

STAFF REPORT

43

A 20

06/28/19

S 10

W 27235
M. Schroeder

GENERAL LEASE – PUBLIC AGENCY USE

APPLICANT:

Union Sanitary District

PROPOSED LEASE:

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Alameda Creek Flood Control Channel, adjacent to Assessor's Parcel Numbers 482-22-6-5 and 482-80-3, Union City, Alameda County.

AUTHORIZED USE:

Continued use, operation, and maintenance of an existing 48-inch-diameter emergency outfall pipeline; construction, use, and maintenance of a concrete outlet structure, access stairway, riprap chute, and temporary sheet pile coffer dam.

LEASE TERM:

25 years, beginning June 28, 2019.

CONSIDERATION:

The 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, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

Public Trust and State's Best Interests Analysis:

The Union Sanitary District (Applicant or District) provides wastewater collection, treatment, and disposal services to residents and businesses within the cities of Fremont, Newark, and Union City in southern Alameda County. The Applicant's wastewater collection system consists of three major pump stations and about 800 miles of pipelines ranging in size from 6- to 48-inches in diameter. The existing emergency outfall facilities were constructed in the early 1960s as part of the original Alvarado Water

STAFF REPORT NO. 43 (CONT'D)

Pollution Control Plant and served as the plant's outfall. With subsequent plant upgrades, the effluent is now discharged through the East Bay Dischargers Authority system and the existing facilities are used only when effluent flows exceed the capacity of that system, such as during significant wet weather events.

The Applicant holds a National Pollution Discharge Elimination System permit to discharge final effluent to Alameda Creek Flood Control Channel. With the existing system, final effluent is conveyed from the Alvarado Effluent Pump Station at the Alvarado Wastewater Treatment Plant (WWTP) to the south channel of the Alameda Creek Flood Control Channel through the 48-inch-diameter emergency outfall pipeline. A system of valves and piping located at the WWTP control the flow to the creek. Under current conditions, the emergency outfall flap gate is submerged below water during high tides and is partially exposed during low tides. This presents a maintenance issue as the water brings in sediments that bury the flap gate and promotes vegetation growth, which impedes the operation of the flap gate. The Applicant currently performs maintenance to clear the sediment and vegetation growth once every 3 months.

The proposed project will raise the emergency outfall pipe and flap gate above high tide to avoid future maintenance issues. The Applicant proposes to construct a concrete outlet structure, access stairway, riprap chute to stabilize the creek banks around the concrete outlet structure, and temporary sheet pile coffer dam. The location of the new outlet structure is in the same location as the existing 48-inch-diameter emergency outfall pipeline. A portion of the existing outfall pipeline (retired pipeline segment) will be removed for construction of the new outlet structure. As a result of removing some of the existing outfall pipeline, a segment of pipeline will be removed from service and left in place. Subsequently, the next segment of pipeline will be rehabilitated. The rehabilitated segment of pipeline will be connected to a newly constructed 48-inch-diameter segment of pipeline. The new segment of 48-inch-diameter pipeline and the rehabilitation of a portion of the existing 48-inch-diameter emergency outfall pipeline are not within the Commission's jurisdiction. Construction of a redundant 48-inch-diameter emergency outfall pipeline (parallel to the existing pipeline) is also part of the project but is not within the Commission's jurisdiction. The redundant pipeline will connect to the new outfall structure and will extend approximately 100 linear feet to the WWTP site, where it will be capped for future use.

The emergency outfall pipeline, concrete outlet structure, access stairway, riprap chute, and temporary sheet pile coffer dam are not generally

STAFF REPORT NO. 43 (CONT'D)

associated with traditional Public Trust uses. However, the facilities do not significantly interfere with Public Trust activities. The existing public use of the Alameda Creek Flood Control Channel serves mainly as a drainage channel. An ecological preserve and open space border the Alameda Creek Flood Control Channel providing public access for wildlife viewing and hunting.

