

**STAFF REPORT  
C48**

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D. Tutov

**GENERAL LEASE – PUBLIC AGENCY USE**

**APPLICANT:**

Santa Clara Valley Water District

**PROPOSED LEASE:**

*AREA, LAND TYPE, AND LOCATION:*

Sovereign land in Artesian Slough and New Chicago Marsh, near Alviso, Santa Clara County.

*AUTHORIZED USE:*

Construction, use and maintenance of coastal levees, tide gate, tidal marsh habitat and recreational features, and use of a temporary construction area.

*LEASE TERM:*

49 years, beginning February 4, 2019.

*CONSIDERATION:*

Public use and benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

**STAFF ANALYSIS AND RECOMMENDATION:**

**Authority:**

Public Resources Code sections 6005, 6216, 6301, 6321, 6321.2, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

**Public Trust and State's Best Interests Analysis:**

Santa Clara Valley Water District has applied for a General Lease – Public Agency Use for the construction, use and maintenance of coastal levees, tide gate, tidal marsh habitat and recreational features. The proposed lease area and facilities will be part of the South San Francisco Bay Shoreline Phase 1 Project (Project), which will provide tidal flood protection between Coyote Creek and the Guadalupe River, allow for the restoration of approximately 2,000 acres of former salt ponds to tidal marsh, and allow for recreational features. The Project objectives are to

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protect human health and safety and reduce the risk of economic and environmental damages caused by potential tidal flooding along the South Bay shoreline in Santa Clara County. In addition, the creation of approximately 2,900 acres of contiguous tidal marsh would contribute to the Don Edwards San Francisco Bay Wildlife Refuge (Refuge) and increase habitat area for native, resident plant and animal species, including special-status species such as the Central California Coast steelhead, California Ridgway's rail, and salt marsh harvest mouse. The Project will also create recreational features, such as educational and interpretive signs, multi-use trails, seating areas and viewing platforms, and tie into surrounding recreational areas, including the Bay Trail and Refuge.

The portion of the Project proposed to be located on State sovereign land is less than 2 acres and will include a portion of the levee and a tide gate across Artesian Slough, which will only be closed during extreme storm events. Most of the lands underlying the proposed 3.8-mile levee are owned and managed by the U.S. Fish and Wildlife Service, the City of San Jose and the County of Santa Clara. The levee will be constructed at an elevation of 15.2 feet NAVD 88 with an average width at the crown of the levee of 16 feet and 107.2 feet at the base of the levee. The flood-risk management levee will provide tidal flood-risk management benefits to a population of about 6,000 residents and people working in the low-lying Alviso area and would provide protection from a 100-year flood through the next 50 years, accounting for the U.S. Army Corps of Engineer's (USACE) high sea-level rise scenario.

Low-lying terrain within the area is the result of widespread overdraft of groundwater for agricultural and urban uses during the early and middle decades of the 20th century. This overdraft led to severe ground subsidence under most of the Santa Clara Valley and portions of the south Bay, including many of the Project site's former salt ponds. Salt pond dikes were raised by their owners, and outboard tidal marshes accumulated sediment quickly enough to maintain their elevation. However, without tidal flows, the floors of the salt ponds had no way to compensate for the loss in elevation. In addition, the nonengineered berms protecting these areas from tidal flooding are dikes that were created as early as the 1920s, and were generally maintained to protect the ponds from tidal flooding when they were used for salt production. These dikes were not engineered or intended to reduce flood risk for urban areas. While groundwater overdraft has ceased and the water table has recovered considerably, the previous loss of elevation is permanent.

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Due to this subsidence, many areas landward of the former salt ponds have become vulnerable to tidal flooding. Alviso is at or below an elevation of 5 feet NAVD88, which is lower than the mean higher high tides in the area. During a 1983 flood event, floodwaters from Coyote Creek reached a depth of 6 feet in Alviso, and more than 1,700 residents were flooded. The Project site's flood risk is exacerbated by the substantial sea-level rise that is expected during the Project's 50-year planning horizon. This projected increase in sea level would put the community of Alviso and the surrounding area at a greater risk of flooding than currently present. The Project will provide flood protection to Alviso by constructing a flood risk management levee and restoring tidal action to the former salt ponds. Project construction will occur in three phases and is estimated to be completed in 2032.

Staff believes the levee construction and tidal marsh creation Project is consistent with the common law Public Trust Doctrine. Overall, the Project is intended to construct reinforced structural levee and limit potential tidal flooding. The levee also confers a public health and safety benefit to the entire Alviso area by addressing known levee deficiencies along the South Bay shoreline in Santa Clara County. The Project also seeks to restore tidal marsh and enhance public access to the area.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The lease requires the Applicant to conduct all construction, repair and maintenance work safely and indemnify the Commission in the event of any liability resulting from the proposed action. The proposed lease also has a term of 49 years. While staff rarely recommends a lease term of this length, there are several distinctive factors that inform staff's recommendation in this unique situation. First, as a federal sponsor of the Project, the USACE typically requires a permanent easement. In this case, given the Commission's statutory and common law restrictions, a maximum lease term of 49 years is more likely to be accepted by the USACE in order to fulfill the federal funding commitment. Second, the amount of sovereign land, less than two acres, subject to the proposed lease is relatively minor when compared to the size of the entire Project. And finally, the sea-level rise and flooding risk that generally guide staff to recommending a shorter lease term are addressed by the local sponsors of the Project, including the Applicant and the State Coastal Conservancy, as described in more detail below.

### **Climate Change:**

Climate change impacts, including sea-level rise, increased wave activity, storm events, and flooding are not limited to the open coast. The lease

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area has considerable risk for tidal flooding due to having large areas of low-lying terrain protected by nonengineered dikes.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. Commission staff evaluated the “high emissions,” “medium-high risk aversion” scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea-level rise scenario for the region as listed in Table 1.

**Table 1. Projected Sea-Level Rise for San Francisco<sup>1</sup>**

<b>Year</b>	<b>Projection (feet)</b>
2030	0.8
2040	1.3
2050	1.9
2060	2.6
2070	3.5
2100	6.9

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update

Note: <sup>1</sup> Projections are with respect to a 1991 to 2009 baseline.

The Project’s Environmental Impact Report/Environmental Impact Study (EIR/EIS, page 3-13), states “Sea level change projections for the project area in South San Francisco Bay will use the current relative sea level rise rate for the San Francisco tide gauge, 2.06 millimeters per year, based on 1983–2001 National Tidal Datum Epoch (NTDE).” This equates to a change (high scenario) of 2.59 feet over 50 years, or in 2067 (EIR/EIS Table 3.3-1, page 3-14). This projection assumes a constant rate of change and a linear progression of sea level. Based on this methodology, the USACE initially proposed a corresponding levee height of 12.5 feet NAVD 88, which would achieve net benefits for flood protection under the Low and Intermediate scenarios of the USACE model. However, an elevation of 12.5 feet will not provide a sustained level of protection over the 50-year planning horizon of the project if sea-level rise is indeed greater than predicted by the Low and Intermediate scenarios of the USACE model.

The State of California relies on a different set of sea-level rise models and methodologies showing the potential for a greater level of sea-level rise projected over this timeline. The State model estimates 3.5 feet of

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sea-level rise. The non-federal sponsors of this project (the Applicant and State Coastal Conservancy) then worked to design the levee to a greater height, 15.2 feet NAVD 88, in order to reflect the current, best available science for California (see [Rising Seas In California: An Update On Sea Level Rise Science](#), April 2017). This new elevation of 15.2 feet includes 1.09-foot of freeboard in the event of a 1 percent coastal flood event coupled with 3.5 feet of sea-level rise, as shown in Table 1. Per the Federal Emergency Management Agency (FEMA), communities are encouraged to adopt at least a 1-foot freeboard to account for the 1-foot rise built into the concept of designating a floodway and the encroachment requirements where floodways have not been designated; therefore, the feature designs would be acceptable.

A 15.2-foot NAVD 88 levee elevation also meets the non-federal sponsor goal of reaching an elevation, with the greatest degree of certainty, that will meet FEMA flood reduction requirements through 2067 (the end of the period of analysis). The increased elevation requires the non-federal sponsors to “buy up” and pay the additional cost of the higher levee. The extra cost to the non-federal sponsors was justified to ensure a greater degree of certainty that the Project will meet the flood reduction requirements of the future, to reduce environmental impacts from flood hazards and risks, and be consistent with the state of California’s planning guidance. The locally preferred plan that “buys up” the levee height to 15.2 feet NAVD 88 was included in the USACE Chief’s Report and authorized by Congress.

The flood risk substantially increases over the next several decades due to potential sea-level change. In addition to flood risk, the past creation of commercial salt harvesting ponds along southern San Francisco Bay has resulted in a loss of most of the tidal salt marsh habitat within the surrounding area. These local tidal marsh losses are in addition to San Francisco estuary-wide losses of approximately 90 percent of all tidal wetlands. The purpose of the Project is to decrease flood risk, restore tidal marsh habitat, and maintain recreational opportunities.

Sea-level rise could increase inundation levels within the lease area. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea-level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm created debris. Climate change and sea-level rise

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will further influence coastal and riverine areas by changing erosion and sedimentation rates. Near-coastal riverine areas will be exposed to increased wave force and run up, potentially resulting in greater bank erosion than previously experienced. Finally, in rivers and tidally influenced waterways, flooding and storm flow will likely increase scour, decreasing bank stability and structure.

Increases in sea level combined with more frequent and stronger storm events will likely expose the lease area structures to higher flood risks, comprised of greater total water levels for longer periods of time. The lease area may be subject to the climate change effects of the projected sea-level rise scenario provided above. Regular maintenance and implementing best management practices, as required by the terms of the lease, will help reduce the likelihood of levee degradation. Further climate change impact analyses on the leased facilities will be assessed at the time the lease expires in 2068, if an application is submitted for a new lease, and would be based on projected sea-level rise scenarios at that time.

### **Conclusion:**

For all the reasons above, staff believes the issuance of this lease will not substantially interfere with Public Trust needs at this location, at this time, and for the foreseeable term of the proposed lease; is consistent with the common law Public Trust Doctrine; and is in the best interests of the State.

### **OTHER PERTINENT INFORMATION:**

1. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation, and responsible economic use of the lands and resources under the Commission's jurisdiction.
2. An EIR/EIS, State Clearinghouse No. 2006012020, was prepared for this project by the Santa Clara Valley Water District and certified on March 22, 2016. Staff has reviewed this document and the Mitigation Monitoring Program prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21081.6) and adopted by the lead agency.

A Mitigation Monitoring Program and Findings and a Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15091, 15093, and 15096) are contained in the attached Exhibits C and D.

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3. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon staff's consultation with the persons nominating such lands and through the CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

**EXHIBITS:**

- A. Land Description
- B. Site and Location Map
- C. Mitigation Monitoring Program
- D. Statement of Overriding Considerations

**RECOMMENDED ACTION:**

It is recommended that the Commission:

**CEQA FINDING:**

Find that an EIR/EIS, State Clearinghouse No. 2006012020, was prepared for this project by the Santa Clara Valley Water District and certified on March 22, 2016, and that the Commission has reviewed and considered the information contained therein.

Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit C.

Adopt the Findings, made in conformance with California Code of Regulations, title 14, sections 15091 and 15096, subdivision (h), as contained in the attached Exhibit D.

Adopt the Statement of Overriding Considerations made in conformance with California Code of Regulations, title 14, section 15093, as contained in the attached Exhibit D.

**PUBLIC TRUST AND STATE'S BEST INTERESTS:**

Find that the proposed lease will not substantially interfere with the Public Trust needs and values at this location at this time, or for the foreseeable term of the lease; is consistent with the common law Public Trust Doctrine; and is in the best interests of the State.

**SIGNIFICANT LANDS INVENTORY FINDING:**

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

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**AUTHORIZATION:**

Authorize issuance of a General Lease – Public Agency Use to Santa Clara Valley Water District beginning February 4, 2019, for a term of 49 years, for the construction, use and maintenance of coastal levees, tide gate, tidal marsh habitat and recreational features, and use of a temporary construction area, as described in Exhibit A and shown on Exhibit B (for reference purposes only) attached and by this reference made a part hereof; consideration being the public use and benefit, with the State reserving the right, at any time, to set a monetary rent as specified in the lease if the Commission finds such action to be in the State's best interests.

**EXHIBIT A-1**  
**LAND DESCRIPTION**  
**LEVEE LEASE**

ALL THAT CERTAIN REAL PROPERTY SITUATE IN THE CITY OF SAN JOSE, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, BEING A PORTION OF TRACT (41-I), TRACT (41A-I), TRACT (41A-II) AND TRACT (41B-II) AS DESCRIBED IN THAT CERTAIN QUITCLAIM DEED RECORDED ON OCTOBER 23, 1985, AS DOCUMENT NUMBER 8567596 OF OFFICIAL RECORDS AND ALSO BEING PORTIONS OF BLOCKS 70, 71 AND 72 AS SHOWN ON THAT CERTAIN RECORD OF SURVEY FILED ON AUGUST 27, 1976 IN BOOK 378 OF MAPS AT PAGE 55, IN THE OFFICE OF THE RECORDER, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**PARCEL 1**  
**(FLOOD PROTECTION LEVEE LEASE AREA)**

**BEGINNING** AT THE MOST WESTERLY CORNER OF SAID TRACT (41-I) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596;

THENCE ALONG THE GENERAL WESTERLY LINE OF SAID TRACT (41-I) THE FOLLOWING FOUR (4) COURSES:

- 1) NORTH 27° 14' 47" EAST, 22.96 FEET;
- 2) SOUTH 87° 47' 49" EAST, 14.69 FEET;
- 3) NORTH 16° 40' 20" EAST, 31.13 FEET;
- 4) NORTH 56° 00' 57" EAST, 6.51 FEET;

THENCE LEAVING SAID GENERAL WESTERLY LINE, SOUTH 02° 31' 31" WEST, 51.49 FEET TO A POINT ON THE GENERAL EASTERLY LINE OF SAID TRACT (41-I);

THENCE ALONG SAID GENERAL EASTERLY LINE, SOUTH 33° 40' 45" WEST, 8.49 FEET;

THENCE CONTINUING ALONG SAID LINE NORTH 80° 55' 40" WEST, 32.95 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 1,021 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 2**  
**(FLOOD PROTECTION LEVEE LEASE AREA)**

**BEGINNING** AT THE MOST WESTERLY CORNER OF SAID TRACT (41A-II) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596;

THENCE ALONG THE WESTERLY LINE OF SAID TRACT (41A-II), NORTH 62° 39' 59" EAST, 10.32 FEET;

THENCE CONTINUING ALONG SAID WESTERLY LINE, NORTH 01° 42' 48" WEST, 17.74 FEET TO A POINT ON THE GENERAL NORTHERLY LINE OF SAID TRACT (41A-II);

THENCE ALONG SAID GENERAL NORTHERLY LINE, NORTH 78° 45' 59" EAST, 17.04 FEET;

THENCE LEAVING SAID GENERAL NORTHERLY LINE, SOUTH 02° 31' 31" WEST, 24.06 FEET TO A POINT ON THE GENERAL SOUTHERLY LINE OF SAID TRACT (41A-II);

THENCE ALONG SAID GENERAL SOUTHERLY LINE, SOUTH 85° 52' 31" WEST, 24.35 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 382 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 3**  
**(FLOOD PROTECTION LEVEE LEASE AREA)**

**BEGINNING** AT THE MOST SOUTHERLY CORNER OF SAID TRACT (41A-I) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596;

THENCE ALONG THE GENERAL WESTERLY LINE OF SAID TRACT (41A-I) THE FOLLOWING THREE (3) COURSES:

- 1) NORTH 00° 17' 56" WEST, 7.12 FEET;
- 2) NORTH 75° 02' 29" EAST, 12.11 FEET;
- 3) NORTH 59° 22' 04" EAST, 23.50 FEET;

THENCE LEAVING SAID GENERAL WESTERLY LINE, SOUTH 02° 31' 31" WEST, 11.19 FEET TO A POINT ON THE GENERAL EASTERLY LINE OF SAID TRACT (41A-I);

THENCE ALONG SAID GENERAL EASTERLY LINE, SOUTH 70° 37' 34" WEST, 33.27 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 248 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 4**  
**(FLOOD PROTECTION LEVEE LEASE AREA)**

**COMMENCING** AT THE MOST NORTHERLY CORNER OF SAID TRACT (41A-I) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596, SAID POINT ALSO BEING A POINT ON THE SOUTHERLY LINE OF ADAMS STREET AS SHOWN ON SAID RECORD OF SURVEY FILED IN BOOK 378 OF MAPS AT PAGE 55;

THENCE ALONG THE NORTHWESTERLY LINE OF SAID TRACT (41A-I), SAID LINE ALSO BEING THE SOUTHERLY LINE OF SAID ADAMS STREET, SOUTH 49° 07' 40" WEST, 16.36 FEET TO THE **POINT OF BEGINNING**, SAID POINT ALSO BEING AN ANGLE POINT IN THE GENERAL WESTERLY LINE OF SAID TRACT (41A-I) AND ALSO BEING A POINT ON SAID SOUTHERLY LINE OF SAID ADAM STREET;

