

EXHIBIT "A"
SCOPE OF SERVICES (required)

BKF Engineers (the "Contractor") shall provide professional services for final design, permitting and preparation of plans, specifications and engineering cost estimates to the 65 percent level for construction of several improvements to the Marin City stormwater pond system. These services include but are not limited to hydrology and hydraulic analysis of the final preferred alternatives to ensure effective flood mitigation capacity, biological assessment and permitting, and engineering design for a trenchless installation for a new culvert boring under Highway 101 with an inlet structure, sluice gates, a tide outlet gate, a new sheet pile floodwall along the eastern boundary of the detention basin west of Highway 101 and pipe improvements including constructability analysis of optimum construction methods, development of required easements requirements and detailed cost estimates.

All technical and administrative support required to provide services and deliver completed work products to the District are included.



Figure 1: Marin City Stormwater Pond Site Location Map

The Richardson Bay Audubon and Shore-Up Marin Wetlands Restoration Project

Richardson Bay Audubon (Audubon) and Shore-Up Marin City (SUMC) are developing a wetlands restoration and public enhancement project for the shopping center owned pond under a separate grant scope and budget. They will have their own design team of wetlands biologist, designers and landscape architects and their own public outreach process. As described in more detail and in particular in Task 6 below (H&H analysis), the Contractor shall cover the hydraulic modeling and analysis of the proposed Audubon and SUMC design alternatives (with three iterations for each alternative). The Contractor will provide both quantitative and qualitative analysis and feedback and recommendations on both the flooding and ecological impacts and implications for their alternative's analysis and to assist Audubon with their wetlands design. Under this scope, the Contractor shall interface with their project design team on a regular basis to provide input and feedback to the design alternatives. The goal is to work with Audubon and SUMC to provide an integrated design that maximizes both flood reduction and ecological benefits to the extent possible.

2020 FEMA Grant Proposal Summary

In 2017, the Flood District (via the County) applied for a federal Hazard Mitigation Grant Program grant to fund a new floodwall around the Shopping Center pond (the "Pond") as well as a new culvert under Highway 101. The Contractor shall comply with all provisions of the CalOES/FEMA grant.

The project involves improvements to the existing drainage culvert and the installation of a second drainage culvert under 101 connecting the Marin City stormwater pond to the bay, construction of a new floodwall around portions of the pond, thereby increasing the flood conveyance capacity and level of flood protection for the pond and adjacent roadways and community. The scope tasks required to complete the project scope for the six primary flood reduction elements below that constitute this final design and 65% and 100% PS&E RFP are as follows. Contractors are encouraged to review and modify the scope below with their submission along with the rationale for such changes. The flood reduction elements contained in the FEMA approved grant scope below shall be the basis for the contract design and plans and specifications and permitting:

- (1) installation of a new tidal flap gate on the existing US 101 culvert connecting the Marin City detention basin to San Francisco Bay;
 - (2) the construction using trenchless technology of a new 48" culvert (240 lf) under US 101 adjacent to the existing culvert to provide additional flood conveyance from the pond and increase the level of flood protection;
 - (3) installation of a new inlet structure, 48" tide gate, 48" sluice gate, 48" flap gate, and a 48" RCP connecting the existing and new inlet structure on the new culvert from the pond to the bay;
 - (4) installation of manhole at the end of the jack and jack and bore and; construction of a vault, 6' x 4' flap gate and 6' x 4' sluice gate west of the existing headwall on the Richardson Bay side of the US 101 culvert as maintenance access points for the project to allow for cleaning and removal of sediments;
 - (5) the construction of a 700' long new sheet pile floodwall (or alternative materials or designs, to include consideration of green infrastructure techniques and nature-based solutions) between the pond/basin and the US 101 to increase the level of flood protection in the pond while also enhancing the wetland and pond habitat by filtering or diverting pollutants running off of the highway and into the pond through this area. Use of sustainable materials is encouraged;
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- (6) installation of 4 new flap gates (2-18", 33" and 68"x 43" oval) on existing stormdrain outfalls into the detention basin, 4 new lateral pipe flap gates in manholes in the Marin City existing drainage system and the sealing of these 4 manholes as well as the sealing of 3 additional existing manholes to prevent stormwater overflows from the system under pressure conditions.

Phase I of the Project design work described above was approved by CalOES and FEMA on June 23, 2020 and is the subject of this RFP. CalOES/FEMA has specific provisions for allowable project costs and invoicing that shall be complied with as part of this project. Any work conducted that is deemed as ineligible by CalOES/FEMA based on guidance provided at the time of bidding will be at the Contractor's expense and will not be paid by the District or County. Figure 2 shows a schematic of the various FEMA funded flood reduction elements under this RFP.