The retired pipeline segment of the existing 48-inch pipeline is buried underground and will not have an impact on Public Trust activities for the foreseeable term of the lease. Consistent with the provisions of the lease, the lessee is required to remove the retired pipeline segment along with other lease facilities prior to termination of the lease. The portion of the pipeline that is exposed will be removed with construction of the new outfall structure adjacent to the retired pipeline segment of pipeline.

The 48-inch pipeline has existed for many years at this location. The proposed facilities will not significantly alter the land, the lease does not alienate the State's fee simple interest, and neither permanently impairs public rights. The lease is limited to a 25-year term and does not grant the lessee exclusive rights to the lease premises. Upon termination of the lease, the lessee may be required to remove all improvements from State land.

Climate Change:

Climate change impacts, including sea-level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The site is located within Union City in Alameda County, at 5072 Benson Road, along the eastern border of the Old Alameda Creek channel, which is a tidally influenced site vulnerable to flooding at current sea levels. Therefore, this area would be at a higher risk of flood exposure given future projection scenarios of sea-level rise.

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.

STAFF REPORT NO. 43 (CONT'D)

Table 1. Projected Sea-Level Rise for San Francisco¹

Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	6.9

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

Note: ¹ Projections are with respect to a 1991 to 2009 baseline.

The goal of the Project is to raise the emergency outfall pipe and flap gate above high tide to avoid future maintenance issues. To achieve this, the District proposes to replace a portion of the existing pipe which is located under the access road and within a portion of the banks of Old Alameda Creek at a higher discharge elevation.

The District completed a Preliminary Study of the Effect of Sea-Level Rise on District Infrastructure (Study) in 2013 to plan for sea-level rise for District facilities and projects. In addition, the District compared the 2013 data to the 2018 State Guidance noted above and found that the projections used in the Study correspond to the updated projections in the revised State Guidance with a 5 percent probability of occurrence.

A projected sea-level rise for the year 2070 was used to design the outfall improvements, resulting in a projected mean higher high tide (MHHT) elevation of 10.15 feet. Assuming the sediment in the channel would remain at 2 feet below the MHHT, the projected sediment elevation for the year 2070 would be approximately 8.15 feet. The top of the slab of the new emergency outlet structure would match this elevation, and the bottom of the outlet pipe would be several inches above the slab.

Due to the uncertainty of sea-level rise projections given the design life of the improvements, the improved emergency outfall would allow adaptation to future conditions as suggested in the State Guidance. The walls of the outlet structure would be constructed above the surrounding grade of the flood control levee to accommodate an increase in levee height in the future to adapt to sea-level rise. Should the levee need to be raised higher than the top of the outlet structure walls, the wall height could be extended by pouring additional concrete on top of them. Another example of a potential adaptation could be the addition of a fabricated steel riser to the outfall pipeline should the sea level and sediment rise faster than projected. The benefit of this approach is that the elevation of the riser section can be adjusted as needed based on observed sediment levels.

STAFF REPORT NO. 43 (CONT'D)

This may be important as projections beyond the year 2050 become more uncertain.

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 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.

The increase 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 is up for renewal in 2044 and would be based on projected sea-level rise scenarios at that time.

Conclusion:

For the reasons stated above, staff believes the issuance of the proposed lease will not result in significant changes in the use of, or impacts to, Public Trust resources; does not substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission denies the application, the Applicant may be required to remove the outfall pipeline and appurtenant facilities and restore the premises to their original condition. Upon expiration or prior

STAFF REPORT NO. 43 (CONT'D)

termination of the lease, the lessee also has no right to a new lease or to renewal of any previous lease.

2. 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, and Strategy 1.4, to incorporate strategies to address climate change, adapt to sea-level rise, incentivize water conservation, and reduce greenhouse gas emissions and the generation of litter and marine debris into all the Commission's planning processes, project analyses and decisions.
3. A Mitigated Negative Declaration, State Clearinghouse No. 2018062006 was prepared by Union Sanitary District and adopted on December 10, 2018, for this project. Commission staff has reviewed this document.

A Mitigation Monitoring Program was adopted by Union Sanitary District.

