

**DRAFT FIRST AMENDMENT TO CONSULTANT SERVICES AGREEMENT BETWEEN
CITY OF SUNNYVALE AND CAROLLO ENGINEERS, INC. FOR DESIGN AND
CONSTRUCTION SUPPORT SERVICES FOR SUNNYVALE CLEANWATER PROGRAM
EXISTING PLANT REHABILITATION DESIGN 2.1**

First Amendment to Consultant Services Agreement, dated _____, is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and CAROLLO ENGINEERS, INC, a Delaware corporation ("CONSULTANT").

WHEREAS, on August 13, 2019, CITY and CONSULTANT entered into a Consultant Services Agreement whereby CONSULTANT would perform professional services necessary for investigation, analysis, design, preparation of construction drawings and contract specifications consultation, engineering services during construction and other services for a project known as Sunnyvale Cleanwater Program Existing Plant Rehabilitation Design 2.1; and

WHEREAS, the parties now agree that a First Amendment to said Agreement is advisable;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS FIRST AMENDMENT TO CONSULTANT SERVICES AGREEMENT:

1. Services by CONSULTANT

[Replace the first paragraph with the following:]

CONSULTANT shall provide services in accordance with Exhibit "A" entitled "Scope of Work" and Exhibit "A-2" entitled "Additional Scope of Work." All exhibits referenced in this Agreement are attached hereto and are incorporated herein by reference. To accomplish that end, CONSULTANT agrees to assign Sanjay Reddy, P.E. to this project, to act in the capacity of Project Manager and personally direct the professional services to be provided by CONSULTANT.

2. Notice to Proceed/Completion of Services

[Replace paragraph (b) with the following:]

- (b) When CITY determines that CONSULTANT has satisfactorily completed the services defined in Exhibit "A" and Exhibit "A-2," CITY shall give CONSULTANT written Notice of Final Acceptance, and CONSULTANT shall not incur any further costs hereunder. CONSULTANT may request this determination of completion when, in its opinion, it has satisfactorily completed the Scope of Work (Exhibit "A"), Additional Scope of Work (Exhibit "A-2") and if so requested, CITY shall make this determination within fourteen (14) days of such request.

4. Payment of Fees and Expenses

[Replace this section with the following:]

Payments shall be made to CONSULTANT on a monthly basis as set forth in the attached Exhibit "B" entitled "Compensation Schedule. All compensation will be based on monthly billings as provided in Exhibit "B." Compensation will not be due until said detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion and actual hours completed associated with the various task descriptions of the services shall be furnished by CONSULTANT with said billing. When applicable, copies of pertinent financial records will be included with the submission of billing(s) for all direct reimbursables. In no event shall the total Compensation exceed the amounts set forth in Exhibit "B" for each task description total fee, and shall include services as identified in Exhibit "A" in the amount of Seven Million Three Hundred Fifteen Thousand Six Hundred Fifteen and No/100

Dollars (\$7,315,615.00) for the duration of the contract, as well as optional services in an amount not to exceed One Thirty Six Thousand Nine Hundred Ninety Five Four and No/100 Dollars (\$136,995.00) for the duration of the contract.

In no event shall the total amount of compensation exceed the amount set forth in Exhibit B-1 for each task description total fee shall include services identified in Exhibit A-2 in the amount of Nine Hundred Forty Six Thousand Five Hundred Eighty Two and No/100 Dollars (\$946,582.00) unless upon written modification of this Agreement executed by both parties.

In no event shall the total amount of compensation payable under this agreement exceed the sum of Eight Million Three Hundred Ninety Nine Thousand One Hundred Ninety Two and No/100 Dollars (\$8,399,192.00) unless upon written modification of this Agreement. All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

CONSULTANT will be reimbursed as promptly as fiscal procedures will permit upon receipt by the CITY of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated in the Compensation Schedule and shall reference the project title. The final invoice must contain the final cost and all credits due CITY. The final invoice should be submitted within 60 calendar days after completion of CONSULTANT's work.

8. Standard of Workmanship

[Replace second paragraph with the following:]

The plans, designs, specifications, estimates, calculations, reports and other documents furnished under Exhibits "A" and "A-2" shall be of a quality acceptable to CITY. The criteria for acceptance of the work provided under this Agreement shall be a product of neat appearance, well-organized, technically and grammatically correct, checked and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that used by CITY for similar projects.

All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties have executed this Agreement Amendment.

ATTEST:

CITY OF SUNNYVALE ("CITY")

By _____
City Clerk

By _____
City Manager

CAROLLO ENGINEERS, INC. ("CONSULTANT")

By _____

APPROVED AS TO FORM:

Name/Title

City Attorney

By _____

Name/Title

PROJECT MEMORANDUM

**PROJECT 2.1 – AMENDMENT NO. 1 –
POND PIPELINE DESIGN**

Date: July 27, 2021

Project No.: 11599A.10

Cleanwater Program - City of Sunnyvale

Prepared By: Tim Taylor, P.E.

Reviewed By: Jon Boitano, P.E., Sanjay Reddy, P.E.

Subject: P2.1 – Amendment No. 1 – Pond Pipeline Design

Purpose

The purpose of this Addendum No. 1 is to provide professional engineering services to the OWNER for the Secondary Effluent (SE) Pipeline and Pond Return Pipeline replacement or rehabilitation designs (Project).