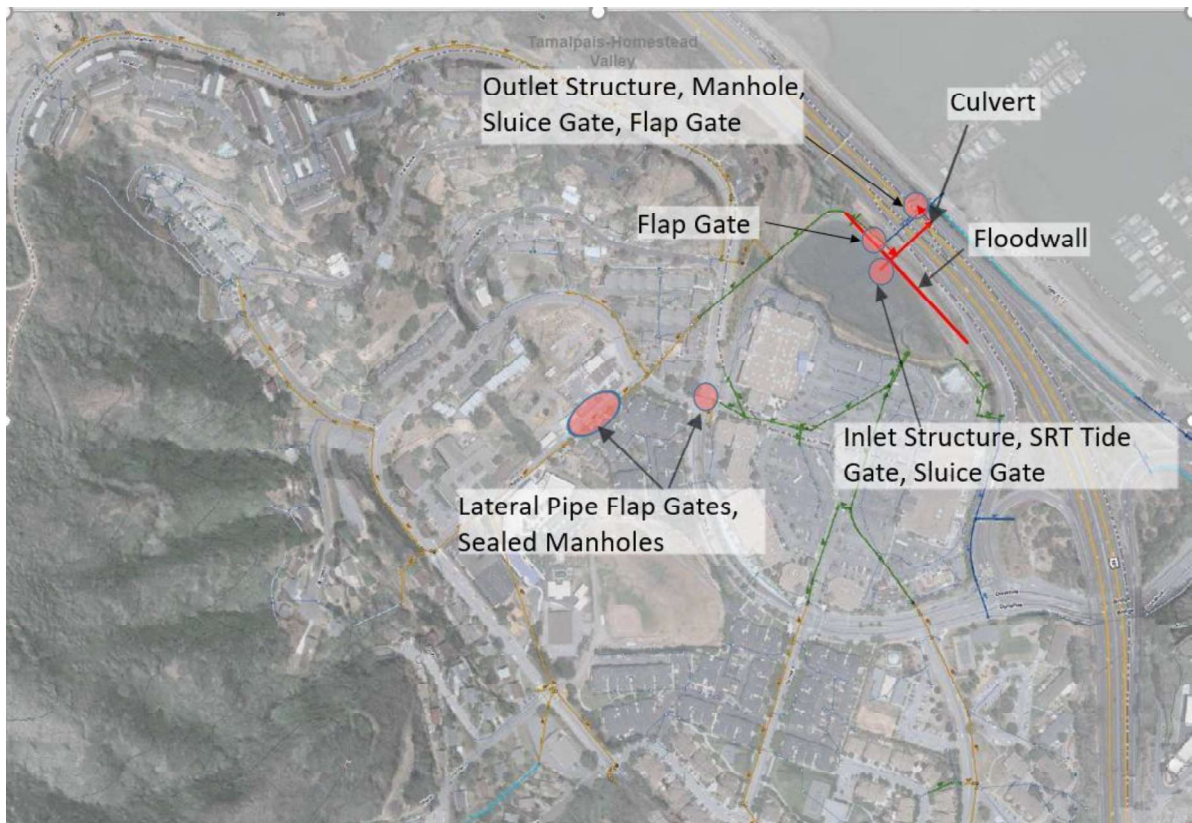


Figure 2: Schematic of FEMA Funded Flood Reduction Elements

The task list summary is as follows:

- Task 1: Review of Studies Conducted To-Date
- Task 2: Site Topographic, Utility, ROW and Boundary Surveys
- Task 3: Soil Contamination Sampling and Disposal Analysis
- Task 4: Geotechnical and Trenchless Boring Report Design Review
- Task 5: Design Review and Value Engineering
- Task 6: Hydrologic and Hydraulic Analysis and Model Refinement
- Task 7: Biological Assessment
- Task 8: Structural Engineering
- Task 9: Report of Final Design
- Task 10: Preparation of CalTrans and County Park Permits
- Task 11: Preparation of PD and Initial Study and Permitting Support
- Task 12: Preparation of 65 Percent Plans and Specifications for Construction
- Task 13: Preparation of 90 and 100 Percent Plans and Specifications for Construction
- Task 14: Project Management and Meetings
- Task 15: As-Needed Task

Task 1: Review of Studies Conducted To-Date

1. **Previous Study Review:** The Contractor will collect and review previous studies and models to familiarize themselves as to the level of analysis performed, review data to identify any critical data needs required for completion of design studies under this scope. The Contractor will review the items listed under Task 1 of the RFP Scope of Work. Review of geotechnical studies and data is included as part of Task 4.
2. **Database Development:** The Contractor compile all existing investigation logs (i.e., test pits, boring logs) and input into a database for use during future analyses. The Contractor will identify areas of additional survey required to complete design studies.
3. **Previous Study Memorandum:** The Contractor will prepare a draft memorandum that lists all documented reviewed and summarizes significant findings relative to this scope of work as described in the RFP. The Contractor will coordinate with District staff as they evaluate the data needs list and determine feasibility. The Contractor will develop a workaround solution if data needs cannot be addressed in a supplemental memorandum that will be included as an appendix to the final memorandum. The supplemental memorandum will include a discussion of the pros and cons for implementing the workaround solution.

Deliverables: *Draft and Final Previous Study Memorandum*
 List of Critical Data Needs
 Workaround Solution Summary

Task 2: Site Topographic, Utility, Right of Way and Boundary Surveys

1. **Composite Base Mapping:** The Contractor will leverage existing boundary and site base mapping performed by the Contractor for the County of Marin in 2020 associated with the Large Trash Capture Device feasibility study project along with additional field surveys to develop a comprehensive map of the project limits. The composite base mapping will include locating survey control to correlate the bathymetry survey for the detention basin, boundary survey for the Gateway Shopping Center parcel (APN 052-490-06) and aerial photography survey along Highway 101 within the Marin City have been performed by Wood Rodgers in 2017 for the District.
 2. **Boundary Analysis:** The Contractor will perform a Boundary Survey and prepare a Boundary Analysis that will define the project parcel's boundaries. Based on previous experience at the site and a cursory
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review of publicly available data, it appears that the project's boundaries are shown on a combination of record maps filed with the County Surveyor and Caltrans Right Of Way maps. The Contractor will conduct field research for primary monumentation to establish boundary resolution. Once the research and reconnaissance has been completed, the Contractor will perform a boundary determination, which includes an analysis of the assembled evidence with respect to its relationship to the title and other documentary evidence.

3. **Topographic Field Survey:** Simultaneous to conducting the field reconnaissance discussed above, the Contractor will supplement the previous mapping prepared at the site by performing field surveys to prepare a Topographic Map within the project limits. The Contractor will gather available public data and plans for the site and its surrounding improvements. The topographic survey will be comprised of the following:
 - a. Field Survey – The Contractor will provide the field work to prepare a Topographic Map for the project. The limits of the topographic survey will be the area of contemplated improvements described in the Request for Proposals. The topographic survey will be comprised of identified visible site features such as roadways, pavements, evidence of significant traveled ways, walls, fences, trees 9-inches and larger in diameter and visual utility infrastructure. The Contractor will obtain a succession of spot elevations to define the general terrain of the site and immediately adjacent improvements to produce mapping at a 1-foot contour interval.
 - b. Utilities - Utility infrastructure within the mapping limits, including sewer, water valves, hydrants, meter boxes, storm drain and marked utilities, if encountered during the course of the field survey, will also be identified. The basic routing, inverts and orientation of the on-site gravity utilities will be identified based on field evidence and any available plans provided if to the Contractor prior to commencement of the survey. If as-built drawings are not provided or are inconclusive when compared to the field evidence, only data at the diked structures will be provided. Locating of underground pressure pipe and dry utilities is not included.
 - c. Mapping – The Contractor will produce the mapping in a reproducible hard copy and electronic format. The signed hardcopy Topographic Map will be an instrument of service. Electronic mapping will be completed in an AutoCAD format and can be transferred and used by other team consultants for their work.
 - 1)The mapping is anticipated to be compiled at 1" = 20', and will also indicate individual spot elevations at various locations throughout the site. The Contractor will take a series of photographs for future reference and documentation of current field conditions encountered during the time of the survey.
 - 2)The vertical control for the survey will be tied to the North American Vertical Datum of 1988 (NAVD88) to correlate to the most recently published FEMA FIRM.
 - 3)The horizontal location and rotation of the mapping is anticipated to be on California State Plane Coordinates, Zone III based on the North American Datum of 1983 (NAD83).
 4. **Easements and Encumbrances:** Based on title reports provided by the County, the Contractor will plot all the listed easements contained in said reports on the base mapping described above. Metes and bounds legal descriptions with accompanying plat of new easements will be provided by the Contractor (if necessary) as part of this scope of work. The Contractor will have assumed that right of way certification will not be required, but can be provided as an additional service.
 5. **Record of Survey [not included]:** As noted above, it appears the project's boundaries are shown on a combination of record maps and that sufficient monumentation exists to retrace said surveys. If sufficient existing monumentation is not recovered, if a material discrepancy is discovered, or any other provisions requiring a Record of Survey as stated in Section 8762 of the Professional Land Surveyors Act of the State of California are encountered, the Contractor will prepare a Record of Survey to fulfill their legal and professional obligation. Since, at this time, a Record of Survey is not anticipated, Professional Fees to provide a Record of Survey are not included in this work. Should this situation occur, the Contractor will notify the County and a Record of Survey will be performed as an additional service.
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Task 3: Soil and Groundwater Contamination Sampling and Disposal Analysis

