

COUNCIL AGENDA: 10/26/21 FILE: 21-2258 ITEM: 6.1

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow Matt Cano

SUBJECT: SEE BELOW

DATE: October 4, 2021

Approved		Date
	Onder S. Maure	10/4/2021

SUBJECT: REPORT ON BIDS AND AWARD OF CONSTRUCTION CONTRACT FOR 7745 – OUTFALL CHANNEL AND INSTRUMENTATION IMPROVEMENTS PROJECT AT THE SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

- (a) Report on the bids and award a construction contract for the 7745 Outfall Channel and Instrumentation Improvements Project to the low bidder, Anvil Builders Inc., for base bid and Add Alternate No. 1, in the amount of \$4,297,570 and approve a 15 percent construction contingency in the amount of \$644,636.
- (b) Adopt a resolution adopting the Mitigated Negative Declaration (MND) and the corresponding Mitigation Monitoring and Reporting Program (MMRP) prepared for the San José-Santa Clara Regional Wastewater Facility Outfall Bridge and Instrumentation Improvements Project (File No. PP19-073) as having been completed in compliance with the California Environmental Quality Act reflecting the City of San José's independent judgment and analysis.

OUTCOME

Award of the construction contract to Anvil Builders Inc., will allow for construction of the Outfall Channel and Instrumentation Improvements Project (Project) at the San José-Santa Clara Regional Wastewater Facility (RWF). The improvements to crucial instrumentation and equipment will enable continued regulatory compliance and improve operational reliability at the final point of compliance for the RWF's final effluent.

BACKGROUND

The RWF treats an average flowrate of 110 million gallons per day of wastewater and is the largest tertiary filtration facility in the western United States. RWF's final effluent is the end product of the wastewater treatment process and travels through the outfall channel before it reaches Artesian Slough and South San Francisco Bay. The outfall channel weir structure is the final point of compliance for the RWF's regulatory permit requirements such as the National Pollution Discharge Elimination System permit. The final effluent leaving RWF is monitored by flow meters and other water quality instrumentation located at the outfall channel weir structure, and inside the adjacent sulfur dioxide ("SO₂") building. A condition assessment evaluation completed in 2018 concluded instrumentation and related infrastructure required replacement, citing age, expected life span, maintainability, settlement, and erosion as threats to the structural integrity of the weir structure and various components. The assessment also recommended site repairs at and adjacent to the SO₂ building and replacement of the existing power transformer.

The Project will replace structural flashboards on the outfall weir; restore rock rip-rap erosion protection to the weir's pile foundation; replace instrumentation required for water quality monitoring; restore and improve overall site grading around the SO₂ building (maneuverability and access); restore protection to the SO₂ building foundation structure; replace the electric transformer; replace the flow meters at the daylight station and construct a vault for installing new flow meter technology; and install underground conduits for a fiber optic cable system to facilitate reliable and secure communication between the SO₂ building, the daylight station, and the process controls systems of the RWF. Additional electrical conduits may be installed alongside the fiber optic cable conduit to provide for future project needs.

Construction is scheduled to begin in December 2021, with substantial completion anticipated by December 2022.

ANALYSIS

Bids were opened on August 5, 2021, with the following results:

Contractor	Base Bid Amount	Bid Alternates #1	Total Bid	Variance Amount	Over/ (Under) Percent
Anvil Builders Inc. (San Francisco, CA)	\$4,027,570	\$270,000	\$4,297,570	(\$338,736)	(7.3)
Kiewit Infrastructure West Co. (Fairfield, CA)	\$3,971,200	\$525,000	\$4,496,200	(\$140,106)	(3.0)
Engineer's Estimate	\$ 4,180,335	\$455,871	\$4,636,306	-	-
Power Engineering Construction Co. (Alameda, CA)	\$4,357,541	\$729,897	\$5,087,438	\$451,132	9.7

In addition to the base bid scope of work, there is one bid alternate for the installation of three empty conduits for future power supply, including concrete encasing from outfall area gate to SO_2 building.

A total of three bids were received and were within the expected level of variance from Engineer's Estimate. The low bid submitted by Anvil Builders Inc., is seven percent under the Engineer's Estimate. Staff considers this reasonable for the work involved. Staff's review of Anvil Builders Inc.'s previous work and experience finds them a responsible bidder and staff recommends awarding the construction contract to Anvil Builders Inc.

San Jose Municipal Code Section 27.04.050 provides for a standard contingency for all public works contracts (except those involving the renovation of a building or buildings) of ten percent of the total contract amount. However, this project includes special circumstances – the challenge of maintaining continuous operations at the RWF during construction, the possibility of unforeseen regulatory permit conditions or mitigation requirements due to performing work in and adjacent to environmentally sensitive habitat – and staff recommends a 15 percent contingency to account for unforeseen conditions that might arise in the construction.

Project Labor Agreement Applicability

The Director of Public Works determined that a project labor agreement is applicable to this project because the engineer's estimate is over three million dollars, and it does not fall under any of the exemption categories.

Local and Small Business Outreach

Public Works procurement staff used Biddingo to outreach to local and small business enterprises. Chapter 4.12 of the San José Municipal Code defines a "local business enterprise" as one with a legitimate business presence in Santa Clara County and "small business enterprise" as a local business enterprise with 35 or fewer employees. Procurement staff sent bid invitations to 9,138 vendors, and documents were downloaded by 40 vendors, approximately nine of which were located within Santa Clara County and therefore local. The recommended contractor is not a local or a small business enterprise. In addition, none of the listed subcontractors is a local or a small business enterprise.

CONCLUSION

Based on staff's evaluation of the bids, staff recommends awarding the construction contract for the Project to the low bidder, Anvil Builders Inc.

EVALUATION AND FOLLOW-UP

No follow-up action with City Council is expected at this time. Quarterly progress reports of the RWF Capital Improvement Program will also be submitted to the Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

CLIMATE SMART SAN JOSE

The recommendation in this memo has no effect on Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This contract was advertised on Biddingo.com on June 16, 2021. This memorandum will be posted on the City's Council Agenda website for the October 26, 2021 City Council Meeting.

COORDINATION

This contract and memorandum have been coordinated with the Departments of Planning, Building and Code Enforcement, Fire, Finance, the City Manager's Budget Office, and the City Attorney's Office. This memorandum will be presented at the October 14, 2021 TPAC meeting for consideration.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the October 14, 2021 TPAC meeting. A supplemental memo with the committee's recommendation will be included in the amended October 26, 2021 City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This work is consistent with the Council-approved focus on rehabilitating aging RWF infrastructure, improving efficiency, and reducing operating costs. It is also consistent with the budget strategy principle of focusing on protecting our vital core services.