4. This activity involves lands which have NOT been identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq.; however, the Commission has declared that all lands are "significant" by nature of their public ownership (as opposed to "environmentally significant"). Since such declaration of significance is not based upon the requirements and criteria of Public Resources Code section 6370 et seq., use classifications for such lands have not been designated. Therefore, the finding of the project's consistency with the use classification as required by California Code of Regulations, title 2, section 2954 is not applicable.

APPROVALS OBTAINED:

California Department of Fish and Wildlife.

FURTHER APPROVALS REQUIRED:

U.S. Army Corps of Engineers
San Francisco Bay Regional Water Quality Control Board
San Francisco Bay Conservation and Development Commission

EXHIBITS:

- A. Land Description
- B. Site and Location Map
- C. Mitigation Monitoring Program

STAFF REPORT NO. 43 (CONT'D)

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that a Mitigated Negative Declaration, State Clearinghouse No. 2018062006 and a Mitigation Monitoring Program were prepared by Union Sanitary District and adopted on December 10, 2018, for this Project and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State California Environmental Quality Act (CEQA) Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

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

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease for the existing emergency outfall pipeline, construction of a concrete outlet structure, access stairway, riprap chute, and temporary sheet pile coffer dam will not substantially impair the public rights to navigation and fishing or substantially interfere with the Public Trust needs and values at this location, at this time; and is in the best interests of the State.

AUTHORIZATION:

Authorize the issuance of a General Lease – Public Agency Use to the Applicant beginning June 28, 2019, for a term of 25 years, for the continued use, operation, and maintenance of an existing 48-inch-diameter emergency outfall pipeline; construction, use and maintenance of a concrete outlet structure, access stairway, riprap chute and temporary sheet pile coffer dam, 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

W 27235

LAND DESCRIPTION

A parcel of land being a portion of Parcel One as described in that certain deed recorded January 14, 1963, from LESLIE SALT CO., a Delaware corporation to STATE OF CALIFORNIA, in Reel 770, Image 630, Alameda County Records, situate in the County of Alameda, State of California, and being more particularly described as follows:

COMMENCING at the northeast corner of said Parcel One; thence along the easterly and southeasterly boundary of said Parcel One, South $21^{\circ}24'19''$ West 1453.67 feet; thence to the left along the arc of a 1585.00 foot radius curve, having a central angle of $21^{\circ}24'19''$, and an arc length of 592.14 feet; thence South 1693.73 feet; thence to the right along the arc of a 785.00 foot radius curve, having a central angle of $40^{\circ}05'34''$, and an arc length of 549.30 feet to the POINT OF BEGINNING; thence leaving said boundary, North $49^{\circ}13'39''$ West 62.00 feet; thence South $40^{\circ}46'21''$ West 50.00 feet; thence South $49^{\circ}13'39''$ East 61.00 feet to a point on the southeasterly boundary of said Parcel One; thence along said boundary, to the left along the arc of a non-tangent 785.00 foot radius curve, having a radial bearing of South $46^{\circ}15'23''$ East, a central angle of $3^{\circ}39'03''$, and an arc length of 50.02 feet, to the point of beginning.

END OF DESCRIPTION

Prepared 04/23/2019 by the California State Lands Commission Boundary Unit.



