Master City of San José Consultant Agreement
Approved Service Order Form – RWF Capital Projects
Cover Page

1a.	CPMS Contract No.: 9855-3	**1b.**	Master Agreement AC Contract No.: 32246
2.	Approved Service Order No. 2		Master Agreement Records Database Contract No.: 667141
3.	Consultant's Name: HDR Engineering, Inc. ("Consultant")		

4. Project Name: Flood Protection – Preliminary Design Services ("Project")

5. Project Location: San José-Santa Clara Regional Wastewater Facility, 700 Los Esteros Road, San Jose, CA 95134 ("RWF")

6. The Consultant and the City will implement this Approved Service Order in accordance with the Master Agreement, this cover page and Attachments "A" (Tasks), "B" (Terms and Conditions), and "C" (Compensation Table), and "D" (Level of Effort), which are incorporated herein by references.

7. Budget/Fiscal:

a.	Current **unencumbered** amount in Master Agreement:	$	6,872,216.45
b.	**Maximum Service Order Compensation for this Approved Service Order:**	$	797,173
c.	New unencumbered balance in Master Agreement (7.a – 7.b):	$	6,075,043.45

d. **Appropriation Certification**: I certify that an unexpended appropriation in the amount of the Maximum Service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.

Fund: 512 Appn: 402M RC: 191033 Amount:$ 765,219

Fund: 512 Appn: 402M RC: 191034 Amount: $ 31,954

Authorized Signature: Harpal Singh Date:
Email: harpal.singh@sanjoseca.gov
Date: 02/13/2023 GMT

8. Division Analyst Approval: Mary Crippen Date:
Email: mary.crippen@sanjoseca.gov
Date: 02/13/2023 GMT

9. Consultant Approval: Holly Kennedy Date:
Email: holly.kennedy@hdrinc.com
Date: 02/12/2023 GMT

10. Approval as to Form (City Attorney):

☐ Service Order Form Approved by the Office of the City Attorney

(There are no material changes to the provisions of the Approved Service Order Form.)

☒ Approved as to Form:

Attorney
Kevin Fisher
Assist City Attorney U
kevin.fisher@sanjoseca.gov

Kevin Fisher Date:
Email: kevin.fisher@sanjoseca.gov
Date: 02/13/2023 GMT
Assistant City Attorney

11. City Director Approval: Napp Fukuda Date:
Email:
Date: 02/14/2023 GMT

Attachment A: Tasks

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's Contract Manager.

General Description of Project for which Consultant will Provide Services:

The purpose of the Flood Protection Project ("Project") is to construct flood protection berm to the south and west of the RWF to 9.5 feet North American Vertical Datum of 1988 (NAVD 88) with a design allowing us to ultimately raise the berm to 12.5 feet NAVD 88 under a separate project

This project is not under jurisdiction of the United States Army Corps of Engineers (USACE), the Federal Emergency Management Agency (FEMA), or other Federal programs. The project features will be designed to the elevations provided by the City as determined during the Alternatives Analysis phase.

This Project will follow a design-bid-build delivery method.

The objective of this Service Order ("SO") is to conduct site investigations, and provide design services to complete Preliminary Design, Detailed Design, and Bid and Award Period services for Project.

This SO consists of the following tasks.

Task No. 1: Project Management

Task No. 2: Site Survey and Utility Location

Task No. 3: Geotechnical Investigation

Task No. 4: Preliminary Design Services

Task No. 5: Funding Support

Task No. 6: Stockpile Soils Characterization

Task No. 1: Project Management

A. **Services:** Consultant's project manager ("PM") shall make staffing assignments, review and track work progress, coordinate quality management and review procedures, and serve as the primary point-of-contact when communicating with the City. Consultant's PM shall manage the budget, schedule, and invoicing. Consultant's PM shall also prepare and maintain a log to record decisions made by the City throughout the Project and manage the quality of deliverables.

Consultant shall use the document management systems used by the RWF CIP. The systems include a Microsoft SharePoint site referred to as the CIP Portal and a cloud-based design and construction management software.