COST SUMMARY/IMPLICATIONS

1.	AMOUNT OF RECOMMENDATION/COST OF PROJECT:	\$4,297,570
	Project Delivery*	\$4,908,800
	Construction	\$4,297,570
	Contingency (15%)	\$644,636
	Total Project Costs	\$9,851,006
	Prior Year Expenditures	<u>\$2,271,763</u>
	REMAINING PROJECT COSTS	\$7,579,243

* Project delivery estimate includes: \$1,016,500 for project management and professional consultant services during feasibility/development; \$1,245,300 for project management and professional consultant services during design; \$119,900 project management and professional consultant services for bid and award; \$960,600 for project management and professional consultant services during construction; \$1,344,900 for construction management (including specialty inspections) during construction; and \$221,600 for project management and professional consultant services during post-construction and professional consultant services during post-construction and project closeout.

The estimated project delivery cost is above average when compared to project delivery costs for capital projects at other wastewater facilities. The project delivery cost is above average due to the extensive condition assessment work required and additional environmental support needed due to the environmentally sensitive nature of the project area. Additionally, the project delivery method was changed during design, which required a restructuring of the procurement documents.

2. COST ELEMENTS OF AGREEMENT/CONTRACT:

This is a lump sum contract.

\$4,297,570

- 3. SOURCE OF FUNDING: 512 San José-Santa Clara Treatment Plant Capital Fund.
- 4. FISCAL IMPACT: The Project will have no additional impact on the San José-Santa Clara Treatment Plant Operating Fund (Fund 513) or the General Fund.
- 5. PROJECT COST ALLOCATION: In accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memo (Carollo Engineers, March 2016), this project is allocated 100% flow.

BUDGET REFERENCE

The table below identifies the fund and appropriations to fund the contract recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency cost.

Fund	Appn		Total	Amt. for	2022-2026 Proposed Capital	Last Budget Action (Date,
#	#	Appn. Name	Appn*	Contract	Budget Page	Ord. No.)
Rema	Remaining Project Costs*		\$7,579,243			
Rema	ining Fu	inding Available				
512	7678	Outfall Channel &	\$7,061,000	\$4,297,570	V-116	06/22/2021
Instrument					Ord. No.	
		Improvements				30621

*There is adequate funding available in 2021-2022 to award this contract. Future funding is subject to appropriation and, if needed, will be included in the development of future year budgets during the annual budget process.

CEQA

Mitigated Negative Declaration for the 7745 – Outfall Channel and Instrumentation Improvements Project. File No. PP19-073.

/s/ KERRIE ROMANOW Director, Environmental Services Department /s/ MATT CANO Director of Public Works

For questions, please contact Napp Fukuda, Assistant Director, Environmental Services Department at (408) 793-5353.

Attachment A – Outfall Channel and Instrumentation Improvements Project Location Map Attachment B – Mitigation Monitoring and Reporting Program

Attachment A – Outfall Channel and Instrumentation Improvements Project Location Map



MITIGATION MONITORING AND REPORTING PROGRAM





San José-Santa Clara Regional Wastewater Facility Outfall Bridge and Instrumentation Improvements Project File Nos. PP19-073

PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

The Initial Study/Mitigated Negative Declaration prepared for the San Jose-Santa Clara Regional Wastewater Facility Outfall Bridge and Instrumentation Improvements Project concluded that the implementation of the project could result in significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval. This Mitigation Monitoring and Reporting Program addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the Initial Study/Mitigated Negative Declaration concluded that the impacts from implementation of the project would be less than significant.

The City of San José hereby agrees to fully implement the Mitigation Measures described below, which have been developed in conjunction with the preparation of an Initial Study/Mitigated Native Declaration for the proposed project. The City understands that these mitigation measures, or substantially similar measures, will be adopted as conditions of approval to avoid or significantly reduce potential environmental impacts to less than significant levels.

The following abbreviations are used:



San José-Santa Clara Regional Wastewater Facility Outfall Bridge and Instrumentation Improvements Project File Nos. PP19-073

BAAQMD = Bay Area Air Quality Management District BMPs = Best Management Practices CCR = California Code of Regulations CDFW = California Department of Fish and Wildlife CEQA = California Environmental Quality Act CFR = Code of Federal Regulations CIP = Capital Improvements Project CNDDB = California Natural Diversity Database CM = Construction Management Resources Team DO = Dissolved Oxygen DPS = Distict Population Segment DTSC = Department of Toxic Substance Control ESD = Environmental Services DepartmentESU = **Evolutionarily Significant Unit** ET= Environmental Team Project Lead HASP = Health and Safety Plan

- ct HCP = Santa Clara Valley Habitat Conservation Plan
 - MWQO = Marine Water Quality Objectives
 - NACH = Native American Heritage Commission
 - NOAA = National Oceanic and Atmospheric Administration
 - NAHC = Native American Heritage Commission
 - NTU = Nephelometric Turbidity Units
 - OSHA = Occupational Safety and Health Administration PAHs = Polycyclic Aromatic Hydrocarbons
 - PM = San José-Santa Clara Regional Wastewater Facility Capital Improvements Program Project Manager
 - PBCE = Planning, Building and Code Enforcement
 - RWQCB = Regional Water Quality Control Board
 - SCCDEH = Santa Clara County Department of Environmental Health
 - SVOCs = semi-volatile organic compounds
 - USFWS = U.S. Fish and Wildlife Service
 - VOCs = volatile organic compounds



MITIGATIONS	MONITORING AND REPORTING PROGRAM					
		Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Lead Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule	
AIR QUALITY						
Impact AIR-1: The Project could result in a cumulatively applicable federal or state ambient air quality standard.	v considerable net increase of	any criteria pollutant	for which the projec	t region is non-attainm	ent under an	
 MM-AIR-1:Bay Area Air Quality Management District (BAAQMD) Basic Construction Mitigation Measures Construction contractors shall be required to implement the following BAAQMD recommended basic construction mitigation measures to reduce fugitive dust emissions. All exposed surfaces (e.g., parking areas, staging areas, 	1. Add BAAQMD Basic Construction Mitigation Measures to construction design plans and specifications.	1. Design	1. Environmental Services Team Project Lead (ET)/Construction Management Resources Team (CM)	1. Check final design plans and specifications	1. Design	
 soil piles, graded areas, and unpaved access roads) shall be watered two times per day. All haul trucks transporting soil, sand, or other loose material offsite shall be covered. 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. All vehicle speeds on unpaved roads shall be limited to 15 mph. 		2. Construction	2. CM	2. Monitor to ensure that contractor implements measures in contract documents. CM notifies PM and ET of non-compliance and ensures corrective action.	2. Construction	
 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. 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 Title 13, 						