The OWNER owns and operates a Secondary Effluent Pump Station (SEPS) and SE Pipeline that conveys water from the treatment ponds to the Fixed Growth Reactors (FGR). The existing SE Pipeline is a 36-inch diameter steel pipeline that is routed beneath the Cargill Channel and Sunnyvale Channel and then over to the Tank Drainage Pump Station structure where it goes thru a flow meter and continues to the FGR distribution structure. After the SE Pipeline ruptured in Summer of 2020 a temporary pipeline system was constructed in order for the SEPS to be able to maintain the pond elevations and convey water to the FGR's. A permanent solution to address the SE Pipeline failure is required. Additionally, the parallel 48-inch steel Pond Return Pipeline is of the same material and vintage as the SE Pipeline and should be addressed.

Therefore, this scope of services is provided to address the two major components that include the following:

- SE Pipeline permanent replacement; and
- Pond Return Pipeline rehabilitation and/or replacement (if required per study)

Exhibit A details the estimate of engineering hours and costs with and without optional tasks included for Addendum No. 1.

Addendum No. 1 Scope of Services**TASK 1.0 - PROJECT MANAGEMENT**

Task 1.1 - Project Administration. Administer the project and subconsultants to maintain project schedule and budget. The project progress and budget status will be included in monthly progress reports that will be attached to billing invoices. Additionally, the monthly progress report will include a list of work completed for the time period, meeting minutes for all meetings held during the time period, and an updated decision log.

Task 1.2 - Project Meetings. Meetings will be conducted to coordinate the project tasks between the OWNER and subconsultants. Anticipated project meetings are identified below:

- Project Status Meetings (Monthly)

Task 1 Deliverables:

- Monthly Progress Reports
- Project Status Meeting Minutes
- Decision Log

Task 1 Assumptions:

- Project Status Meetings to be one (1) hour and via telephone
- Project duration to be 24 months

TASK 2.0 - ALTERNATIVES ANALYSIS

Task 2.1 - Review Existing Information. Under this task, the ENGINEER will review the existing record drawings and other pertinent information for the SEPS, SE Pipeline and Pond Return Pipeline. ENGINEER will conduct one (1) field visit to assist in identifying potential alternatives.

Task 2.2 - Alternatives Analysis. ENGINEER will identify potential solutions to identify possible alternatives to rehabilitating and/or replacing the Pond Return Pipeline. While the SE Pipeline final alternative for replacement has been previously identified the ENGINEER will review other alternatives that could be beneficial by collaborating with the Pond Return Pipeline alternatives. Cost estimates for each alternative will be developed to a "Class 4" level estimate as defined by the Association for the Advancement of Cost Engineering (AACE). ("Class 4" level estimates have an expected range of accuracy of -30 percent to +50 percent). A brief alternatives analysis will be conducted to identify a recommended alternative for both pipelines.

Task 2.3 - Alternatives Analysis. After OWNER review of the Draft Alternatives Analysis Technical Memorandum (TM) a workshop will be conducted to discuss the findings and identify the recommended alternative. Prior to the workshop, a pre-call will be conducted with Program representatives.

Task 2 Deliverables:

- Draft Alternatives Analysis Technical Memorandum (TM)
- Final Alternatives Analysis TM

Task 2 Assumptions:

- One (1) field site visit
- Field condition assessment work is NOT included

TASK 3.0 - FIELD INVESTIGATIONS

Task 3.1 - Conduct Topographic Survey. Under this task, ENGINEER will conduct a field investigation and develop the topographic survey information necessary to complete the project design. This work will be conducted by a subconsultant to the ENGINEER.

Task 3.1.1 - Conduct field topographic survey for project area limits. This includes obtaining all permits, utility locates, access to property, and equipment required to perform the field work. Provide complete surveys in accordance with jurisdictional requirements. Establish or tie-in to project control network. Bathymetric survey of the Cargill Channel and levee system. Survey to include utilities that can be easily accessed. Provide Digital Terrain Model (DTM) of project area limits.

Task 3.2 - Conduct Geotechnical Investigation. Under this task, ENGINEER will conduct a geotechnical field investigation and develop a geotechnical report. This work will be conducted by a subconsultant to the ENGINEER. Three (3) borings on the existing levees are proposed. Three (3) existing borings, within the

project area, encountered sandy and clayey fills that extended to depths of about 15 to 16 feet. Below the surficial fills, medium stiff to very stiff, native clays with interbeds of thin medium dense to dense sand lenses were encountered to the maximum depth explored of about 85 feet. Depending upon the findings from the proposed borings on the levees, one additional optional boring along the pipeline alignment that extends within the Cargill Channel may be proposed.

Task 3.2.1 - Preliminary Review. Conduct a review of previous investigations and logs of subsurface exploration from previous geotechnical studies in the vicinity of the project. Perform a preliminary site reconnaissance to observe access considerations to the areas where the three borings on existing levees and one (optional) boring will be performed.

Task 3.2.2 - Exploratory Borings and Laboratory Testing. Review the existing utility record drawings and coordinate with plant maintenance crew to gather utility information, notify Underground Service Alert, and subcontract a private utility locating company to clear the proposed exploration locations for underground utilities.