Consultant shall follow the City's templates and guidelines. The deliverables submitted by Consultant shall conform to the City's templates and guidelines. The City will provide access to these templates and guidelines no later than ten (10) Business Days following the Kickoff Meeting. The templates and guidelines currently available include:

- CIP Cost Estimating Manual
- Design Guidelines

- Division 0 and Division 1 Specifications
- Meeting Agenda
- Meeting Minutes
- Project Decision Log ("PDL")
- Project Quality Plan
- Quality Management Certification
- Quality Review Form
- Risk Matrix and Assessment
- Technical Memorandum; and
- Technical Report.

Consultant shall perform the following project management activities.

1. Daily Oversight: Consultant shall oversee the daily management of scope, deliverables, schedule, and budget. Total duration of Project is assumed to be 17 months.
2. Teleconferences: Consultant shall participate in status teleconferences with the City every two weeks to discuss overall work progress and the status of near-term efforts and requirements. Communication that is more frequent may occur if necessary, and as requested by the City's Contract Manager. Teleconferences will be scheduled every other week and last one hour each and will be attended by the PM and a senior engineer as needed.
3. Project Work Plan: Consultant shall prepare and submit a draft and final Project Work Plan ("PWP") detailing tasks to be performed, schedule, deliverables (including their requirements and resources needed), and risk management plan. The PWP does not need to be updated monthly.
4. Project Schedule: Consultant shall prepare and maintain a Project schedule utilizing the Critical Path Method technique and electronic scheduling software (e.g., Primavera or Microsoft Project). The schedule shall adopt a work breakdown structure that reflects the Project scope and that is based on City Business Days for activity durations (i.e., start and finish dates) and link activities with the appropriate logic (i.e., predecessors and successors). The schedule shall include required constraints, sequences, milestones, and a baseline to track actual progress to date and anticipated future performance. Monthly, Consultant shall summarize significant changes in the updated schedule from the previous submitted schedule and propose corrective actions to mitigate negative variances (i.e., delays) to the baseline as soon as they are identified for concurrence from the City's Project Manager. Consultant shall update the schedule and submit the updated schedule with the summary of significant changes and proposed corrective actions along with Monthly Progress Reports. The Project Schedule will be developed in detail at the start of the Project and will be updated as needed month-to-month to reflect changes to the schedule. The initial schedule will be developed as a" best-case" scenario with the expectation that items will likely change over time.
5. Health and Safety Plan: Consultant shall develop and submit the Health and Safety Plan ("HASP") for the portion of Consultant's work that will involve field work, assessments, or investigations of certain Project elements. The HASP shall describe how Consultant plans to complete field work, assessments, and/or investigations at the RWF. Consultant's HASP must comply with the CIP HASP and shall be updated as new conditions are encountered.
6. Quality Management: Consultant shall develop and implement a Project-specific Quality Management Plan ("QMP") to support the execution of the work required by this SO. The QMP shall describe Consultant's overall quality management process, identify the quality reviewers and the review levels associated with each Project milestone and deliverable, and the timing of each review.

a. The quality management efforts that shall be addressed by Consultant in the QMP include:
   - Coordinating work products, milestones, and staff assigned for review activities
   - Conducting milestone technical and readability reviews for deliverables
   - Certification of internal quality control and quality assurance activities and work product modifications in the PDL; and
   - Completing and submitting Quality Review Forms and Quality Management Certifications for draft and final deliverables.

b. Consultant's quality reviewers and their respective qualifications shall be identified in the QMP. Quality reviewers shall be independent (i.e., not part of Consultant's core team for the Project) and shall be qualified to provide technical reviews. Each deliverable shall be reviewed by quality reviewers for technical correctness and completeness and proofread by a technical writer for readability prior to the submittal of the deliverable to the City. Consultant shall submit a Quality Management Certification signed by the quality reviewers confirming the quality review process was completed for each draft and final deliverable. The City may request Consultant to submit additional evidence that Consultant is following the procedures in the QMP.

c. Comments from the City's review of the Consultant's draft and final deliverables will be recorded on a Quality Review Form. Consultant shall review the City's comments, confirm with the City how Consultant shall address the comments in the next iteration of the deliverable or a subsequent deliverable, and then submit a Quality Review Form with responses to the City's comments for up to one round of comments per deliverable.