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Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.						
• All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.						
• Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.						
BIOLOGICAL RESOURCES						
mpact BIO-1: Implementation of the Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service						

1. Environmental 1. ET/qualified **MM-BIO-1:** General Construction Measures. 1. Qualified wildlife biologist 1. Pre-construction/ 1. Preto conduct environmental biologist awareness program construction/ construction Prior to construction, all construction workers shall take • and worker sign-in awareness program. construction part in an environmental awareness program conducted sheets by a qualified wildlife biologist.¹ The biologist shall train work crews in standard procedures for identifying and 2. CM notifies PM 2. Contractor to install covers 2. Construction 2. ET/CM 2. Construction avoiding impacts to all special-status species with the and ET of nonover or escape ramps in

¹ A qualified wildlife biologist shall have a minimum of four years of academic training and professional experience in biological sciences and related resource management activities with field experience (e.g., conducting surveys or monitoring) with the species that may be present within the project area.



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 potential to occur in the work area (steelhead – Central California Coast DPS, Chinook salmon – Central Valley fall-run ESU, longfin smelt, western pond turtle, Ridgway's rail, black rail, western burrowing owl, birds protected by the Migratory Bird Treaty Act, salt marsh harvest mouse, salt marsh wandering shrew, Congdon's tarplant and saline clover). The awareness program shall be conducted at the start of construction and thereafter as required for new construction personnel. At the end of each work day, all excavations (i.e. holes, construction pits, and trenches) of a depth of 8 inches or greater shall be covered with plywood or other material that can effectively exclude wildlife from a pit, and gaps around the cover shall be filled with dirt, rocks, or other appropriate material to prevent entry by wildlife. Alternatively, a barrier such as a fence can be installed around excavations that prevents wildlife from entering the hole, pit or trench. If excavations cannot be covered or there is no fence installed, then they shall include escape ramps constructed of either dirt fill, wood planking, or other appropriate material installed at a 3:1 grade (i.e., an angle no greater than 30 degrees) to allow wildlife that fall in a means to escape. 	excavations greater than 8 inches in depth.			compliance and ensures corrective action		
MM BIO-2: Seasonal Avoidance of Sensitive Aquatic Species In-water construction work with the potential to result in short-term impacts to sensitive aquatic species, including project activities that are expected to create turbidity or disturb the streambed, shall be conducted only from June 1	1. Add construction window dates to construction design plans and specifications.	1. Design	1. PM/ET	1. In-water work shall be conducted only from June 1 through November 30	1. Confirm work window during design	



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through November 30 (the approved National Oceanic and Atmospheric Administration (NOAA) work window).						
 MM BIO-3: Western Pond Turtle Protection Measures Prior to the start of construction activities, the project proponent shall retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats (aquatic and upland) in the vicinity of the work site. Surveys shall take place no more than 72 	1. Ensure that requirements for compliance with any biological resources buffer zones and species protection are included in contract documents.	1. Design	1. PM/ET	1. Confirm requirements are included in contract documents	1. Design	
 hours prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If no western pond turtles are observed during the preconstruction surveys, no further action is required. If preconstruction surveys identify active western pond turtle nests within the project site, the biologist shall 	2. Retain a qualified biologist to perform preconstruction surveys. If active nests are located during the survey, establish buffer zones with fencing in consultation with CDFW.	2. Within 72 hours prior to onset of construction	2. ET and qualified biologist	2. Agency coordination	2. Pre- construction	
 establish no-disturbance buffer zones around each nest using temporary orange construction fencing. The demarcation shall be permeable to allow young turtles to move away from the nest following hatching. The radius of the buffer zone and the duration of exclusion shall be determined in coordination with the California Department of Fish and Wildlife (CDFW). The buffer zones and fencing shall remain in place until the young have left the nest, as determined by the qualified biologist. If western pond turtle is identified during preconstruction surveys, or during construction, a 	 3. Monitor to ensure that exclusion fencing and buffer zones are implemented: Include in environmental training. Relocate turtles to suitable habitat, if encountered. Maintain site inspection and monitoring logs, results of any 	3. Construction	3. CM and qualified biologist	3. Ongoing monitoring during construction if necessary	3. Construction	



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 qualified biologist shall monitor construction activities in the Project site within 50 feet of suitable western pond turtle habitat, and remove and relocate western pond turtles in proposed construction areas to suitable habitat outside the project limits, consistent with CDFW protocols and handling permits. Relocation sites shall be subject to CDFW approval. If any turtles are found in the project site, construction activities shall halt within 50 feet and the qualified biologist shall be notified. Construction activities can continue, or commence, more than 50 feet from the western pond turtle individual; however, the qualified biologist shall still be notified. If the biologist determines the turtle is a western pond turtle, the qualified biologist shall relocate the western pond turtle into nearby suitable habitat consistent with CDFW protocols and handling permits. 	 consultation with CDFW. Notify Project Manager (PM) and ET of non- compliance and ensure corrective action 	4. Post-construction	4. ET	4. Compliance monitoring reports	4. Post- construction	



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 MM BIO-4: Special-status Bird Species Protection Measures The project proponent and its contractors shall avoid conducting vegetation removal or ground disturbing 	1. Avoid vegetation removal or ground disturbing activities between February 1–August 31.	1. Construction	1. ET	1. Construction avoidance window	1. February 1– August 31	
 activities during the nesting season (February 1– August 31, inclusive). If avoidance of the nesting season is not possible, the ET or its contractor shall retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory bird nests within 7 days of the start of 	2. Retain a qualified wildlife biologist to conduct a pre- construction nesting bird survey for raptors and migratory birds.	2. Pre-construction; within 7 days of start of construction or after construction breaks of 14 days or more.	2. Biologist	2. Document survey results.	2. February 1– August 31	
construction or after any construction breaks of 14 days or more, within 7 days prior to the resumption of construction. Surveys shall be performed for the Project areas and for suitable habitat within 300 feet. If an active nest is discovered, a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, or nests identified on Facility buildings, the nest itself) shall be established. The no-disturbance zone shall be marked with flags or fencing that is easily identified by the construction crew and will not affect	3. If an active nest is discovered, a no-disturbance buffer zone around the nest shall be established; buffer zone widths and other avoidance measures may be modified based on consultation with CDFW and the USFWS.	3. Construction	3. ET/biologist/ USFWS/CDFW	3. Document survey results.	3. February 1– August 31	
the nesting birds. In general, minimum buffer zone widths shall be as follows: 100 feet (radius) for non- raptor species and 300 feet (radius) for raptor species; however, the buffer zone widths may be adjusted if an obstruction, such as a building, is within line-of-sight	4. Retain a qualified wildlife biologist and conduct surveys for California Ridgway's rail and California black rail	4. Pre-construction/ construction	4. ET/biologist	4. Document survey results.	4. Pre- construction	