Perform three borings on existing levees to a depth of the order of about 5 feet below the pipe invert which is estimated to be 30 to 35 feet below grade using truck-mounted mud rotary drilling methods. Field engineer will observe and log the exploratory borings and collect disturbed and relatively undisturbed samples of the subsurface materials for visual evaluation and laboratory testing. Soils will be classified using the Unified Soil Classification System. Drilling derived spoils will be collected in 55-gallon DOT drums, characterized for possible contamination, and then off hauled to an appropriate landfill (assumes that the soil cuttings will not be found to be environmentally hazardous). The levee borings will be backfilled with neat cement grout. We assume a drilling permit will not be required.

Laboratory tests that include the following will be performed (as necessary):

- Classification of soil materials in accordance with the Unified Soil Classification System (i.e., Atterberg limits and grain size).
- Sieve and hydrometer analysis.
- Strength tests (e.g., unconsolidated undrained triaxial, unconfined compression).
- Moisture content and dry density.
- Corrosion tests on at least one (1) sample of soil from the site. The corrosion testing will include pH, Resistivity (ohm-centimeter), Redox (millivolts, positive or negative), Chlorides (parts per million), and Sulfates (parts per million). Soil samples will be from depths at which buried piping and concrete are located and/or will be placed.

Task 3.2.3 - Develop Geotechnical Report. Develop a draft and final geotechnical report that includes the field investigations, laboratory analyses and project geotechnical recommendations. The geotechnical report will include the following:

- Vicinity and previous exploration location map;
- Description of physical properties and characteristics of subsurface soils including groundwater level;
- General site geology, seismicity, and seismic design parameters in accordance with the 2019 California Building Code, as appropriate;
- Recommendations for excavation and site earthwork, including procedures for subgrade preparation, and proper placement of fill and backfill, as appropriate;
- Discussion of probable total and differential settlements of the pipelines; and

- Appendix with relevant logs of the test borings from previous studies, and a summary of the subsurface conditions previously found by us and others

Task 3 Deliverables:

- Topographic survey (AutoCAD Civil 3D format)
- Geotechnical Investigation Report (Draft and Final in PDF format)

Task 3 Assumptions:

- One (1) field site visit for each subconsultant
- Potholing not included in this scope
- Spoils from borings are assumed to be non-hazardous. If tested and determined to be hazardous, additional costs for disposal shall be borne by the OWNER
- Field condition assessment work is NOT included

TASK 4.0 - REGULATORY AGENCY PERMITTING ASSISTANCE

Under this task, ENGINEER will provide environmental permitting and compliance as necessary to complete the project design. This work will be conducted by a subconsultant to the ENGINEER. To proceed with a long-term solution to rehabilitate/replace the SE pipeline and the Pond Return Pipeline (if required), the OWNER must coordinate with resource agencies and acquire environmental permits, as well as prepare an Addendum to the Sunnyvale WPCP Master Plan Programmatic Environmental Impact Report (PEIR). The scope for these tasks is detailed below.

Task 4.1 - Project Description and CEQA Addendum. Under this task, ENGINEER will prepare a draft project description to be used for the CEQA analysis. The reviewed project description will be used to prepare an Addendum, which documents the activities, impacts, and mitigation measures in the PEIR that are applicable to this project. The purpose of this Addendum is to determine whether the proposed activities would result in any new significant environmental impacts or increase the magnitude or severity of any significant impacts disclosed in the PEIR. It is anticipated that the project will have no effects beyond those analyzed in the PEIR. Should the project require additional CEQA documents, these services shall be priced separately. Up to two (2) conference calls for this task are included.

Task 4.2 - Resource Agency Coordination and Environmental Permit Acquisition Support. ENGINEER shall confirm applicable regulatory and permitting agency requirements, inform the OWNER of such requirements, prepare draft applications and supplemental documentation, revise applications based on OWNER and permitting agencies' review and comments, and participate in an interagency meeting to discuss and review applications. The OWNER will take the lead in the permit acquisition process after draft applications and supplemental documentation are completed. The OWNER will be the lead negotiator in the permit acquisition process.

ENGINEER shall inform the OWNER of the appropriate permit application fee and the OWNER will pay all required permit application fees.

Agency Coordination Support. After permit applications are submitted and prior to permit issuance, ENGINEER shall provide technical assistance to OWNER to respond to regulatory agency questions. It is anticipated that the permitting consultation and coordination activities would be conducted in parallel/simultaneously with the application process described in this task for permit processing. This task includes ENGINEER's attendance at twelve (12) meetings or conference calls. If agency consultation/coordination requires additional effort, ENGINEER may elect to negotiate a service order amendment. The permitting applications will be prepared by ENGINEER; permit applications are intended

to be submitted to the agencies no later than March 31, 2022. ENGINEER's technical staff shall be available after that time to answer questions or provide follow-up support regarding regulatory matters up to the budget limit set aside for this task.

Compensatory Mitigation Support. This task includes support to respond to unforeseen regulatory agency requirements, such as the need for compensatory mitigation or a revised permitting strategy. This task can be utilized to assist the OWNER to identify compensatory mitigation if required by the agencies, to assist with agency mitigation negotiation, or to support revegetation planning. These services will be coordinated with the OWNER prior to initiating work and the OWNER will need to authorize this work prior to initiation.