7. Kickoff Meeting: Consultant shall organize and facilitate a Kickoff Meeting with City staff. Consultant's PM and the appropriate Project team members shall attend the Kickoff Meeting. Topics to be discussed at the meeting shall include:

   a. Introduction of key Consultant and City Project team members

   b. Presentation of Consultant's QMP

   c. Review of Consultant's understanding of the Project need and objectives

   d. Summary of Project scope, work plan, schedule, and deliverables

   e. Recap of previously completed analyses, studies, and reports associated with the Project

   f. Discussion of other CIP or maintenance projects underway and planned that may be dependent on and/or have implications for the Project

   g. Additional information Consultant has deemed relevant to or necessary for Project and for which City may address by transmitting an existing document; and

   h. Confirmation of next steps.

   Consultant shall prepare an agenda and meeting materials in advance of the Kickoff Meeting and shall prepare meeting minutes.

   The Kickoff Meeting will be hosted on Microsoft (MS) Teams, Zoom, Webex or similar platform and last two hours. The PM, Senior Geotechnical Engineer, Quality Assurance Manager, and Senior Civil Engineer will attend.

8. Risk Register: Consultant shall prepare and maintain a Risk Register that identifies project risks, probabilities, mitigation measures, and ownership using the Program's Risk Matrix and Assessment template. The Risk Register shall list interfaces with other projects, possible schedule impacts, and contingency plans. The Risk Register shall be updated monthly and submitted with Monthly Progress Reports.

9. Project Decision Log: Consultant shall prepare and maintain a Project Decision Log (PDL) that documents the City's comments and decisions made related to the Project and Consultant's

work. As applicable, the PDL shall reference other documents such as meeting minutes, technical memoranda, and reports for all decisions made. The PDL shall be updated monthly and submitted with Monthly Progress Reports.

10. Monthly Progress Reports: Consultant shall prepare and submit a Monthly Progress Report by the 10th of each month, unless requested otherwise by the City's Contract Manager. The Monthly Progress Report shall be a brief written summary of the progress made on each task, estimate the overall task's percent completion, and include the status of each deliverable. The Monthly Progress Report shall also include any significant issues encountered, risks, or concerns Consultant has (e.g., anticipates difficulty meeting deadline for work due within the next 30 days for some reason beyond their control).
11. Monthly Invoices: Consultant shall prepare and submit invoices monthly by the tenth of each month, unless requested otherwise by the City's Contract Manager. The invoices shall be accompanied by the Monthly Progress Report that describes the work completed during the invoice's billing period.

B. Deliverables: Consultant shall provide the following documents to the City's Contract Manager.

1. PWP
    a. A draft PWP shall be provided in an electronic editable file format within ten (10) Business Days from issuance of Notice to Proceed ("NTP"). Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.
    b. A final PWP addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.
2. Schedule:
    a. The initial schedule shall be provided in an electronic editable file format and PDF no later than the Kickoff Meeting.
    b. Updated schedules, including summaries of significant changes and proposed corrective actions, shall be provided as an electronic editable file and as a PDF file submitted along with Monthly Progress Reports.
3. HASP
    a. A draft HASP shall be provided in an electronic editable file format at least twenty (20) Business Days prior to first scheduled field work, assessment, or investigation. Consultant shall allow City a minimum of ten (10) Business Days to review, compile, and provide comments.
    b. The final HASP addressing City comments shall be provided as an electronic editable file and as a PDF file within ten (10) Business Days after receipt of City comments.
4. QMP
    a. A draft QMP shall be provided in an electronic editable file format when the draft PWP is provided to City. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments. The draft QMP can be included in the draft PWP.
    b. The final QMP addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments. The final QMP can be included in the final PWP.
5. A completed Quality Management Certification shall be submitted along with each draft and final deliverable.
6. A Quality Review Form with Consultant's responses to the City's comments shall be submitted within ten (10) Business Days after receipt of City comments on the draft deliverable.
7. Kickoff meeting agendas and materials (e.g., handouts and presentation)

a. The draft agenda and materials shall be provided in an electronic editable file format five (5) Business Days in advance of the meeting date. Consultant shall allow City three (3) Business Days to review, compile, and provide comments.

b. The final agenda and materials addressing City comments shall be provided as electronic editable files and as PDF files no later than two (2) Business Days before the meeting. Consultant shall also provide sufficient printed copies of the final agenda and any handouts for meeting attendees.