1. **Soil and Groundwater Contamination Analysis:** The Contractor will determine the volume of excess soils to be excavated from both the jack and bore receiving pit, as well as the new inlet structure. The Contractor will perform collection and analysis of five (5) sediment samples at both locations and analysis for all landfill disposal criteria. The Contractor will also perform water quality sampling of the groundwater at two (2) locations, including the boring and jacking pit locations to determine the presence of contaminants that will require on-site treatment prior to dewatering to meet NPDES requirements. The Contractor will review the results of all available earlier sediment and soils testing in the project area, including the testing undertaken as part of the complementary Audubon and SUMC restoration project.

Analytical testing includes:

- a. VOCs/TPHg = volatile organic compounds/total petroleum hydrocarbons as gasoline; analyzed using United States Environmental Protection Agency Method (USEPA) Method 8260, with the soil samples preserved using USEPA Method 5035
- b. TPHd/mo = total petroleum hydrocarbons as diesel and as motor oil; analyzed using USEPA Method 8015
- c. PAHs = polynuclear aromatic hydrocarbons; analyzed using USEPA Method 8270-SIM
- d. CCR T22 Metals = California Code of Regulations Title 22 metals; analyzed using USEPA Method 6010/7471
- e. PCBs = polychlorinated biphenyls; analyzed using USEPA Method 8082
- f. PCP = pentachlorophenol; analyzed using USEPA Method 8270

The Contractor will conduct a site visit for notification of Underground Service Alert (USA) for field sampling activities. Soil and samples will be collected from borings advanced within two jack and bore pits to investigate whether the identified historical operations or activities adversely impacted the site's subsurface environment. Prior to drilling, each location will be hand augered to a depth of 5 feet below ground surface (bgs) as an additional risk mitigation measure for encountering subsurface utilities. Once cleared, the two (2) borings will be advanced using a direct- push technology drill rig to a total depth of about 30 feet bgs. These borings will be continuously cored for lithologic description, with up to three discrete depth soil samples collected per boring based on the conditions encountered. In addition, grab groundwater samples will be collected from four of the borings as indicated in above. Following the sampling activities, the borings will be backfilled with neat cement. The soil and groundwater samples will be collected following standard environmental handling and management procedures. Each sample will be placed in laboratory provided sample containers or bottles, which will be labeled, placed in resealable plastic bags, and stored in an ice-filled cooler for transportation under chain-of-custody documentation to a California-certified analytical laboratory. The Contractor will coordinate the disposal of the investigation-derived waste (IDW), which will consist of drummed soil cuttings and decontamination water. The IDW will be temporarily stored in labeled 55-gallon drums and placed in a secured onsite location pending waste profiling and offsite transportation and disposal.

2. **Soil and Groundwater Contamination Memorandum:** The Contractor's services will include preparation of an initial sampling plan for review and approval by the District prior to conducting the Soil Contamination and Groundwater Contamination Analyses. In addition, the Contractor will prepare a draft and final memorandum of results. The memorandum will include a map showing the sampling locations, include copies of the certified analytical laboratory reports and boring logs, and provide summary tables presenting the analytical results. The detected soil and groundwater concentrations will be compared against applicable Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board. Recommendations will be provided related to the Site's planned development based on the findings.

Deliverables: *Sampling and Analysis Plan*
 Draft and Final Contamination Analysis Memorandum

Task 4: Geotechnical and Trenchless Boring Report Design Review

1. **Review Geotechnical Information:** The Contractor will review the two geotechnical documents already completed, including the 2019 Settlement Technical Memorandum, and the 2020 Geotechnical Data Report. They will also review the Trenchless Alternatives and Constructability Analyses Memorandum, and the Geotechnical Interpretative Report once they are completed. The review will include confirming all soil information necessary to construct the trenchless boring, floodwall, and other structures are provided. If additional studies are required, the Contractor will provide them as an additional service. Additionally, Caltrans did not specifically request analyses of systemic settlement as a result of overcut and annular space a part of the 2020 Settlement Technical Memorandum. The analysis is expected to be included in the upcoming studies, so the Contractor will include time to present this information to Caltrans staff.
2. **Utility Research and Potholing:** The Contractor will review the utilities mapped by the District within the project extent that are described in the RFP to confirm or modify the alignment of the proposed pipe boring. They will assume that the utility information will be provided in AutoCAD format. The Contractor will check the completeness of the information based on the Contractor's understanding of the site, and will identify if additional utility research or potholing will be required. No additional potholing is included in this scope. The Contractor will assess the accuracy of the mapped information based on as-builts and the topographic field survey.
3. **Geotechnical and Trenchless Boring Report Design Review Summary:** The Contractor will summarize their findings from their review of the geotechnical documents and their utility research and potholing data review in a memorandum.

Deliverables: *Geotechnical and Trenchless Boring Report Design Review Summary Memorandum*

Task 5: Design Review and Value Engineering

The Contractor will assess if the four alternatives documented in the Marin City Drainage Study were modeled correctly based on their professional opinion. The Contractor will conduct a value engineering assessment of the four alternatives and look for cost savings. They will consider pipe alignments, jacking and receiving pit locations, sheet pile wall alternatives, construction methods, and ecological impacts. The Contractor will refine the costs already developed in the Marin City Drainage Study to reflect changes to the alternatives due to value engineering, and current construction cost data. The cost analyses will consider impacts of design choices on the habitat restoration project being led by Audubon and SUMC.

Task 6: Hydrologic and Hydraulic Analysis and Model Refinement

The Contractor's hydraulic modeling team will conduct all modeling required to accomplish the task goals described by the RFP. The Contract shall have assumed analyses for up to three restoration design alternatives and design guidance provided by Audubon California (Audubon) for the proposed grading. The Contractor shall assume the restoration alternatives will be developed into preliminary grading plans suitable for hydraulic modeling. Flood duration curves shall be developed from the modeling and provided to Audubon for their use in ecological design. The Contractor will identify the trigger storm and boundary condition that will drive the hydraulic structure design (anticipated to be the 100- year storm with highest SLR condition). The Contractor will optimize the hydraulic structures based on the trigger storm, and then model the hydraulic structure under the range of conditions described in the RFP. The design of the structures will consider construction and maintenance costs. If the Contractor identifies structure options that are equivalent in function, the Contractor will present pros/cons for each option to District staff so they may select a preferred option. The Contractor will provide information from their analyses to

their subconsultants for their efforts. The analysis will include impacts downstream of the discharge pipe as described in the RFP and as required for permitting and CEQA. Below includes additional information on anticipated tasks.