THENCE ALONG SAID NORTHWESTERLY LINE OF SAID TRACT (41A-I), NORTH 49° 07' 40" EAST, 5.56 FEET;

THENCE LEAVING SAID NORTHWESTERLY LINE, SOUTH 02° 31' 31" WEST, 5.34 FEET TO A POINT ON THE GENERAL WESTERLY LINE OF SAID TRACT (41A-I);

THENCE ALONG SAID GENERAL WESTERLY LINE, NORTH 66° 51' 50" WEST, 4.32 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 11 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 5**  
**(FLOOD PROTECTION LEVEE LEASE AREA)**

**BEGINNING** AT THE SOUTHERLY CORNER OF SAID TRACT (41B-II) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596, SAID POINT ALSO BEING A POINT ON THE NORTHERLY LINE OF ADAMS STREET AS SHOWN ON SAID RECORD OF SURVEY FILED IN BOOK 378 OF MAPS AT PAGE 55;

THENCE ALONG THE WESTERLY LINE OF SAID TRACT (41B-II) TO A POINT ON THE NORTHERLY LINE OF SAID TRACT (41B-II), NORTH 05° 31' 29" EAST, 10.92 FEET;

THENCE ALONG SAID NORTHERLY LINE, NORTH 57° 28' 07" EAST, 6.96 FEET;

THENCE LEAVING SAID NORTHERLY LINE, SOUTH 02° 31' 31" WEST, 8.97 FEET TO A POINT ON THE SOUTHERLY LINE OF SAID TRACT (41B-II);

THENCE ALONG SAID SOUTHERLY LINE, SOUTH 49° 07' 40" WEST, 8.63 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 58 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 6**  
**(FLOOD PROTECTION LEVEE LEASE AREA)**

**COMMENCING** AT THE CAST ALUMINUM MONUMENT NO. 45A SHOWN AS POINT NUMBER 3981 ON THE NORTHERLY LINE OF SAID RECORD OF SURVEY;

THENCE ALONG SAID NORTHERLY LINE OF SAID RECORD OF SURVEY, NORTH 89° 47' 32" WEST, 188.80 FEET TO THE **POINT OF BEGINNING**;

THENCE CONTINUING ALONG SAID NORTHERLY LINE, NORTH 89° 47' 32" WEST, 323.54 FEET TO A POINT ON THE WESTERLY LINE OF MALLARD SLOUGH AS SHOWN ON SAID RECORD OF SURVEY;

THENCE ALONG SAID WESTERLY LINE, THE FOLLOWING FIVE (5) COURSES:

- 1) NORTH 46° 04' 44" WEST, 49.79 FEET;
- 2) NORTH 59° 40' 16" EAST, 108.91 FEET;
- 3) NORTH 29° 50' 19" EAST, 78.41 FEET;
- 4) NORTH 15° 52' 04" WEST, 106.00 FEET;
- 5) NORTH 30° 52' 17" WEST; 21.69 FEET;

THENCE LEAVING SAID WESTERLY LINE, SOUTH 89° 55' 54" EAST, 93.00 FEET TO A POINT ON THE WESTERLY LINE OF THE LANDS OF THE CITY OF SAN JOSE 656 OR 61 AS SHOWN ON SAID RECORD OF SURVEY;

THENCE ALONG SAID WESTERLY LINE, SOUTH 31° 51' 32", 328.71 EAST, FEET TO THE **POINT OF BEGINNING**.

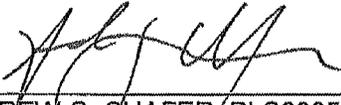
CONTAINING 51,062 SQUARE FEET OF LAND, MORE OR LESS.

**BASIS OF BEARINGS:**

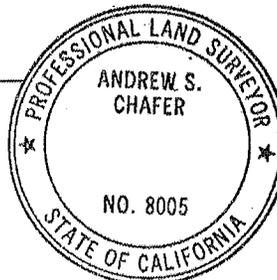
THE BEARING N 89°47'32" W ALONG THE SOUTH LINE OF FORMER LESLIE SALT CO. PARCEL SC-4, SHOWN AS N 89°47'44" W ON PAGE 53 OF 57 OF THAT CERTAIN RECORD OF SURVEY FILED ON AUGUST 27, 1976 IN BOOK 378 OF MAPS, PAGES 1 THROUGH 57, IN THE OFFICE OF THE RECORDER, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, WAS USED AS THE BASIS OF ALL BEARINGS SHOWN HEREON

**SURVEYOR'S STATEMENT:**

THE DESCRIPTION WAS PREPARED BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT.

  
\_\_\_\_\_  
ANDREW S. CHAFER, PLS8005

12/27/18  
DATE



**EXHIBIT A-2**  
**LAND DESCRIPTION**  
**TEMPORARY CONSTRUCTION AREA**

ALL THAT CERTAIN REAL PROPERTY SITUATE IN THE CITY OF SAN JOSE, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, BEING A PORTION OF TRACT (41-I), TRACT (41A-I), TRACT (41A-II) AND TRACT (41B-II) AS DESCRIBED IN THAT CERTAIN QUITCLAIM DEED RECORDED ON OCTOBER 23, 1985, AS DOCUMENT NUMBER 8567596 OF OFFICIAL RECORDS AND ALSO BEING PORTIONS OF BLOCKS 70, 71 AND 72 AS SHOWN ON THAT CERTAIN RECORD OF SURVEY FILED ON AUGUST 27, 1976 IN BOOK 378 OF MAPS AT PAGE 55, IN THE OFFICE OF THE RECORDER, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**PARCEL 1**  
**(TEMPORARY CONSTRUCTION LEASE AREA)**

**COMMENCING** AT THE MOST WESTERLY CORNER OF SAID TRACT (41-I) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596;

THENCE ALONG THE GENERAL EASTERLY LINE OF SAID TRACT (41-I), SOUTH 80° 55' 40" EAST, 32.95 FEET;

THENCE CONTINUING ALONG SAID GENERAL EASTERLY LINE, NORTH 33° 40' 45" EAST, 8.49 FEET TO THE **POINT OF BEGINNING**;

THENCE LEAVING SAID GENERAL EASTERLY LINE, NORTH 02° 31' 31" EAST, 51.49 FEET TO A POINT ON THE GENERAL WESTERLY LINE OF SAID TRACT (41-I);

THENCE ALONG SAID GENERAL WESTERLY LINE, NORTH 56° 00' 57" EAST, 22.69 FEET;

THENCE CONTINUING ALONG SAID GENERAL WESTERLY LINE, SOUTH 63° 16' 08" EAST, 45.80 FEET;

THENCE LEAVING SAID GENERAL WESTERLY LINE, SOUTH 02° 31' 31" WEST, 17.19 FEET TO A POINT ON THE GENERAL EASTERLY LINE OF SAID TRACT (41-I);

THENCE ALONG SAID GENERAL EASTERLY LINE NORTH 70° 43' 13" WEST, 37.53 FEET;  
THENCE CONTINUING ALONG SAID GENERAL EASTERLY LINE, SOUTH 33° 40' 45" WEST,  
46.55 FEET TO THE **POINT OF BEGINNING**.  
CONTAINING 1,668 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 2**  
**(TEMPORARY CONSTRUCTION LEASE AREA)**

**COMMENCING** AT THE MOST NORTHERLY CORNER OF SAID TRACT (41-I) AS  
DESCRIBED IN SAID DOCUMENT NUMBER 8567596;

THENCE ALONG THE GENERAL WESTERLY LINE OF SAID TRACT (41-I), SOUTH 85° 04'  
11" WEST, 31.84 FEET;

THENCE CONTINUING ALONG SAID GENERAL WESTERLY LINE, SOUTH 45° 44' 10" WEST,  
80.16 FEET TO THE **POINT OF BEGINNING**;

THENCE LEAVING SAID GENERAL WESTERLY LINE, SOUTH 02° 31' 31" WEST, 26.64 FEET  
TO A POINT ON THE GENERAL WESTERLY LINE OF SAID TRACT (41-I);

THENCE ALONG SAID GENERAL WESTERLY LINE, NORTH 20° 11' 49" WEST, 19.98 FEET;

THENCE CONTINUING ALONG SAID GENERAL WESTERLY LINE, NORTH 45° 44' 10" EAST,  
11.27 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 103 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 3**  
**(TEMPORARY CONSTRUCTION LEASE AREA)**

**COMMENCING** AT THE MOST WESTERLY CORNER OF SAID TRACT (41A-II) AS  
DESCRIBED IN SAID DOCUMENT NUMBER 8567596;

THENCE ALONG THE GENERAL SOUTHERLY LINE OF SAID TRACT (41A-II), NORTH 85° 52'  
31" EAST, 24.35 FEET TO THE **POINT OF BEGINNING**;

THENCE LEAVING SAID GENERAL SOUTHERLY LINE, NORTH 02° 31' 31" EAST, 24.06 FEET  
TO A POINT ON THE GENERAL NORTHERLY LINE OF SAID TRACT (41A-II);

THENCE ALONG SAID GENERAL NORTHERLY LINE, NORTH 78° 45' 59" EAST, 9.50 FEET;

THENCE CONTINUING ALONG SAID GENERAL NORTHERLY LINE, SOUTH 81° 56' 13"  
EAST, 51.03 FEET;

THENCE LEAVING SAID GENERAL NORTHERLY LINE, SOUTH 02° 31' 31" WEST, 28.95 FEET TO A POINT ON THE GENERAL SOUTHERLY LINE OF SAID TRACT (41A-II);

THENCE ALONG SAID GENERAL SOUTHERLY LINE, NORTH 72° 51' 00" WEST, 39.83 FEET;

THENCE CONTINUING ALONG SAID GENERAL SOUTHERLY LINE SOUTH 85° 52' 31" WEST, 21.62 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 1,514 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 4**  
**(TEMPORARY CONSTRUCTION LEASE AREA)**

**BEGINNING** AT THE MOST NORTHERLY CORNER OF SAID TRACT (41A-I) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596, SAID POINT ALSO BEING A POINT ON THE SOUTHERLY LINE OF ADAMS STREET AS SHOWN ON SAID RECORD OF SURVEY FILED IN BOOK 378 OF MAPS AT PAGE 55;

THENCE ALONG THE GENERAL EASTERLY LINE OF SAID TRACT (41A-I) THE FOLLOWING FOUR (4) COURSES:

- 1) SOUTH 29° 59' 57" EAST, 8.91 FEET;
- 2) SOUTH 62° 44' 43" EAST, 36.92 FEET;
- 3) SOUTH 45° 23' 44" WEST, 64.25 FEET;
- 4) SOUTH 70° 37' 34" WEST, 2.65 FEET;

THENCE LEAVING SAID GENERAL EASTERLY LINE, NORTH 02° 31' 31" EAST, 11.19 FEET TO A POINT ON THE GENERAL WESTERLY LINE OF SAID TRACT (41A-I);

THENCE ALONG THE GENERAL WESTERLY LINE OF SAID TRACT (41A-I) THE FOLLOWING FOUR (4) COURSES:

- 1) NORTH 59° 22' 04" EAST, 36.15 FEET;
- 2) NORTH 45° 24' 39" EAST, 0.99 FEET;
- 3) NORTH 06° 48' 30" WEST, 16.15 FEET;
- 4) NORTH 66° 51' 50" WEST, 30.26 FEET;

THENCE LEAVING SAID GENERAL WESTERLY LINE, NORTH 02° 31' 31" EAST, 5.34 FEET TO A POINT ON THE GENERAL WESTERLY LINE OF SAID TRACT (41A-I), SAID POINT ALSO BEING A POINT ON THE SOUTHERLY LINE OF SAID ADAMS STREET;

THENCE ALONG SAID GENERAL WESTERLY LINE, NORTH 49° 07' 40" EAST, 10.79 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 703 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 5**  
**(TEMPORARY CONSTRUCTION LEASE AREA)**

**BEGINNING** AT THE EASTERLY CORNER OF SAID TRACT (41B-II) AS DESCRIBED IN SAID DOCUMENT NUMBER 8567596, SAID POINT ALSO BEING A POINT ON THE NORTHERLY LINE OF ADAMS STREET AS SHOWN ON SAID RECORD OF SURVEY FILED IN BOOK 378 OF MAPS AT PAGE 55;

THENCE ALONG THE SOUTHERLY LINE OF SAID TRACT (41B-II), SOUTH 49° 07' 40" WEST, 50.62 FEET;

THENCE LEAVING SAID SOUTHERLY LINE, NORTH 02° 31' 31" EAST, 8.97 FEET TO A POINT ON THE NORTHERLY LINE OF SAID TRACT (41B-II);

THENCE ALONG SAID NORTHERLY LINE, NORTH 57° 28' 07" EAST, 44.94 FEET TO THE **POINT OF BEGINNING**, SAID POINT ALSO BEING A POINT ON THE NORTHERLY LINE OF SAID ADAMS STREET.

CONTAINING 165 SQUARE FEET OF LAND, MORE OR LESS.

**PARCEL 6**  
**(TEMPORARY CONSTRUCTION LEASE AREA)**

**COMMENCING** AT THE CAST ALUMINUM MONUMENT NO. 45A SHOWN AS POINT NUMBER 3981 ON THE NORTHERLY LINE OF SAID RECORD OF SURVEY;

THENCE ALONG SAID NORTHERLY LINE OF SAID RECORD OF SURVEY, NORTH 89° 47' 32" WEST, 188.80 FEET TO A POINT ON THE WESTERLY LINE OF THE LANDS OF THE CITY OF SAN JOSE 656 OR 61 AS SHOWN ON SAID RECORD OF SURVEY;

THENCE ALONG SAID WESTERLY LINE, NORTH 31° 51' 32" WEST, 328.71 FEET TO THE **POINT OF BEGINNING**;

THENCE LEAVING SAID WESTERLY LINE, NORTH 89° 55' 54" WEST, 93.00 FEET TO A POINT ON THE WESTERLY LINE OF MALLARD SLOUGH AS SHOWN ON SAID RECORD OF SURVEY;

THENCE ALONG SAID WESTERLY LINE, NORTH 30° 52' 17" WEST; 291.47 FEET;

THENCE LEAVING SAID WESTERLY LINE, SOUTH 89° 55' 54" EAST; 87.08 FEET TO A POINT ON THE WESTERLY LINE OF THE LANDS OF THE CITY OF SAN JOSE 656 OR 61 AS SHOWN ON SAID RECORD OF SURVEY;

THENCE ALONG SAID WESTERLY LINE, SOUTH 31° 51' 32", 294.56 FEET TO THE **POINT OF BEGINNING**.

CONTAINING 22,510 SQUARE FEET OF LAND, MORE OR LESS.

**BASIS OF BEARINGS:**

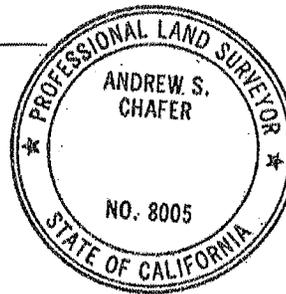
THE BEARING N 89°47'32" W ALONG THE SOUTH LINE OF FORMER LESLIE SALT CO. PARCEL SC-4, SHOWN AS N 89°47'44" W ON PAGE 53 OF 57 OF THAT CERTAIN RECORD OF SURVEY FILED ON AUGUST 27, 1976 IN BOOK 378 OF MAPS, PAGES 1 THROUGH 57, IN THE OFFICE OF THE RECORDER, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, WAS USED AS THE BASIS OF ALL BEARINGS SHOWN HEREON.

**SURVEYOR'S STATEMENT:**

THE DESCRIPTION WAS PREPARED BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT.