8. Kickoff meeting minutes

   a. Draft minutes shall be provided in an electronic editable file format within five (5) Business Days after the meeting. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.

   b. Final minutes addressing City comments shall be provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.

9. Risk Register

   a. The initial Risk Register shall be provided within thirty (30) Business Days of the NTP in an electronic editable file format.

   b. An updated Risk Register shall be provided monthly as an electronic editable file and as a PDF file with each Monthly Progress Report.

10. PDL

    a. The initial PDL template shall be provided within thirty (30) Business Days of the NTP in an electronic editable file format.

    b. An updated PDL shall be provided monthly shall be provided as an electronic editable file and as a PDF file with each Monthly Progress Report.

11. Monthly Progress Reports shall be provided as a PDF file.

12. Monthly invoices shall be provided as a PDF file with each Monthly Progress Report.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

☒ On or before the following date: June 30, 2024.

☐ On or before ____ Business Days from _____.

Task No. 2: Site Survey and Utility Location

A. Services:

Site Survey: Consultant shall conduct a verification/update survey across the project extents (approximately 1,200 feet from the existing rail to the emergency overflow basin, and approximately 2,500 feet from the emergency overflow basin to the project termination) in 500-foot increments using ground survey methods with vertical datum and horizontal control coordinate systems that correspond to the most recent coordinate systems approved by the City. A detailed survey will be conducted for areas adjacent to Los Esteros Road, near the railroad track, and at the tie-in locations to the emergency overflow basin. The survey will provide 1-foot contours for use in the design model. Traffic control will be administered by the Consultant with coordination from the City. Access to the site will be provided by the City. Coordinate system used by the City will be provided to Consultant 10 days prior to start of survey work.

Two underground utilities were noted within the project footprint south of the existing rail tracks. Consultant shall field verify the location of utilities. Field verification will be done via vacuum

excavation and surveyed by a professional land surveyor. Traffic control will be administered by the surveyor. A maximum of 14 utility pothole surveys are anticipated for this Project.

B. **Deliverables:** Electronic copy of survey information.

C. **Completion Time:** Weather pending, Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

☒ On or before the following date: July 31, 2023.

☐ On or before ____ business days from _____.

Task No. 3: Geotechnical Investigation

A. **Services:** Consultant shall perform a geotechnical investigation to support the design of the flood protection berm. The extent of the project considered herein are Reaches A, B, and C, as presented in the project overview titled "RWF Flood Protection Project, Background and Proposed Scope," dated October 5, 2021, as provided by the City. The geotechnical investigation includes the following:

Subsurface Exploration

A review of geologic and geotechnical information available to Consultant indicates that the RWF site is located along the former bay margin. The available information suggests that the northwestern portion of the proposed berm alignment may be underlain by Young Bay Mud. The available information also indicates that a historic slough meandered through the RWF site, crossing the proposed berm alignment near the tie-in to the eastern portion of the Emergency Overflow Basin. The tie-in location corresponds to approximately the west end of Reach B in the project overview provided by the City. Identification and characterization of subsurface conditions in these two specific areas were taken into consideration in establishing the proposed subsurface exploration program. Based on USACE guidance, explorations should be performed at least approximately every 1,000 feet along a berm alignment, or closer where anticipated site and subsurface conditions suggest it is needed. Where practicable, three explorations should be performed perpendicular to the levee alignment: near the waterside toe, on/near the berm crest, and near the landside toe. Although this is not a USACE levee, the Consultant judges that the guidance is applicable and should generally be followed, with some adjustments.

On this basis, Consultant will perform subsurface exploration consisting of up to six (6) hollow stem auger borings to depths of about 35 to 40 feet and six (6) cone penetrometer tests ("CPTs") to depths of about 60 feet along the proposed berm alignment. In general, borings and CPTs will be done in pairs across (perpendicular to) the alignment to provide data to draw cross sections for analysis. In addition, Consultant will perform up to six (6) hollow stem auger borings to depths of about 8 feet along the proposed berm alignment to further characterize the near surface soil to inform the development of recommendations for the inspection trench and subgrade preparation.

