and young have moved out of the work area.
    - If the owls are gone for at least one week, the project proponent may request approval from the CDFW that a qualified biologist excavate usable burrows to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.
- If preconstruction surveys document burrowing owl presence during the nonbreeding season (September 1–January 31), the contractor would establish a 50-foot nondisturbance buffer around occupied burrows as determined by a qualified biologist. Construction activities outside of this 50-foot buffer are allowed. Construction activities within the non-disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:
    - A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction)
    - The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities
    - If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities would cease within the 50-foot buffer
    - If the owls are gone for at least 1 week, the Authority may request approval from the CDFW that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone would be removed and construction may continue.

Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

Roosting Bats

It is unlikely that any of the special-status bat species discussed above roost on the site. No evidence of bat roosts was observed during the October 2016 site visit.

Wintering Waterfowl and Shorebirds

The San Francisco Bay Estuary is well-known as a major migratory stopover and wintering site for many species of waterfowl and shorebirds (Takekawa et al. 2000). It is included in the Western Hemisphere Shorebird Reserve Network (WHSRN) as a site of "hemispheric" importance (i.e., supports over 900,000 shorebirds annually) and provides wintering habitat for over 50 percent of all diving ducks[4] in the Pacific Flyway (Accurso 1992, cited in Takekawa et al. 2000). The open waters of San Leandro Bay in and adjacent to the project site provide resting and foraging habitat for waterfowl and the shoreline provides roosting habitat for shorebirds. During the October 24, 2016 site visit, ICF observed approximately 80 least sandpipers, 8 black turnstones, 2 black oystercatchers, and 4 willets roosting along the shoreline between the pump house and the southernmost dock (closest to Swan Way). Similar numbers of these species have been reported on eBird checklists in the vicinity (eBird 2018).

While the project may result in short- (e.g., individuals fleeing from construction activity in the Bay and along the shoreline) and long-term (e.g., loss of open-water habitat) impacts on wintering waterfowl and shorebirds, it is ICF's professional opinion that such impacts would be "less than significant." First, based on available evidence (e.g., ICF observations, eBird checklists), the open Bay waters and associated shoreline habitat in the immediate project vicinity do not support the high numbers of waterfowl and shorebirds typical of less disturbed and/or larger sites around San Francisco Bay such as the Don Edwards San Francisco Bay National Wildlife Refuge, Hayward Regional Shoreline, Emeryville Crescent, and Albany Mudflats. eBird (2018) checklists suggest that the main body of San Leandro Bay approximately 0.7 mile northwest of the site supports higher numbers of wintering waterfowl than the narrow channel at the site (i.e., Airport Channel), but even there they are not as numerous as at the sites mentioned above. Second, waterfowl and shorebirds that currently use the Airport Channel and shoreline are already subject to a moderate level of human disturbance (e.g., park users and their pets, anglers, boaters) and it is unlikely that the project would increase disturbance to a level that would cause them to permanently abandon the western shoreline of the Airport Channel where the project would be constructed. The channel is suboptimal for large concentrations of waterfowl on the open water or shorebirds roosting on the shoreline because its relatively narrow width (500–600 feet) leaves little room for birds to retreat to from shoreline or in-water disturbance. Construction of the project would not substantially degrade these existing suboptimal habitat conditions. In summary, potential impacts on wintering waterfowl and shorebirds would be less than significant because the project would not **substantially** alter the existing conditions. Migratory and wintering waterfowl and shorebird species that use the open Bay waters and shoreline habitat in the project vicinity may slightly alter their movement and roosting

[4] Duck species that dive to the bottom of shallow bays to feed on invertebrates and fish. Common species in San Francisco Bay include greater scaup, ruddy duck, bufflehead, and canvasback.

patterns in response to trail construction, but are unlikely to stop using the southern end of the Airport Channel on a permanent basis.