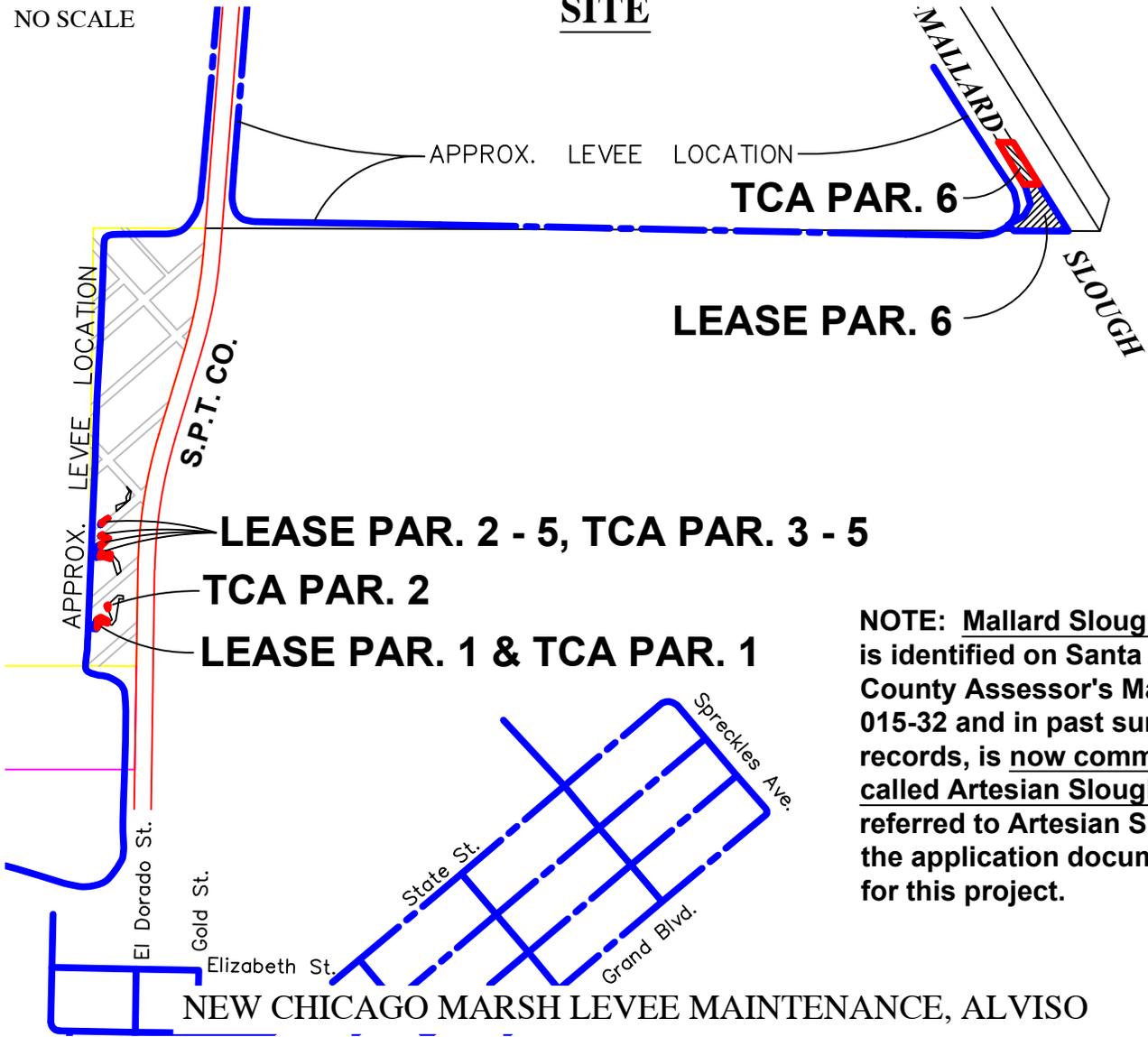
  
\_\_\_\_\_  
ANDREW S. CHAFER, PLS8005

12/21/18  
DATE



NO SCALE

# SITE



**LEASE PAR. 6**

**TCA PAR. 6**

**LEASE PAR. 2 - 5, TCA PAR. 3 - 5**

**TCA PAR. 2**

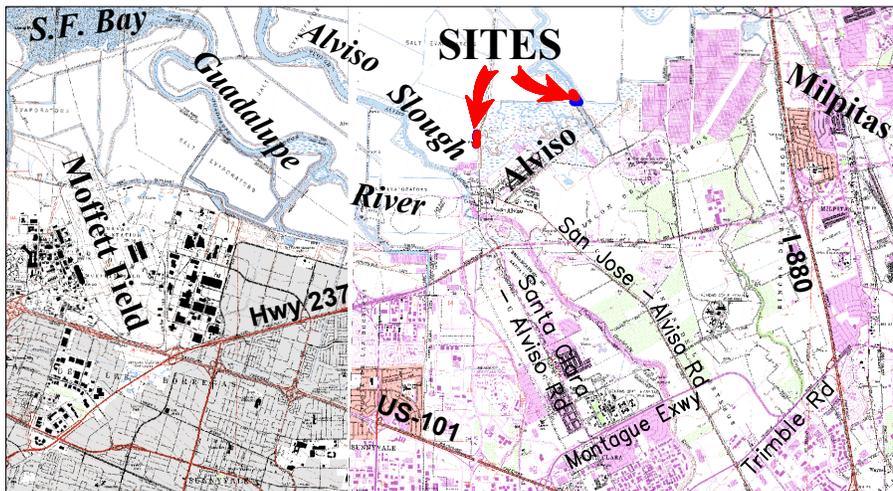
**LEASE PAR. 1 & TCA PAR. 1**

**NOTE: Mallard Slough, as it is identified on Santa Clara County Assessor's Map 015-32 and in past survey records, is now commonly called Artesian Slough and is referred to Artesian Slough in the application documents for this project.**

**NEW CHICAGO MARSH LEVEE MAINTENANCE, ALVISO**

NO SCALE

# LOCATION



MAP SOURCE: USGS QUAD

## Exhibit B Sheet 1 of 2

W 27193

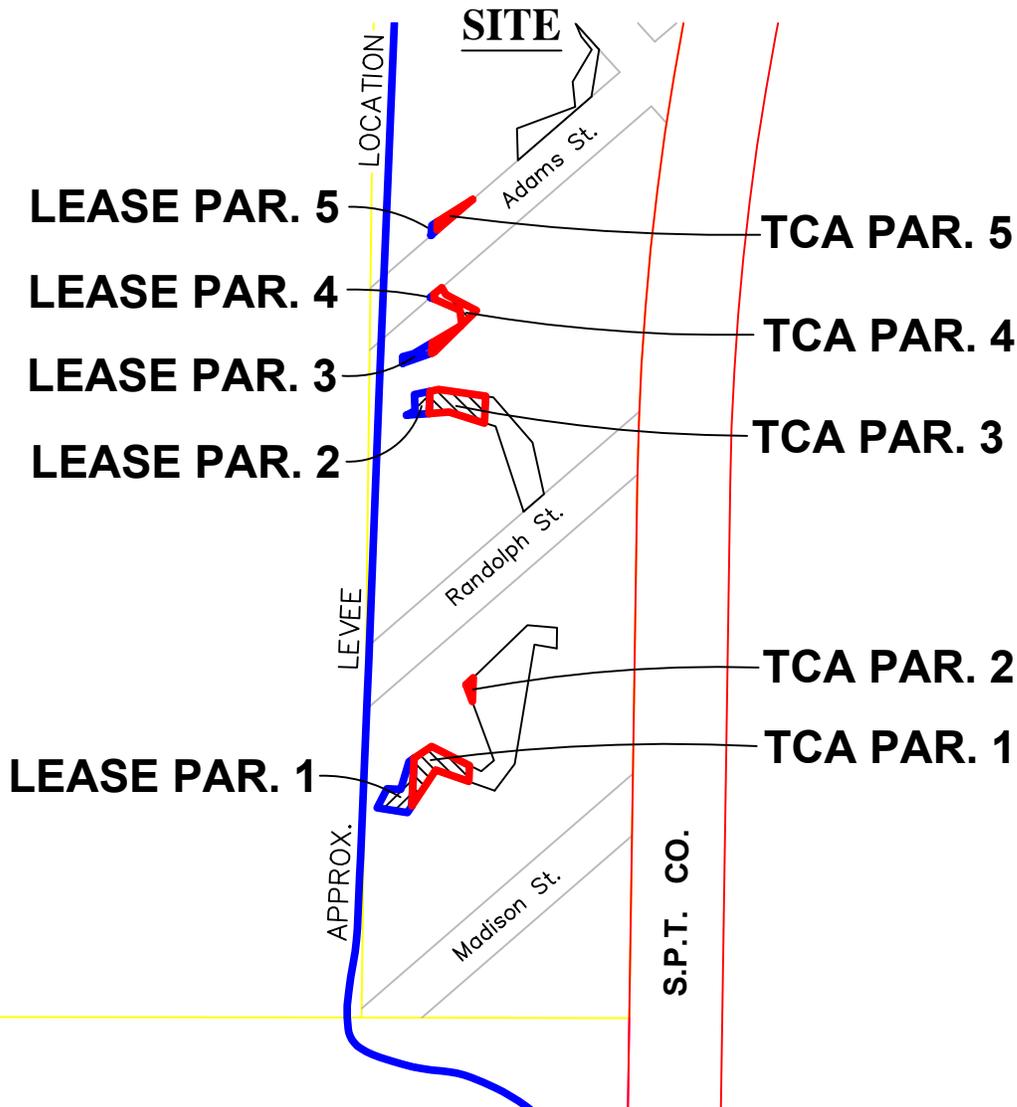
GENERAL LEASE  
PUBLIC AGENCY USE  
SAN JOSE - ALVISO AREA  
SANTA CLARA COUNTY



SITE

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

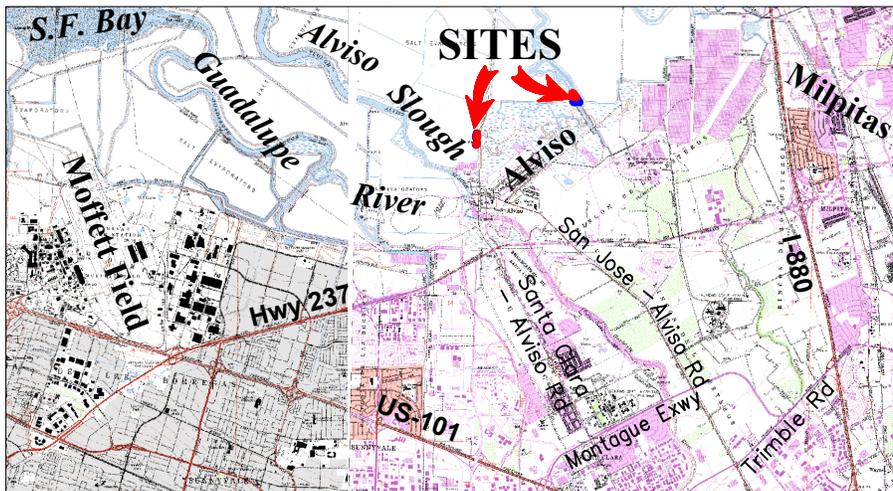
NO SCALE



**NEW CHICAGO MARSH LEVEE MAINTENANCE, ALVISO**

NO SCALE

**LOCATION**



MAP SOURCE: USGS QUAD

**Exhibit B**  
**Sheet 2 of 2**

W 27193  
GENERAL LEASE  
PUBLIC AGENCY USE  
SAN JOSE - ALVISO AREA  
SANTA CLARA COUNTY



**SITE**

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

**EXHIBIT C**  
**CALIFORNIA STATE LANDS COMMISSION**  
**MITIGATION MONITORING PROGRAM**  
**SOUTH SAN FRANCISCO BAY SHORELINE PHASE I STUDY**  
(W27193, State Clearinghouse No. 2006012020)

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The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the South San Francisco Bay Shoreline Phase I Study (Project). The CEQA lead agency for the Project is the Santa Clara Valley Water District.

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines section 15097, subdivision (a), states in part:<sup>1</sup>

*In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency certified an Environmental Impact Statement (EIS)/EIR, State Clearinghouse No. 2006012020, adopted a Mitigation Monitoring and Reporting Program (MMRP) for the whole of the Project (see Exhibit C, Attachment C-1), and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below. The full text of each mitigation measure and avoidance and minimization measure, as set forth in the MMRP prepared by the CEQA lead agency and listed in Table C-1 and Table C-2, is incorporated by reference in this Exhibit C. Any measures adopted by the Commission that differ substantially from those adopted by the lead agency are shown as follows:

- Additions to the text of the mitigation measure are underlined; and
- Deletions of the text of the mitigation measure are shown as ~~strikeout~~ or as otherwise noted.

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<sup>1</sup> The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

**Table C-1. Project Impacts and Applicable Mitigation Measures**

Potential Impact	Mitigation Measure (MM) <sup>2</sup>	Difference Between CSLC MMP and Lead Agency MMP
HYD-1 – Erosion and Siltation	M-HYD-1a, M-HYD-1b	None
TBR-2 – Salt Marsh Harvest Mouse	M-TBR-2a	None
TBR-2 – Salt Marsh Wandering Shew	M-TBR-2a	None
TBR-2 – Western Snowy Plover	M-TBR-2b	None
TBR-2 – Burrowing Owl	M-TBR-2d	None
TBR-2 – Ridgeway’s Rail	M-TBR-2e	None
TBR-2 – Nesting Birds	M-TBR-2f	None
TBR-2 – Sensitive Plants	M-TBR-2g	None
AIR-01	M-AIR-1a, M-AIR-1b	None
NOI-1	M-NOI-1	None
NOI-2	M-NOI-2	None
CUL-1	M-CUL-1	See below

**M-CUL-1:** In 2012, the USFWS consulted with the California State Historic Preservation Office (SHPO) regarding the restoration program for the entire Alviso Unit under the SBSP Restoration Project, and consequently satisfied the requirements of Section 106 of the National Historic Preservation Act (NHPA), pursuant to 36 C.F.R. § 800, by executing a Memorandum of Agreement (MOA) that included a Historic Property Treatment Plan (HPTP). Information from the USFWS Section 106 compliance has direct impact on the current Shoreline Study effort to comply with Section 106. Through ongoing consultation with SHPO, the Shoreline Study may have to develop a HPTP for Section 106 purposes to resolve any unforeseen adverse effects to the Alviso Salt Pond Historic Landscape and the Alviso Historic District prior to initiation of construction. The title to all abandoned archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the California State Lands Commission (Commission) (Pub. Resources Code, § 6313). The District shall consult with Commission staff should any archaeological or historical resources on State lands be discovered during construction of the proposed Project. The final disposition of archaeological or historical resources recovered on State lands under the jurisdiction of the Commission must be approved by the Commission.

<sup>2</sup> See Attachment C-1 for the full text of each MM taken from the MMRP prepared by the CEQA lead agency.

**Table C-2. Project Impacts and Applicable Avoidance and Minimization Measures**

Potential Impact	Avoidance and Minimization Measure (AMM) <sup>3</sup>
GEO-1	AMM-GEO-1, -3
GEO-2	AMM-GEO-1, -4
GEO-3	AMM-GEO-2, -5, -6
LND-2	AMM-LND-1, -2
LND-3	AMM-LND-1, -2
HYD-2	AMM-HYD-1
WAT-01	AMM-WAT-1, -2, -3, -5, 6, -7, -8, -9, -10, -12, -13, -14, -15, -17, -19, -20, -21, -22, -23, -24, -26, -27, -28, -29, -30
ABR-1	AMM-ABR-1, -2, -3, -4, -5, -7, -8, -9, -10, -11, -12, AMM-WAT-27, AMM-WAT-28
TBR-2	AMM-TBR-1, -2, -3, -4, -5, -6, -7, -8, -9, -12, -13, -14, 15, -16, -17, -18, -19, -20, -21, -22, -23, -25
TBR-4	AMM-TBR-24
AIR-1	AMM-AIR-1, -2, -3, -5, -6
AIR-2	AMM-AIR-2, -5, -6
AIR-4	AMM-AIR-2, -5, -6
AIR-5	AMM-AIR-4
REC-1	AMM-REC-1, -2, -3
AES-1	AMM-AES-1
NOI-1	AMM-NOI-1, -3
NOI-2	AMM-NOI-1, -2, -3
CUL-1	AMM-CUL-1
CUL-2	AMM-CUL-2

<sup>3</sup> See Attachment C-1 for the full text of each AMM taken from the MMRP prepared by the CEQA lead agency.