1. **Tide Study Technical Memorandum:** the Contractor will provide guidance and commentary for two sea-level rise scenarios that will be used for the hydraulic modeling, consistent with the State of California Sea-Level Rise Guidance, 2018 Update prepared by California Ocean Protection Council (OPC). Sea-level rise projections are assumed to be specified by the District. The Contractor will prepare an analysis of tidal conditions for monthly spring and neap tides and annual King tides per Table 2 in the RFP. Budget is included to prepare time-series of tides for historical conditions using 2016 and 2017 water years, and time-series for tides following the scenarios used in the Marin City Drainage Study (2018) under the two conditions of sea-level rise specified by the District. The time-series will be provided in Excel files that can be input into the hydraulic model for analysis of the Pond. The Contractor will summarize the sea-level rise and tidal information in a technical memorandum. The memorandum will include a brief summary of the project, as well as a summary of tidal datum planes applicable to the project. A Table of OPC sea-level rise projections applicable to the Bay Area will be provided. The memorandum will also include a table of the two District-specified sea-level rise scenarios with guidance and commentary, as well as a table of tidal datums adjusted for the two sea-level rise scenarios.
 2. **Updated Hydraulic Analysis and Modeling:** The Contractor will construct a hydraulic model of the project in XP SWMM using EPA SWMM export files from previous modeling efforts. The XP SWMM model will be used for hydraulic modeling of the various projects as required to complete the final design. This scope includes modeling to fully evaluate the hydraulic and operational performance of three Pond restoration alternatives developed by Audubon, and up to three iterations of analyses for each alternative. Sea-level rise scenarios will utilize the information provided by the Tide Study Technical Memorandum. Fish screens, if required by the agencies, will be included. We will make recommendations for culvert and outlet gate types and configurations to maximize flood benefits and potential wetland restoration operations.
 3. **Flood Maps:** Flooding maps showing existing and residual flooding under all scenarios will be prepared for review by stakeholders. The flood maps will clearly show roadway flooding and access under the various scenarios.
 4. **CEQA and Permitting (Task 11) Analysis Support:** The Contractor will provide preliminary design concepts and details for all hydraulic aspects of the three project alternatives. The concepts will explain the impacts and pros/cons for each of the final design options. The Contractor will include a recommended alternative to be brought forward to final design. All H&H analysis needed for analysis of CEQA impacts are included. The Contractor will prepare a summary of modeling results and methodology. The Contractor will identify and mitigate potential impacts under CEQA to the extent possible.
 5. **Future Flood Reduction Design Elements:** The Contractor will conduct modeling and prepare preliminary designs for future flood reduction elements that are not part of the FEMA grant and are beyond the 2017 Flood study, as described in the RFP. H&H design evaluations and project cost estimates are included. The elements include the following:
 - a. Flood Reduction Elements in Flood Study

The Contractor will further develop and analyze the flood reduction elements in the Flood Study as described in the RFP. This includes preliminary pump sizing and design of pump stations and detention basins to reduce roadway flooding in up to a Q10 event. Budget is included to work with the District and Caltrans staff.
 - b. Flood Reduction Elements Beyond the 2017 Flood Study

The Contractor will prepare an examination of up to three (3) additional flood reduction alternatives to protect the Donahue Street area. It is anticipated that the alternatives to include a range of solutions including: additional detention storage, green infrastructure, and/or distributed storage. The Contractor will perform design iterations to optimize each design alternative.
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c. **Evaluation of Flooding**

The Contractor will evaluate flooding along the northbound highway subject to Caltrans input.

6. **H&H Technical Memorandums:** Results of the H&H tasks will be presented as preliminary and final focused design memorandum as the work proceeds as documented in the RFP. The Contractor will incorporate these memos into the final design basis report as an appendix.

Deliverables: *Draft and Final Tide Study Technical Memorandum*

Draft and Final Hydraulic Analysis Update Technical Memorandum

Draft and Final Future Flood Reduction Analysis Technical Memorandum

Final Hydraulic Model Files (data input / output)

Supporting Analyses

Detailed Index for all Model Files with Descriptions

XPSWMM model files exported to EPA SWMM format

Task 7: Biological Assessments

1. **Strategic Planning:** The Contractor, working with the District, will assist in developing an “Overall Project Purpose” and a preferred alternative design that will be assessed during the CEQA process and help meet the goals of the wetland enhancement plans being proposed by Audubon and SUMC. During the pre-project strategic planning process, the Contractor will review proposed plans, discuss potential permitting scenarios, and evaluate up to nine (9) conceptual design alternatives with respect to achieving the primary project purpose, which is flood reduction, and considering the benefits and/or impacts each design alternative may have on the habitat and ecological value of the area, and its consistency with the wetland enhancement plans being proposed by Audubon and SUMC. The evaluation will include benefits and/or impacts each design alternative may have on the habitat and ecological value of the area, consistency with Audubon and SUMC proposed enhancement plan, and complexity of each conceptual alternative design with respect to obtaining environmental permits, with a summary of existing vegetation communities. The evaluation will factor in long-term management or control of invasive species and how to reduce future impacts of new invasive species that may impact the area. It is assumed that the Audubon and SUMC proposed enhancement plan will be available for review.

The Contractor will document the evaluation in one (1) summary memo. The summary memo will include an assessment of the benefits and/or impacts that each design alternative may have on the habitat and ecological value of the area, its consistency with the wetland enhancement plans being proposed by Audubon and SUMC, plant and animal surveys that may be required, and environmental permitting requirements. The summary memo will include a list of existing vegetation communities in tabular form, maps illustrating the proposed shift in vegetation, and wetland types that could occur for each of the nine alternatives. Biological studies that may be required depending on the alternative design in support of permit applications will be included. In addition, the summary memo will provide an assessment of the complexity of each conceptual alternative design with respect to obtaining environmental permits from the USACE, RWQCB, NOAA Fisheries, USFWS, CDFW, and BCDC.

This scope assumes the Contractor will conduct one (1) full day site visit, and attend up to five (5) project team calls. In addition, the Contractor will attend up to five (5) meetings with regulatory agencies and attend one (1) kick off meeting at the Project site or via video conference.

2. **Aquatic Resource Delineation:** The Contractor will conduct an Aquatic Resource Delineation (ARD) within the defined Study Area to determine the presence of waters of the US (WOUS) potentially subject to US Army Corps of Engineers and US Environmental Protection Agency regulatory jurisdiction subject to Section 404 Clean Water Act and Section 10 Rivers and Harbors Act jurisdiction, and waters of the State (WOS) subject to Porter- Cologne Act jurisdiction and subject to CDFW jurisdiction. Special attention during the ARD will be focused on the history of the site with respect to culverts or flap gates used to drain the property, and how water enters the Study Area.
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The Contractor will also describe if the tidal flow entering the Pond is unobstructed and therefore may be described as “full tidal” or if there are obstructions that create or more muted tidal effect.