Fish

Two federally listed (central California coast [CCC] steelhead and green sturgeon) and one state-listed (longfin smelt) fish species could occur in San Leandro Bay and therefore be affected by in-water construction activities. In-water work could temporarily affect special-status fish habitat as a result of temporary flow diversion or dewatering, temporary increases in turbidity and suspended sediment, potential contaminant spills or mobilization of contaminated sediment from heavy equipment and soil disturbance, and temporary alteration of migration and rearing habitat. In-water work could also cause direct mortality or injury of special-status fish during pile driving (noise) and dewatering activities. Driving of piles with an impact hammer when special-status fish may be present could expose individuals to potentially harmful underwater sounds, although the potential exposure and susceptibility of fish to injury from pile driving sounds depend on several factors including the size, mobility, and likely responses of the species and life stages of concern. Individuals exposed to pile driving sounds may elicit a behavioral response (delay movement or avoid feeding), or be injured or killed. Therefore, avoidance and minimization measures to avoid take of these species will be necessary to reduce impacts to "less than significant" under CEQA and obtain incidental take authorization under the ESA. Compensatory mitigation for habitat loss (i.e., reduced habitat value for foraging fish due to increased footprint of overwater structures) may also be necessary. Potential avoidance and minimization measures may include the following:

- In-water pile installation using impact hammers will be conducted within environmental work windows that have been prescribed or approved by the NMFS (CCC steelhead and green sturgeon) and CDFW (longfin smelt). At the time of writing, June 1 to November 30 is the NMFS-approved work window for dredging activities in San Francisco Bay (National Marine Fisheries Service 2015) and it is assumed that pile-driving conducted during this window would also avoid adverse effects because it coincides with the period when steelhead and green sturgeon are less likely to occur in the Bay. The CDFW has not prescribed any standard work windows for longfin smelt.
- If predicted underwater sound levels exceed injury thresholds for special-status fish, the project proponent will prepare a hydroacoustic monitoring plan for submittal to and approval by the NMFS and CDFW. The plan will analyze noise and vibratory impacts of proposed construction activities on special-status fish and other protected marine resources in San Leandro Bay (e.g., harbor seals) by estimating underwater sound levels that would be generated by proposed pile-driving activities. The plan will also prescribe field methods for monitoring underwater sound levels during pile-driving activities and best management practices (BMPs) for reducing sound levels below NMFS thresholds for injury to fish and marine mammals. Potential BMPs include the following:
    - All steel pilings will be installed with a vibratory pile driver to the deepest depth practicable. An impact pile driver may be used only where necessary, as determined by the contractor and/or project engineer, to complete installation of the steel pilings, in accordance with seismic safety or other engineering criteria.
    - The contractor will use the smallest pile driver and minimum force necessary to complete the work, as determined by the contractor and/or project engineer.

- The contractor will use a "soft start" technique[5] when initiating a prolonged pile-driving session to allow fish to vacate the area.

Jurisdictional Features

As described previously, San Leandro Bay, a ditch, and a seasonal wetland on the project site are subject to jurisdiction by the USACE and by the RWQCB. Any placement of fill in the ditch or the seasonal wetland would likely require a Section 404 permit from the USACE and a 401 Water Quality Certification from the RWQCB. Additionally, any placement or removal of structures, any work involving dredging, disposal of dredge material, filling, excavation, or other disturbance of soils/sediments or modification of a navigable waterway subject to the ebb and flow of the tide shoreward to Mean High Water (i.e., San Leandro Bay) is a regulated activity that would require a permit from the USACE. Also, a majority of the project site is within BCDC jurisdiction; therefore, the project proponent will need to obtain approval from BCDC under the McAteer-Petris Act.