Task 4.3 - Field Assessments and Reports. Under this task, ENGINEER will prepare required surveys assessments and reports to facilitate the regulatory permitting requirements. The anticipated reports are as follows:

Aquatic Resources Delineation Report. A wetland specialist will conduct a preliminary aquatic resources delineation of the project site in accordance with current U.S. Army Corps of Engineers (USACE) requirements to determine the location and extent of potential jurisdictional waters of the U.S., including wetlands. The delineation using the methods specified in the USACE 1987 Wetland Delineation Manual and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) will be implemented. The delineation area will include any areas where ground disturbance and construction activities would occur and any potential staging and access areas. The delineation report will include a site description; a description of the methodologies and results of the data collection; a map of the site and all aquatic resources that were identified during the field delineation; a discussion of vegetation, soils, and hydrology; and copies of the standardized data sheets that were used during field work. The report will include information necessary to support the USACE in their verification and any required permitting.

Expected limits of State jurisdictional waters [per RWQCB and CDFW guidance], if different from the extent of USACE jurisdictional areas, will also be documented concurrently with the USACE delineation effort for use in the RWQCB 401 Certification application and CDFW Streambed Alteration Agreement Notification. Extents of potential San Francisco Bay Conservation and Development Commission (BCDC) jurisdiction will also be mapped.

ENGINEER will assume that all potential waters of the U.S. within the delineation study area are jurisdictional in the USACE permit application and will not request a formal jurisdictional determination from the USACE. This scope assumes one site visit with USACE staff to verify the extent of jurisdictional waters and one round of revision to the delineation map based on USACE comments.

Rare Plant Survey. As discussed in the PEIR, one special-status plant, Congdon's tarplant, is known to occur in the vicinity of the Sunnyvale WPCP. ESA will conduct a floristic survey of the project site during the summer of 2021, to capture the flowering period of summer flowering annuals including tarplants. The survey will occur over one day. The survey will be conducted in accordance with the California Department of Fish and Wildlife's (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, 2018), to identify and document the floristic diversity within the survey area, including special-status plants. In addition, an existing population of Congdon's tarplant (*Centromadia parryi* subsp. *congdonii*) will be used as a reference site to confirm the correct survey timing.

All plant taxa observed will be identified to the level necessary to determine rarity status and recorded in a comprehensive list of plants observed. Location, population characteristics, and vegetation community information for special-status plant populations will be recorded, and populations will be mapped according to the CDFW protocol. Voucher collections will be made, as necessary, under ESA's voucher collection permit (2018(a)-18-074-V) and submitted to the UC Berkeley Herbarium as physical evidence to validate plant identification. Any collected specimens are documented for posterity.

ENGINEER will prepare a report that presents the methods and results of the floristic survey, along with a comprehensive list of plants observed, following the conclusion of the summer survey. A map of special-status plants will also be included with the report along with photos of such species, if any are observed. ENGINEER will incorporate one round of comments and edits from the OWNER into the report.

Biological Assessment. ENGINEER shall prepare a biological assessment using the best scientific and commercial data available that complies with the Section 7 regulations (50 C.F.R. § 402.13) to complete consultation with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries, and Essential Fish Habitat (EFH) Consultation under the Magnuson-Stevens Fishery Conservation and Management Act (50 C.F.R. § 600.905 – 600.930) with NOAA Fisheries. A recently completed detailed biological resources technical report for other OWNER projects in the vicinity, and to the extent possible will use information from the biological resources technical report. The biological assessment shall include:

- A description of the action being considered;
- A description of the specific area that may be affected by the action including maps;
- Site reconnaissance, habitat mapping, and identification of known or anticipated special-status plant, aquatic, and animal species present.
- A description of any listed species or critical habitat that may be affected by the action;
- A description of the manner in which the action may affect any listed species or critical habitat, and an analysis of any cumulative effects;
- A description of proposed avoidance and minimization measures that would be adopted by the applicant that would avoid or minimize the effects to the extent that the species or habitat; and,
- An assessment regarding whether these habitats/species are likely to be adversely affected by the implementation of the project.

This task assumes that the project would avoid take of all state-listed species and take of all species listed as Fully Protected Species under California Fish and Game Code.

State Historic Preservation Office (SHPO) Consultation Support. ENGINEER shall prepare a technical memorandum summarizing the findings of the cultural resources survey report prepared for the Master Plan PEIR, including an updated archival records search, updated Native American outreach, and an evaluation of the Cargill Channel as a contributor to the Alviso Salt Ponds Historic District. This scope assumes the Cargill Channel is either not a contributor to the District and the finding will be No Historic Properties Affected or that the Cargill Channel is a contributor to the District and there will be No Adverse Effect. If there is a finding of Adverse Effect, additional documentation or agreement documents would be required that are not included in this scope of work. Cost estimate for this task includes archival records search fee for the Northwest Information Center.

Permitting Project Description. ENGINEER will prepare the permitting project description that will be included as an attachment to the USACE, RWQCB, CDFW, and BCDC permit applications. The project

description will include a description of project features, construction period, and construction methods and will be based on the project's 60% design drawings. Using the CEQA Addendum project description as a starting point, ENGINEER will prepare a request for information for submittal to the OWNER with a list of items to complete the draft permitting project description. After OWNER review, ENGINEER will produce one final project description based on consolidated comments. This task assumes that a permitting specialist will participate in a conference call to discuss the project description.