Prior to conducting the subsurface explorations, Consultant will prepare a Field Work Plan and Health and Safety Plan, obtain the applicable Santa Clara Valley Water District drilling permit, and check for the presence of underground utilities by contacting Underground Service Alert (USA). Consultant will retain and coordinate with appropriate exploration subcontractors to select suitable exploration equipment for the proposed borings. It is anticipated that track-mounted exploration equipment will be needed to access the proposed exploration locations.

Borings are anticipated to be performed in unpaved areas. Drill cuttings from borings will be spread on site at the boring locations. The scope and fee assume that the subsurface materials encountered are free of contaminants. If that is not the case, additional scope and fee would be needed for soil handling and disposal. If soil cuttings requiring disposal are encountered, the City shall sign all regulatory paperwork, including all waste manifests or bills of lading.

If needed, Consultant shall perform additional mowing to clear the proposed exploration locations and along access paths to these locations to allow for rig access. The scope and fee assume that

no permits or formal approvals will be required for mowing and that only nominal coordination effort with the City will be needed. The scope and fee also assume that there will be no standing water at and along access paths to the exploration locations. This may require delaying the explorations until a later time, as dictated by the weather.

Laboratory Testing

Consultant shall perform geotechnical laboratory tests on selected samples obtained from the borings to help characterize subsurface conditions at the site. Testing will include moisture content, density, Atterberg limits, gradation, consolidation, and shear strength, as appropriate.

Geotechnical Analyses

Consultant shall perform engineering analyses to develop geotechnical conclusions and recommendations for the widened berm alternative. Analyses would be limited to one berm configuration (berm width and slope inclination).

Settlement analyses will be performed to estimate the magnitude of settlement that may occur following construction of the flood protection alternative and overbuild heights required.

Seepage and stability analyses will be performed for the selected flood protection alternative at up to four cross-sections along the proposed alignment. For each cross-section location, seepage and stability analyses will be performed for one geometry/configuration for the widened berm with the berm crest at Elevation 9.5 feet using two design water surface elevations (Elevation 8.5 feet and Physical Top of Levee), and for one geometry/configuration for the widened berm with the berm crest at Elevation 12.5 feet using two design water surface elevations (Elevation 11.5 feet and Physical Top of Levee) for the following conditions:

- Stability at the end of berm construction.
- Landside (side facing treatment plant) seepage and stability under steady-state seepage conditions at the design water surface elevation.
- Stability under rapid drawdown loading conditions (when water is lowered rapidly).
- Stability under seismic loading (from ground shaking).

This scope and fee do not include a detailed evaluation of liquefaction potential nor the development and implementation of liquefaction mitigation measures, such as soil improvement. Should such conditions be encountered, the City would need to weigh the cost and benefit of liquefaction mitigation measures versus the risks. This issue will need to be addressed under a contract modification if it arises.

Reporting

Consultant will prepare a report that describes the subsurface conditions encountered and will include, as appropriate, field and laboratory test data, logs of the test borings, and a site plan showing the locations of the borings. The report will present Consultant's discussions, conclusions, and recommendations regarding:

- Vicinity map and exploration location plan
- Logs of the test borings and CPTs
- Site geology and seismicity
- Soil and groundwater conditions encountered
- Findings of the potential for seismic hazards, including liquefaction
- Recommendations for berm configuration
- Recommendations for earthwork for the proposed berm, including subgrade preparation, allowable fill materials, and placement and compaction of fill.

B. Deliverables: Draft and final geotechnical report, in PDF format only.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

☒ On or before the following date: January 30, 2024.

☐ On or before ____ business days from Consultant receiving Authorization to Proceed.

Task No. 4: Preliminary Design Services

A. Services: Consultant shall continue developing the Project's design and shall prepare a Preliminary Design Report that will be used for the Project's final detailed design. Consultant shall submit an outline of the report to the City for approval prior to drafting the report. Consultant shall provide the draft Preliminary Design Report to the City for review and shall organize and facilitate a workshop with the City to present the draft report. Consultant shall address and appropriately incorporate City's comments as well as input received during the workshop into the final Preliminary Design Report. Workshop will be virtual and up to 3 hours in length and shall be attended by up to three Consultant team members.