Examples of measures to avoid, minimize, and compensate for impacts on jurisdictional aquatic resources that may be included in permit applications to these agencies include the following:

- The project proponent will ensure that a qualified resource specialist (i.e., wetland biologist, ecologist, or soil scientist) will clearly identify wetland areas to be preserved abutting the project footprint and wetland areas outside of the direct construction area with high-visibility construction fencing or markers (e.g., lathe or pin flags) before site preparation. Construction will not encroach upon jurisdictional wetlands or waters identified by the resource specialist using a verified delineation. No construction activity, traffic, equipment, or materials will be permitted in fenced wetland areas. The fencing will be maintained throughout the construction period. Exclusion fencing and markers will be removed following the completion of construction activities.
- All conditions imposed by the project's state and federal permits will be implemented as part of the project construction. The conditions will be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.
- If the project would result in permanent loss of jurisdictional aquatic features, and a mitigation banking option that satisfies all regulatory agencies with jurisdiction over the impacts is not available, then the project proponent will develop a compensatory mitigation plan subject to approval by the USACE, RWQCB, and BCDC, as applicable. The plan will identify the type and quantity of impacted aquatic resources and a strategy for preservation, enhancement or rehabilitation, or re-establishment/restoration of mitigation features suitable for the setting. The plan also will identify monitoring methods and success criteria for the proposed mitigation. Potential mitigation options include fish barrier removal, piling removal, and shoreline layback or other shoreline improvements that are compatible with the project. Mitigation sites will be located as near to the impact location as possible; however, in the event that local mitigation opportunities are not available, such activities would occur elsewhere within the San Francisco Bay.

[5] Soft starts require an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period between subsequent three-strike sets. Soft starts for vibratory hammers will initiate noise at 15 seconds at reduced energy, followed by a 1-minute waiting period between subsequent starts. This process should continue for a period of no less than 20 minutes.

Once the plan is approved, the project proponent will implement the compensation measures prior to or concurrent with project construction. The project proponent will be responsible for funding compensatory mitigation, including plan development, implementation, monitoring and maintenance.

Native Wildlife Nursery Sites

Nesting Birds

Nests of all native bird species are protected under the federal Migratory Bird Treaty Act (MBTA) and Section 3503 the California Fish and Game Code, which prohibits the take, possession, or needless destruction of the nest or eggs of any bird (see Attachment A). Existing trees and shrubs on the site provide nesting habitat for a variety of native bird species in addition to the special-status species discussed above (white-tailed kite, Alameda song sparrow, and burrowing owl). Implementation of the preconstruction bird survey measures identified above for white-tailed kite and Alameda song sparrow would also avoid impacts on other species nesting on the site.

Chapter 6
Summary

The primary sensitive biological resources on the site that would pose constraints to future development include the following.

1. **Special-Status Plants**. Three special-status plants, all subject to CEQA and one subject to federal protection, could be affected by project construction, so a preconstruction survey would be necessary to determine their presence or absence from the site. If present, special-status plant species could be avoided or transplanted to another location. Prior to activities involving federally protected species, Section 7 ESA consultation would be necessary to obtain a required permit. If transplantation occurs, then a monitoring plan would need to be developed, approved by applicable agencies, and implemented.
2. **Nesting Birds**. The numerous trees on the site provide nesting habitat for a variety of native bird species, including white-tailed kite (California fully protected species). To avoid impacts on nesting birds, any tree or shrub removal activities should be conducted outside the bird nesting season (September 1 to January 31), if feasible. If such activities are conducted from February 1 to August 31, preconstruction nesting bird surveys should be conducted before the initiation of work.
3. **Burrowing Owl**. Ground squirrel burrows could support burrowing owl, which could be impacted by project construction. A preconstruction survey would be required to determine if the species occurs at the site. If results are negative, no further action is necessary. If results are positive, then avoidance of occupied burrows and CDFW consultation would be necessary to determine further action.
4. **Salt Marsh Harvest Mouse/Salt Marsh Wandering Shrew.** Salt marsh harvest mouse, and salt marsh wandering shrew could be impacted by project construction along the San Leandro Bay. To avoid injuring or killing of mice or shrews potentially occurring in fringe tidal marsh that will be directly impacted by construction and in tidal marsh habitat northwest of the site, vegetation in and within 2 feet of the construction footprint where it intersects fringe tidal marsh would be removed by hand and a barrier would be installed at the northern boundary of the construction footprint. Section 7 ESA consultation with USFWS may be necessary to determine final mitigation requirements and obtain authorization.
5. **Special-Status Fish.** In-water construction within San Leandro Bay could affect CCC steelhead, green sturgeon, and longfin smelt; therefore, the project will need to clearly define proposed in-water activities (e.g., number and type of piles proposed for driving) and may need to prepare a hydroacoustic monitoring plan that demonstrates how adverse effects on fish and other marine resources will be minimized and monitored. These should be prepared prior to initiating informal or formal consultation with the NMFS and CDFW under the Section 7 of the ESA and Section 2081 of CESA, respectively.
6. **Jurisdictional Features and Bay Shoreline.** San Leandro Bay, a ditch and a seasonal wetland on the project site are subject to jurisdiction by the USACE and by the RWQCB and permits from these agencies would be required to impact these features. A permit from BCDC will be required for improvements made within the Bay jurisdictional and within the shoreline band.