The ARD report will be prepared using current USACE and RWQCB standards and CDFW standards. The Contractor will request a Preliminary Jurisdictional Determination from the USACE. All areas identified as WOUS/WOS will be mapped on a scaled base map. The ARD will include map of aquatic communities using USACE required Cowardin classification system within the Pond, at the inlet of the culvert and at the outlet of the culvert. A draft ARD will be submitted to the District for review. The final ARD will be submitted to USACE. Geographical information such as wetland types, and jurisdictional boundaries (i.e. limits of wetlands, MHW, HTL, extent of CDFW jurisdiction) will be mapped using GPS equipment and provided to the District or District’s consultants as shape files in a state plane coordinate system.

- 3. Biological Resource Evaluation:** The Contractor will prepare a Biological Resource Evaluation (BRE) that will be utilized by the CEQA Lead Agency in the preparation of documents pursuant to their review of the project under CEQA. The BRE will assess the preferred alternative design determined during the Strategic Planning process as discussed in the Strategic Planning task. The Contractor will provide the BRE report to the County of Marin for their use during CEQA review of the project.

The Contractor will conduct a field review of the site and describe the potential for sensitive habitats or special status species to occur at the site or in the project vicinity. The evaluation will incorporate the ARD prepared by the Contractor, previously-prepared biological resource assessments prepared by Horizon Consultants dated January 20, 2017, and other information which Audubon and SUMC may have. The BRE will include a determination of the presence of any sensitive natural community identified in local or regional plans, including City policies, and regulations of the CDFW and USFWS. The report will also include a discussion of any regulated wetlands as defined by Section 404 of the federal Clean Water Act or state Porter-Cologne Act, or areas subject to the BCDC jurisdiction and/or CDFW jurisdiction.

The Contractor will consult with the California Natural Diversity Data Base to obtain current information regarding the potential for rare, threatened, or endangered plant or animal species to occur on site or in the general vicinity.

The biological assessment will include an evaluation of impacts to biological resources due to the development of the proposed project, as required by CEQA. The evaluation will describe potential impacts to sensitive natural communities and the extent to which the site plan could impact special status species.

An evaluation of fish and wildlife impacts will be conducted, including any potential conflicts with fish or wildlife species, or loss of wildlife habitat and potential movement of migration corridors and nursery sites. The Contractor will evaluate any potential conflicts with local policies or ordinances protecting biological resources, including policies of the County of Marin. Based on impact findings, the Contractor will describe feasible and cost effective mitigation measures to minimize any identified impacts and identify post-construction actions to minimize impacts such as biological monitoring, pre-construction nesting bird surveys, etc. A draft BRE will be submitted to the District for review. The final BRE will be submitted to the District and included with the USACE, RWQCB, CDFW and BCDC applications. Geographical information such as vegetation communities and wetland types, and potential special status species habitat will be mapped using GPS equipment and provided to the District or District’s consultants as shape files in a state plane coordinate system.

- 4. Engineering Support:** The Contractor shall include budget to provide engineering support for the Biological Assessment task. Work will include providing elevations of the MHW within the Pond and at the inlet and outlet of the culvert. The Contractor will provide topographic information for the Pond at a minimum of 1-foot contours in a state plane coordinate system.

Deliverables: *Draft and Final Strategic Planning Summary Memorandum*

Task 8: Civil and Structural Engineering

Based on the findings of the hydraulic analyses, the Contractor will work with the District to select one project alternative to move forward in the design process. The Contractor will develop a preliminary design concept including preliminary plan figures (approximately 30% level), and calculations for the components of the selected alternative.

1. **Preliminary Structural Engineering Design:** The Contractor will provide preliminary designs and details for structural components of the proposed project alternative. The structural design is assumed to be preliminary in nature to capture the fundamental structure type, basic layout and configuration and general feasibility. Detailed structural plans and calculations will be prepared as part of Task 12. The structural components will include the Concrete Inlet Structure, including headwall and wingwalls (connected to 48-inch pipe culvert), Concrete Outlet Structure, including headwall and wingwalls (connected to 48-inch pipe culvert), Concrete Vault Structure (to facilitate cleaning and removal of sediments), and the 700 linear foot Flood Wall Structure (sheet pile style flood wall assumed). The Contractor will consider alternatives and costs as described in the RFP (two (2) alternatives are assumed for budgeting purposes). The Contractor will summarize the structural type selection into a letter style Structure Type Selection Memorandum. A draft Structure Type Selection Memorandum will be prepared for District review. One set/round of consolidated review comments will be addressed and a final Structure Type Selection Memorandum will be prepared. The Memorandum will include the following information:
 - a. Design of structural components described above
 - b. Design of connections to structures, including evaluation of flexible connectors that allow for differential settlement where the new culvert attaches to the existing inlet structure and the existing pipe into the bay

2. **Preliminary Civil Engineering Design:** The Contractor will provide preliminary design concepts and details for civil components of the proposed project designs. The Contractor will coordinate site utility services and identify conflicts between proposed and existing improvements. The Contractor will identify conforms to existing conditions, boundaries, and site constraints. The concepts will include, but are not limited to, preliminary designs for the culvert and pipelines, tide gates, sluice gates, and flap gates. The Contractor will consider alternatives and costs as described in the RFP (two (2) alternatives are assumed for budgeting purposes). The Contractor will summarize their civil design information into a brief Preliminary Civil Design Memorandum. A draft Memorandum will be prepared for District review. One set/round of consolidated review comments will be addressed and a final Memorandum will be prepared.

The Memorandum will include the following information:

- a. Project grading and conforms
- b. Design the culvert and pipe system
- c. Design requirements for construction bidders for design of temporary sheet pile walls, dewatering and sediment removal for construction of the jack and bore pits at both the inlet and outlet ends of the proposed culvert jack and bore for review by the engineer during construction submittal review
- d. Recommendations for sediment and environmental analysis of any sediment removal required for construction

Deliverables: *Draft and Final Structure Type Selection Memorandum
Draft and Civil Engineering Design Memorandum*

Task 9: Report of Final Design

1. **Basis of Design Report:** The Contractor will perform a final civil design review and final cost estimates. The Contractor will prepare a draft Basis of Design Report that includes the results of all prior studies and analysis described in the Tasks above. The report will consist of an overall design summary and include the technical memorandums prepared as appendices. The report will summarize the approach and analysis results in a manner suitable for a non-technical audience. The Contractor will include justification for fill or other improvements that the permitting agencies may ask justification for. The report shall contain draft right of way agreements and easement requirements for the various property owners developed under Task 2. The report shall contain all the required design criteria and expected performance for each project element along with detailed cost estimates including capital, O&M, and monitoring and reporting costs. The report will also include 30% design figures suitable for permitting as well as the basis for the 65% Plans and Specifications. The Contractor will submit the draft Basis of Design Report to the District and Caltrans for review. The Contractor will incorporate all District and Caltrans comments into the final Basis of Design Report. Model output parameters will be provided in ArcView GIS format to the District. The report will include the minimum information identified in the RFP.