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 and other avoidance measures may be modified based on consultation with CDFW and the U.S. Fish and Wildlife Service (USFWS). Buffer widths shall remain in place as long as the nest is active or young remain in the area and are dependent on the nest. The project proponent and its contractors shall retain a qualified wildlife biologist and conduct surveys for California Ridgway's rail and California black rail prior to initiation of construction activities. These surveys are required for construction activities conducted at any time of the year. 	detected within 700 feet of the project site during their nesting season (February 1– August 31), all construction activities within 700 feet of suitable nesting or forage habitat for this species will be delayed until after the nesting season is over.		5. ET/USFWS and CDFW	5. Consult with agencies.	5. During construction	
the project site during their nesting season (February 1– August 31, inclusive), all construction activities within 700 feet of suitable nesting or forage habitat for this species will be delayed until after the nesting season is over	detected within 700 feet of the project site during the non- nesting season (September 1– January 31), construction activities can commence, but	6. Construction	6. Biologist	6. Document actions taken.	6. During construction	
• If either of these species is detected within 700 feet of the project site during the non-nesting season (September 1–January 31), construction activities can	all vegetation shall be cleared by hand or with hand tools and a biologist will be retained on site during vegetation clearing.					



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• If any birds initiate nests within the established buffer distances while construction is occurring, then it is assumed that they are habituated to the construction activities, and construction can continue as long as the birds or their nests are not physically harmed.						
MM BIO-5: Western Burrowing Owl Protection Measures	1. Contractor shall not disturb owls, burrows or nests.	1. During construction	1. CM	1. None	1. During construction	
To avoid or minimize direct impacts of project activities on western burrowing owls, the City shall ensure the following Capital Improvements Program (CIP) specifications for western burrowing owl are implemented 1. The contractor shall not disturb western burrowing owls	 Stop work; notify engineer; qualified biologist shall 	2. If western burrowing owls are	2. CM/biologist	2. Document survey results.	2. During construction	
and any occupied burrows or nests.If western burrowing owls are encountered during construction, work must stop, and the Engineer should be notified immediately. A survey must be performed by	perform a survey for western burrowing owls	encountered				
be notified inified actively. A survey must be performed by the qualified biologist before construction work can proceed.3. If surveys identify evidence of western burrowing owls within 250 feet of the project area, the contractor shall:	3. Biologist will establish 250-foot exclusion zone around occupied burrow and contractor will avoid exclusion zone	3. During construction	3. ET/CM/biologist	3. Establish 250-foot exclusion zone	3. During construction	
 a. Establish a 250-foot exclusion zone around the occupied burrow or nest, as directed by the qualified biologist b. Avoid the exclusion zone and all nests that could be 	4. If avoidance of occupied burrows is not feasible and construction occurs in breeding season, construction	4. February 1–August 31	4. ET/biologist	4. Prepare Monitoring Plan	4. February 1– August 31	
disturbed by project construction activities during the						



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remainder of the breeding season or while the burrow is occupied by adults or young	disturbed and biologist prepares a Monitoring Plan.					
 c. Not resume construction activities within the 250-foot zone until the Engineer provides written Notice to Proceed based on the recommendation of the qualified biologist 4. If avoidance of occupied burrows is not feasible during February 1 to August 31 breeding season, construction may occur within 250 feet of the occupied burrows if the burrows are not disturbed and thequalified biologist prepares and implements a Monitoring Plan approved by the California Department of Fish and Wildlife. 5. If avoidance of occupied burrows is not feasible during September 1 to January 31 non-breeding season, construction may occur within 250 feet of the overwintering burrows as long as the contractor's qualified biologist monitors the owls for at least 3 days prior to Project construction and during construction and finds no change in owl foraging behavior in response to construction activities. If there is any change in owl 	5. If avoidance of occupied burrows is not feasible during September 1 to January 31, biologist will monitor owls for at least 3 days prior to construction and during construction. If monitoring results show a change in owl foraging behavior then construction activities shall cease within the 250-foot exclusion zone.	5. September 1– January 31	5. Biologist	5. Prepare survey results	5. Pre- construction/ Construction during September 1–January 31	



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 MM BIO-6: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Protection Measures Prior to initiation of work in suitable habitat, an agency-approved² biologist shall be retained to conduct preconstruction surveys areas where disturbance is 	1. Retain agency-approved biologist to conduct preconstruction surveys	1. No more than 24 hours prior to vegetation removal or ground-disturbing activities	1. ET/biologist	1. Survey results	1. Pre- construction	
 planned. Surveys shall take place no more than 24 hours before the onset of vegetation removal or ground-disturbing activities. Prior to construction on the east side of the outfall 	2. Install exclusion fence overseen by an agency- approved biologist.	2. Prior to construction on east side of outfall channel or Artesian Slough	2. ET/biologist	2. Add fence specifications to design plans.	2. Pre- construction	
channel or Artesian Slough, silt exclusion fencing with wire-mesh backing shall be installed by hand between the eastern edge of the project area and the non-tidal seasonal marsh, to prevent the mouse/shrew from	3. Biologist to conduct weekly monitoring of exclusion fence.	3. Weekly during construction	3. Biologist	3. Document fence conditions in weekly biomonitoring report	3. Construction	
entering the active work area, protect habitat within the marsh from earthmoving activities or accidental spills, and to exclude workers from the marsh. The fence should have a minimum above-ground height of 30 inches, and the bottom should be buried to a depth of at least 6 inches so that mice cannot crawl under the fence. Any supports for the salt marsh harvest mouse exclusion fencing (e.g., t-posts) will be placed on the inside of the project area. The last 5 feet of the fence shall be angled	4. Biologist shall supervise the hand removal of any vegetation in mouse/shrew habitat (including, but not limited to pickleweed, and emergent salt marsh vegetation including bulrush and cattails).	4. Construction	4. Biologist	4. Document monitoring results in weekly biomonitoring report	4. Construction	
away from the road to direct wildlife away from the road. Installation of the exclusion fence shall be overseen by an agency-approved biologist.	5. If mouse/shrew individuals are observed, contact USFWS and CDFW to determine	5. Construction	5.Biologist/USFWS and CDFW	5. Document agency consultation results and proposed action	5. Construction	

² The "agency"-approved biologist would be approved by USFWS and CDFW, the federal and state regulatory agencies responsible for implementing endangered species acts, and/or state regulations applicable to Fully-Protected Species.