CDFW 1602 Notification. A Lake or Streambed Alteration (LSA) Agreement under California Fish and Game Code (FGC) Section 1602 applies to any project that will substantially divert, obstruct, or change the natural flow of a river, stream or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. ENGINEER will prepare a LSA Notification for the City to submit to CDFW to secure an LSA Agreement for the project. The notification will include the project description; a description of existing vegetation communities; special-status species with potential to occur at the project site; impacts on FGC 1600 et seq. resources including streams, vegetation, fish, and wildlife; measures to avoid and minimize project impacts; copies of the aquatic resources delineation report and biological resources evaluation; and a copy of the CEQA compliance. ENGINEER will prepare a draft and final CDFW 1602 Notification for the City. The OWNER, as the project applicant, will submit the application electronically via CDFW's Environmental Permit Information Management System (EPIMS) Permitting Portal. ENGINEER will provide assistance to the OWNER with this submittal.

U.S. Army Corps of Engineers (USACE) Clean Water Act 404 Nationwide Permit (NWP) Pre-Construction Notification. This task assumes that the project will qualify for coverage under one or more USACE NWP such as NWP 3: Maintenance and/or NWP 58: Utility Line Activities. The USACE will determine the appropriate NWPs for the project. ENGINEER shall prepare one pre-construction notification package. ENGINEER shall submit the aquatic resources delineation report with the pre-construction notification package for the NWP. The pre-construction notification will also include the required notification form; supplemental project information, impacts, and impact avoidance and minimization measures based on PEIR MMRP and recent biological opinion for work near Moffett Channel; technical reports to support USACE consultation with USFWS, NMFS, and SHPO; project designs; and other required information. This task includes a field delineation verification with USACE staff and minor revisions to the jurisdictional delineation as requested by the USACE. If the USACE determines that an Individual Permit is required, additional scope, budget and schedule will be required.

San Francisco Bay Regional Water Quality Control Board Clean Water Act 401 Water Quality Certification Application Package. A Section 401 permit is needed from RWQCB for activities that may result in a discharge to Waters of the State/U.S. This requirement is triggered by the in-water construction work and the need for a Clean Water Act Section 404 permit. ENGINEER will prepare a 401 permit application package to submit to RWQCB in order to pursue a water quality certification for the project.

The application will follow the Implementation Guidance for the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Wetland Procedures; April, 2020) and the U.S. Environmental Protection's (EPA's) Section 401 certification rule (40 CFR Part 121), which went into effect in September 2020. The application form will be completed and submitted along with supplemental information on the proposed project, including the project description, potential project impacts, a list of impact avoidance and minimization measures that will be implemented, copies of the aquatic resources delineation report and biological assessment, a copy of the CEQA compliance documentation, and a cover letter. The City will submit the application to the RWQCB. This task includes with RWQCB, answering

questions, and reviewing the agency-issued draft permit (if provided). The budget does not include any permit application fees.

As required by the Wetland Procedures, ENGINEER will prepare an alternatives analysis as required by the Wetland Procedures and will provide information to the RWQCB to support a determination that the proposed project is the Least Environmentally Damaging Practicable Alternative. Background information on at least two alternative project designs that were evaluated, but rejected, as part of project development will be included. This task assumes that an ENGINEER permitting specialist will participate in conference calls to discuss the alternatives.

RWQCB Pre-application Meeting. In accordance with the EPA's September 2020 401 Certification Rule, an applicant must request a pre-application meeting with the RWQCB at least 30 days prior to applying for certification. ENGINEER will assist with the preparation of a brief memorandum to request the interagency pre-application meeting including a description of the project, the applicable permits and approvals, summary of project impacts, etc. ENGINEER will provide the memorandum and the OWNER will review and ENGINEER will finalize for OWNER to submit it to the appropriate regulatory agencies and schedule the meeting. ENGINEER will support the OWNER at the pre-application meeting, assumed to be virtual meeting. ENGINEER will prepare a short PowerPoint presentation and provide meeting notes. This scope assumes one ENGINEER staff would attend the pre-application meeting, participate in a conference call with the project team prior to meeting, and participate in a conference call with the project team to debrief after the meeting.

Bay Conservation and Development Commission (BCDC) Development Permit Application Package. ENGINEER shall prepare a BCDC permit application and required supplemental analyses and documentation. This scope assumes that a Major Permit will not be required by BCDC. If a Major Permit is required, ENGINEER may elect to negotiate a service order amendment that provides for the effort required to complete a Major Permit. The budget does not include any permit application fees.

Task 4 Deliverables:

- Draft Project Description
- Administrative Draft, Draft, Draft Final, and Final CEQA Addendum
- Response to comments for Administrative Draft, Draft, Draft Final CEQA Addendum
- Administrative Draft, Screen Check Draft, and Final permit notification packages
- Geographic Information System (GIS) files
- Draft and Final Aquatic Species Resources Delineation Report.
- Draft and Final Special Status Plant Report.
- Draft and Final Biological Assessment Report.
- Draft and Final Cultural Resources Technical Memorandum.
- Draft and Final Permitting Project Description.
- Draft and Final CDFW 1602 Notification package.
- Draft and Final USACE Pre-Construction Notification application package.
- Draft and Final SF RWQCB 401 Water Quality Certification application package.
- Draft and Final RWQCB Pre-Application Memorandum.
- Draft and Final BCDC Development Permit application package.
- Draft and final construction compliance measures table and checklist.
- Draft and final post-construction report memorandum.