Site visits will be required at various points during the Preliminary Design development. Consultant will coordinate with the City to determine best days to view the site. Up to two (2) site visits are anticipated, to be attended by the PM and up to two (2) engineers. Each site visit will last eight (8) hours, including travel and coordination.

Consultant shall perform an internal quality review and constructability review at the Preliminary Design with comments made by the quality reviewers addressed and appropriately incorporated into the documents prior to submittal to the City for review. The purpose of the constructability review shall be to determine whether the Project can be constructed with readily available equipment and techniques. Suggestions for design revisions will be made for features for which simpler but equally functional, durable, and cost-effective alternatives exist.

The Preliminary Design Report shall include the following sections.

1. Executive Summary
2. Introduction
    a. Background information.
    b. Objectives and vision; and
    c. Preliminary design scope and an overview of the overall approach to the preliminary design.
3. Regulatory and Agency Requirements—outline of the regulatory and agency requirements as well as the approval process required for the Project's construction and operation.
4. Related and Supporting Studies—a brief overview of the related and supporting studies available for reference.
5. Site Civil
    a. Demolition and removals requirements.
    b. Site grading.
    c. Construction access and staging areas, fencing and access gate; and
    d. Stormwater management, sedimentation, and erosion control.
6. Constructability
    a. Identify the provision of temporary systems to maintain RWF operations during construction.

b. Address coordination of the construction in recognition of other construction projects underway or posed at the RWF, noting potential interferences and/or construction issues; and

7. Schedule

   a. Consultant shall prepare a schedule for construction and commissioning of the Project to the City at the draft and final Preliminary design submissions. Schedule shall be based on analyses of key sequencing constraints by a construction management / constructability specialist. The schedule shall serve as the basis for determining the appropriate construction duration.

   b. Propose design sequence with consideration to the sequence or phasing of construction required to minimize disruption to RWF operations.

8. Cost Estimates—a summary of the construction costs as well as an updated estimate of annual operational and maintenance costs. Construction costs shall be a Class 3 Opinion of Probable Construction Cost (OPCC) and be based on available quantity take-offs, manufacturers' quotes, experience at other wastewater treatment facilities incorporating similar Project elements and shall be escalated to the mid-point of construction. The OPCC shall be prepared to a level of accuracy consistent with the standards of the AACE International, formerly known as the American Association of Cost Engineering and the Association for the Advancement of Cost Engineering, and the Program's cost estimating guidelines. If the Class 3 OPCC exceeds the Class 4 OPCC, Consultant shall include a summary explaining the cause(s) for such increase.

9. Up to one set of plans will be developed to show all project improvements. And will include the following Reduced Drawings—the following drawings shall be provided on 11" x 17" sheets:

   a. Index, Symbols, and General Notes (up to 3)

   b. Construction Limits (up to 2)

   c. Lines and Curves (up to 2)

   d. Survey Control (up to 1)

   e. Site Plan (up to 2)

   f. Plan and Profile (up to 6)

   g. Detailed Sections (up to 7 placeholder sheets)

   h. Typical Sections (up to 2)

   i. Standard Details (up to 5); and

   j. Utilities (up to 1)

The outline specified above is intended as a guide and to convey the level of detail the PDR will include. Sections may be revised, added, or not included, based on the specific requirements of the design

Changes from Draft to Final Preliminary Design Report are assumed to be minor edits (spelling, typos, and minor linework) for clarification of the document rather than changes in design. Design changes will be carried forward to the next step of design. Comments received on the Final Preliminary Design Report will be addressed as part of Detailed Design Services.

A Professional Engineer registered in California will sign and seal the final Preliminary Design Report. The Preliminary Design Report shall be considered a 60% design submittal.

B. **<u>Deliverables:</u>** Consultant shall provide the following documents to the City's Contract Manager.

1. Preliminary Design Report Outline as one (1) electronic editable file.

2. Preliminary Design Report:

    a. Draft report provided as one (1) electronic editable file and one (1) PDF file five (5) Business Days prior to the Preliminary Design Workshop. Consultant shall allow City a minimum of fifteen (15) Business Days to review, compile, and provide comments.

    b. Final signed and sealed report addressing City comments provided as one (1) electronic editable file and one (1) PDF file within thirty (30) Business Days after Workshop.