Chapter 7
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Attachment A

Regulatory Setting

Federal and State Endangered Species Laws

Federal Endangered Species Act

The federal Endangered Species Act (ESA) is administered by the U.S. Fish and Wildlife Service (USFWS) for terrestrial and freshwater fish species and by the National Marine Fisheries Service (NMFS) for marine and anadromous species. ESA requires these federal agencies to maintain lists of threatened and endangered species.

USFWS or NMFS can list species as either endangered or threatened. An endangered species is at risk of extinction throughout all or a significant portion of its range (ESA Section 3[6]). A threatened species is likely to become endangered within the foreseeable future (ESA Section 3[19]). Section 9 of the ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering" (50 CFR 17.3).

Section 7

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat critical to such species' survival. To ensure that its actions do not result in jeopardy to listed species or in the adverse modification of critical habitat, each federal agency must consult with USFWS and/or NMFS regarding federal agency actions that may affect listed species. The issuance of Clean Water Act Section 404 permits is a federal action that triggers a Section 7 consultation. Consultation begins when the federal agency submits a written request for initiation to USFWS or NMFS, along with the agency's biological assessment of its proposed action, and when USFWS or NMFS accepts that biological assessment as complete. If USFWS or NMFS concludes that the action is not likely to adversely affect a listed species, the action may be conducted without further review under ESA. Otherwise, USFWS or NMFS must prepare a written biological opinion describing how the agency's action will affect the listed species and its critical habitat.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) establishes a management system for national marine and estuarine fishery resources. This legislation requires that all federal agencies consult with NMFS regarding all actions or proposed actions permitted, funded, or undertaken that may adversely affect essential fish habitat (EFH), defined as "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."

The Magnuson-Stevens Act states that migratory routes to and from anadromous fish spawning grounds are considered EFH. The phrase adversely affect refers to any impact that reduces the quality or quantity of EFH. Federal activities that occur outside of EFH but that may have an impact on EFH must also be considered in the consultation process.

Habitat Areas of Particular Concern (HAPC) are a subset of EFH. HAPCs are considered high priority areas for conservation, management, or research because they are rare, sensitive, stressed by development, or important to ecosystem function. Current HAPC types are estuaries, canopy kelp, seagrass, rocky reefs, and "areas of interest" (a variety of submarine features, such as banks, seamounts, and canyons along with Washington State waters). (National Marine Fisheries Service 2017). San Francisco Bay is designated as HAPC for estuarine habitat.

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. *Take* is defined under the California Fish and Game Code (more narrowly than under ESA) as any action or attempt to "hunt, pursue, catch, capture, or kill." Therefore, *take under CESA does not include "the taking of habitat alone or the impacts of the taking." (Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 [2006]). *Rather, the courts have affirmed that under CESA, "taking involves mortality."*

Like ESA, CESA allows exceptions to the prohibition for take that occurs during otherwise lawful activities. The requirements of an application for incidental take under CESA are described in Section 2081 of the California Fish and Game Code. Incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and "fully mitigates" the impacts of this take.