Task 4 Assumptions:

- Permit application preparations are assumed to take no more than twelve (12) months.
- OWNER will prepare and file the Notice of Determination and any associated Findings.
- Development of a mitigation plan would be covered under a separate scope and budget.
- Permitting calculations, descriptions, and figures will be based on one single set of design drawings. This scope does not accommodate re-work associated with design drawing revisions or dividing project components into different permit applications.
- ENGINEER will provide limits of federal and state jurisdiction in GIS. ENGINEER will provide the area and volume of cut and fill by type of material within each jurisdiction.
- Project alternatives required for 401 certification Least Environmentally Damaging Practicable Alternative analysis will be identified by ENGINEER.
- The OWNER shall pay all permit fees.
- Areas affected will be restored to pre-project conditions.
- The project will not result in take of a state listed species and a CDFW Section 2081 Incidental Take Permit will not be required.
- Permit applications prepared by ENGINEER will meet regulatory requirements and ENGINEER will support the OWNER in gaining agency approvals to the best of our abilities. However, ENGINEER cannot guarantee successful procurement of regulatory agency permits and approvals within a desired timeframe.
- A BCDC major permit will not be required.
- The regulatory agencies may request technical studies or additional documents that are not identified in this scope. Preparation of such documents can be provided under a separate scope of work.
- All submittals will be electronic PDF format.
- The ENGINEER will attend permit coordination meetings with a total assumed level of effort of 72 hours for the entire permitting period, including all permitting meeting effort.

TASK 5.0 - DEVELOP CONSTRUCTION DOCUMENTS

Task 5.1 - Develop 50% Plans, Specifications and Estimate (PS&E). Under this task the ENGINEER will provide development of a 50% PS&E document submittal, including:

- Develop design base map with utilities, right-of-way, easement and lot lines.
- Develop plan sheets for the pipelines, showing existing utilities and proposed pipeline alignments
- Identify utilities to pothole
- Prepare list of technical specifications and 50% engineer's estimate

Five copies of the plans (half-size), specifications, and estimate will be provided to the OWNER for review.

Task 5.2 - Conduct 50% PS&E Review Workshop. A workshop to discuss the design components of the 50% PS&E documents will be conducted after the OWNER review period. The workshop will be held at the OWNER offices. Prior to the workshop, a pre-call will be conducted with Program representatives.

Task 5.3 - Develop 75% PS&E Submittal Package. Development of a 75% PS&E document submittal will be completed under this task, including:

- Coordinate potholing activities
- Prepare complete detailed plans, plan and profile drawings, general drawings, pipe connection details, technical specifications and 75% engineer's estimate

- Incorporate project specific information into City front-end specifications

Five copies of the plans (half-size), specifications, and estimate will be provided to the OWNER for review. Comments from the 50% review will be incorporated into the 75% PS&E package and a Comment Response Log provided to the OWNER.

Task 5.4 - Conduct 75% PS&E Review Workshop. A workshop to discuss the design components of the 75% PS&E documents will be conducted after the OWNER review period. The workshop will be held at the OWNER offices. The workshop will focus on the key facilities and discuss item design components for the project. Prior to the workshop, a pre-call will be conducted with Program representatives.

Task 5.5 - Develop 95% PS&E Submittal Package. Development of a 95% PS&E document submittal will be completed under this task. Five copies of the plans (half-size), specifications, and estimate will be provided to the OWNER for review. Comments from the 75% review will be incorporated into the 95% PS&E package and a Comment Response Log provided to the OWNER.

Task 5.6 - Conduct 95% PS&E Review Meeting. A review meeting will be conducted to discuss the 95% PS&E submittal and any questions that the OWNER may have after the review period.

Task 5.7 - Develop FINAL PS&E Submittal Package. Development of a FINAL PS&E document submittal will be completed under this task. Five copies of the plans (half-size), specifications, and estimate will be provided to the OWNER. This submittal will be for final Bid Ready documents. Comments from the 95% review will be incorporated into the FINAL PS&E package and a Comment Response Log provided to the OWNER.

Task 5 Deliverables:

- 50% PS&E submittal package. (Five hard copies and one PDF file)
- 50% Review Workshop materials.
- 50% Review Comment Response Log.
- 75% PS&E submittal package. (Five hard copies and one PDF file)
- 75% Review Workshop materials.
- 75% Review Comment Response Log.
- 95% PS&E submittal package. (Five hard copies and one PDF file)
- 95% Review Meeting materials.
- 95% Review Comment Response Log.
- FINAL PS&E submittal package. (Five hard copies and one PDF file)

Task 5 Assumptions:

- Existing utility bridge to be incorporated into final SE Pipeline alignment alternative.
- Rehabilitation and/or replacement of the Pond Return Pipeline is included in this task, however, the ENGINEER will not complete that scope until confirmation from the OWNER is received based on work completed under previous tasks and per the Phase 3 Condition Assessment (by others).