Deliverables: *Draft and Final Report of Final Design*

Task 10: Preparation of CalTrans and Marin County Parks Encroachment Permit Applications

The Contractor will prepare the encroachment permits for both Caltrans and for Marin County Parks (Parks) for impacts to the Sausalito-Mill Valley multi-use trail. The will develop a boring design that will minimize or eliminate impacts to the trail system during construction. The Contractor will coordinate all impacts with Parks.

Task 11: Preparation of Project Description, Initial Study and Permitting Support

1. **USACE 404 CWA Application:** The Contractor will prepare and submit a Pre-Construction Notification (PCN) application for a Nationwide Permit (NWP) to the USACE for placement of fill in waters of the United States. It is assumed that the Project will be self-mitigating meaning any permanent or temporary impacts will be offset by the Project itself. A self-mitigating project may require some detail of a mitigation plan but that will be unknown until we determine the level of impacts and engage with the agencies. The Contractor will prepare a draft PCN application package for District review and comment. The Contractor will address all District comments and prepare the final PCN application package. The Contractor will coordinate with the USACE, as necessary, during the preparation of the PCN application and negotiation of permit conditions. The Contractor will provide up to two (2) telephone calls with USACE, and written documentation with USACE representatives regarding agency requirements pursuant to the NWP. The Contractor will coordinate all aspects of permit approval with the District and/or designated representative. If required, a brief conceptual mitigation plan will be described and included with the PCN, not a detailed mitigation plan.
 2. **Endangered Species Act Biological Assessment:** The ESA BA will be necessary for the USACE to initiate an ESA Section 7 consultation with the USFWS and NOAA Fisheries. The Contractor will prepare the ESA BA pursuant to requirements of the Endangered Species Act and the Code of Federal Regulations (50 CFR Section 402.12). The Contractor will provide a draft ESA BA for District to review and provide comments. The Contractor will address all district comments and prepare the final ESA BA. The Contractor will provide the final ESA BA report to the USACE for review and approval as part of the permit application documentation. The Contractor will provide up to two (2) telephone calls with USFWS or NOAA Fisheries to discuss the ESA BA.
 3. **RWQCB 401 WQC Application:** The Contractor will submit a request for a pre-application meeting as per RWQCB's new requirement. The request will include the site plan and impact calculations, and conclusions as to the Alternatives Analysis Tier for which the project may qualify. The Contractor will assume a Tier 1 level analysis will be sufficient to satisfy RWQCB Alternatives Analysis requirements and the impacts are all associated with the Project (i.e. flood reduction). Once the pre-application meeting is complete, the Contractor will incorporate RWQCB comments and prepare the authorization request for State 401 Water Quality Certification following current RWQCB guidelines for submission. The Contractor will submit a draft application package to the District
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for review. The Contractor will address all District comments and prepare a final application package that will be submitted to the RWQCB. The Contractor will coordinate with the RWQCB, as necessary, during the preparation of the permit application, and negotiation of permit conditions. The Contractor will attend one (1) "Pre-Application" meeting with the RWQCB, one (1) telephone call with RWQCB to discuss the project and conceptual mitigation plan, and up to two (2) conference calls to coordinate with the RWQCB. The application fee check is assumed to be provided by the District.

4. **BCDC Application:** The Contractor will prepare a BCDC administrative permit application request following current BCDC guidelines for submission. A draft application will be provided for the District to review. The Contractor will address all District comments and prepare the final application. The application will include the standard application form signed by the District and signed by all property owners who are not co-applicants, maps showing the project site, and documentation showing the District has legal interest over the parcels to implement the work. The Contractor will prepare for and attend one (1) BCDC pre-application meeting video conference call along with the District. The Contractor will assume that the District has legal interest to conduct the work over all parcels that are part of the Project, and the District will provide documentation (e.g. Title Reports, Lease Agreements etc.) that will satisfy BCDCs legal interest requirements. The Contractor will assume that the District will be the Applicant will sign the BCDC application and will be responsible for coordinating with other property owners to sign the application as "property owners" or as "co-applicants". The Contractor is assumed to be designated as the applicant and co-applicant's acting agent. The application fee check is assumed to be provided by the District.
 5. **CDFW LSAA Application:** The Contractor will prepare a CDFW Lake and Streambed Alteration Agreement Application following current CDFW guidelines for submission through CDFW's online portal. A draft LSAA application will be provided for the District to review. The Contractor will address all District comments and prepare the final LSAA application. The Contractor will assume that an arborist report will not be required. Upon District approval, the application will be submitted through CDFW's online portal. It is assumed that the District will provide the application fee check to the Contractor to submit with the application. The Contractor will coordinate all aspects of the project approval process with the District and/or designated representative(s). Coordination will be through telephone calls, emails, and written documentation.
 6. **Project Description:** The Contractor will draft a project description that will be provided to District for review for accuracy. The project description will be based on project information provided by the Contractor and/or the District, and will incorporate figures from the plan set, maps, and photographs. Once the project description is finalized, the Contractor will prepare the Initial Study.
 7. **Initial Study:** The Contractor will prepare an Initial Study (IS), which is a CEQA document that includes all of the sections and analyses required under CEQA. The Initial Study will be prepared using the County's template and in accordance with the Marin County Environmental Impact Review Guidelines and the CEQA Guidelines. The Contractor will coordinate with the agency preparing the NEPA document for the proposed Audubon California wetland enhancement project (described in the RFP for the project), and will incorporate the required Section 106 materials into the Cultural Resources analysis of the IS. The Biological Assessment prepared for Task 7 will be used in the IS. The discussion of flooding will be based on hydraulic modeling information developed for Task 6.
 8. **Consistency with Plans and Policies:** A discussion of the proposed project's consistency with the County's General Plan, Interim Zoning Code (Muni Code Title 22I), and other applicable plans and policies will be included. As required by CEQA and the CEQA Guidelines, particular attention will be given to inconsistencies, if any are identified.
 9. **Environmental Setting, CEQA Checklist, and Mitigations:** The IS will be divided into subsections for each environmental resource. The subsections will be formatted to include a description of the existing environmental setting followed by the relevant CEQA checklist section. The sources of information for determining impacts will be identified. Mitigation measures will be identified to reduce significant impacts as appropriate. Based upon the
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Contractor's current understanding of the project, it is anticipated that the key environmental issues for the project will include the following resources: (a) Biological Resources, and (b) Hydrology/Water Quality. Following receipt of the District's comments on the Administrative Draft IS, the Contractor will address all comments and revise the document, as necessary. After a second round of review and revision, District will review the last version before it is finalized. In addition, the final document will be provided to the County as an ADA-compliant electronic version, set-up to view on-screen.