Other Federal and State Wildlife Laws and Regulations

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918, as amended (MBTA), implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful, as is taking of any parts, nests, or eggs of such birds (U.S. Government Code [USC], title 16, section 703). Take is defined more narrowly under the MBTA than under ESA and includes only the death or injury of individuals of a migratory bird species or their eggs. As such, take under the MBTA does not include the concepts of harm and harassment as defined under ESA. The MBTA defines migratory birds broadly; all birds native to North America are considered migratory birds under the MBTA.

California Fish and Game Code Section 3503 (Bird Nests)

Section 3503 of the California Fish and Game Code makes it "unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Therefore, CDFW may issue permits authorizing take.

Section 3503.5 of the California Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs "except as otherwise provided by this code or any regulation adopted pursuant thereto."

California Fully Protected Species

In the 1960s, before CESA was enacted, the California legislature identified specific species for protection under the California Fish and Game Code. These *fully protected* species may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of bird species for the protection of livestock. Fully protected species are described in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These protections state that "…no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected [bird], [mammal], [reptile or amphibian], [fish]."

Federal and State Wetland Laws and Regulations

Clean Water Act Section 404

The Clean Water Act is the primary federal law that protects the physical, chemical, and biological integrity of the nation's waters, including lakes, rivers, wetlands, and coastal waters. Programs conducted under the Clean Water Act are directed at both point source pollution (e.g., waste discharged from outfalls and filling of waters) and nonpoint source pollution (e.g., runoff from parking lots). Under the Clean Water Act, the U.S. Environmental Protection Agency (EPA) and state agencies set effluent limitations and issue permits under Clean Water Act Section 402 governing point-source discharges of wastes to waters. The U.S. Army Corps of Engineers (Corps), applying its regulations under guidelines issued by EPA, issues permits under Clean Water Act Section 404 governing under what circumstances dredged or fill material may be discharged to waters. These Section 402 and 404 permits are the primary regulatory tools of the Clean Water Act. EPA has oversight over all Clean Water Act permits issued by the Corps.

The Corps issues two types of permits under Section 404: general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the Corps to streamline the Section 404 process for nationwide, statewide, or regional activities that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., activities that may have more than a minimal adverse environmental impact).

Clean Water Act Section 401 and the Porter-Cologne Water Quality Control Act

Under Clean Water Act Section 401, states have the authority to certify federal permits for discharges to waters under state jurisdiction. States may review proposed federal permits (e.g., Section 404 permits) for compliance with state water quality standards. The permit cannot be

issued if the state denies certification. In California, the State Water Resources Control Board (State Board) and the Regional Water Quality Control Boards (RWQCBs) are responsible for the issuance of Section 401 certifications.

The Porter-Cologne Water Quality Control Act is the primary state law concerning water quality. It authorizes the State Board and RWQCBs to prepare management plans such as regional water quality plans to address the quality of groundwater and surface water. The Porter-Cologne Water Quality Control Act also authorizes the RWQCBs to issue waste discharge requirements defining limitations on allowable discharge to waters of the state. In addition to issuing Section 401 certifications on Section 404 applications to fill waters, the RWQCBs may also issue waste discharge requirements for such activities. Because the authority for waste discharge requirements is derived from the Porter-Cologne Water Quality Control Act and not the Clean Water Act, waste discharge requirements may apply to a somewhat different range of aquatic resources than do Section 404 permits and Section 401 Water Quality certifications. Applicants that obtain a permit from the Corps under Section 404 must also obtain certification of that permit by the RWQCB with jurisdiction over the project site.