# **ATTACHMENT C-1**

**Mitigation Monitoring and Reporting Program**

**Adopted by the Santa Clara Valley Water District**

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
<b>Geology and Soils</b>				
AMM-GEO-1 – Public Warning Signs	Public warning signs and sirens would improve public awareness and response to inundation emergencies (floods, tsunamis). This action will enhance safety for people using and working in the area.	Operations	USACE and District with the City of San Jose and Santa Clara County	District
AMM-GEO-2 – Reuse of Soils	Reuse of earth materials (existing dikes, etc.) will reduce the amount of import material, stockpile, and landfill material, which will minimize offsite soils effects	Construction	USACE and contractor	District
AMM-GEO-3 – Levee Design	New or reinforced levees or berms will be designed and constructed to avoid, reduce, or otherwise account for future settlement from liquefaction and potential for lateral spreading. This action will enhance safety for people using and working in the area.	Design	USACE	District
AMM-GEO-4 – Stop Work after Seismic Activity	In the event of an earthquake or tsunami warning, the contractor will stop all work until it is determined that conditions are safe to commence work. This action will enhance safety for people working in the area.	Construction	USACE / Contractor	District
AMM-GEO-5 – Channel Tidal Flow	Ditches will be dug to channel tidal flow into preferred locations to concentrate the erosional potential to small areas. This will minimize erosion and sedimentation effects in large areas.	Design	Project partners	District
AMM-GEO-6 – Prepare Stormwater Pollution Prevention Plan (SWPPP)	Erosion will be controlled based on the SWPPP to be prepared for the project. Implementing the SWPPP measures will minimize soil erosion and related sedimentation.	Construction	USACE / Contractor	District
<b>Land Use and Planning</b>				
AMM-LND-1: Minimize Disturbance	Areas of possible disturbance will be avoided or will be minimized to the smallest footprint necessary. In all cases, the footprint of disturbance will remain within the impact boundaries defined for each resource and evaluated in the impact analyses provided in Section 4.2 <i>Geology, Soils, and Seismicity</i> through Section 4.16 <i>Public Utilities and Service Systems</i> ; however, additional effort will be made to further reduce impacts within these parameters. This measure will minimize the project footprint and impacts to adjacent uses.	Design and Construction	USACE / Contractor	District
AMM-LND-2: Remove Materials	All leftover construction material will be removed from the site after construction is complete. This will reduce land use incompatibilities associated with construction.	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
<b>Hydrology and Flood Risk Management</b>				
AMM-HYD-1: Flood Warnings	Install public warning signs and sirens to improve public awareness and response to inundation emergencies (e.g., flooding and tsunamis). This action will enhance safety for people using and working in the area.	Operations	USACE and District with the City of San Jose and Santa Clara County	District
M-HYD-1a	For any unforeseen excessive scour on the side slopes and crown of the levee, levee maintenance will be adjusted or levee improvements will be implemented (e.g., raise or widen the shoulder or armor the levee).	Maintanance	Project partners	District
M-HYD-1b	For unforeseen excessive scour at the levee toe, natural and geotextile fabric, and/or rock armoring, will be placed to prevent further erosion.	Maintanance	Project partners	District
M-HYD-1c	A plan for protecting the Union Pacific Railroad bridge crossing Coyote Creek will be developed prior to the start of construction and implemented if necessary based on monitoring. Possible measures to protect the bridge include: <ul style="list-style-type: none"> <li>• Modify the bridge structure, such as by constructing new pilings and underpinnings, to accommodate the scour.</li> <li>• Place rock armoring across the channel for some distance upstream and/or downstream of the bridge to limit scour at the bridge supports and approaches.</li> <li>• Place rock armor along the bed and banks of the channel at the bridge and along the bed and railway embankment on both sides of the bridge to limit scour.</li> </ul>	Design and Maintenance	Project partners	District
<b>Surface Water and Sediment Quality</b>				
AMM-WAT-1: Staging Area	Establish staging areas for activities such as fueling, equipment storage, and fill storage.	Design and Construction	USACE / Contractor	District
AMM-WAT-2: Fuel Management Plan	Develop and incorporate a Fuel Management Plan.	Construction	USACE / Contractor	District
AMM-WAT-3: Turbidity Management Plan	Implement a Water Quality and Turbidity Management Plan; plan will include stormwater management.	Construction	USACE / Contractor	District
AMM-WAT-4: Pond Construction Timing	Conduct pond construction activities prior to breaching to minimize turbidity and water quality degradation.	Construction	USACE / USFWS	District
AMM-WAT-5: Hazardous Spill Plan	Develop and incorporate a Hazardous Spill Plan.	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
AMM-WAT-6: Seasonal Restrictions	Implement wet-season restrictions for water quality protection.	Construction	USACE	District
AMM-WAT-7: Minimize Footprint	Avoid and minimize areas of disturbance; use smallest footprint necessary.	Design and Construction	USACE / Contractor	District
AMM-WAT-8: Clean Equipment	Clean all equipment of soil, seeds, and plant material prior to arriving on site to prevent the introduction of undesirable plant species.	Construction	USACE / Contractor	District
AMM-WAT-9: Site Maintenance	Maintain project sites trash-free and contain food refuse in secure bins; trash will be removed daily. Development of trails will include trash receptacles and signage encouraging the proper disposal of waste.	Construction	USACE / Contractor	District
AMM-WAT-10: In-Stream Sediment Control	Use coffer dams and/or silt curtains to the extent feasible during construction.	Construction	USACE / Contractor	District
AMM-WAT-11: Protect Hazardous Sites	Protect potentially hazardous sites.	Construction	USACE / Contractor	District
AMM-WAT-12: Use of On-Site Material	Use on-site material and natural sedimentation processes to fill in low areas of ponds.	Construction	USACE / Contractor	District
AMM-WAT-13: Sediment Accretion Areas	Manage sediment accretion areas to maintain and create marshes and trap additional material.	Construction	USACE / USFWS	District
AMM-WAT-14: Water Quality Parameters	Water quality parameters in ponds will meet SFBRWQCB standards.	Construction	USACE / Contractor	District and RWQCB
AMM-WAT-15: Water Quality Baseline	South Bay water quality will not decline from baseline levels.	Construction	USACE / Contractor	District and RWQCB
AMM-WAT-16: Dissolved Oxygen	DO levels will meet Basin Plan WQOs.	Construction	USACE / Contractor	District and RWQCB
AMM-WAT-17: Mercury in Sentinel Species	Levels of mercury in sentinel species do not show significant increases over the baseline condition, and not higher in target restoration habitats than in existing habitats.	Monitoring	Project partners	District and RWQCB

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
AMM-WAT-18: Control of Nuisance Algae	Nuisance and invasive species of algae are not released from the study area to the South Bay.	Construction	USACE / Contractor	District
AMM-WAT-19: Minimize In-water Construction	In-water construction activities will be minimized to the extent practical.	Construction	USACE / Contractor	District
AMM-WAT-20: Turbidity Control	The use of BMPs for turbidity control shall be employed during all in-water work conducted in the sloughs or bay, where appropriate.	Construction	USACE / Contractor	District
AMM-WAT-21: Stormwater Runoff Control	No debris, soil, silt, sand, cement, concrete, or washings thereof, or other construction-related materials or wastes, oil, or petroleum products, or other organic or earthen material shall be allowed to enter into or be placed where it may be washed from the construction sites by rainfall or runoff into waters of the State.	Construction	USACE / Contractor	District
AMM-WAT-22: Stormwater Management Plan	A Stormwater Management Plan will be developed to ensure that, during rain events, construction activities do not increase the levels of erosion and sedimentation. This plan will include the use of erosion-control materials (i.e., baffles, fiber rolls, or hay bales; temporary containment berms) and erosion-control measures such as straw application or hydroseeding with native grasses on disturbed slopes; and floating sediment booms and/or curtains to minimize any impacts that may occur due to increased mobilization of sediments.	Construction	USACE / Contractor	District
AMM-WAT-23: Use of Clean Fill	All clean fill material proposed for upland and wetland placement will meet the qualifications set forth in the RWQCB's waste discharge requirements (Tentative Order), approved with respect to chemical and biological suitability for uplands and wetlands by the Dredged Material Management Office.	Construction	USACE / Contractor	District and RWQCB
AMM-WAT-24: Prepare SWPPP	Erosion will be controlled based on the SWPPP to be prepared for the project. Implementing the SWPPP measures will minimize soil erosion and related sedimentation.	Construction	USACE / Contractor	District
AMM-WAT-25: No Treated Wood	Treated wood will not be used in structures that come in contact with water.	Design	USACE	District
AMM-WAT-26: Equipment Staging and Fueling	Vehicle staging, cleaning, maintenance, refueling, and fuel storage will be located 150 feet or more from any stream, water body, or wetland. If an action cannot meet this 150-foot requirement, additional BMPs may be required and will be described for each action.	Construction	USACE / Contractor	District

## Mitigation Monitoring and Reporting Program Summary Table

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
AMM-WAT-27: Hazardous Spill Plan	A Hazardous Spill Plan will be developed prior to construction of each action. The plan will describe what actions will be taken in the event of a spill. The plan will also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site will immediately cease until the contractor has contained and mitigated the spill. The contractor will immediately prevent further contamination and notify appropriate authorities and will mitigate damage as appropriate. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided on the project site.	Construction	USACE / Contractor	District
AMM-WAT-28: Prevent Equipment Leaks	All equipment will be maintained free of petroleum leaks. No equipment will enter live water except for aquatic equipment or amphibious equipment designed specifically for aquatic or amphibious use. All vehicles operated within 150 feet of any water body will be inspected daily for leaks and, if necessary, repaired before leaving the staging area. Inspections will be documented in a record that is available for review on request.	Construction	USACE / Contractor	District
AMM-WAT-29: Stabilize Construction Areas	All disturbed areas will be stabilized within 12 hours of any break in work unless construction will resume work within 7 days. Earthwork will be completed as quickly as possible, and site restoration will occur immediately following use.	Construction	USACE / Contractor	District
AMM-WAT-30: Invasive Plant Prevention	To reduce potential impacts from infestation by species such as nonnative <i>Spartina</i> , pepperweed, stinkwort, Algerian sea lavender, and other invasive, nonnative plant species, all equipment (including personal gear) will be cleaned of soil, seeds, and plant material prior to arriving on site to prevent introduction of undesirable plant species. Equipment and personal gear will be subject to inspection. If any invasive, nonnative plant species are found, a qualified botanist will recommend specific measures to control the spread of nonnative plant species. All infestations will be controlled and removed in coordination with the current eradication program for <i>Spartina</i> being implemented within the bay without substantially hindering or harming the establishment of native vegetation in the restored wetlands or along levee slopes or surfaces.	Construction	USACE / Contractor	District
M-WAT-1a: Salinity Control	Discharge water from Ponds A12, A13, and A15 after breaching levees will be limited to a maximum salinity of 44 ppt. Breaching will be done in a manner that allows for the slow release of pond water during high tide to ensure mixing and dilution. Salinity will be monitored at the time of	Construction	USACE / Contractor	District and RWQCB

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	breaches of levees around Ponds A12, A13, and A15. Corrective measures, such as slowing the release of the more-saline water, will be implemented as needed to minimize the potential effects on receiving waters.			
M-WAT-1b: Dissolved Oxygen Control	Discharge waters from the ponds will maintain a minimum DO of 5 mg/L. To ensure that DO does not drop below 5 mg/L, discharge water will be monitored from Pond A12 to ensure minimum DO is maintained. If DO levels fall below 5 mg/L measures will be implanted to increase DO levels in Pond A12. Measures might include solar aerators, harvesting dead algae, or installing flow diversion baffles to redirect the flow near the area of discharge.	Construction	USACE / Contractor	District and RWQCB
<b>Aquatic Biological Resources</b>				
AMM-ABR-1: Seasonal Restrictions	Construction activities in or directly adjacent to waters where CCC juvenile steelhead are likely to be present will be performed between June 1 and November 30. To protect juvenile steelhead, levee breaching will not occur between February 1 and May 31.	Construction	USACE / Contractor	District and NMFS
AMM-ABR-2: Biological Monitor	In-water construction activities will be monitored by a qualified fisheries biologist with the authority to stop work if any special-status species are found during construction and to confirm that all measures are implemented as defined in permits, the SWPPP, and the O&M Manual.	Construction	USACE / Contractor and biological monitor	District
AMM-ABR-3: Vibratory Piling	Pilings for the Artesian Slough pedestrian bridge will be driven using vibratory methods; no impact piles will be utilized.	Construction	USACE / Contractor	District
AMM-ABR-4: In Water Sediment Control	Cofferdams and/or silt curtains will be used to the extent feasible during construction and O&M activities, as well as implementation of any adaptive management actions.	Construction	USACE / Contractor	District
AMM-ABR-5: Screen Pumps	All pumps used for the diversion of water during construction (for in-water dewatering) where salmonids may be present will be screened according to NMFS and CDFW criteria for juvenile salmonids.	Construction	USACE / Contractor	District and NMFS / CDFW
AMM-ABR-6: Work at Low Tide	For construction projects that involve structures that extend into the waters where steelhead, Chinook salmon, longfin smelt, and green sturgeon may be present, activities will be performed at low tide or under dewatered conditions, to the extent practicable.	Construction	USACE / Contractor	District
AMM-ABR-7: Notification of Mortality Events	NMFS personnel will be immediately notified of any observed fish mortality events as related to ESA-listed or Candidate species.	Construction	USACE / Contractor and biological monitor	District and NMFS
AMM-ABR-8: Adequate Depth of	Tidally restored ponds will contain channels that are constructed at an adequate depth and width to allow the ingress and egress of fish with tidal circulation and maintain adequate depths and velocities via scour	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
Channels	and deposition to allow continued fish movement in and out of the channels. Inspections will be documented in a record that is available for review on request.			
AMM-ABR-9: Salvage Natural Materials	Any appropriate large wood, native vegetation, and weed-free topsoil displaced by construction will be stockpiled for use during site restoration.	Construction	USACE / Contractor	District
AMM-ABR-10: Prepare SWPPP	A stormwater management plan will be developed to ensure that, during rain events, construction activities do not increase the levels of erosion and sedimentation. This plan will include the use of erosion-control materials (e.g., baffles, fiber rolls, or hay bales; temporary containment berms) and erosion-control measures such as straw application or hydroseeding with native grasses on disturbed slopes, and floating sediment booms and/or curtains to minimize any impacts that may occur due to increased mobilization of sediments.	Construction	USACE / Contractor	District
AMM-ABR-11: Biological Monitoring	A long-term marine biological monitoring program will be developed in consultation with the NMFS and will be used to inform the MAMP.	Monitoring	Project partners	District with NMFS
AMM-ABR-12: Water Structure Materials	Treated wood will not be used in structures that may come in contact with water.	Design	USACE	District
<b>Terrestrial Biological Resources</b>				
AMM-TBR-1: Reporting Requirements	Notify the USFWS, the NMFS, and the CDFW within 1 working day of the finding of any injured or dead listed species or any unanticipated damage to its habitat associated with the proposed project. In addition, the USACE and/or USFWS Refuge staff will provide annual updates and interim progress reports to the USFWS as outlined in the USFWS BO.	Construction	USACE / Contractor and biological monitor	District and USFWS / CDFW
AMM-TBR-2: Seasonal Restrictions	Implement wet-season restrictions on construction for wildlife protection. To the extent feasible (i.e., if water quality protection can be provided), construction will be conducted outside the nesting season for birds (February 1 through August 31) generally, and in compliance with the specific guidelines outlined in the USFWS BO for listed species.	Construction	USACE	District
AMM-TBR-3: Conduct Preconstruction Surveys	If construction cannot take place entirely during the wet (nonbreeding) season (September 1 through January 31), then preconstruction surveys and establishment of buffers around active nests will be conducted to avoid or minimize impacts on wildlife species. Specific buffer requirements for listed species are included in the USFWS BO.	Pre-construction	USACE / Contractor and biological monitor	District
AMM-TBR-4: Stage	Locate staging, access, and parking areas outside of sensitive habitats.	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
Outside Sensitive Habitats				
AMM-TBR-5: Minimize Footprint	Avoid and minimize areas of disturbance to the smallest footprint necessary.	Design and Construction	USACE / Contractor	District
AMM-TBR-6: Install Exclusionary Fencing	Install exclusionary fencing for environmentally sensitive areas. Any fencing near habitat for the SMHM, California Ridgway's rail, or western snowy plover will incorporate raptor perch deterrents to minimize raptor predation on listed species. In addition, all ingress and egress points will be clearly identified in the field using orange construction fence, and work will not be conducted outside the designated work area.	Pre-construction	USACE / Contractor and biological monitor	District and USFWS / CDFW
AMM-TBR-7: Biological Monitor	A USFWS-approved biological monitor will be present during all work activities in or immediately adjacent to habitat that could be occupied by Federally listed species.	Construction	USACE / Contractor and biological monitor	District and USFWS / CDFW
AMM-TBR-8: Site Stabilization and Restoration	All disturbed areas will be stabilized within 12 hours of any break in work unless construction will resume work within 7 days. Earthwork will be completed as quickly as possible, and site restoration to preconstruction (or better) conditions will occur immediately following use.	Construction	USACE / Contractor	District
AMM-TBR-9: Pond Levels for Snowy Plover	Water-level manipulation (e.g., for management) within ponds that contain suitable western snowy plover habitat will not be performed unless surveys are conducted to determine whether they are present during the breeding season (March 1 through September 14). If western snowy plovers are present, any addition of water to the pond will be monitored closely to ensure that no nests are flooded.	Operations	USFWS	USFWS
AMM-TBR-10: Least Tern Breeding Buffer	No activities will be performed within 300 feet of an active least tern nest during the least tern breeding season, which is April 15 to August 15 (or as determined through surveys). <i>Exception:</i> Only inspection, maintenance, research, or monitoring activities may be performed during the least tern breeding season in areas within or adjacent to least tern breeding habitat with approval of the USFWS and the CDFW under the supervision of a qualified biologist.	Construction	USACE / Contractor and biological monitor	District and USFWS / CDFW
AMM-TBR-11: Pond Levels for Least Tern	Water-level manipulation (e.g., for management) within ponds known to contain nesting least terns will be monitored closely to ensure that no nests are flooded during the least tern breeding season (April 15 to August 15) unless surveys demonstrate that nesting least terns are absent.	Operations	USFWS	USFWS