OPTIONAL TASKS

Task 0.1 - Geotechnical Investigation Additional Boring (Optional Task). Depending upon the subsurface conditions encountered, one additional (optional) boring may be drilled from a barge within the Cargill Channel to a depth of up to 30 feet below the mudline. Perform similar tests on soil samples as described in Task 3.2. Include data analysis and laboratory results in geotechnical report.

Task O.2 - Preparation of a Tiered Negative Declaration (Optional Task). If during project description development in Task 4.1 ENGINEER determines the project will have effects beyond those analyzed in the PEIR, the OWNER will request that ENGINEER prepare an Initial Study leading to a Negative Declaration. It is assumed for this task that any change from the PEIR would result in impacts at the less-than-significant level. If ENGINEER identifies one or more new and significant impacts, ENGINEER will immediately notify the OWNER. ENGINEER will update the Project Description and develop the environmental analysis for any changes from the PEIR. ENGINEER will complete an Administrative Draft Initial Study checklist. The PEIR shall be incorporated by reference and used as the basis of the documents, such that discussion in these documents is limited to new effect(s) which had not been considered in the PEIR. ENGINEER will prepare a Screencheck Draft Initial Study checklist, Notice of Intent, Negative Declaration, and Environmental Document Transmittal Form. After receiving comments on the Screencheck Draft, ENGINEER will prepare the Public Draft Initial Study, Notice of Intent, Negative Declaration, and Environmental Document Transmittal Form, incorporating any comments on the Screencheck Draft. ENGINEER will distribute the Public Draft documents to the State Clearinghouse and a distribution list provided by the OWNER. ENGINEER will be responsible for reproduction of all required hardcopies. It is anticipated that 15 hardcopies of each Public Draft document will be required by the State Clearinghouse. ENGINEER will be responsible for distribution of nine hardcopies to local libraries. If required, publication in the Sunnyvale Sun and San Jose Mercury News would be coordinated by ENGINEER; publication fees are assumed to be paid by the OWNER. ENGINEER will prepare responses to up to 5 comment letters (up to 12 hours of effort) received on the Public Draft Initial Study and Negative Declaration. ENGINEER will prepare a memorandum providing Responses to Comments. ENGINEER will also prepare the Statement of Findings and the Council Resolution. The OWNER will prepare and present the Report to Council. For each of these deliverables, ENGINEER will submit an Administrative Draft and respond to and incorporate OWNER's comments on this draft, prior to producing and releasing the Final version. ENGINEER will prepare Administrative Draft Notice of Determination, respond to and incorporate OWNER's comments on this draft, and prepare and submit required hardcopies of Final Notice of Determination to the State Clearinghouse and Santa Clara County Recorder.

Task O.3 - Additional Environmental Permit Documentation Support (Optional Task). This task includes up to 92 hours of additional support to prepare additional permit documentation if a regulatory agency requires a different type of permit coverage than assumed in the above environmental permitting tasks. If additional time beyond what is included in this optional task is required to prepare the additional permit documentation, such work would be completed under a separate scope of work.

EXHIBIT B-1
ESTIMATED ENGINEERING HOURS AND COSTS
City of Sunnyvale
P2.1 - Amendment No. 1 - Pond Pipeline Design Proposal
July 27, 2021