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	avoidance, protection, or relocation measures.					
• Ground disturbance to suitable mouse/shrew habitat (including, but not limited to pickleweed, and emergent salt marsh vegetation such as bulrush and cattails) will be avoided to the extent feasible. Where mouse/shrew habitat cannot be avoided, an agency-approved biologist shall supervise the hand removal of any vegetation in mouse/shrew habitat to avoid impacts on the mouse/shrew. Such monitoring will occur for the duration of all clearing work within suitable habitat.						
• If mouse/shrew individuals are observed in or near the Project work area, all construction activities shall cease until the USFWS and CDFW can be contacted and appropriate avoidance, protection, or relocation measures can be developed, approved, and implemented. Depending on the specific location and agency guidance, these measures may include relocation or buffer distances.						



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MI •	M BIO-7: Survey for Rare Plants Prior to the start of construction, a rare plant survey shall be conducted by a qualified biologist in accordance with CDFW's 2009 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.	1. Retain qualified biologist to conduct rare plant survey.	1. Prior to start of construction.	1. PM/ET	1. Document survey results and submit to CDFW	1. Prior to construction; confirm flowering period for potential species to be monitored.	
•	If a special status plant species is encountered on the project site, it shall be documented and submitted to the California Natural Diversity Database (CNDDB). The project shall avoid impacts during construction by clearly marking and delineating the location in the field and encircling the species with protective silt exclusion fencing. Visible signage shall be attached to the silt fencing to instruct workers to stay out of the sensitive	2. If special status plant species is encountered, the location shall be clearly marked and delineated by encircling the species with protective silt exclusion fencing.	2. Prior to start of construction.	2. ET/biologist	2. Document survey results and submit to CDFW	2. Prior to construction	
	rare plant area. If direct impacts cannot be avoided, then the District shall consult with CDFW to devise a plan for minimizing the impacts by one or more of the		3. Prior to start of construction.	3. ET/CDFW	3. Prepare Avoidance Plan	3. Prior to construction	



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Impact BIO-2: Implementation of the Project could have pool, coastal, etc.) through direct removal, filling, hydrole			otected wetlands (inc	luding, but not limited	l to, marsh, vernal
Implement MM BIO-1: General Construction Measures, MM BIO-2: Seasonal Avoidance of Sensitive Aquatic Species, and MM HAZ-1b: Health and Safety Plan See Hazards and Hazardous Materials below.					
Impact BIO-3: Implementation of the Project could have regional plans, policies, regulations, or by the California				tural community iden	tified in local or
Implement MM HAZ-1b: Health and Safety Plan, MM HYD-1: Water Quality Best Management Practices During In-water and Near Water Work Activities, and MM HYD-2: Water Quality Monitoring					
See Hazards and Hazardous Materials below. See Hydrology and Water Quality below.					
MM BIO-8: Contain Bridge Deconstruction Debris. ET or its contractor shall install measures to prevent debris associated with the deconstruction from entering Artesian Slough.	1. Cover demoltion debris and any other construction materials every night and during rainfall events	1. Construction	1. CM/ET	1. Confirm protective measures are in place	1. Construction
• No bridge demolition debris shall be allowed to enter Artesian Slough or be placed where it would be subject to erosion by rain, wind, or waves and enter into jurisdictional waters. Demolition debris and any other construction materials with the potential to be	2. Use floating boom to contain accidental debris discharged into Artesian Slough and retrieve any debris immediately	2. Construction	2. CM/ET	2. Confirm protective measures are in place	2. Construction



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 eroded/entrained during a rainfall event will be covered every night and during any rainfall event. Floating booms shall be used to contain any accidental debris discharged into Artesian Slough, and any debris shall be removed as soon as possible, and no later than the end of each workday. If feasible, personnel in workboats within the work area will immediately retrieve such debris for proper handling and disposal. Non-buoyant debris discharged into the outfall channel will be collected at the weir at the downstream terminus of the channel. No debris discharged into the outfall channel will be allowed to enter Artesian Slough. 					
CULTURAL RESOURCES				1	I
Impact CUL-1: Implementation of the Project could cause	a substantial adverse chang	e in the significance of	an archaeological re	source pursuant to Se	ction §15064.5
Resources. If prehistoric or historic-era archaeological resources are encountered by construction personnel during project	1. Ensure that measures related to archaeological discoveries are included in contract documents	1. Design	1. ET/PM	1. Document any archaeological discoveries	1. Design
shall halt and the contractor shall notify the the ET personnel and Planning, Building and Code Enforcement (PBCE) Supervising Environmental Planner. Prehistoric	2. Ensure that all personnel complete environmental training prior to beginning work. Monitor to ensure that the contractors implement	2. Construction	2. ET/CM	2. Document any archaeological discoveries	2. Construction



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flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden")	Method of Compliance Or Mitigation Action measures in contract document.	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.	3. Evaluate the potential discovery and advise the ET as to the significance of the discovery. If warranted, proceed with measures that may include the following:	3. Construction	3. ET/qualified archaeologist	3. Document any archaeological discoveries	3. Construction
The City's ET or its contractor shall retain a Secretary of the Interior-qualified archaeologist to inspect the resource within 24 hours of discovery. If it is determined that the project could damage a historical resource as defined by CEQA, construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared, approved by the PBCE Supervising Environmental Planner, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who will be identified by the Native American Heritage Commission [NAHC]). If the Native American representative identifies the find as a tribal resource, ET or its contractor shall proceed to Mitigation Measure CUL-1.2. For archaeological resources, the archaeologist, in consultation with the PBCE Supervising Environmental Planner and the City's Historic Preservation Officer, shall determine when construction can commence.	 a. On-site preservation of resource; b. Archaeological 	4. Construction	4. ET/qualified archaeologist	4. Prepare a Final Archaeological Resources Report	4. Construction
The mitigation for archaeological resources shall include preservation in place, or, if preservation in place is not feasible, data recovery through excavation. If preservation	5. Ensure that contract documents include measures	5. Design	5. ET/PM	5. Confirm contract documents include measures related to	5. Design



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in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to the satisfaction of the PBCE Supervising Environmental Planner to recover the scientifically consequential information from and about the resource, prior to any excavation at the resource site. Treatment for most resources would consist of (but would not necessarily be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.	related to discovery of human remains			discovery of human remains		
MM CUL-1.2: Inadvertent Discovery of Tribal Cultural Resources. The Native American representative shall make recommendations to the City of San José for the appropriate measures to treat the tribal cultural resource, which will be implemented in accordance with Section 15064.5 of the CEQA Guidelines.	1. Evaluate the potential discovery and advise the ET as to the significance of the discovery.	1. Construction	1. ET/PBCE	1. Consult with Native American representative	1. Construction	