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
AMM-TBR-12: Worker Awareness	At the start of construction, the supervising construction personnel will participate in a USFWS-approved worker environmental awareness program. Under this program, construction personnel will be informed about the presence of listed species and habitats associated with the species and that unlawful take of the animal or destruction of its habitat is a violation of the FESA. Prior to construction activities, a qualified biologist approved by the USFWS will instruct all construction personnel about (1) the description and status of the species; (2) the importance of their associated habitats; and (3) a list of measures being taken to reduce impacts on these species during project construction and implementation. The awareness program will apply to construction occurring within or adjacent to tidal marsh or slough habitat and within or adjacent to managed pond habitat. A fact sheet conveying this information will be prepared for distribution to the construction crew and anyone else who enters the project site. A USFWS representative will be appointed as the point of contact for any employee or contractor who encounters a listed species. The representative will be identified during the environmental awareness program. The representative name and telephone number will be provided to the USFWS and the CDFW prior to the initiation of any activities.	Pre-construction	USACE / Contractor and biological monitor	District
AMM-TBR-13: Closure of Trails for Bird Species	To avoid or minimize potential adverse effects from public access and recreation features constructed near tidal marsh, trails adjacent to some nesting areas for sensitive bird species will be closed during the breeding season. Public trails within 300 feet of suitable western snowy plover or least tern nesting habitat will be closed during the breeding season. In addition, if trails are to be open during the breeding season of these species, viewing platforms, kiosks, benches, boat ramps, interpretive displays, restrooms, and other focal areas for public use will be located a minimum of 600 feet from suitable nesting habitat. The locations of trail segments to be closed, and the periods of closure will depend on whether sensitive bird species, such as western snowy plovers or least terns, are nesting in certain areas in a given year and whether nesting areas are located in close proximity to the trails. Decisions about whether to close a particular trail segment will be made early in the breeding season (and possibly later in the season as conditions change) following surveys for nesting birds within a given pond adjacent to a trail.	Operation	USFWS	USFWS

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
AMM-TBR-14: Interpretive Signs	Interpretive signs prohibiting access to areas that are closed to the public, and indicating the importance of protection of sensitive biological resources, will be placed in key locations, such as along trails near sensitive habitats, at boat launches, and near the mouths of sloughs that are closed to boating access. Interpretive signs at boat launches will describe areas that are closed to boating access and will describe measures to be implemented to avoid impacts on harbor seals, Ridgway's rails, and other sensitive wildlife.	Operation	Santa Clara County (at Alviso Marina) and USFWS	Santa Clara County and USFWS
AMM-TBR-15: No Dogs in Refuge	Dogs are not allowed on Refuge land in the Alviso Pond Complex. If the City of San José allows dogs in the area around Pond A18, dogs will be restricted to designated trails (must be leashed) and designated hunting areas during the waterfowl season. Dogs not actively used for hunting in the area around Pond A18 must be on a leash at all times.	Operation	USFWS and City of San Jose	USFWS and City of San Jose
AMM-TBR-16: Cleaning of Equipment	To reduce potential impacts from infestation by nonnative <i>Spartina</i> , pepperweed, and other invasive, nonnative plant species, all equipment (including personal gear) will be cleaned of soil, seeds, and plant material prior to arriving on site to prevent introduction of undesirable plant species. Equipment and personal gear will be subject to inspection. All infestations occurring within the wetlands will be controlled and removed to the extent feasible without substantially hindering or harming the establishment of native vegetation in the restored wetlands.	Construction	USACE / Contractor	District
AMM-TBR-17: Hazardous Materials Management/Fuel Spill Containment Plan	A hazardous materials management and fuel spill containment plan will be developed prior to construction and given to all contractors and biological monitors working on the project. The plan will describe what actions will be taken in the event of a spill. The plan will also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site will immediately cease until the contractor has contained and mitigated the spill. The contractor will immediately prevent further contamination, notify appropriate authorities, and mitigate damage as appropriate. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided on the project site. Details of the plan elements can be found in the USFWS BO	Construction	USACE / Contractor	District
AMM-TBR-18: Construction Site Maintenance	Project sites will be maintained trash-free, and food refuse will be contained in secure bins and removed daily.	Construction	USACE / Contractor	District
AMM-TBR-19:	Prior to construction, all high-quality habitat for listed species will be mapped and provided to the USFWS. Vehicles driving on levees	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
Speed Limit	adjacent to such habitat for construction or monitoring activities will then travel a speeds no greater than 10 mph to minimize noise and dust disturbance.		and biological monitor	
AMM-TBR-20: Vehicle Staging and Fueling	Vehicle staging, cleaning, maintenance, refueling, and fuel storage will be located 150 feet or more from any stream, body of water, or wetland.	Construction	USACE / Contractor	District
AMM-TBR-21: Vehicle and Equipment Maintenance	All equipment will be maintained free of petroleum leaks. No equipment will enter live water except for aquatic equipment or amphibious equipment designed specifically for aquatic or amphibious use. All vehicles operated within 150 feet of any body of water will be inspected daily for leaks and, if necessary, repaired before leaving the staging area. Inspections will be documented in a record that is available for review on request.	Construction	USACE / Contractor	District
AMM-TBR-22: Stormwater Management Plan	A stormwater management plan will be developed to ensure that, during rain events, construction activities do not increase the levels of erosion and sedimentation. This plan will include the use of erosion-control materials (e.g., baffles, fiber rolls, or hay bales; temporary containment berms) and erosion-control measures such as straw application or hydroseeding with native grasses on disturbed slopes; and floating sediment booms and/or curtains to minimize any impacts that may occur due to increased mobilization of sediments.	Construction	USACE / Contractor	District
AMM-TBR-23: Use of Clean Fill	All clean fill material proposed for upland and wetland placement will meet the qualifications set forth in the San Francisco Bay Regional Water Quality Control Board's waste discharge requirements (Tentative Order), approved with respect to chemical and biological suitability for uplands and wetlands by the USACE Dredged Material Management Office. If the abovementioned thresholds are not attained and the material is approved for use by the San Francisco Bay Regional Water Quality Control Board, consultation will be reinitiated to analyze the potential effects of the contaminated material to listed species.	Construction	USACE / Contractor	District and RWQCB
AMM-TBR-24: Invasive Plant Species Monitoring	The restored tidal marsh wetlands will be monitored for possible infestation by nonnative cordgrass, perennial pepperweed, and other invasive, nonnative plant species that could result in a substantial reduction in the ecological value of the tidal restoration and ecotone construction. It is expected that some nonnatives that are not particularly invasive will colonize the ecotones, but, if any particularly invasive, nonnative plant species are found, a qualified botanist will recommend specific measures to control the spread of nonnative plant species. All infestations of nonnative cordgrass within the restored tidal marsh wetlands will be controlled and removed in coordination with the San	Monitoring	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	<p>Francisco Estuary Invasive Spartina Project without substantially hindering prepared or harming the establishment of native vegetation in the restored wetlands. If perennial pepperweed control is necessary, spraying with glyphosate or imazapyr formulated for aquatic use may be necessary, as described by Hogle et al. (2007) for the San Pablo Bay National Wildlife Refuge. Otherwise, preferred vegetation management will involve non-mechanized methods of removal including hand-pulling, saline spray, pond flooding (during nonbreeding seasons), and substrate-based controls. Aside from glyphosate and imazapyr for pepperweed control, the use of any herbicides will be subject to USFWS and NMFS approval. More details regarding spraying for perennial pepperweed is provided in the USFWS BO.</p>			
<p>AMM-TBR-25: Nighttime Work Avoidance</p>	<p>Nighttime work near tidal marsh habitat will be avoided to the extent feasible. If nighttime work cannot be avoided, lighting will be directed to the work area and away from habitat for the SMHM and California Ridgway's rail.</p>	<p>Construction</p>	<p>USACE / Contractor</p>	<p>District</p>
<p>M-TBR-2a: Construction Avoidance Measures for Salt Marsh Harvest Mouse</p>	<p>To minimize or avoid the loss of individual SMHM from any excavation, fill, or construction activities in suitable habitat within tidal marsh areas the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• Vegetation removal will be limited to the minimum amount necessary to permit the activity to occur.</li> <li>• Sufficient pickleweed habitat, as determined by a USFWS-approved biologist, will remain adjacent to the activity area to provide refugia for displaced SMHM.</li> <li>• Silt fences will be erected adjacent to construction areas to define and isolate potential SMHM habitat.</li> <li>• Vegetation removal where SMHM may occur, including salt and brackish marsh vegetation, both tidal and non-tidal, consisting primarily of pickleweed or with a strong admixture of pickleweed and other halophytes, will start at the edge farthest from the salt marsh and work its way toward the salt marsh. This method of removal provides cover for SMHM (and the salt marsh wandering shrew) and allows individuals to move toward the salt marsh as vegetation is being removed. On Federal lands (the Refuge), SMHM may be moved into adjacent undisturbed vegetation or else captured and relocated, based on the provisions of the BO and coordination with the USFWS Ecological Services office. In areas not under Federal ownership, the State of California Fish and Game Code would apply and must be complied with. Under this code, SMHM is a Fully Protected species and cannot be captured except under permit for</li> </ul>	<p>Pre-construction and construction</p>	<p>USACE / Contractor and biological monitor</p>	<p>District and USFWS / CDFW</p>

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	<p>scientific purposes. This means that capture and relocation of this species would not be allowed for this project in these areas.</p> <ul style="list-style-type: none"> <li>• In areas where SMHM habitat extends in a highly linear fashion with completely unsuitable habitat (bare ground or water) on both sides, such as portions of levee faces and along the levee located southeast of Pond A18, removal of vegetation would not necessarily provide a good escape route for any SMHM that may be present. Individuals discovered during vegetation clearance would therefore be captured and relocated in consultation with the USFWS. However, capture and relocation would not be available as an avoidance measure on non-Federal lands.</li> <li>• On non-Federal lands impact areas would be assessed to determine which vegetation has the potential to harbor SMHM. Next, this vegetation would be removed manually on a gradual and progressive basis, such that the advancing front of vegetation removal moves toward vegetation that would not be disturbed. This would be done over a period of several days to 1 week prior to construction to allow individual SMHM to relocate to remaining vegetation as they seek shelter. A biologist would monitor vegetation removal and would make specific recommendations with respect to the rate of vegetation removal, whether vegetation needs to be retained temporarily in certain areas to provide temporary shelter and facilitate dispersal of mice into habitat outside the impact area, and whether temporary berms may need to be constructed over borrow ditches to allow mice to disperse across channels.</li> </ul>			
<p>MM-TBR-2b: Construction Avoidance Measures for western snowy plovers</p>	<p>To minimize or avoid the loss of individual western snowy plovers during FRM levee construction:</p> <ul style="list-style-type: none"> <li>• No activities will be performed within at least 600 feet of an active western snowy plover nest during the western snowy plover breeding season, which is March 1 through September 14 (or as determined through surveys).</li> <li>• Vehicles driving on levees and pedestrians walking on boardwalks or levees will remain at least 300 feet away from western snowy plover nests and broods.</li> <li>• Personnel who must stop at a specific site for brief inspections, maintenance, or monitoring activities will remain 600 feet away from western snowy plover nests and broods. <i>Exception:</i> Only inspection, maintenance, research, or monitoring activities may be performed during the western snowy plover breeding season in areas within or adjacent to western snowy plover breeding habitat with approval of</li> </ul>	<p>Pre-construction and construction</p>	<p>USACE / Contractor and biological monitor</p>	<p>District and USFWS / CDFW</p>

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	<p>the USFWS and the CDFW under the supervision of a qualified biologist.</p> <ul style="list-style-type: none"> <li>• If western snowy plover chicks are present and are foraging along any levee that will be accessed by vehicles (e.g., for construction, inspection, or access), vehicle use will be under the supervision of a qualified biologist (to ensure that no chicks are present within the path of the vehicle).</li> <li>• Breaching of ponds that contain suitable snowy plover habitat will not be performed during the breeding season (March 1 through September 14) unless surveys have documented that no active nests or unfledged chicks are present within the ponds to be flooded by breaching.</li> </ul>			
MM-TBR-2c: Additional Measures for western snowy plover	<p>Breeding habitat for snowy plover will be enhanced on an island in Pond A16. Islands were constructed in Pond A16 in 2012 and 2013 as part of Phase I activities of the SBSP Restoration Project, for the purpose of providing nesting, roosting, and foraging habitat for a variety of pond-associated bird species, including snowy plovers. Snowy plovers nested on one of these islands in 2013. However, the dark substrate of the islands, and their relatively homogeneous surfaces, could make snowy plovers on the islands relatively conspicuous to predators. The Phase I Study Project will provide small gravel (or other appropriate substrate) that will be distributed in patches on one of the islands in A16 (with the island to be selected by the Refuge), and the Project will fund the maintenance of this gravel. Pea gravel has been intentionally provided in some areas as a substrate for use by nesting snowy plovers. Gravel may make it more difficult for predators such as California gulls and northern harriers to detect plovers due to camouflage (e.g., plovers may be difficult to distinguish within the gravel from a distance) and increased topographic relief associated with the gravel and footprints left by people distributing the gravel. As a result, predation rates on both eggs and chicks are likely to be lower in areas with such gravel, and more plovers may be attracted to nest in areas with gravel. Providing gravel on an island in Pond A16 is expected to increase plover nesting abundance, and possibly nesting success, thus compensating for the adverse effects of other Project activities on nesting plovers.</p> <p>Predator management is currently performed on Refuge lands, but as partial compensation for adverse effects from FRM levee construction on snowy plovers, the intensity of this management will be increased in Pond A16 and the NCM during the snowy plover breeding season. This</p>	Construction and Operations	Project partners	District and USFWS

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Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	enhanced predator management will include more frequent monitoring for predators nesting (e.g., gulls and corvids), roosting, or foraging in these areas islands; more frequent trapping of mammalian predators in the NCM and along Artesian Slough; and ongoing identification and implementation of deterrence or removal measures for those predators. This measure will consist of funding a predator management technician for an additional 10 hours/week during the period March 1 through September 14 (approximately 28 weeks).			
M-TBR-2d Pre-construction Surveys and Passive Relocation of Burrowing Owls	Prior to construction, areas that support known or suspected burrowing owl burrows will be surveyed using the protocol described in the California Burrowing Owl Consortium's Burrowing Owl Survey and Mitigation Guidelines (1993). If active burrows are identified an area buffer will be established until the young have fledged.	Pre-construction	USACE / Contractor and biological monitor	District
MM-TBR-2e Construction Avoidance Measures for California Ridgway's Rails	<p>To minimize or avoid the loss of individual Ridgway's rails, activities within or adjacent to Ridgway's rail habitat will not occur within 2 hours before or after extreme high tides (6.5 feet or above, as measured at the Golden Gate Bridge), when the marsh plain is inundated, because protective cover for Ridgway's rails is limited and activities could prevent them from reaching available cover.</p> <p>To minimize or avoid the loss of individual Ridgway's rails, activities within or adjacent to tidal marsh areas will be avoided during the Ridgway's rail breeding season from February 1 through August 31 each year unless surveys are conducted to determine Ridgway's rail locations and Ridgway's rail territories can be avoided, or the marsh is determined by a qualified biologist to be unsuitable Ridgway's rail breeding habitat. If breeding Ridgway's rails are determined to be present, activities will not occur within 700 feet of an identified calling center. If the intervening distance across a major slough channel or across a substantial barrier between the Ridgway's rail calling center and any activity area is greater than 200 feet, then construction activity may proceed at that location within the breeding season. <i>Exception:</i> Only inspection, maintenance, research, or monitoring activities may be performed during the Ridgway's rail breeding season in areas within or adjacent to Ridgway's rail breeding habitat with approval of the USFWS and the CDFW under the supervision of a qualified biologist.</p>	Construction	USACE / Contractor and biological monitor	District
MM-TBR-2f Construction Avoidance Measures for	To avoid potential impacts on nesting migratory birds, project construction in areas that provide habitat for migratory birds will be performed outside of the bird nesting season (February 1 to September 15), where feasible. If construction must occur during this period, a	Pre-construction	USACE / Contractor and biological monitor	District and USFWS / CDFW