10. **Draft Mitigated Negative Declaration:** The Contractor will prepare a draft Mitigated Negative Declaration (MND) in conformance with the CEQA Guidelines and the Marin County requirements. The draft MND will describe the proposed project, present findings related to the environmental conditions, and include a copy of the IS and mitigation measures to support the findings.
11. **Preparation of Mitigation Monitoring and Reporting Program:** In accordance with state law and CEQA Guidelines, DJP&A will draft a Mitigation Monitoring and Reporting Program (MMRP) identifying when mitigation measures will be implemented, who will be responsible for implementing them, and who will provide oversight. The draft MMRP will be submitted to District prior to the hearing on the project.
12. **Meetings and Hearings:** This scope of work includes attendance at up to two (2) public hearings (e.g., one Planning Commission hearing and one Board of Supervisors hearing). The Contractor will also attend up to three (3) coordination meetings with the District and project team.
13. **Project Management and Contract Administration:** The Contractor will provide general IS project management, contract administration, and coordination with the District and project team throughout the IS/MND process. The Contractor will coordinate with District on a regular basis using email and telephone communications. The IS will be prepared using the County's template and in accordance with the Marin County Environmental Impact Review Guidelines as well as the State CEQA Guidelines. Assuming the IS leads to a MND, the document will be open for an appropriately noticed and announced 30-day review period. The Contractor will prepare a Response to Comments document that responds to all substantive comments received on the document. After the District staff has reviewed it, the Response to Comments document will be revised and updated.
14. **Engineering Support:** The Contractor will include limited budget for to support and submit the necessary documentation for application review and permitting with the applicable agencies. Engineering support for CEQA is included in Task 6.

Deliverables: *Draft and Final PCN*
Draft and Final ESA BA
Draft and Final 401 WQC Application
Draft and Final response to RWQCB Incomplete Application Letter
Draft and Final BCDC Application
Draft and Final Response to BCDC Incomplete Application Letter
Draft and Final LSAA Application
Draft and Final CDFW Incomplete Application Letter
Project Description for CEQA Initial Study
Draft and Final CEQA Initial Study Mitigated Negative Declaration

Task 12: Preparation of 65 Percent Plans and Specifications for Construction (Phase 1 FEMA Grant)

1. **Coordination:** Upon completion of the Report of Final Design, the Contractor will take ownership of the digital site plan layout and geometrics. The Contractor will coordinate with the team and verify that the proposed plan conforms to existing conditions, boundary, and site constraints. The Contractor will coordinate site utility
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services. The Contractor will verify, based on the available record information, if there are any identifiable conflicts between proposed and existing improvements. The Contractor will also determine during this phase if any additional survey is needed to facilitate the design process.

2. **Drawings:** Based on the approved plan documented in the Report of Final Design, the Contractor will prepare construction drawings to the 65% level of completion. The plans will include all elements required for construction, including survey notes, instructions for erosion and sediment control, mobilization, staging areas and phasing, traffic and pathway control and access restriction, equipment access, and details.

The following plans are anticipated to be required for this project:

- Civil Cover Sheet
- Notes & Legend
- Existing Conditions
- Preliminary Traffic Control Plan
- Preliminary Access and Staging Plan
- Demolition/Utility Relocation Plan
- Horizontal Control Plan
- Grading and Drainage Plan
- Utility Plan and Profile
- Cross Sections
- Construction Details
- Structural Details
- Sedimentation and Erosion Control Plan

3. **Engineer's Estimate:** The Contractor will prepare calculations and quantity estimates to develop a bid schedule for the project. The bid schedule will include earthwork quantities, material quantities, and all other anticipated bid items associated with construction of the proposed improvements such as mobilization, dewatering, and traffic control. The Contractor will utilize cost data from similar projects and information from local vendors to estimate probable construction costs. The Contractor will include an estimate of operation and maintenance costs on an annual basis that can be used for long term capital planning. A 20% contingency will be included.
4. **Specifications:** The Contractor will prepare draft technical specifications in CSI format for elements included in the scope of work. All work within the Caltrans Right of Way will be designed in accordance with Caltrans Standards. The Contractor will assume all front-end specifications will be provided by District.
5. **Submittals:** The Contractor will prepare an initial 65% Construction Document submittal and a total of two (2) resubmittal packages for review and comment by the District, as well as Caltrans and other property owners. Each submittal packages will include the following information:

65% Complete Submittal

- a. Comment Checklist of corrections made addressing the previous submittal review comments and all other revisions
 - b. 65% Plans
 - c. 65% Specifications
 - d. 65% Engineer's Estimate
6. **Plan Reviews:** District and Caltrans staff will have an opportunity to review the 65% Construction Documents Submittal and provide feedback. The Contractor will assume that separate markups and comments will be provided by the District and Caltrans, and District staff will endeavor to consolidate other stakeholder comments into their review set. The Contractor will provide a total of two (2) rounds of review with District and Caltrans feedback. Each round of review will consist of the following tasks:
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- a. The Contractor will submit a complete 65% submittal to the District and Caltrans.
- b. The District and Caltrans will review the documents and issue comments and markups. The schedule shall assume a four (4) week review period.
- c. The Contractor will revise the 65% Construction Documents to address the comments and markups.
- d. The Contractor will prepare a Comment Checklist of all comments issued (even those that are deemed to not require changes), and provide responses to each comment that indicates how each comment has been addressed.
- e. The Contractor will re-submit a complete 65% submittal to the District and Caltrans and include the Comment Checklist.

7. **Meetings:** The Contractor will attend up to four (4) meetings during this phase.

Deliverables: *65% Submittal*

- *3 sets of hard copy 65% Plans (24" x 36" size) with electronic copy*
- *3 sets of hard copy 65% Specifications with electronic copy*
- *Electronic copy of 65% Engineer's Estimate*
- *Electronic copy of 65% Comment Checklist*
- *65% Drawings in AutoCAD format*

Task 13: Preparation of 90 and 100 Percent Plans and Specifications for Construction (Phase 2 FEMA Grant)

1. **Coordination:** Following acceptance of the 65% construction plans by CalOES and FEMA, and authorization of Phase II of the project, the Contractor will prepare documents for construction. The Contractor will continue to coordinate utility systems, hardscape, landscape and grading with the team. The Contractor will further progress the design to ensure that backgrounds, utility points of connection, accessible paths of travel, and proposed infrastructure are designed and detailed to the level required by the contractor to bid and construct.
2. **Drawings:** The Contractor will progress the 65% plans prepared under Task 12 to the 90% and then 100% level.
3. **Engineer's Estimate:** The Contractor will update the Engineer's Estimate of Probable Construction Costs performed during Task 12 to reflect the construction level design. The estimate will include a 15% contingency.
4. **Specifications:** The Contractor will prepare final technical specifications in CSI format for elements included in the scope of work.
5. **Submittals:** The Contractor will provide Construction Document submittals at the 90% and 100% level of completion. After all comments on the 100% plans are addressed, the Contractor will provide a final submittal that is stamped by a California Licensed Civil Engineer working directly on the project. The submittal packages will include the following information:

90% Complete Submittal

- a. Checklist of corrections made addressing the previous submittal review comments and all other revisions
- b. 90% Plans
- c. 90% Specifications
- d. 90% Engineer's Estimate

100% Complete Submittal

- a. Checklist of corrections made addressing the previous submittal review comments and all other revisions.
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- b. 100% Plans
- c. 100% Specifications
- d. 100% Engineer's Estimate
- e. Status summary of JARPA permit with documentation

Final Submittal

- a. Checklist of corrections made addressing the previous submittal review comments and all other revisions.
- b. Final Plans (stamped and signed)
- c. Final Specifications (stamped and signed)
- d. Final Engineer's Estimate
- e. Status summary of JARPA permit with documentation

6. **Plan Reviews:** District and Caltrans staff will have an opportunity to review the 90% and 100% Construction Documents Submittals and provide feedback prior to the Final Submittal. Similar to the 65% Plan Review, the Contractor will assume that separate markups and comments will be provided by the District and Caltrans, and District staff will endeavor to consolidate other stakeholder comments into their review set. The Contractor will assume one (1) review period at the 90% level, and one (1) review period at the 100% level. The 100% submittal will address comments from the 90% level, and the Final submittal will address comments from the 100% Submittal.

7. **Meetings:** The Contractor will attend up to four (4) meetings during this phase.

Deliverables:

90% Submittal

- *3 sets of hard copy 90% Plans (24" x 36" size) with electronic copy*
- *3 sets of hard copy 90% Specifications with electronic copy*
- *Electronic copy of 90% Engineer's Estimate*
- *Electronic copy of 90% Comment Checklist*
- *90% Drawings in AutoCAD format*

100% Submittal

- *3 sets of hard copy 100% Plans (24" x 36" size) with electronic copy*
- *3 set of hard copy 100% Specifications with electronic copy*
- *Electronic copy of 100% Engineer's Estimate*
- *Electronic copy of 100% Comment Checklist*
- *100% Drawings in AutoCAD format*

Final Submittal

- *1 set of hard copy Final Plans (24" x 36" size) with electronic copy*
- *1 set of hard copy Final Specifications with electronic copy*
- *Electronic copy of Final Engineer's Estimate*
- *Final Drawings in AutoCAD format*

Task 14: Project Management and Meetings

1. **Project Management:** The Contractor will provide general project management and consultant oversight services including defining and tracking tasks, status updates, general coordination, and preparation of a detailed schedule showing planned milestones and deliverables to be achieved for completion of the Project. The Contractor will also track the budget and issue monthly invoices. The Contractor will also maintain frequent and timely communication with District staff throughout the duration of the Project.
2. **District Meetings:** The Contractor will schedule regular (monthly) progress meeting either virtually or at District offices to discuss the status of the project, upcoming efforts, issues and other relevant information. Up to five (5)

progress and design review meetings will be assumed. Topics of discussion may include submittal comments, project progress, issues which may affect the project schedule and budget, and any other agenda items that District staff request for discussion. The Contractor will prepare agendas, action logs, updated project schedules, and meeting minutes.

3. **Bi-Monthly SUMC & Audubon Meetings:** The Contractor will attend bi-monthly meetings with SUMC community and Audubon project teams through completion of the 65% Plans and Specifications. The Contractor will assume that only minor alterations will be made to the proposed improvements after 65%, so additional coordination with SUMC and Audubon is not required. Per the RFP, the Contractor will prepare and present project information at two (2) meetings that the general public and staff/stakeholders will be invited to attend. The Contractor will submit draft presentations to District staff for review no later than 10 days before a scheduled meeting. The Contractor will assist with agendas, action logs, updated Project schedules, and meeting minutes.
4. **Agency Meetings:** The Contractor will attend up to two (2) meetings with resource agency representatives. The meeting is assumed to include a field visit the same day, if requested. The Contractor will prepare a presentation for the meeting, and will use these meetings as an opportunity to hear concerns and gain support for the conceptual alternatives. Agendas, action logs, updated Project schedules, and meeting minutes will be prepared and distributed.
5. **Quality Assurance/Quality Control (QA/QC):** The Contractor will perform QA/QC checks for each submittal prior to submitting to the District. A work plan that defines design parameters and goals will be prepared after receiving Notice-To-Proceed and before beginning of Project tasks. The work plan will document the interdisciplinary parties responsible for the work product(s), technical submittals, and the quality of the work product(s) and technical submittals. Quality controls from each discipline, including any subconsultants, shall be incorporated into every phase of the work to ensure quality and contract compliance. The Contractor will provide formal tracking and final resolution of review comments and subsequent actions. The Contractor will complete the District's A-E CONTRACTOR STATEMENT OF TECHNICAL REVIEW (Form QC-1) in conjunction with major deliverables for both draft and final versions.

Deliverables: *Schedule Updates*

Invoices Progress Reports

Updated Action Item Lists Meeting Agendas and Minutes

Draft and Final Presentations text and graphics

Presentations at two public meetings

Quality Control Plan

Task 15: As-Needed Task

The Task contains budget for unidentified tasks that may arise during the project design phase. This Task requires prior District approval in writing before any charges can be made. No payments will be made without prior District authorization.

EXHIBIT "B"
FEES AND PAYMENT SCHEDULE (required)

Contractor shall be paid on a time and materials basis by Task. No single task shall be paid more than 80 percent at the discretion of the District's contract manager without a complete draft and/or final deliverable approved by the District.

<i>Task Name</i>	<i>Budget (\$)</i>
Task 1: Review of Studies	\$18,490
Task 2: Site Topographic, Utility, ROW and Boundary Surveys	\$47,821
Task 3: Soil Contamination Sampling and Disposal Analysis	\$33,767
Task 4: Geotechnical and Trenchless Boring Report Design Review	\$19,340
Task 5: Design Review and Value Engineering	\$9,328
Task 6: Hydrologic and Hydraulic Analysis and Model Refinement	\$55,848
Task 7: Biological Assessment	\$39,214
Task 8: Structural Engineering	\$43,484
Task 9: Report of Final Design	\$35,714
Task 10: Preparation of CalTrans and County Park Permits	\$13,452
Task 11: Preparation of PD and Initial Study and Permitting Support	\$90,200
Task 12: Preparation of 65 Percent Plans and Specifications for Construction	\$118,276
Task 13: Preparation of 90 and 100 Percent Plans and Specifications for Construction	\$92,004
Task 14: Project Management and Meetings	\$56,062
Task 15: As-Needed Task	\$100,000
TOTAL:	\$773,000.00