NO SCALE

SITE

ALAMEDA CREEK FLOOD CONTROL CHANNEL

PROPOSED TEMPORARY SHEETPILE COFFER DAM

LEASE AREA

EXISTING 48" OUTFALL PIPELINE TO BE ABANDONED

PROPOSED RIPRAP CHUTE

PROPOSED CONCRETE SLAB

APN 482-80-3

PROPOSED ACCESS STAIRWAY

PROPOSED CONCRETE OUTLET STRUCTURE

PROPOSED REDUNDANT 48" OUTFALL PIPELINE

EXISTING 48" OUTFALL PIPELINE

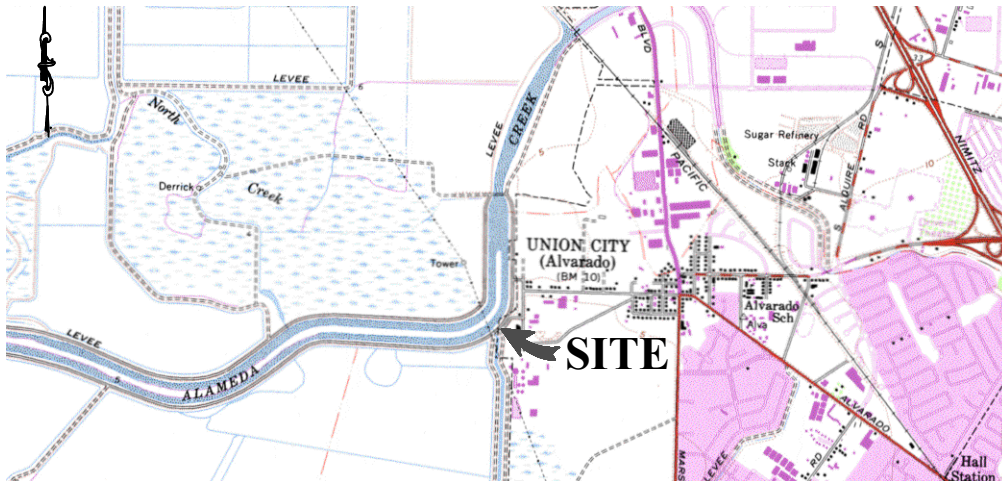
APN 482-22-6-5



ALAMEDA CREEK FLOOD CONTROL CHANNEL, NEAR UNION CITY

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

Exhibit B

W 27235
UNION SANITARY DISTRICT
APNs 482-22-6-5 & 482-80-3
GENERAL LEASE -
PUBLIC AGENCY USE
ALAMEDA COUNTY



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
EMERGENCY OUTFALL IMPROVEMENTS PROJECT
(W27235, State Clearinghouse No. 2018062006)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the Emergency Outfall Improvements Project (Project). The CEQA lead agency for the Project is Union Sanitary 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:¹

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 adopted an MND, State Clearinghouse No. 2018062006, adopted a MMP 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, as set forth in the MMP prepared by the CEQA lead agency and listed in Table C-1, is incorporated by reference in this Exhibit C.

¹ 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) ²
BIO-1	BIO-1a, BIO-1b, BIO-1d, BIO-1f, BIO-1g
BIO-2	BIO-2a
BIO-3	BIO-3a
BIO-4	BIO-4a, BIO-4b
BIO-5	BIO-5a, BIO-5b
ARCH-1	ARCH-1, ARCH-2

² See Attachment C-1 for the full text of each MM taken from the MMP prepared by the CEQA lead agency.

ATTACHMENT C-1

**Mitigation Monitoring Program Adopted by the
Union Sanitary District**

MITIGATION MONITORING AND REPORTING PLAN

The following mitigation measures shall be implemented to reduce the impact to less than significant levels:

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>D. Biological Resources</p> <p>D1. Impact to Special-Status Species</p> <p>BIO-1: The SMHM and SMWS could be impacted through vegetation removal, entrapment in excavations or staged equipment, and vehicle or equipment strikes.</p>	<p>BIO-1a: Prior to the initiation of construction, the biological monitor shall provide an endangered species training program to all personnel involved in Project construction. At a minimum, the employee education program shall consist of a brief presentation by persons knowledgeable about the biology and legislative protection of protected species with potential to occur in or adjacent to the Project area, to explain concerns to contractors, their employees, and agency personnel involved with implementation of the Project. The program shall include the following: a description of such species and their habitat needs, any reports of occurrences in the action area, an explanation of the status of these species and their protection under state and federal legislation, and a list of measures being taken to reduce impacts to protected species during the work. Fact sheets containing this information shall be provided to the Project foreman.</p>	<p>Contractor* USD</p> <p>* hire qualified biologist</p>	<p>Sensitive species training program</p>	<p>Prior to start of construction</p>
	<p>BIO-1b: Prior to ground disturbance, all ruderal non-native grassland and coastal brackish marsh shall be carefully removed from the impact footprint under the supervision of a qualified biologist. The biologist will first conduct a thorough nest search within vegetation to be removed. If active small mammal nests with potential to be SMHM or SMWS nests are observed, a 50-foot buffer will be established around the nest until the biologist has determined that the young are independent of the nest. Vegetation will then be removed using only hand tools or hand-operated power tools to carefully remove vegetation down to bare ground.</p>	<p>Contractor* USD</p> <p>* hire qualified biologist</p>	<p>Survey to clear small mammals and hand removal of marsh vegetation</p>	<p>Prior to ground disturbance</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	BIO-1c: The access road within the Project area is used by USD and the AFC&WCD, and thus the installation of effective wildlife exclusion fencing in the Project area has low feasibility. To prevent wildlife entrapment, equipment and materials shall be staged in developed areas within the USD WWTP; they shall not be staged adjacent to Old Alameda Creek where they could provide cover for small mammals that normally reside in the adjacent vegetation. Alternatively, exclusion fencing may be installed along the top of bank of Old Alameda Creek for 200 feet in either direction from the center of the Project area, and the fencing shall be inspected weekly by the qualified biologist. Exclusion fencing may double as erosion control as described in Mitigation Measure BIO-5b.	USD Contractor	Determine staging area location and install exclusion fencing if the alternate location is chosen	Prior to arrival of equipment and materials.
	BIO-1d: A qualified biologist will be present for initial ground disturbance within the banks of Old Alameda Creek. Following initial ground disturbance, the biologist will monitor on an as-needed basis for any new ground breaking within the banks of the creek.	Contractor* USD * hire qualified biologist	Biologist to monitor initial ground disturbance	Conclusion of all initial ground disturbance
	BIO-1e: If excavations or trenches are not backfilled on the same day as excavation, they shall either be covered so as to prevent small mammals from falling in, or they shall be provided with exit ramps suitable for small mammals to escape on their own.	Contractor USD	Fill or cover excavations or provide means of animal escape	Daily during construction
	BIO-1f: Work hours shall be limited to half an hour after sunrise to half an hour prior to sunset. Night work shall be avoided to the maximum extent feasible.	Contractor USD	Observe work hour restrictions	Daily during construction
	BIO-1g: If any mouse or shrew is observed at any time during construction, work shall not be initiated or shall be stopped immediately until the animal leaves the vicinity of the work area on its own volition. The Project biologist shall direct the contractor on how to proceed accordingly. Neither the biologist nor any other persons at the site shall pursue, capture, handle or harass any potential protected species observed.	Contractor USD	Crew to watch for small mammals, stop work if observed, notify biologist.	Daily during construction