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Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
Nesting Birds	qualified biologist will conduct preconstruction surveys within suitable habitat areas potentially affected by the Proposed Project. If nesting migratory birds are found during preconstruction surveys, the USACE or its construction contractor will consult with the CDFW and/or the USFWS regarding appropriate actions to comply with the Migratory Bird Treaty Act and the Fish and Game Code. Unless the CDFW and/or the USFWS specify otherwise, established protection zones will remain until young birds have fledged.			
M-TBR-2g Conduct Focused Protocol-level Surveys for Congdon's tarplant	<p>Preconstruction protocol-level focused surveys shall be conducted in suitable habitat for Congdon's tarplant. These surveys shall be conducted according to the CNPS (2001), CDFG (2009), and USFWS (2003) special-status plant survey protocols. If no plants are discovered then no further mitigation is necessary. If Congdon's tarplant is found in the study area, consultation shall be initiated with USFWS or CDFW to finalize a mitigation plan, as appropriate. If required, the mitigation plan shall minimally include:</p> <ul style="list-style-type: none"> <li>• Preparation by a qualified botanist with experience in native plant restoration, mitigation, and management;</li> <li>• Description of avoidance measures, such as construction setbacks, installation of exclusionary fencing prior to and during construction, and pre-construction training of construction personnel on the identification and location of these plants. If sensitive plant species can be avoided, then no further mitigation is required;</li> <li>• If plants cannot be avoided, compensatory mitigation for unavoidable impacts, which will include preservation or creation;</li> <li>• Creation of a new population using propagules collected from the impact site or protection of an existing population at a ratio of 2 acres preserved for each acre removed or as determined in agency consultation; including clearly defined performance criteria focusing on plant establishment and nonnative species control measures and locations and procedures for restoration. Plants shall be salvaged only where feasible as determined by a qualified botanist. Plant salvage will not be conducted in lieu of population creation using local propagules or population preservation.</li> <li>• Specification of a minimum 5-year post-construction maintenance and monitoring plan for any plant salvage or habitat creation to ensure that the plant establishment performance criteria are met. The monitoring program shall include potential remedial action measures. Annual reports and a final report shall be prepared and submitted to USFWS or CDFW, as appropriate, to document the success of the</li> </ul>	Pre-construction	USACE	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	mitigation; <ul style="list-style-type: none"> <li>Secure a source of funding for mitigation and monitoring operations.</li> </ul> Alternatively, plant credits may be purchased at a mitigation bank at a ratio of 2:1 at a local site.			
<b>Hazards and Hazardous Materials</b>				
AMM-HAZ-1: Avoid Hazardous Sites	All sites listed in Table 4.8-1 <i>Hazardous Materials Sites within or adjacent to Potential Disturbance Areas</i> that are designated as “having HTRW concerns that are not likely to or with the potential to affect future construction” should be avoided for inclusion in this Recommended Plan (Proposed Project). Moreover, construction will be avoided in all areas where the presence or potential presence of HTRW has been documented previously. Further coordination with the City of San José, the operator of the Wastewater Facility, will be conducted in order to accurately locate and avoid all areas with HTRW concerns prior to construction.	Design	USACE with City of San Jose	District
AMM-HAZ-2: Compliance with Federal, State, and Local Regulations	Compliance with applicable regulations would reduce the potential for accidental release of hazardous materials during construction. The contractor would also be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention Control and Countermeasure Plan (SPCCP) that details the contractors plan to prevent discharge from the construction site into drainage systems, lakes, or rivers. This plan would include Best Management Practices (BMPs) and a spill cleanup plan that are planned for implementation at each construction site	Construction	USACE / Contractor	District
AMM-HAZ-3: Prepare Health and Safety Plan	A worker health and safety plan would be prepared before the start of construction activities that identifies, at a minimum, all contaminants that could be encountered during construction activities; all appropriate worker, public health, and environmental protection equipment and procedures to be used during project activities; emergency response procedures; the most direct route to the nearest hospitals; and a Site Safety Officer. The plan would describe actions to be taken should hazardous materials be encountered on site, including protocols for handling hazardous materials and preventing their spread, and emergency procedures to be taken in the event of a spill.	Construction	USACE / Contractor	District
AMM-HAZ-4: Records Review Prior to Construction	If significant time has elapsed between approval of this document and construction, a second records review should be completed to reduce the risk of encountering a site during construction.	Pre-construction	USACE	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
M-HAZ-1: Discovery of Undocumented Hazardous Materials	<p>It is unlikely that any HTRW will be encountered in areas that have no previous documentation of the presence or potential presence of HTRW. However, should HTRW be encountered unexpectedly during construction activities such as excavation and dewatering, the contractor must notify the appropriate Federal, state, and local agencies, and the site would be remediated in compliance with applicable Federal, state, and local laws. If an undocumented underground storage tank is encountered, a licensed contractor will be retained to remove the UST and any associated contaminated material.</p> <p>In the event that contamination is encountered, the contractor will notify appropriate agencies and remediate the site consistent with state and local regulations.</p>	Construction	USACE / Contractor	District
M-HAZ-3: Construction Near Hazardous Sites	<p>All sites listed in Table 4.8-2 <i>Hazardous Materials Consideration for Flood Risk Management Alignment</i> that are designated as “having HTRW concerns that are not likely to or with the potential to affect future construction” should be avoided for inclusion in this Proposed Project. Construction will be avoided in all areas where the presence or potential presence of HTRW has been documented previously.</p> <p>If construction activities must occur in close proximity to sites where the presence or potential presence of HTRW has been documented previously, the USACE would reevaluate the site to determine if a Phase II Environmental Site Assessment is necessary. If it is determined that a Phase II Environmental Site Assessment must be completed, the USACE would conduct a Phase II Environmental Site Assessment for the alignment of the FRM levee, staging areas, and other construction areas as appropriate to confirm the presence or absence of HTRW. The results will determine the existence of actionable concentrations of released hazardous materials. This would further reduce the risk of exposure to workers and the public during construction and assist in the remediation planning. If necessary, the assessment would include an analysis of soil or groundwater samples if an analysis had not yet been completed during previous investigations before construction activities begin. Prior to commencement of the Phase II Environmental Site Assessment, the USACE would develop a contingency plan to address the hazardous materials and work safety requirements for the proper handling, storage, treatment, and disposal of any contaminants present at an actionable level consistent with Federal, State, and local laws. Based on the results of the Phase II Environmental Site Assessment,</p>	Design and construction	USACE	District

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Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	<p>additional measures, such as remediation, disposal, containment, and special safety precautions for workers, may be required consistent with Federal and State regulations.</p> <p>If contamination is present, safety measures would be implemented to protect workers, and soil would be further characterized to determine the nature and extent of contamination, guide disposal options, and potentially limit placement and reuse of soil on site consistent with mitigation measure M-HAZ-01.</p>			
<b>Transportation</b>				
AMM-TRN-1: Work Hours	Truck delivery and regular construction work hours would be outside the AM and PM peak traffic hours, so project-related trips would occur predominantly outside the peak traffic hours and would minimize impacts on the area transportation system.	Construction	USACE / Contractor	District
AMM-TRN-2: Coordination with Railroad	The USACE would coordinate the construction and use of temporary railroad crossings with rail owners and transit operators to ensure that project activities are conducted during off-peak hours with minimal effects on railroad operations.	Construction	USACE	District and railroad
AMM-TRN-3: Traffic Control Plan	A traffic-control plan would be prepared for local agency review consistent with local agency requirements.	Construction	USACE / Contractor	District
<b>Air Quality / Greenhouse Gases</b>				
AMM-AIR-1: Dust-Control Measures	<p>The contractor will implement standard dust-control methods recommended by the BAAQMD including:</p> <ul style="list-style-type: none"> <li>All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>All haul trucks transporting soil, sand, or other loose material off site shall be covered.</li> <li>All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure CCR Title</li> </ul>	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	<p>13, Section 2485). Clear signage shall be provided for construction workers at all access points.</p> <ul style="list-style-type: none"> <li>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.</li> <li>A publicly visible sign shall be posted with a telephone number and person to contact at the lead agency 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.</li> </ul>			
AMM-AIR-2: Limit Idling Time	The contractor shall limit the idling time of diesel-powered construction equipment to 2 minutes.	Construction	USACE / Contractor	District
AMM-AIR-3: Prepared SWPPP	The contractor shall prepare a SWPPP. The compliance with SWPPP water quality standards will also minimize the generation of dust.	Construction	USACE / Contractor	District
AMM-AIR-4: Greenhouse Gas BMPs	The contractor will utilize alternatively fueled construction equipment for at least 15-percent of the fleet, use local building materials for at least 10-percent of the total, and recycle or reuse at least 50-percent of construction waste or demolition materials.	Construction	USACE / Contractor	District
AMM-AIR-5: Cleaner Construction Equipment	Ensure that construction vehicles use newer and cleaner construction equipment (e.g., Tier 4), or diesel particulate filters are installed on older construction equipment.	Construction	USACE / Contractor	District
AMM-AIR-6: Use Electrical Power where Possible	Use electricity from the grid, rather than portable diesel-powered generators, where possible.	Construction	USACE / Contractor	District
M-AIR-1a	Prior to the start of construction, the contractor shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project-wide fleet average of 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.	Construction	USACE / Contractor	District
M-AIR-1b	The contractor will require that all construction equipment, diesel	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	trucks, and generators be equipped with BACT for emission reductions of NOx and PM and that all equipment meets the ARB's most recent certification standard for off-road heavy-duty diesel engines.			
<b>Recreation</b>				
AMM-REC-1: Incorporate Existing Trails	Incorporation of existing trail segments into a levee, either by including a crossing of the levee or by providing Americans with Disabilities Act-compliant access to pedestrians along portions of the levee alignment.	Design	USACE	District
AMM-REC-2: Landscape Displays	Interpretive displays will be incorporated into the landscape (i.e., former viewshed blocked by the levee) to explain the restoration project efforts and the impacts and development of the project in phases.	Design	Project partners	District
AMM-REC-3: Bay Trail Connection	An enhancement to connect the Bay Trail spine between Milpitas and Alviso (just north of SR 237) has been incorporated into the design at 100% non-Federal cost to meet a goal of the Bay Trail Board. This segment of trail could be used by commuters and provide regional trail connectivity. Paving this segment for non-motorized multiple uses would encourage bicycle commuters to use the Bay Trail instead of the new unpaved levee maintenance trail.	Design	Project partners and City of San Jose	District and City of San Jose
<b>Aesthetics</b>				
AMM-AES-1: Stabilize Disturbed Areas	Temporarily disturbed areas would be stabilized; bayward sides of the levee would be seeded if native vegetation did not establish on its own	Construction	USACE / Contractor	District
<b>Noise</b>				
AMM-NOI-1: Work Hours	Truck delivery and regular construction work hours will be restricted from 9:00 AM to 3:00 PM Construction also has seasonal restrictions as discussed in Section 4.6 <i>Aquatic Biological Resources</i> and Section 4.7 <i>Terrestrial Biological Resources</i> .	Construction	USACE / Contractor	District
AMM-NOI-2: Wildlife Buffers	Construction must maintain minimum buffers from sensitive wildlife species as discussed in Section 4.7 <i>Terrestrial Biological Resources</i> .	Construction	USACE / Contractor and biological monitor	District
AMM-NOI-3: Noise Best Management Practices	The contractor will implement practices that minimize disturbances to residential neighborhoods surrounding work sites, including: <ul style="list-style-type: none"> <li>• Internal combustion engines will be equipped with adequate mufflers;</li> <li>• Excessive idling of vehicles will be prohibited;</li> <li>• All construction equipment will be equipped with manufacture's standard noise control devices;</li> <li>• The arrival and departure of trucks hauling material will be limited to the hours of construction; and,</li> </ul>	Construction	USACE / Contractor	District

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	<ul style="list-style-type: none"> <li>The use of jake brakes is prohibited in residential areas.</li> </ul>			
M-NOI-1	<p>The contractor will obtain a conditional-use permit from the City of San José to allow exceedances of the noise standard during construction activities. The contractor will comply with all provisions of the conditional-use permit, which are expected to include time-of-day restrictions, equipment setback requirements, notification requirements, equipment maintenance, and equipment muffler requirements. The contractor will monitor construction-related noise levels for a period of at least one hour daily during active construction for activity that is within 100 feet of the Alviso Marina, the EEC, or any residences. If noise levels exceed the levels permitted through the conditional-use permit or City of San José standards, the contractor will reduce the numbers of noise-generating equipment in use at any one time or install temporary noise barriers. After necessary noise control measures are implemented, the contractor will continue to monitor noise levels for a period of at least one hour daily during active construction to ensure that noise levels remain within the allowable standard(s).</p>	Construction	USACE / Contractor	District and City of San Jose
<b>Public Health and Aviation Safety</b>				
AMM-HEA-1: Coordinate with Vector Control District	The City of San José and the Refuge will continue to coordinate with the Vector Control District and the USFWS for ongoing management of vector issues. This AMM would avoid and minimize effects associated with mosquito populations in the Shoreline Phase I Study Area.	Operation	USFWS, City of San Jose	District, USFWS, City of San Jose, and Vector Control District
<b>Cultural Resources</b>				
AMM-CUL-1: Avoid Cultural Resources	The levee alignments and related construction activities will avoid known cultural resources, except the Alviso Salt Pond Historic Landscape, within the study area.	Design	USACE	District
AMM-CUL-2: Discovery of Remains	Work in areas where any burial site is found will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified. No further excavation or disturbance within 30 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs.	Construction	USACE / Contractor	District
M-CUL-1	In 2012, the USFWS consulted with the California State Historic Preservation Office (SHPO) regarding the restoration program for the entire Alviso Unit under the SBSP Restoration Project, and consequently satisfied the requirements of Section 106 of the National Historic	Design	USACE	USACE and SHPO

**Mitigation Monitoring and Reporting Program Summary Table**

Measure #	Measure	Timeframe for Implementation	Responsibility for Implementation	Responsibility for Monitoring/Oversight
	Preservation Act (NHPA), pursuant to 36 C.F.R. § 800, by executing a Memorandum of Agreement (MOA) that included a Historic Property Treatment Plan (HPTP). Information from the USFWS Section 106 compliance has direct impact on the current Shoreline Study effort to comply with Section 106. Through ongoing consultation with SHPO, the Shoreline Study may have to develop a HPTP for Section 106 purposes to resolve any unforeseen adverse effects to the Alviso Salt Pond Historic Landscape and the Alviso Historic District prior to initiation of construction.			
<b>Public Utilities and Service Systems</b>				
AMM-UTL-1: Reuse Materials	Reuse earth materials (existing levees, etc.) to reduce the amount of import material, stockpile and landfill material.	Construction	USACE / Contractor	District
AMM-UTL-2: Flood Warning Signs	Install public warning signs and sirens to improve public awareness and response to inundation emergencies (floods and tsunamis).	Operations	USACE and District with the City of San Jose and Santa Clara County	District
AMM-UTL-3: Relocate Utilities	Relocate utilities in conflict with levee features either before or in conjunction with construction of levee features to minimize impacts.	Construction	USACE	District

# **EXHIBIT D – South San Francisco Bay Shoreline Phase I Study**

## **CALIFORNIA STATE LANDS COMMISSION STATEMENT OF FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS**

(W27193, State Clearinghouse No. 2006012020)

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### **1.0 INTRODUCTION**

The California State Lands Commission (Commission or CSLC), acting as a responsible agency under the California Environmental Quality Act (CEQA), makes these findings and this Statement of Overriding Considerations to comply with CEQA as part of its discretionary approval to authorize issuance of a General Lease-Public Agency Use, to Santa Clara Valley Water District, for use of sovereign land associated with the proposed South San Francisco Bay Shoreline Phase I Study (Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines, § 15381.)<sup>1</sup> The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions. (Pub. Resources Code, §§ 6301, 6306, 6009, subd. (c).) All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust.

The Commission is a responsible agency under CEQA for the Project because the Commission must approve a lease for the Project to go forward and because the Santa Clara Valley Water District (District), as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The District analyzed the environmental impacts associated with the Project in a Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (State Clearinghouse [SCH] No. 2006012020) and, in March 2016, certified the EIS/EIR and adopted a Mitigation Monitoring and Reporting Program (MMRP), Findings, and a Statement of Overriding Considerations.

The Project study area has considerable risk for tidal flooding due to having large areas of low-lying terrain protected by non-engineered dikes. The flood risk substantially increases over the next several decades due to potential sea level change. In addition to flood risk, the past creation of commercial salt harvesting ponds along southern San Francisco Bay has resulted in a loss of most of the tidal salt marsh habitat within the Study Area. These local tidal marsh losses are in addition to San Francisco estuarywide losses of approximately 90 percent of all tidal wetlands. The purpose of the Project is to

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<sup>1</sup> CEQA is codified in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.

decrease flood risk, restore tidal marsh habitat, and maintain recreational opportunities. The Project proposes the construction of an engineered levee, restoration of Ponds A9 through A15 and A18, and the creation of new recreation features.

The District determined that the Project could have significant environmental effects on the following environmental resources:

- Hydrology and Flood Risk Management
- Surface Water and Sediment Quality
- Terrestrial Biological Resources
- Hazards and Hazardous Materials
- Air Quality/Greenhouse Gases
- Noise
- Cultural Resources

Of the seven resources areas noted above, Project components within the Commission's jurisdiction (i.e., expansion of a portion of the levee and installation of a tide gate) could have significant environmental effects on five of the resource areas, as follows:

- Hydrology and Flood Risk Management
- Terrestrial Biological Resources
- Air Quality/Greenhouse Gases
- Noise
- Cultural Resources

In certifying the Final EIS/EIR and approving the Project, the District imposed various mitigation measures for Project-related significant effects on the environment as conditions of Project approval and concluded that Project-related impacts would be substantially lessened with implementation of these mitigation measures such that the impacts would be less than significant. However, even with the integration of all feasible mitigation, the District concluded in the EIS/EIR that some of the identified impacts would remain significant. As a result, the District adopted a Statement of Overriding Considerations to support its approval of the Project despite the significant and unavoidable impacts. The District determined that, after mitigation, the Project may still have significant impacts on air quality and cumulative noise. Because some of these significant impacts may occur on lands under the jurisdiction of the Commission, the Commission also adopts the Statement of Overriding Considerations set forth in this exhibit as part of its approval.

As a responsible agency, the Commission complies with CEQA by considering the EIS/EIR and reaching its own conclusions on whether, how, and with what conditions to approve a project. In doing so, the Commission may require changes in a project to lessen or avoid the effects, either direct or indirect, of that part of the project which the Commission will be called on to carry out or approve. In order to ensure the identified mitigation measures and/or Project revisions are implemented, the Commission adopts the Mitigation Monitoring Program (MMP) as set forth in Exhibit C as part of its Project approval.