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Impact CUL-2: Implementation of the Project could disturb human remains, including those interred outside of formal cemeteries										
MM-CUL-2: Inadvertent Discovery of Human Remains If human remains are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the PBCE Supervising Environmental Planner. The ET shall contact the Santa Clara County Coroner to determine whether the remains are of Native American origin or whether an investigation into the cause of death is required. The Native American Heritage Commission (NAHC) would be contacted within 24 hours if the Coroner determines that the remains are Native American. The NAHC would then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn shall make recommendations to the City of San José for the appropriate	 Include in environmental training. Monitor to ensure that the contractor implements measures in contract document including reporting human remains if encountered and suspending work in the vicinity. Confirm identification of human remains, if needed. If human remains are confirmed, perform required coordination and notifications. 	 Preconstruction/ Construction Construction 	1. PBCE/ET/CM 2.PBCE/Coroner/ NAHC	 Environmental training Contact NAHC 	 Construction Construction 					
means of treating the human remains and any associated funerary objects, which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines as summarized below:	3. Monitor to ensure the appropriate disposition of human remains.	3. Construction	3. PBCE	3. Monitoring	3. Construction					
In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:	4. Submit final compliance report, if applicable.	4. Construction	4. PBCE/NAHC	4. Submit final compliance report, if applicable	4. Construction					
 (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and 										



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(B)If the coroner determines the remains to be Native American:					
1. The coroner shall contact the Native American Heritage Commission within 24 hours.					
2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.					
3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or					
(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.					
(A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.					
(B)The descendant identified fails to make a recommendation; or					



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(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.							
GREENHOUSE GAS EMISSIONS			•	•			
Impact GHG-1: The Project could conflict with an applic	able plan, policy or regulation	n adopted for the purp	ose of reducing the e	nissions of greenhous	e gases.		
 MM-GHG-1: Construction specifications for the Project shall require contractors to implement the following measures: To comply with the City's Construction and Demolition Debris program, construction contractors shall use an authorized hauler to haul all construction and demolition debris from the Project to a certified waste diversion facility. 	1. Ensure that contract documents include these measures.	1. Design	1. ET/PM	1. Confirm design specifications include these measures	1. Design		
 Construction contractors shall use locally extracted, manufactured or recycled and reused materials including construction material to the extent feasible. Cut and fill from the Project site shall be balanced to the extent feasible 							



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HAZARDS AND HAZARDOUS MATER	RIALS				
Impact HAZ-1: Implementation of the Project could create conditions involving the release of hazardous materials into pursuant to Government Code Section 65962.5					
Assessment Prior to construction, ET or ESD's contractor shall ensure that a limited soil and/or groundwater investigation is performed at proposed construction work areas to	1. Ensure that contract documents include a limited soil and/or groundwater investigation meeting the requirements of the mitigation measure	1. Design	1. ET/PM/PBCE	1. Results shall be incorporated into the Site Health and Safety Plan and the Soil and Groundwater Management Plan	1. Design
of applicable regulatory screening levels (Environmental Screening Levels or California human health screening levels) for the proposed site use, the City shall contact the appropriate regulatory agency (the Santa Clara County Department of Environmental Health [SCCDEH], the Regional Water Quality Control Board [RWQCB], and/or Department of Toxic Substances Control [DTSC]) as appropriate. The ET or ESD's contractor shall complete subsequent site investigations and/or remedial activities required by the regulatory agency to ensure that residual	2. The ET or its contractor shall complete subsequent site investigations and/or remedial activities required by the regulatory agency to ensure that residual impact, if any, shall not pose a continuing significant threat to groundwater resources, human health, or the environment.	2. Pre-construction	2. ET/CM	2. Site Health and Safety Plan and Soil and Groundwater Management Plan	2. Pre- construction
environment. The results of the pre-construction hazardous materials assessment shall be incorporated into the Site Health and	3. Incorporate results of pre- construction hazardous materials assessment into the Site Health and Safety Plan	3. Pre-construction	3. CM/ET/PBCE	3. Site Health and Safety Plan and Soil and Groundwater Management Plan	3. Pre- construction



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regulatory screening levels, a Soil and Groundwater	Method of Compliance Or Mitigation Action and the Soil and Groundwater	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule		
Management Plan would be prepared in accordance with Mitigation Measure HAZ-1c, below, to determine whether specific soil and groundwater management and disposal procedures for contaminated materials are required; excavated soils are suitable for reuse; and construction worker health and safety procedures for working with contaminated materials are required.	Management Plan.						
MM-HAZ-1b: Health and Safety Plan The ET or its contractor shall retain a qualified environmental professional to prepare a site-specific Health and Safety Plan (HASP) in accordance with federal Occupational Safet and Health Administration (OSHA) regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Title 8, Section 5192). Because anticipated	1. Ensure that contract documents include preparation of a Health and Safety Plan and documentation of compliance in accordance with the mitigation measure.	1. Design	1. ET/PM	1. Health and Safety Plan	1. Prior to construction		
 contaminants vary depending upon the location of proposed improvements in the Project area and may vary over time, the HASP shall address site-specific worker health and safety issues during construction. The HASP shall include the following information. Results of sampling conducted in accordance with Mitigation Measure HAZ-1a. 	2. Ensure the contractor has a site health and safety supervisor fully trained pursuant to hazardous materials regulations be present during excavation, trenching, or cut and fill	2. Pre-construction	2. ET/CM	2. Documentation that HASP measures have been implemented during construction.	2. Prior to construction		
• All required measures to protect construction workers and the general public by including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction areas and to reduce hazards outside of the construction areas. If prescribed contaminant exposure levels are exceeded,	operations to monitor for evidence of potential soil contamination, including soil staining, noxious odors, debris or buried storage containers.						