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>BIO-2: Noise and other disturbances resulting from the construction-related activities could disrupt CRR and CBR nesting and breeding activity in the adjacent marsh.</p>	<p>BIO-2a: Construction work shall be limited to the period between September 1 and January 31 to avoid the rail nesting season. If construction work is proposed after January 31 or prior to September 1, protocol-level surveys for rails shall be conducted to determine the extent and location of nesting rails.</p> <p>The methodology of this survey effort was developed utilizing the survey protocol for CRR published by the U.S. Fish and Wildlife Service (USFWS 2015). Three listening stations shall be utilized to cover the area of potential rail habitat within 700 feet of the proposed work. Four surveys shall be conducted, with the first beginning before February 1. All surveys shall be conducted no less than 14 days apart from each other.</p> <p>If rail activity centers are identified, a suitable buffer (700 feet for CRR; CBR buffers vary) shall be established and maintained around the activity center until September 1. If no rail nesting activity is observed during protocol-level surveys during a given year, construction may proceed adjacent to potential nesting habitat during the breeding season of the same year. Surveys are typically finalized by the beginning of April and results accepted by the USFWS by the end of April, in a given year. The USFWS typically requires receipt and confirmation of survey results prior to authorizing work during the rail breeding season. Additionally, Mitigation Measure BIO-1a shall be implemented to avoid impacts to these species..</p>	<p>USD* Contractor</p> <p>* hire qualified biologist</p>	<p>Determine construction schedule. Conduct rail survey if construction is to begin between January 31 and August 31.</p>	<p>Upon confirmation of survey results by USFWS (usually by late April) if surveys need to be conducted.</p>
<p>BIO-3: Project activities including vegetation clearing and earth work have potential to directly impact nests of common and special-status avian species.</p>	<p>BIO-3a: No surveys or other avoidance measures for nesting bird species are necessary for Project activities conducted during the non-breeding season (i.e., between September 1 and January 31). For any vegetation removal and/or ground-disturbing activities that are proposed to occur during the avian breeding season (February 1 through August 31), nesting surveys shall be conducted. Specifically, pre-construction surveys shall be conducted</p>	<p>Contractor* USD</p>	<p>Determine construction schedule. Conduct bird nesting survey if construction begins between</p>	<p>Upon conclusion of nesting bird surveys or nests are no longer active.</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	<p>within 14 days of ground disturbance to avoid disturbance to active nests, eggs, and/or young of native birds. It is also recommended that any trees, shrubs, or grasses in or adjacent to the Project area that are proposed for removal and that could be used as avian nesting sites be removed during the non-breeding season (September 1 through February 1). Surveys can be used to detect the nests of special-status as well as non-special-status birds. An exclusion zone shall be established around any active nests of any native avian species found in the Project area until a qualified biologist has determined that all the young have fledged. Buffer zone distances differ depending on species, location, and placement of nest.</p>	<p>* hire qualified biologist</p>	<p>February 1 and August 31.</p>	
<p>BIO-4: In-water work has extremely limited potential to impact green sturgeon and Central California Coast steelhead fish species through increased turbidity and situation that could potentially stress respiratory function in fish. It may also temporarily impact an extremely limited area of potential rearing habitat during construction. Permanent impacts to the creek banks and mapped critical habitat from installation of rip rap and the new outfall structure are anticipated to be negligible, particularly as listed fish are unlikely to occur in the Project footprint.</p>	<p>BIO-4a: Impacts to these species can be avoided by scheduling Project activities during the work windows established by National Marine Fisheries Service (NMFS) for Bay dredging work. In-water work activities shall occur between June 1 and November 30 to avoid impacts to listed fish species, as per NMFS Programmatic Biological Opinion guidance for dredging in the San Francisco Bay. Temporary and permanent impacts to the creek bed and channel shall be minimized.</p>	<p>Contractor USD</p>	<p>Work only during work window (June 1 to November 30) and minimize creek and channel impacts.</p>	<p>When construction is completed or November 30</p>
	<p>BIO-4b: For in-water work outside this work window (i.e., for in-water work that occurs between December 1 and May 31, a coffer dam as noted above shall be installed at low tide with the oversight from a qualified biologist to prevent or minimize increases in turbidity during in-water work. If any standing water remains inside the Project area within the coffer dam, the biologist will dip net the area to ensure that no fish have been trapped within the coffer dam prior to dewatering. If listed fish species are observed within the coffer dam area, NMFS shall be contacted immediately and the coffer dam carefully opened to allow the fish to escape.</p>	<p>Contractor USD</p> <p>* hire qualified biologist</p>	<p>Determine work window; install coffer dam if construction is between December 1 and May 31</p>	<p>When construction is completed</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>D2 and D3. Impact to Sensitive Natural Communities and Wetlands</p> <p>BIO-5: Construction activities within coastal brackish marsh and open water are anticipated to result in temporary disturbance during construction. Additionally, the installation of a new outfall structure and rip rap to stabilize the bank will result in permanent fill in wetland and non-wetland water features potentially under the jurisdiction of the Corps, BCDC, RWQCB and CDFW. Ground disturbance adjacent to Old Alameda Creek may also result in unintentional fill or discharge into wetlands or non-wetland waters. Project activities within these sensitive areas would likely require permits from the Corps, BCDC, RWQCB, and CDFW.</p>	<p>BIO-5a: Impacts to wetlands and waters of the U.S. and State typically require a Corps Section 404 Individual or Nationwide Permit and a RWQCB Section 401 Water Quality Certification. Additionally, impacts below the top of bank of Old Alameda Creek may require a 1602 Lake and Streambed Alteration Agreement from CDFW. The BCDC may also require a new permit or update to an existing permit for impacts to Bay and Shoreline Band jurisdiction.</p> <p>Temporary impacts to waters of the State will be mitigated through revegetation of affected areas. Revegetation of the marsh zone will consist of native plantings from plants salvaged on-site and/or purchased from a local nursery. Marsh plantings will be monitored for five years or until success criteria are met. Upland areas, which are characterized by ruderal, non-native annual species, will be allowed to revegetate naturally. Mitigation of permanent impacts to waters of the State will be made through payment of a required fee to an approved mitigation bank of the San Francisco Regulatory Division of the U.S. Army Corps of Engineers.</p> <p>BIO-5b: Best management practices shall be used to lessen potential impacts to sensitive habitats. This includes the use of silt fencing, wattles, and other appropriate stormwater pollution prevention measures. For in-water work, a coffer dam or similar shall be installed at low tide with oversight from a qualified biologist to prevent or minimize increases in turbidity during work in open water. Implementation of the proposed Project will also result in much less frequent maintenance than is currently required, and reducing maintenance-related disturbance will benefit the habitat and associated species in this part of the Creek.</p>	USD	<p>Obtain necessary regulatory agency permits and certifications</p> <p>Pay required mitigation fee</p>	Prior to start of construction, after construction
		Contractor* USD	<p>Install appropriate erosion control BMPs, coffer dams, or other measures to protect water quality</p>	Daily during construction
<p>D5. Impact to Local Policies and Ordinances</p>	<p>BIO-6a: To modify or remove any tree on public lands, the Contractor shall apply to the City of Union City Director of Public Works for a permit. The Director may require an inspection and will issue or refuse</p>	Contractor USD	<p>Obtain permit for tree removal or</p>	Prior to tree removal or modification