TASK		CAROLLO								OTHER DIRECT COSTS								COST SUMMARY			
		PIC	PM	DPM	LP	AP	Admin	CADD Tech.	Clerical							Sub-consultant					
Rates		\$310	\$310	\$261	\$254	\$208	\$155	\$155	\$135	Subtotals		ESA	Fugro	Towill		Subtotals	5.0%	Misc. Costs and Printing	Travel	Total ODCs	Total Cost
Task 1 - Project Management																					
1.1	Project Administration	8	32	48	0	0	84	0	24	196	\$41,188	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500	\$41,688
1.2	Meetings	12	24	40	0	40	0	0	24	140	\$33,160	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$2,000	\$2,250	\$35,410
Task 1 Total Hours		20	56	88	0	40	84	0	48	336											
Task 1 Total Budget		\$6,200	\$17,360	\$22,968	\$0	\$8,320	\$13,020	\$0	\$6,480		\$74,348	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$2,000	\$2,750	\$77,098
Task 2 - Alternatives Analysis																					
2.1	Review Existing Information	2	4	8	0	16	0	0	0	30	\$7,276	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$7,776
2.2	Alternatives Analysis	4	24	40	2	40	0	32	36	178	\$37,768	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,768
2.3	Alternatives Analysis Workshop	4	8	8	0	8	0	8	4	40	\$9,252	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$0	\$250	\$9,502
Task 2 Total Hours		10	36	56	2	64	0	40	40	248											
Task 2 Total Budget		\$3,100	\$11,160	\$14,616	\$508	\$13,312	\$0	\$6,200	\$5,400		\$54,296	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$500	\$750	\$55,046
Task 3 - Field Investigations																					
3.1	Conduct Topographic Survey	0	4	4	4	8	0	4	4	28	\$6,124	\$0	\$0	\$13,000	\$0	\$13,000	\$650	\$0	\$100	\$13,750	\$19,874
3.2	Conduct Geotechnical Investigation	0	4	4	6	8	0	0	4	26	\$6,012	\$0	\$49,300	\$0	\$0	\$49,300	\$2,465	\$0	\$100	\$51,865	\$57,877
Task 3 Total Hours		0	8	8	10	16	0	4	8	54											
Task 3 Total Budget		\$0	\$2,480	\$2,088	\$2,540	\$3,328	\$0	\$620	\$1,080		\$12,136	\$0	\$49,300	\$13,000	\$0	\$62,300	\$3,115	\$0	\$200	\$65,615	\$77,751
Task 4 - Regulatory Agency Permitting Assistance																					
4.1	Project Description Development and Addendum to the PEIR	2	4	4	0	8	0	0	4	22	\$5,108	\$28,050	\$0	\$0	\$0	\$28,050	\$1,403	\$0	\$0	\$29,453	\$34,561
4.2	Resource Agency Coordination and Environmental Permit Acquisition Support	2	32	48	0	36	0	0	4	122	\$31,096	\$29,180	\$0	\$0	\$0	\$29,180	\$1,459	\$0	\$0	\$30,639	\$61,735
4.3	Field Assessments and Reports	2	8	8	0	4	0	0	4	26	\$6,560	\$111,480	\$0	\$0	\$0	\$111,480	\$5,574	\$0	\$0	\$117,054	\$123,614
Task 4 Total Hours		6	44	60	0	48	0	0	12	170											
Task 4 Total Budget		\$1,860	\$13,640	\$15,660	\$0	\$9,984	\$0	\$0	\$1,620		\$42,764	\$168,710	\$0	\$0	\$0	\$168,710	\$8,436	\$0	\$0	\$177,146	\$219,910
Task 5 - Develop Construction Documents																					
5.1	Develop 50% Plans, Specifications and Estimate (PS&E)	4	32	40	40	120	0	240	48	524	\$100,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,400
5.2	Conduct 50% PS&E Review Workshop	2	4	16	4	16	0	8	16	66	\$13,780	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$1,500	\$2,000	\$15,780
5.3	Develop 75% PS&E Submittal Package	8	40	80	80	80	0	160	80	528	\$108,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$108,320
5.4	Conduct 75% PS&E Review Workshop	2	8	20	4	16	0	8	16	74	\$16,064	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$1,500	\$2,000	\$18,064
5.5	Develop 95% PS&E Submittal Package	8	16	32	40	40	0	120	84	340	\$64,212	\$0	\$4,150	\$0	\$0	\$4,150	\$208	\$0	\$0	\$4,358	\$68,570
5.6	Conduct 95% PS&E Review Meeting	4	8	20	0	16	0	8	16	72	\$15,668	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$1,500	\$1,900	\$17,568
5.7	Develop FINAL PS&E Submittal Package	0	4	4	0	8	0	0	12	28	\$5,568	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,568
Task 5 Total Hours		28	112	212	168	296	0	544	272	1632											
Task 5 Total Budget		\$8,680	\$34,720	\$55,332	\$42,672	\$61,568	\$0	\$84,320	\$36,720		\$324,012	\$0	\$4,150	\$0	\$0	\$4,150	\$208	\$1,400	\$4,500	\$10,258	\$334,270
Total Hours (w/o Optional Task)		64	256	424	180	464	84	588	380	2440											
Total Cost (w/o Optional Task)		\$ 19,840	\$ 79,360	\$ 110,664	\$ 45,720	\$ 96,512	\$ 13,020	\$ 91,140	\$ 51,300		\$ 507,556	\$ 168,710	\$ 53,450	\$ 13,000	\$ -	\$ 235,160	\$ 11,759	\$ 2,400	\$ 7,200	\$ 256,519	\$ 764,075
OPTIONAL TASKS																					
O.1	Geotechnical Investigation Additional Boring (Optional Task)	0	2	2	0	4	0	0	2	10	\$2,244	\$5,520	\$72,000	\$0	\$0	\$77,520	\$3,876	\$0	\$0	\$81,396	\$83,640
O.2	Preparation of a Tiered Negative Declaration (Optional Task)	0	4	8	0	8	0	8	4	32	\$6,772	\$64,440	\$0	\$0	\$0	\$64,440	\$3,222	\$0	\$0	\$67,662	\$74,434
O.3	Additional Environmental Permit Documentation Support (Optional Task)	0	4	8	0	8	0	8	4	32	\$6,772	\$16,820	\$0	\$0	\$0	\$16,820	\$841	\$0	\$0	\$17,661	\$24,433
Task O Total Hours		0	10	18	0	20	0	16	10	74											
Task O Total Budget		\$0	\$3,100	\$4,698	\$0	\$4,160	\$0	\$2,480	\$1,350		\$15,788	\$86,780	\$72,000	\$0	\$0	\$158,780	\$7,939	\$0	\$0	\$166,719	\$182,507
Total Hours (w/ Optional Task)		64	266	442	180	484	84	604	390	2514											
Total Cost (w/ Optional Task)		\$ 19,840	\$ 82,460	\$ 115,362	\$ 45,720	\$ 100,672	\$ 13,020	\$ 93,620	\$ 52,650		\$ 523,344	\$ 255,490	\$ 125,450	\$ 13,000	\$ -	\$ 393,940	\$ 19,698	\$ 2,400	\$ 7,200	\$ 423,238	\$ 946,582