McAteer-Petris Act of 1969

The McAteer-Petris Act of 1969 created the San Francisco Bay Conservation and Development Commission (BCDC) as a response to the filling of San Francisco Bay. BCDC is responsible for implementation of the CZMA in the San Francisco Bay Area and regulates activities within its jurisdiction as defined by the McAteer-Petris Act. In general, BCDC jurisdiction includes the San Francisco Bay (all areas subject to tidal action), a 100-foot-wide band along the bay shoreline, salt ponds diked off from the bay, managed wetlands that have been diked off from the bay, and certain waterways (defined in BCDCs San Francisco Bay Plan). Depending on the type and scale of activity within its jurisdiction, BCDC will issue either a major, administrative, or region-wide permit at its discretion. Major permits take the longest to process (90 days after application deemed complete) and require a public hearing. Administrative permits take less time to process (typically 5 to 8 weeks) and may require a public hearing (at BCDC's discretion). Region-wide permits have the fastest processing time (44 days after application deemed complete) and do not require a public hearing. BCDC will determine which permit is appropriate either through advanced consultation or review of application materials.

Attachment B

Delineation Map

122°12'50"W 37°44'30"N 122°12'40"W 37°44'20"N

122°13'0"W 37°44'30"N

122°13'10"W

San Leandro Bay

Cessna St

Doolittle Dr

Langley St

Convair St

Martin Luther King Jr Reg Shoreline

61

SW-1

SW-2

D-1

1a

1b

2a

2b

bing

San Francisco Bay Trail at Martin Luther King, Jr. Shoreline Project, Phase 1
Sheet 1 of 2

Waters of the United States

Wetlands

Seasonal Wetland	0.097 acres
Ditch	0.001 acres

Tidal Waters

San Leandro Bay	16.423 acres

Other Features

Delineation Study Area	34.165 acres

Disturbed Area
concrete outfall
concrete structure
Flow Direction
Photo Location (with bearing)
Non-wetland Sampling Point
Wetland Sampling Point
Culvert
Mean High Water (approx. 5.9 ft. NAVD 88)
High Tide Line (approx. 6.85 ft. NAVD 88)

Note: Mean High Water (5.9 feet NAVD 88) and High Tide Line (6.85 feet NAVD 88) are being represented by the 5.9 foot and 6.9 foot NAVD contours respectively. These contours are shown only in the tidally influenced parts of the delineation study area

Note: All reported areas only represent areas where wetland and non-wetland waters intersect the Delineation Study Area

0 100 200 400
Feet

1 inch = 200 feet

Imagery Source: Microsoft Bing Aerial, 2019

Delineated by Eric Christensen on 10/24/2016 and Danielle Tannourji on 11/21/2019
Drawn by Sacha Selim on 3/2/2017 and Bill Parker on 11/26/2019