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>BlO-6. If necessary for the Contractor, landscape trees within the Project area may be trimmed or removed to accommodate heavy machinery or excavation for pipeline placement.</p>	<p>to issue the permit with appropriate conditions.</p>		<p>modification</p>	
<p>E. Cultural Resources</p> <p>E4. Impact to Disturbed or Redeposited Human Remains</p>	<p>ARCH 1: An archaeologist shall be retained to prepare an archaeological "Alert Sheet" which will be distributed to the construction crew. A brief, on-site education session with the construction crew shall be conducted. The final disposition of archaeological, historical, and paleontological resources recovered on state lands under jurisdiction of the California State Lands Commission must be approved by the Commission.</p> <p>ARCH 2: If human remains are encountered, the following procedures will be implemented:</p> <p>a. Per the stipulations of the California Health and Safety Code Section 7050.5(b), the Alameda County Coroner's Office will be contacted immediately; this will occur whether or not a Most Likely Descendant has already been appointed.</p> <p>b. The Coroner's Office has two working days in which to examine the identified remains. If the Coroner determines that the remains are Native American, then—if a Most Likely Descendant has not yet been appointed—the Office will notify the Native American Heritage Commission (NAHC) within 24 hours.</p> <p>c. Following receipt of the Coroner's Office notice, the NAHC will contact a Most Likely Descendant. The Most Likely Descendant</p>	<p>Contractor* USD * hire qualified archaeologist</p> <p>Contractor USD</p>	<p>Prepare "Alert Sheet," have session</p> <p>Follow requirements of Health and Safety Code</p>	<p>Prior to start of construction</p> <p>During construction</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	<p>then has 48 hours in which they can make recommendations to the project sponsor and consulting archaeologist regarding the treatment and/or re-interment of the human remains and any associated grave goods.</p> <p>d. Appropriate treatment and disposition of Native American human remains and associated grave goods will be collaboratively determined in consultation between the appointed Most Likely Descendant, the consulting archaeologist, and the landowner or authorized representative. The treatment of human remains may potentially include the preservation, excavation, analysis and/or reburial of those remains and any associated artifacts.</p> <p>e. If the remains are determined not to be Native American, the Coroner, archaeological research team, and USD will collaboratively develop a procedure for the appropriate study, documentation, and ultimate disposition of the historic human remains.</p>			