## 2.0 FINDINGS

The Commission's role as a responsible agency affects the scope of, but not the obligation to adopt, findings required by CEQA. Findings are required under CEQA by each "public agency" that approves a project for which an EIR has been certified that identifies one or more significant impacts on the environment (Pub. Resources Code, § 21081, subd. (a); State CEQA Guidelines, § 15091, subd. (a).) Because the EIS/EIR certified by the District for the Project identifies potentially significant impacts that fall within the scope of the Commission's approval, the Commission makes the Findings set forth below as a responsible agency under CEQA. (State CEQA Guidelines, § 15096, subd. (h); *Riverwatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1202, 1207.

While the Commission must consider the environmental impacts of the Project as set forth in the EIS/EIR, the Commission's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the Commission's exercise of discretion involves only issuing a General Lease – Public Agency Use for this Project, the Commission is responsible for considering only the environmental impacts related to lands or resources subject to the Commission's jurisdiction. With respect to all other impacts associated with implementation of the Project, the Commission is bound by the legal presumption that the EIS/EIR fully complies with CEQA.

The Commission has reviewed and considered the information contained in the Project EIS/EIR. All significant adverse impacts of the Project identified in the EIS/EIR relating to the Commission's approval of a General Lease – Public Agency Use, which would allow the construction, use and maintenance of coastal levees, tide gate, tidal marsh habitat and recreational features, and use of a temporary construction area.

These Findings, which reflect the independent judgment of the Commission, are intended to comply with CEQA's mandate that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects unless the agency makes written findings for each of those significant effects. Possible findings on each significant effect are:

- (1) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the Commission. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

- (3) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIS/EIR.<sup>2</sup>

A discussion of supporting facts follows each Finding.

- Whenever Finding (1) occurs, the mitigation measures that lessen the significant environmental impact are identified in the facts supporting the Finding.
- Whenever Finding (2) occurs, the agencies with jurisdiction are specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed.
- Wherever Finding (3) is made, the Commission has determined that, even after implementation of all feasible mitigation measures and consideration of feasible alternatives, the identified impact will exceed the significance criteria set forth in the EIS/EIR. Furthermore, to the extent that potentially feasible measures have been alleged or proposed, the Findings explain why certain economic, legal, social, technological or other considerations render such possibilities infeasible. The significant and unavoidable impacts requiring Finding (3) are identified in the Final EIS/EIR, discussed in the Responses to Comments, and explained below. Having done everything it can to avoid and substantially lessen these effects consistent with its legal authority and CEQA, the Commission finds in these instances that overriding economic, legal, social, and other benefits of the approved Project outweigh the resulting significant and unavoidable impacts. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

These Findings are supported by substantial evidence contained in the EIS/EIR and other relevant information provided to the Commission or existing in its files, all of which is contained in the administrative record. The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the Final EIS/EIR.

The Commission is the custodian of the record of proceedings upon which its decision is based. The location of the Commission's record of proceedings is in the Sacramento office of the Commission, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825.

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<sup>2</sup> See Public Resources Code section 21081, subdivision (a) and State CEQA Guidelines section 15091, subdivision (a).

**A. SUMMARY OF FINDINGS**

Based on public scoping, there are no environmental issue where the proposed Project will have No Impact. However, the EIS/EIR subsequently identified the following impacts as Less Than Significant:

- Geology, Soils, and Seismicity
- Land Use and Planning
- Aquatic Biological Resources
- Transportation
- Recreation
- Aesthetics
- Public Health and Aviation Safety
- Public Utilities and Service Systems

For the remaining potentially significant effects, the Findings are organized by significant impacts within the EIS/EIR issue areas as presented below.

**B. POTENTIALLY SIGNIFICANT IMPACTS**

The impacts identified identified in Table 1 were determined in the Final EIS/EIR to be potentially significant absent mitigation. After application of mitigation, however, several impacts were determined to be less than significant (LTSM). For the full text of each mitigation measure (MM), please refer to Exhibit C, Attachment C-1.

However, even with the integration of all feasible mitigation, the District concluded in the EIS/EIR that the other identified potentially significant impacts will remain significant. Table 1 identifies those impacts that the District determined would be, after mitigation, significant and unavoidable (SU).

**Table 1 – Significant Impacts by Issue Area**

Environmental Issue Area	Impact Nos.	
	LTSM	SU
Hydrology	HYD-1	
Terrestrial Biological Resources	TBR-2	
Air Quality/Greenhouse Gases		AIR-01
Noise	NOI-1/NOI-2	
Cumulative Noise		CNOI-01
Cultural Resources	CUL-1	

## C. IMPACTS REDUCED TO LESS THAN SIGNIFICANT LEVELS WITH MITIGATION (LTSM)

The impacts identified below were determined in the Final EIS/EIR to be potentially significant absent mitigation; after application of mitigation, however, the impacts were determined to be less than significant.

### 1. HYDROLOGY AND FLOOD RISK MANAGEMENT

#### CEQA FINDING NO. HYD-1

Impact: **Impact HYD-1. Alter Existing Drainage Patterns in a Manner that would Result in Scour that could Cause Substantial Erosion or Siltation.**  
Construction of Project facilities included in the action alternatives would cause temporary disruptions to drainage paths and facilities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIS/EIR.

#### FACTS SUPPORTING THE FINDING(S)

The construction of a pedestrian bridge crossing flood gate structure in Artesian Slough would require activities in the slough. For these activities, cofferdams may be required. The cofferdams would impede slough flows, resulting in hydraulic impacts.

**MMs M-HYD-1a** and **M-HYD-1b** would reduce the impact to a less than significant level by requiring actions such as placement of geotextile fabric or rock armoring to protect levees if scour is identified.

#### **M-HYD-1a: Levee Maintenance**

#### **M-HYD-1b: Levee Protection**

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

## 2. TERRESTRIAL BIOLOGICAL RESOURCES

### CEQA FINDING NO. TBR-2

Impact: **Impact TBR-2. Candidate, Sensitive, or Special-status Species.** The Project may impact sensitive species or habitat during construction.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIS/EIR.

### FACTS SUPPORTING THE FINDING(S)

There are several terrestrial species that may occur within the Project area and would be impacted by the proposed Project due to the removal of vegetation, the use of construction equipment, and earth movement. The salt marsh harvest mouse and salt marsh wandering shrew are present, particularly in areas where pickleweed is present. The Project area may also contain areas that provide suitable nesting habitat for western snowy plovers. Burrowing owls could use the existing berms for nesting, although burrowing owls have not been noted to nest in any of the Project levees in recent years. California Ridgway's rail has also been recorded in the Project area. Direct disturbance to Ridgway's rail could occur from the presence of construction equipment and indirect impacts may result from the loss of habitat. Nesting birds, which are protected under the Migratory Bird Treaty Act could be directly impacted by construction activity, including direct injury or mortality of individuals (e.g., destruction of active nests). Indirect impacts, such as disturbance of nesting birds outside the footprint, are also expected.

Implementation of **MMs M-TBR-2a, M-TBR-2b, M-TBR-2d, M-TBR-2e, and M-TBR-2f**, which will require preconstruction surveys, limit construction periods and vegetation removal, and protect and enhance habitat has been incorporated into the Project to reduce this impact to a less than significant level.

#### **M-TBR-2a: Construction Avoidance Measures for Salt Marsh Harvest Mouse**

#### **M-TBR-2b: Construction Avoidance Measures for Western Snowy Plovers**

#### **M-TBR-2d Pre-construction Surveys and Passive Relocation of Burrowing Owls**

#### **M-TBR-2e Construction Avoidance Measures for Ridgway's Rails**

#### **M-TBR-2f Construction Avoidance Measures for Nesting Birds**

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

### 3. NOISE

#### CEQA FINDING NO. NOI-1/NOI-2

Impact: **Impact NOI-1. Expose people to or generate noise levels in excess of standards established by the city and county and Impact NOI-2. A substantial temporary or periodic increase in ambient noise levels.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIS/EIR.

#### FACTS SUPPORTING THE FINDING(S)

The nearest noise receiver to work sites is the Alviso Marina County Park located near Hope Street and Mill Street, which is about 50 feet from the southwest corner of the construction area. Projecting the calculated noise level to a distance of 50 feet results in an estimated construction noise level of 84 decibels on the A-weighted scale (dBA) equivalent continuous noise level (Leq) at this receiver. The other identified receiver is the Refuge Environmental Education Center located in the study area at the north end of Grand Boulevard, which is about 200 feet from the construction area. The projected construction noise level is estimated at 72 dBA Leq at this receiver. Both of these receivers are recreational land uses.

Implementation of **MM M-NOI-1**, which requires the contractor to obtain a conditional-use permit from the City of San Jose to allow exceedances of the noise standard during construction activities, and require noise monitoring near sensitive receptors and corrective actions to reduce noise levels as necessary, has been incorporated into the Project to reduce these impacts to a less than significant level.

#### **MM M-NOI-1: Conditional-Use Permit**

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

#### 4. CULTURAL RESOURCES

##### **CEQA FINDING NO. CUL-1**

Impact: **Impact CUL-1. Cause a substantial adverse change in the significance of a historical or archaeological resource.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIS/EIR.

##### FACTS SUPPORTING THE FINDING(S)

The Alviso Salt Pond Historic Landscape would be adversely affected by ecosystem restoration activity associated with the Project. The Project would require removing and/or altering part of the salt pond and levee complex as part of restoring selected areas to tidal marsh. The impacts would take place over time as restoration activity is phased, but, when all ecosystem restoration construction activity is considered collectively, there would be an adverse effect on the historic landscape from implementation.

Implementation of **MM M-CUL-1**, which would reduce the impact to a less than significant level by preparing and implementing a Historic Property Treatment Plan in coordination with the California State Historic Preservation Office to minimize or compensate for the impacts to the Alviso Salt Pond Historic Landscape, has been incorporated into the Project to reduce this impact to a less than significant level.

##### **MM M-CUL-1: Historic Property Treatment Plan**

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

## D. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts were determined in the Final EIS/EIR to be significant and unavoidable. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

### 1. AIR QUALITY/GREENHOUSE GASES

#### CEQA FINDING NO. AIR-1

Impact: **Impact AIR-1. Exceedance of nitrogen oxides and reactive organic gas emission thresholds.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIS/EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIS/EIR.

#### FACTS SUPPORTING THE FINDING(S)

Construction of the Project would result in a temporary increase in exhaust emissions from construction and transportation equipment. Construction emissions were quantified using the California Emissions Estimator Model (CalEEMod). Both nitrogen oxides and reactive organic gas would exceed BAAQMD emission thresholds for maximum pounds per day from the large amount of material to be moved and placed to form the new levees and transition habitat. Even with Project-incorporated minimization measures the construction of the levee and ecotone would result in significant emissions of nitrogen oxides and reactive organic gas.

Implementation of **MMs M-AIR-1a** and **M-AIR-1b** has been incorporated into the Project require the contractor to achieve a Project-wide fleet reduction of at least 20 percent for nitrogen oxides reduction and 45 percent for particulate matter reduction compared to the most recent state Air Resources Board fleet average; and require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of nitrogen oxides and reactive organic gas. Implementing these two mitigation measures would reduce construction-related air quality impacts by about 15 to 20 percent overall compared to uncontrolled emissions modeling results these measures would not be able to reduce peak daily nitrogen oxides and reactive organic gas emissions below the BAAQMD threshold of 54 pounds per day. The measures would reduce the severity of Impact AIR-1, although not necessarily to a less than significant level.

#### MM M-AIR-1a: Emission Reduction Plan

## MM M-AIR-1b: Best Available Control Technology

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

### 2. CUMMULATIVE NOISE

#### CEQA FINDING NO. CNOI-2

Impact: **Impact CNOI-2. Cumulative Noise**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIS/EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIS/EIR.

#### FACTS SUPPORTING THE FINDING(S)

Noise impacts from construction and operation of the Project would be limited to the immediate vicinity of the Project. Other future construction activities that could occur include the South Bay Salt Ponds Restoration Project Phase II activity associated with Ponds A19, A20, A21, and A8 and development consistent with the Wastewater Facility's Master Plan to areas adjacent to the Project area. Ongoing noise sources in the Project vicinity include traffic noise associated with local roads and airport noise from the international airport. Construction activities associated with the South Bay Salt Ponds Restoration Project and Wastewater Facility development would be required to comply with applicable noise standards and mitigate for significant impacts if any. Further, it is unlikely that the Project construction would be concurrent with either the South Bay Salt ponds Restoration Project or the Wastewater Facility construction, and even if construction were concurrent, it is unlikely that the combined noise effect of the projects would exceed noise standards at the same receiver at the same time. However, because of the proximity of residential uses to area roads, the airport, the Union Pacific Railroad track, and the wastewater facility, cumulative noise impacts experienced by people in Alviso could be significant, particularly if Project construction activity is concurrent with other construction activity.

The implementation of **MM M-NOI-1** would further reduce the incremental contribution of the Project to overall noise in the area, but given all potential concurrent noise sources, the cumulative impact would remain significant.

#### MM M-NOI-1: Conditional-Use Permit

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

### 3.0 STATEMENT OF OVERRIDING CONSIDERATIONS

#### A. INTRODUCTION

This section addresses the Commission’s obligations under Public Resources Code section 21081, subdivisions (a)(3) and (b). (See also State CEQA Guidelines, §§ 15091, subd. (a)(3), 15093.) Under these provisions, CEQA requires the Commission to balance, as applicable, the economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of the Lease approval related to the South San Francisco Bay Shoreline Phase I Study (Project) against the backdrop of the Project’s unavoidable significant environmental impacts. For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered acceptable and the decision-making agency may approve the underlying project. (State CEQA Guidelines § 15092, subd. (b)(2)(B).) CEQA, in this respect, does not prohibit the Commission from approving the Lease even if the Project activities as authorized under the Lease may cause significant and unavoidable environmental effects.

This Statement of Overriding Considerations presents a list of (1) the specific significant effects on the environment attributable to the approved Project that cannot feasibly be mitigated to below a level of significance, (2) benefits derived from the approved Project, and (3) specific reasons for approving the Project.

Although the District and Commission have imposed mitigation measures to reduce impacts, impacts remain that are considered significant after application of all feasible mitigation. Significant impacts of the approved Project fall under Air Quality and Cumulative Noise resource areas (see Table 2). These impacts are specifically identified and discussed in more detail in the Commission’s CEQA Findings and in the District’s Final EIS/EIR. While the Commission has required all feasible mitigation measures, these impacts remain significant for purposes of adopting this Statement of Overriding Considerations.

**Table 2 – Significant and Unavoidable Impacts Identified for the Approved Project**

Impact	Impact Description
<b>Air Quality</b>	
<b>AIR-01. Exceedance of nitrogen oxides and reactive organic gas emission thresholds.</b>	Construction of the Project would result in a temporary increase in exhaust emissions from construction and transportation equipment. Construction emissions were quantified using the California Emissions Estimator Model (CalEEMod). Both nitrogen oxides and reactive organic gas would exceed BAAQMD emission thresholds for maximum pounds per day from the large amount of material to be moved and placed to form the new levees and transition habitat. The contractor will be required to limit idle time of diesel powered equipment as part of the Project (AMM-AIR-2), utilize cleaner construction equipment (e.g., Tier 4), or diesel particulate filters if

Impact	Impact Description
	<p>older equipment is used (AMM-AIR-5), and use electricity, rather than portable diesel-powered generators, where possible (AMM-AIR-6). Implementing <b>MMs M-AIR-1a</b> and <b>M-AIR-1b</b> would also reduce construction-related air quality impacts by about 15 to 20 percent overall compared to uncontrolled emissions; however, based on the modeling results these measures would not be able to reduce peak daily nitrogen oxides and reactive organic gas emissions below the BAAQMD threshold of 54 pounds per day. The impact would remain significant after mitigation</p>
<p><b>CNOI-01. Cumulative Noise</b></p>	<p>Noise impacts from construction and operation of the Project would be limited to the immediate vicinity of the Project. Other future construction activities that could occur include the South Bay Salt Ponds Restoration Project Phase II activity associated with Ponds A19, A20, A21, and A8 and development consistent with the Wastewater Facility's Master Plan to areas adjacent to the Project area. Ongoing noise sources in the Project vicinity include traffic noise associated with local roads and airport noise from the international airport. Construction activities associated with the South Bay Salt Ponds Restoration Project and Wastewater Facility development would be required to comply with applicable noise standards and mitigate for significant impacts if any. Further, it is unlikely that the Project construction would be concurrent with either the South Bay Salt Ponds Restoration Project or the Wastewater Facility construction, and even if construction were concurrent, it is unlikely that the combined noise effect of the projects would exceed noise standards at the same receiver at the same time. However, because of the proximity of residential uses to area roads, the airport, the Union Pacific Railroad track, and the wastewater facility, cumulative noise impacts experienced by people in Alviso could be significant, particularly if Project construction activity is concurrent with other construction activity. As described in the Final Integrated Document, as part of the Project, truck delivery and regular construction work hours would be restricted from 9 am to 3 pm (AMM-NOI-1). In addition, the contractor will be required to implement practices to minimize disturbances to the neighboring residents (AMM-NOI-3); these practices include equipping internal combustion engines with mufflers, equipping construction equipment with noise control devices, limiting the arrival and departure of trucks hauling material to the hours of construction, etc. Mitigation measure <b>M-NOI-1</b> (discussed in Section II above) would further reduce the incremental contribution of the Project to overall noise in the area, but given all potential concurrent noise sources, the cumulative impact would remain significant.</p>

## B. ALTERNATIVES

As explained in *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000:

*When it comes time to decide on project approval, the public agency's decisionmaking body evaluates whether the alternatives [analyzed in the EIR] are actually feasible.... At this final stage of project approval, the agency considers whether [s]pecific economic, legal, social, technological, or other considerations...make infeasible the mitigation measures or alternatives identified in the environmental impact report.' Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives [citations omitted].*

The five alternatives analyzed in the EIS/EIR represent a reasonable range of potentially feasible alternatives that could reduce one or more significant impacts of the Project. These alternatives include:

- Alternative 1: No Project / No Action Alternative
- Alternative 2: USACE NED/NER Project
- Alternative 3: District Preferred Project (referred to as the Locally Preferred Project in the Integrated Document)
- Alternative 4: Preferred Project with the Railroad Spur Levee Alignment between Alviso and Artesian Sloughs and the Bench Transition Habitat
- Alternative 5: Preferred Project with the Alviso South Alignment

Under State CEQA Guidelines section 15126.6, subdivision (e)(2), if the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. Alternative 3 is the environmental superior alternative, as it would meet all the Project objectives with only slightly increased impacts, due to the addition of a transitional habitat slope of 30:1 (30:1 ecotone). The 30:1 ecotone would provide transitional habitat with a gradual slope to serve as upland refugia for endangered marsh dependent species with the consideration of sea level rise.