Prepared for:
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East Bay Regional Park District
2950 Peralta Oaks Court
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Prepared by:
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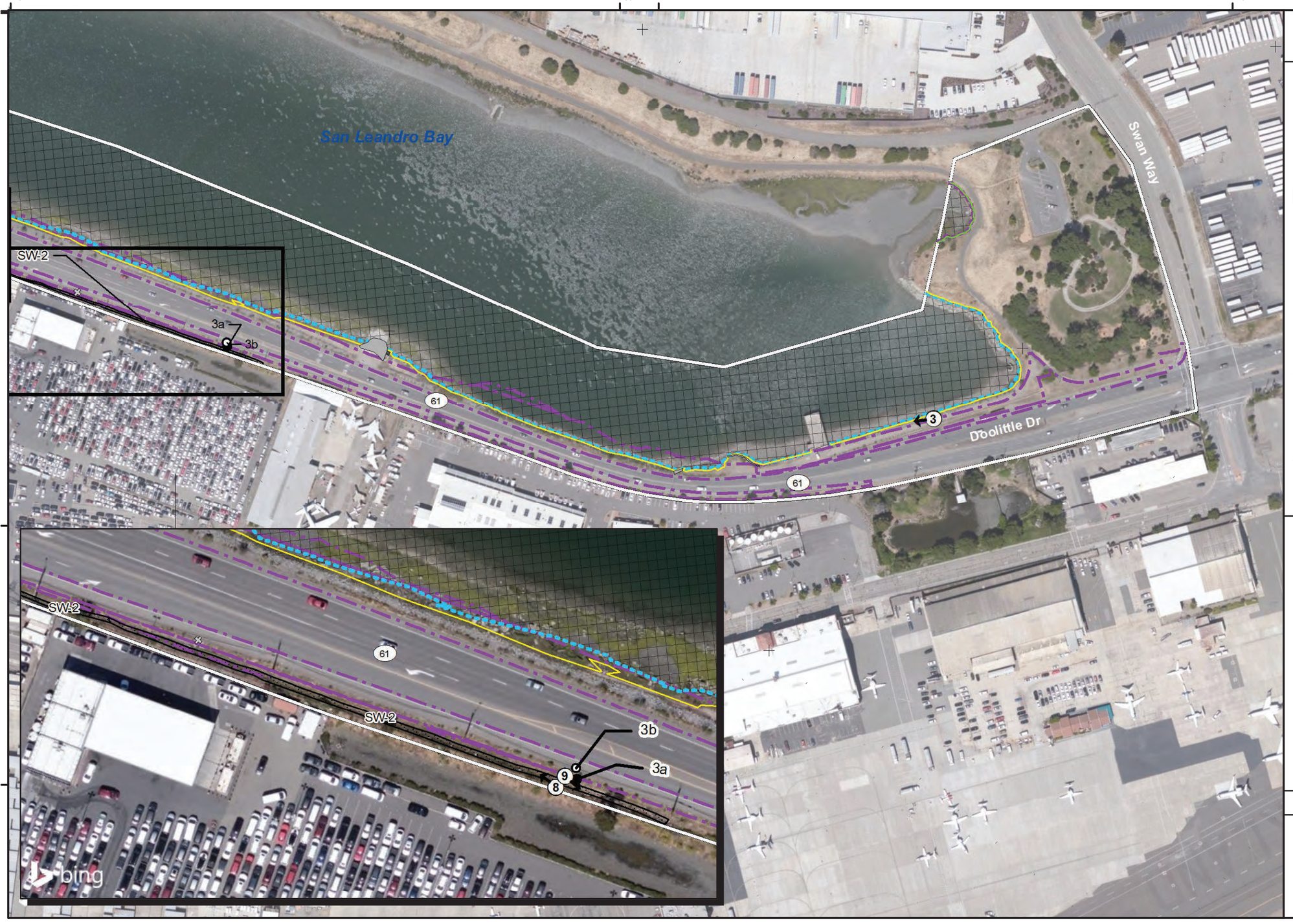
San Francisco, CA 94107

Path: \\PDC\CITRDSGIS1\Projects_1\GHD\000320_16_Doolittle_Drive\mapdoc\Doolittle_Dr_Wetland_Delineation_Mapbook_20191126.mxd; Author: ; Date: 12/9/2019

Delineation of Waters of the United States (subject to verification by USACE)



San Francisco Bay Trail at Martin Luther King, Jr. Shoreline Project, Phase 1
Sheet 2 of 2

Waters of the United States

Wetlands

Seasonal Wetland	0.097 acres

Tidal Waters

San Leandro Bay	16.423 acres

Other Features

Delineation Study Area	34.165 acres

- Disturbed Area
- concrete outfall
- concrete structure
- Photo Location (with bearing)
- Non-wetland Sampling Point
- Wetland Sampling Point
- Culvert
- Mean High Water (approx. 5.9 ft. NAVD 88)
- High Tide Line (approx. 6.85 ft. NAVD 88)
- Estimated High Tide Line
- Estimated Mean High Water

Note: Mean High Water (5.9 feet NAVD 88) and High Tide Line (6.85 feet NAVD 88) are being represented by the 5.9 foot and 6.9 foot NAVD contours respectively. These contours are shown only in the tidally influenced parts of the delineation study area

Note: All reported areas only represent areas where wetland and non-wetland waters intersect the Delineation Study Area

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Path: \\PDCCITRDSGIS1\Projects_1\GHD\00320_16_Doolittle_Drimapdoc\Doolittle_Dri_Wetland_Delineation_Mapbook_20191126.mxd; Author: ; Date: 12/4/2019

Delineation of Waters of the United States (subject to verification by USACE)