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•	personal protective equipment shall be required for workers in accordance with state and federal regulations. Required worker health and safety provisions for all	3. A copy of the HASP shall be submitted to the PBCE Supervising Environmental Planner for review.	3. Design/Pre- construction	3. CM/ET/PBCE	3. HASP	3. Prior to construction
	workers potentially exposed to contaminated materials, in accordance with state and federal worker safety regulations, and designated qualified individual personnel responsible for implementation of the HASP.	4. Monitor compliance by the contractor, report non-compliance or discovery of suspect hazardous	4. Construction	4. ET/CM	4. HASP	4. Construction
•	The contractor shall have a site health and safety supervisor fully trained pursuant to hazardous materials regulations be present during excavation, trenching, or cut and fill operations to monitor for evidence of potential soil contamination, including soil staining, noxious odors, debris or buried storage containers. The site health and safety supervisor must be capable of evaluating whether hazardous materials encountered constitute an incidental release of a hazardous substance or an emergency spill. The site health and safety supervisor shall implement procedures to be followed in the event of an unanticipated hazardous materials release that may impact health and safety. These procedures shall be in accordance with hazardous waste operations and regulations and specifically include, but are not limited to: 1) immediately stopping work in the vicinity of the unknown hazardous materials release; 2) notifying SCCDEH, RWQCB, and/or DTSC; and 3) retaining a qualified environmental firm to perform sampling, remediation, and/or disposal.	materials to PM and ET. Ensure corrective action, sampling, remediation and/or disposal as warranted. (Note contractor is solely responsible for health and safety of its employees).				



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• Documentation that HASP measures have been implemented during construction.					
• Provision that submittal of the HASP to ET, or any review of the contractor's HASP, shall not be construed as approval of the adequacy of the contractor as a health and safety professional, the contractor's HASP, or any safety measure taken in or near the construction site. The contractor shall be solely and fully responsible for compliance with all laws, rules, and regulations applicable to health and safety during the performance of the construction work.					
MM HAZ-1c: Soil and Groundwater Management Plan If hazardous materials or contaminated soil and groundwater above regulatory screening levels are identified under the pre-construction hazardous materials assessment, done in accordance with Mitigation Measure HAZ-1a, ET shall require the construction contractor to prepare and implement a Soil and Groundwater Management Plan that specifies the method for handling and disposal of contaminated soil and groundwater prior to construction.	1. Ensure that contract documents include a Soil and Groundwater Management Plan meeting the requirements of the mitigation measure and requirement for submittal of final compliance report documenting disposal of materials.	1. Design	1. ET/PM	1. Soil and Groundwater Management Plan	1. Design
The Soil and Groundwater Management Plan will establish the sampling and laboratory analysis program which may include the following: analysis of subsurface soil samples	2. Review contractor's Soil and Groundwater Management Plan.	2. Design/ construction	2. PM/CM/ESD's Hazardous Material Specialist	2. Soil and Groundwater Management Plan	2. Construction
within the Project site for total petroleum hydrocarbons (as gasoline, diesel, and waste oil), Title 22 metals, and volatile organic compounds (VOCs) or any other chemicals of concern to evaluate the potential presence of contamination; groundwater samples if subsurface excavations are	3. Monitor compliance by the contractor, report non- compliance or discovery of suspect hazardous materials to PM and ET. Ensure corrective		3. ET/CM	3. Review contractor's final compliance report and retain all manifests for	3. Construction/ post-construction



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anticipated to require dewatering; and additional analyses for VOCs and semi-volatile organic compounds (SVOCs) for groundwater samples collected at construction locations within 1,000 feet of adjacent landfills.	action, sampling, remediation and/or disposal as warranted.	•		hazardous waste disposal	
The Soil and Groundwater Management Plan shall include all necessary procedures to ensure that excavated materials and fluids generated during construction are stored, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. The Plan shall include the following information.					
• Step-by-step procedures for evaluation, handling, stockpiling, storage, testing, and disposal of excavated material, including criteria for reuse and offsite disposal. All excavated materials shall be inspected prior to initial stockpiling, and spoils that are visibly stained and/or have a noticeable odor shall be stockpiled separately to minimize the amount of material that may require special handling. In addition, excavated materials shall be inspected for buried building materials, debris, and evidence of underground storage tanks; if identified, these materials shall be stockpiled separately and characterized in accordance with landfill disposal requirements. If some of the spoils do not meet the reuse criteria and/or debris is identified, these materials shall be disposed of at an appropriately permitted landfill facility.					



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• Procedures to be implemented if unknown subsurface conditions or contamination are encountered, such as previously unreported tanks, wells, or contaminated soils.					
• Procedures for containment, handling and disposal of groundwater generated from construction dewatering, the method to be used to analyze groundwater for hazardous materials likely to be encountered and the appropriate treatment and/or disposal methods.					
HYDROLOGY AND WATER QUALIT	Y				
Impact HYD-1: Implementation of the Project could viola ground water quality.	ate water quality standards or	waste discharge requi	rements or otherwis	e substantially degrad	le surface or
MM-HYD-1: Water Quality Best Management Practices During In-water and Near Water Work Activities	1. If requested by regulatory agencies, prepare intrusion prevention plan plan.	1. Pre-construction	1. PM/ET/water quality specialist	1. Oversight of intrusion prevention	1. Pre- construction
In order to avoid and/or minimize potential impacts to water quality (and jurisdictional waters) during Project activities that would be conducted in or over waters, the following construction BMPs would be implemented by the contractor, and overseen by a water quality specialist, to	2. Conduct rip –rap placement and grouting during low tide	2.During Construction of in-water work	2. ET/CM/water quality specialist	plan plan 2. Monitor for compliance	2. Construction
prevent releases of construction materials or hazardous materials and to avoid other potential environmental impacts:	3. Conduct weir flashboard replacement at high tide	3. Construction	3. ET/contractor/ water quality specialist	3. Monitor for compliance	3. Construction
 In-water work with the potential to harm fish and aquatic resources (e.g., grouting and rip-rap placement) will be conducted at low tide to the extent feasible. All project components will be designed using materials that follow local, California, and national environmental regulations; this includes the use of 	4. Staged construction materials with the potential to be eroded/entrained during a rainfall event will be covered every night and during any rainfall event	4. Construction	4. ET/CM/water quality specialist	4. Monitor for compliance	4. Construction



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	washings thereof, or other construction-related	5. Remove construction material, wastes, debris, sediment, rubbish, trash, etc., daily	5. During construction of in-water work	5. ET/CM/water quality specialist	5. Monitor for compliance	5. Construction
	materials or wastes, oil, or petroleum products shall be allowed to enter into jurisdictional waters or placed where it would be subject to erosion by rain, wind, or waves and enter into jurisdictional waters. Staged	6. Install a silt curtain with floating boom, or another effective technology	6. Construction	6. ET/CM/water quality specialist	6. Monitor for compliance	6. Construction
	construction materials with the potential to be eroded/entrained during a rainfall event will be covered every night and during any rainfall event (as applicable).	7. Service vehicles and equipment used during the course of construction offsite				
	All construction material, wastes, debris, sediment, rubbish, trash, fencing, etc., will be removed from the project site daily during construction, and thoroughly at completion of the project. Debris will be transported to an authorized upland disposal area.					
,	During rip-rap placement and grouting, a silt curtain with floating boom, or another effective technology, will be placed to isolate the construction footprint from Artesian Slough to prevent water quality impacts. The silt curtain will be placed within 500-feet of the in- water construction activity. The exact location will be determined, at the discretion of the contractor in consultation with the water quality specialist, with the					
	goal to maximize functionality of the curtain. The contractor will ensure curtain placement is also upstream of the water quality monitoring location					