The District independently reviewed and considered the information on alternatives provided in the EIS/EIR and in the record. The EIS/EIR reflects the District's independent judgment as to alternatives. The District found that the Project provides the best balance between the Project goals and objectives and the Project's benefits. The five CEQA alternatives proposed and evaluated in the EIR were rejected as being infeasible for reasons provided in the District's Findings Regarding Alternatives (Attachment D-1). The Commission concurs with the District's Alternatives Analysis.

Based upon the objectives identified in the Final EIS/EIR and the detailed mitigation measures imposed upon the Project, the Commission has determined that the Project should be approved, subject to such mitigation measures (Exhibit C, Mitigation

Monitoring Program), and that any remaining unmitigated environmental impacts attributable to the Project are outweighed by the following specific economic, fiscal, social, environmental, land use, and other overriding considerations.

### **C. BENEFICIAL IMPACTS OF THE PROJECT**

State CEQA Guidelines section 15093, subdivision (a) requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project.

A key Project objective is to improve public safety through flood risk management. The proposed Project would provide tidal flood protection benefits to a population of approximately 6,000 residents and people working in the area and would provide protection from a 1-percent annual chance of exceedance flood through the end of the 50-year period of analysis (2017–2067). In addition, the proposed Project would create approximately 2,900 acres of tidal marsh habitat and ecotone, thereby restoring ecological structure and function, area, and connectivity. In consideration of the existing flood risks along the South San Francisco Bay shoreline associated with lack of adequate engineered levees and the analysis of Project outcomes presented in the Final Integrated Document, the Commission balances these Project benefits and considerations against the unavoidable and irreversible environmental risks identified in the EIS/EIR and concludes that those impacts are outweighed by the Project benefits.

Upon balancing the environmental risk and countervailing Project benefits, the Commission concludes that the benefits from implementation of the Project outweigh those environmental risks, many of which are temporary. The impacts of the Project are localized to the Project vicinity, but the Project provides long-term regional benefits from implementation. The remaining unavoidable and irreversible impacts of the Project are acceptable in light of economic, legal, social, technological, and other considerations set forth herein because the benefits of the Project outweigh any significant and unavoidable or irreversible environmental impact of the Project.

### **B. COMMISSION ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS**

As noted above, under Public Resources Code section 21081, subdivisions (a)(3) and (b) and State CEQA Guidelines section 15093, subdivision (a), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or state-wide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve a project.

For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, the decision-making agency may approve the underlying project. CEQA, in this

respect, does not prohibit the Commission from approving the Project, even if the activities authorized by that approval may cause significant and unavoidable environmental effects. This balancing is particularly difficult given the significant and unavoidable impacts on the resources discussed in the EIS/EIR and these Findings. Nevertheless, the Commission finds, as set forth below, that the benefits anticipated by implementing the Project outweigh and override the expected significant effects.

The Commission has balanced the benefits of the Project against the significant unavoidable impacts that will remain after selection of the Approved Project and with implementation of all feasible mitigation in the EIS/EIR that is adopted as enforceable conditions of the Commission's approval of the Project. Based on all available information, the Commission finds that the benefits of the approved Project outweigh the significant and unavoidable adverse environmental effects, and considers such effects acceptable. The Commission adopts and makes this Statement of Overriding Considerations with respect to the impacts identified in the EIS/EIR and these Findings that cannot be reduced to a less than significant level. Each benefit set forth above or described below constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

## **E. CONCLUSION**

The Commission has considered the Final EIS/EIR and all of the environmental impacts described therein including those that cannot be mitigated to a less than significant level and those that may affect Public Trust uses of State sovereign land. The Commission has considered the fiscal, economic, legal, social, environmental, and public health and safety benefits of the Project and has balanced them against the Project's unavoidable and unmitigated adverse environmental impacts and, based upon substantial evidence in the record, has determined that the benefits of the Project outweigh the adverse environmental effects. Based on the foregoing and pursuant to Public Resources Code section 21081 and State CEQA Guidelines sections 15096 subdivision (h) and 15093, the Commission finds that the remaining significant unavoidable impacts of the Project are acceptable in light of the economic, fiscal, social, environmental, and public health and safety benefits of the Project. Such benefits outweigh such significant and unavoidable impacts of the Project and provide the substantive and legal basis for this Statement of Overriding Considerations.

The Commission finds that to the extent that any impacts identified in the Final EIS/EIR remain unmitigated, mitigation measures have been required to the extent feasible, although the impacts could not be reduced to a less than significant level.

Based on the above discussion, the Commission finds that the benefits of the Project outweigh the significant unavoidable impacts that could remain after mitigation is applied and considers such impacts acceptable.

## **ATTACHMENT D-1**

### **Santa Clara Valley Water District's Findings Regarding Alternatives and Statement of Overriding Considerations**

#### IV. ALTERNATIVES ANALYSIS

CEQA requires that an EIR describe a range of reasonable alternatives to a project, or to the location of a project, which could reduce potential impacts while still attaining the basic objectives of the project, and to evaluate the comparative merits of the alternatives. The CEQA Guidelines also require that the range of alternatives considered include a "No Project" alternative. For comparative purposes, the objectives of the Proposed Project are set forth in Section I. A. of these findings, and impacts are analyzed in Sections II and III above. As set forth below, the District and its project partners considered various alternatives in selecting the Proposed Project.

Fifty-three management measures and alternatives were considered in the planning process, prior to preparing the Draft Integrated Document. Many of these measures were eliminated from further consideration because they did not meet all Project objectives, there were logistical issues with their implementation which made them infeasible, or they were already being implemented to the extent practical. Table 3-4.1 *Management Measures* in the Integrated Document lists these 53 measures and alternatives. The remaining feasible measures and alternatives were consolidated and refined for further analysis.

The USACE, as part of their Feasibility Report, examined the cost effectiveness of the feasible alternatives to determine a National Economic Development (NED) alternative for the flood protection element and National Ecosystem Restoration (NER) alternative for the ecosystem functions element. From this analysis a suite of alternative Project elements was established. For the levee between Alviso Slough and Artesian Slough three potential alignments were considered: Alviso North, Railroad Spur, and Alviso South. Two alternative methods were established to cross Artesian Slough: levee or tide gate. Three alignments were considered for the segment between Artesian Slough and Coyote Creek: WPCP north, WPCP south, and treatment plant ring levee. A suite of levee heights was also considered ranging from 11 feet to 15 feet. From this analysis the USACE identified a 12.5 foot high levee as part of NED alternative. This height maximized net benefits in the analysis. The District selected a 15.2 foot levee height as the preferred alternative since this is the minimum height necessary to provide two feet of freeboard above predicted maximum tide level in 2067 (the end of the period of analysis).

Ecosystem restoration options included opening all or various groups of ponds, basic or enhanced preparation of the ponds prior to breaching, and three potential transition habitat slopes – a 50-foot bench, a 30:1 slope and a 100:1 slope. A cost-benefit analysis prepared for restoration options determined that benefits would be maximized by opening all the ponds in the Project area to the tides. Enhanced pond preparation does not substantially increase benefits, especially in relation to costs, so this alternative was not brought forward. The USACE determined that the 50-foot bench maximized benefits as transition habitat for the NER. However, the District and other project partners preferred the greater restoration potential provided by the 30:1 slope. The 100:1 slope for transition habitat was determined to be too costly (over 10 times the cost of the 30:1 slope), making this alternative economically infeasible, and result in much greater fill of waters, making it undesirable from environmental and policy perspectives.

A set of recreational elements was established to provide the maximum feasible public access to the bay as required by the Bay Development and Conservation Commission while protecting sensitive species in the marshes of the south bay.

From these potential components five alternatives were assembled for analysis under CEQA and NEPA. Alternative 1 is the No Project / No Action alternative. Alternative 2 is the USACE NED/NER Project which includes the Alviso North and WPCP south levee alignments with a 12.5- foot levee and 50-foot wide bench, flood gate across Artesian Slough, basic restoration of all ponds in the Project area and the recreational elements. Alternative 3 is the District preferred Project (referred to as the Locally Preferred Project in the Integrated Document) which includes the Alviso North and WPCP south levee alignments with a 15.2- foot levee with a 30:1 slope ecotone, flood gate across Artesian Slough, basic restoration of all ponds in the Project area and the recreational elements. Alternative 4 is the same as Alternative 3, except with the Railroad Spur levee alignment between Alviso and Artesian Sloughs and the bench transition habitat; and Alternative 5 considers the same with the Alviso South alignment.

The Board rejects Alternative 2 as it would not meet the District's objective of providing the community tidal flood protection up to the 1-percent event and freeboard required for Federal Emergency Management Agency (FEMA) levee accreditation throughout the life of the Project. This alternative also does not meet the District's objective to provide ecosystem restoration that takes into consideration future sea level rise.

The Board rejects Alternative 4 and 5 because they do not meet the District's objective to provide ecosystem restoration that takes into consideration future sea level rise. These alternatives also result in significant impacts to habitat in New Chicago Marsh and significant aesthetic impacts to the town of Alviso, which are avoided by the preferred alternative.

The Board finds the following with regard to the alternatives analyzed in the Integrated Document, as discussed below:

1. That the Final Integrated Document describes a reasonable range of alternatives to the Project as proposed.
2. The Board has evaluated the comparative merits of the alternatives and rejected them in favor of the Project (Alternative 3).
3. There are not feasible alternatives within the District's powers that would substantially lessen or avoid the significant effects identified in Section III.

## **V. ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

Alternative 3 is identified as environmentally superior. Alternative 2 and 3 both avoid land use and biological impacts to New Chicago Marsh from a levee alignment that splits the marsh (Alternative 4) and leaves the marsh at risk from tidal flooding (Alternatives 4 and 5). Also avoided are aesthetic impacts from locating the levee close to the community of Alviso that would block views (Alternatives 4 and 5). The No Action Alternative is deemed to have substantial long-term impacts to flood risk and terrestrial biological resources when compared to the action alternatives, and not considered environmental superior to Alternatives 2 and 3.

Alternative 2 would have incrementally fewer impacts than Alternative 3 based on the slightly smaller footprint of the levee. This would result in slightly fewer impacts to construction related traffic, air quality, and noise, and less area of tidal wetlands and managed ponds in the construction footprint. However, Alternative 2 does not meet the flood protection objective of the District to provide 100 year tidal flood protection over 50 years with assumed sea level rise. As Alternative 3 would meet all the Project objectives with only slightly increased impacts, with the addition of the 30:1 ecotone providing transitional habitat which provides upland refugia for endangered marsh dependent species with the consideration of sea level rise, it is the environmental superior alternative.

## **VI. STATEMENT OF OVERRIDING CONSIDERATIONS**

Except for temporary air and cumulative noise impacts during construction, and the incremental contribution to the loss of pond habitat for pond-specialist birds, the Board finds that the EIR identifies no other significant environmental effects of the proposed Project which cannot be mitigated to levels of less than significant and further finds that all other impacts will either be avoided or reduced to a level that is both less than significant and acceptable. The air quality, cumulative noise, and cumulative impacts to pond habitat, specified above in Section III, are considered significant and unavoidable.

**A. Significant and Unavoidable Impacts Remain After Mitigation**

The Board finds that the construction-related noise and air impacts are temporary and an unavoidable byproduct of the need to use heavy equipment to complete the Project. The cumulative loss of managed ponds used by pond-specialist bird species could only be addressed by replacing pond habitat being converted to tidal marsh. The conversion of other habitat to pond would be inconsistent with the objectives of the Project and restoration of the south bay salt ponds.

All feasible mitigation measures will be incorporated into the Project's Mitigation Monitoring and Reporting Program which the Board will adopt along with Project approval. The Board finds that specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures or Project alternatives to further reduce or avoid these significant impacts.

**B. The Project provides long term benefits to the Project area**

A key Project objective is to improve public safety through flood risk management. The proposed Project would provide tidal flood protection benefits to a population of approximately 6,000 residents and people working in the area and would provide protection from a 1-percent annual chance of exceedance flood through the end of the 50-year period of analysis (2017–2067), accounting for sea level change under the USACE “high” scenario. A structure inventory conducted as part of the economic analysis identified 1,140 structures (1,034 residential, 54 commercial, 42 industrial, and 9 public), transportation corridors, the wastewater treatment plant, and other critical infrastructure in the 0.2-percent floodplain under the USACE High sea level change scenario that defines the study area's boundaries for the tidal flood risk assessment.

In addition to the increased tidal flood risk, the area has lost substantial amounts of coastal wetlands. In the study area, the creation of commercial salt ponds along southern San Francisco Bay eliminated most of the tidal salt marsh habitat. These local tidal marsh losses are part of San Francisco Bay estuary-wide losses of approximately 90 percent of all tidal wetlands. The proposed Project would create approximately 2,900 acres of tidal marsh habitat and ecotone, thereby restoring ecological structure and function, area, and connectivity. The restored habitat would benefit special-status species such as the California-endemic salt marsh harvest mouse and Ridgway's rail, which reside almost exclusively on tidal marsh habitat. The proposed Project includes an ecotone transitional habitat feature, which would be constructed bay-ward to the proposed levee along Ponds A12, A13, and A18. Currently in San Francisco Bay, wetland-upland transition zones have largely disappeared from marshes. These features mimic the natural landform that once existed around the perimeter of San Francisco Bay and provide the functions of a distinct habitat that is now largely absent along southern San Francisco Bay. These habitat areas serve as high-tide refugia for State- and Federally-listed threatened and endangered species, such as Ridgway's rail, black rail, and salt marsh harvest mouse and also provide habitat for a unique suite of plant species. Adding this feature bay-ward of the levees would benefit the recovery of protected wetland species and help restore ecological functions. In addition, a large ecotone would buffer any maintenance actions that are necessary on the adjacent levee. The ecotone also would allow inland migration of the restored marshes in response to sea level change.

The recreational benefits provided by the proposed Project include enhanced outdoor recreational opportunities and improved access to the Refuge and adjacent restored marsh areas for tourists and residents. The proposed recreation features are estimated to increase the annual number of visitors to the Refuge by 20 percent and would create key connections in the San Francisco Bay Trail.

**C. The benefits of the Project outweigh the unavoidable adverse environmental effects**

In making this Statement of Overriding Considerations the Board has considered information contained in the Final Integrated Document for the Project as well as the public testimony and record of proceedings in which the Project was considered. The District has balanced the Project's benefits against the unavoidable adverse impacts identified in the Final Integrated Document.

In consideration of the existing flood risks along the South San Francisco Bay shoreline associated with lack of adequate engineered levees and the analysis of Project outcomes presented in the Final Integrated Document, the Board balances these Project benefits and considerations against the unavoidable and irreversible environmental risks identified in the Integrated Document and concludes that those impacts are outweighed by the Project benefits. Upon balancing the environmental risk and countervailing Project benefits, the Board concludes that the benefits from implementation of the Project outweigh those environmental risks, many of which are temporary. The impacts of the Project are localized to the Project vicinity, but the Project provides long term regional benefits from implementation. The remaining unavoidable and irreversible impacts of the Project are acceptable in light of economic, legal, social, technological, and other considerations set forth herein because the benefits of the Project outweigh any significant and unavoidable or irreversible environmental impact of the Project.