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described below. The silt curtain will accomplish the following:					
 Isolate construction activities from Artesian Slough 					
 Contain turbidity and sediment resulting from the construction activity 					
• Deter fish, and other aquatic species, from accessing the active construction area					
 Allow water to pass between Artesian Slough and the outfall channel with the tides 					
• The silt curtain will be at least the height of the outfall weir (approximately 6 feet tall) to maintain a barrier at high tide. The curtain will consist of permeable filter fabric supported by a line of floats (boom) on the water surface and a line of weights/anchors on the bottom to secure the curtain to the channel bed to maintain coverage around the active in-water construction area. The curtain would be secured to land and to the weir with anchors at the channel banks to hold the curtain in place.					
• If requested by					
BCDC, CDFW, the Water Board, or USACE, the contractor will prepare a plan that provides a description of methods to be used to direct flow away from the active construction work area in Artesian Slough prior to implementation. Temporary measures will be used to minimize the volume of direct flow from the outfall channel into the active construction					



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site to minimize the movement of construction-related	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
turbidity increases into Artesian Slough.					
 Floating booms shall be used to contain any accidental debris discharged into waters, and any debris shall be removed as soon as possible, and no later than the end of each workday. If feasible, personnel in workboats within the work area will immediately retrieve such debris for proper handling and disposal. Non-buoyant debris discharged into waters shall be recovered (by divers) as soon as possible after discharge. Protective measures will be utilized to prevent accidental discharges of oils, gasoline, or other hazardous materials to jurisdictiona waters during fueling, cleaning, and maintenance of equipment. Well-maintained equipment will be used to perform construction work, and, except in the case of failure or breakdown, equipment maintenance will be performed off-site. Crews will check heavy equipment daily for leaks, and if leaks are discovered it will be immediately contained and use of the equipment will be suspended until repaired. The source of the leak will be identified, material will be collected and properly disposed. 					
• Vehicles and equipment used during the course of construction will be serviced offsite. On-site fueling of marine equipment (if any) will comply with U.S. Coast Guard requirements. Smaller equipment, such as generators and hand tools will be fueled using fuel					



MITIGATIONS	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Lead Agency Responsibility]		
	Method of Compliance Timing of Or Mitigation Action Compliance I		Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
tanks, hoses, and fuel cans. Fueling locations will be inspected after fueling to document that no spills have occurred. Any spills will be cleaned up immediately.					



MITIGATIONS	MONITORING AND REPORTING PROGRAM						
		Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Lead Agency Responsibility]			
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule		
 MM-HYD-2: Water Quality Monitoring Prior to and during in-water construction, water quality measurements will be collected, and recorded within Artesian Slough. Data will be collected at the City's 	1. Conduct water quality monitoring	1. During in-water construction	1. ET/CM	1. Document water quality monitoring results	1. Construction		
previously established monitoring location within Artesian Slough, approximately 1,500 feet downstream of the outfall weir. ³							
• Measurement data will be collected prior to the start of in-water construction each day to establish current ambient, baseline conditions. Subsequently, water quality data will be collected every two hours during construction to ensure compliance with the water quality metrics described below. All measurements will be collected at the top of the water column to control for the natural variability in water quality at different depths, and to ensure data are comparable.							
• Exceedance of any of the water quality metrics described below would trigger a stop to in-water work, and adjustment to the water quality BMPs (as described in MM HYD-1) until it can be demonstrated that water quality objectives can be maintained. The water quality monitoring parameters enumerated halow represent a consolidation of applicable							
below represent a consolidation of applicable regulatory requirements as outlined within the Marine							

³ This station was established in 2005 under the RWQCB's Wastewater Discharge Requirement (WDR, Order No. R2-0003) for the operation of the City's Pond A18 continuous discharge monitoring. Fourteen years of water quality data have been collected at this monitoring location.



	Water Quality Objectives (MWQO) for the San Francisco Bay Basin.			
•	Visual: No significant floating particulates, suspended materials, grease, or oil shall be visible. No aesthetically undesirable coloration of the water surface; oils, grease, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water.			
•	Turbidity. Given the wide historic range, and high daily variability, in documented turbidity within Artesian Slough, strict adherence to Basin Plan objectives is infeasible. As a result, the following thresholds are proposed:			
	 No more than 50 Nephelometric Turbidity Units (NTUs) above background when background between 0 and 100 NTUs. 			
	 No more than 50 percent above background turbidity levels when background is greater than 100 NTUs. 			
•	Dissolved oxygen (DO): DO levels will not drop below 5.0 mg/l. If natural factors cause lesser concentrations, construction will cause no further reduction in the concentration of DO.			
•	pH: Construction will cause no more than a 0.5 increase or decrease in pH and pH levels will remain within 6.5 to 8.5.			
•	If requested by natural resource agencies, during work that is associated with the potential to release Polycyclic Aromatic Hydrocarbons (PAHs), pre- construction and post-construction sampling for total PAHs will be conducted as follows: pre-construction sampling for total PAHs prior to construction activity to establish ambient PAH concentration in Artesian Slough, and at the conclusion of project construction,			



MITIGATIONS	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance[Project Applicant/Proponent Responsibility]Method of ComplianceOr Mitigation ActionCompliance		Documentation of Compliance [Lead Agency Responsibility]		
			Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
conduct additional PAH sampling for total PAHs. Post- construction total PAHs are not to exceed 15 µg/l, unless it can be shown that post-construction site concentrations are similar to the ambient levels measured during pre-construction sampling.					



MITIGATIONS	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance		Documentation of Compliance		
	[Project Applicant/Proponent Responsibility]		[Lead Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
TRIBAL CULTURAL RESOURCES					
Impact TRC-1: Implementation of the Project could cause a substantial adverse change in the significance of a tribal cultural resource pursuant to §21074.					
Implement MM CUL-1.1: Inadvertent Discovery of Archaeological Resources, MM CUL-1.2: Inadvertent Discovery of Tribal Cultural Resources, and MM CUL-2: Inadvertent Discovery of Human Remains					
See Cultural Resources section, above.					

Source: San Jose-Santa Clara Regional Wastewater Facility Outfall Bridge and Instrumentation Improvements Project Initial Study, March 2021



San José-Santa Clara Regional Wastewater Facility Outfall Bridge and Instrumentation Improvements Project File Nos. PP19-073

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