3. Workshop agenda and materials provided in PDF format no later than two (2) Business Days before Workshop. Consultant shall also provide sufficient printed copies of agenda and handouts for meeting attendees.

4. Preliminary Design Workshop Summary:

    a. Draft summary provided in an electronic editable file format within five (5) Business Days after Preliminary Design Workshop. Consultant shall allow City a minimum of five (5) Business Days to review, compile, and provide comments.

    b. Final summary addressing City comments provided as an electronic editable file and as a PDF file within three (3) Business Days after receipt of City comments.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

☒ On or before the following date: December 30, 2023.

☐ On or before ____ Business Days from _____.

Task No. 5: Funding Support

A. Services: Consultant shall provide staff support to investigate funding opportunities for the Project. The consultant shall:

1. Meet and coordinate with the City to obtain publicly available project data
2. Discuss with the City alternatives for funding and develop ideas for a funding strategy
3. Review available existing data, reports, and analyses.
4. Advise the City on available funding opportunities as they arise.
5. Conduct preliminary benefit-cost and other analyses.

B. Deliverables:

1. Memorandum summarizing funding opportunities.
2. Technical memorandum summarizing preliminary analyses.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

☒ On or before the following date: June 30, 2024.

☐ On or before ____ Business Days from _____.

Task No. 6: Soil Stockpile Sampling for the Digest Thickener and Facilities Upgrade and Digested Sludge Dewatering (Facility Side) Stockpile

Services: The objective of this task is to conduct soil stockpile sampling of the *Digest Thickener and Facilities Upgrade & Digested Sludge Dewatering* (Facility Side) stockpile. To the extent feasible, HDR will assess the presence of surface and subsurface soil contamination in this soil stockpile. Included in this task will be the preparation of Sampling and Analysis Plan (SAP), a project Health and Safety Plan (HASP), and a Soil Stockpiles Characterization Report.

This task consists of the following activities:

- Preparation of a Sampling and Analysis Plan (SAP) for the subject soil stockpile. The SAP will identify proposed sampling locations on a map, sample collection and laboratory analytical methods, quality assurance/quality control procedures, investigative waste disposal protocols, and contaminant comparative criteria.
- Preparation of a Health and Safety Plan (HASP) specific to this task will be prepared prior to conducting field activities. The HASP will provide health and safety protocols for the field activities in the form of Job Hazard Analysis (JHAs) sheets to address site specific potential hazards.
- Hand-augering for soil sample collection
- Soil samples will be collected and submitted to a California accredited laboratory for chemical analysis which may include one or more of the following analyses:
    - Volatile Organic Compounds (VOCs) by EPA Method 8260,
    - Total extractable hydrocarbons (GRO, DRO and RRO) by EPA Method 8015B,
    - Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270 including PAHs,
    - Metals (California Accreditation Manual [CAM] 17) by EPA Method 6020/200.8,
    - Pesticides by EPA Method 8081B,
    - Herbicides by EPA Method 8151A,
    - Asbestos by Polarized Light Microscopy

A results of soil stockpile analyses, letter report will be prepared. The chemical analytical results will be compared to the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFRWQCB ESLs) and to regional background concentrations.

D. Deliverables:

1. Draft and Final task-specific HASP. Electronic deliverable only.
2. Draft and Final Sampling and Analysis Plan. Electronic deliverable only.
3. Draft and Final Soil Results from the subject stockpile. Electronic deliverable only.

C. Completion Time: Consultant must complete the services and deliverables for this task in accordance with whichever one of the following times is marked:

☒ On or before the following date: January 30, 2024.

☐ On or before ____ Business Days from _____.

Attachment B: Terms and Conditions

1. **City's Contract Manager:** The City's contract manager for this Approved Service Order is:

Name: Moheb Argand, P.E.	Phone No.: (408) 635-2016
Department: Environmental Services	Email: moheb.argand@sanjoseca.gov
Address: 700 Los Esteros Road	City/State/Zip: San José, CA 95134

2. **Consultant's Contract Manager and Other Staffing:** Identified below are the following: (a) the Consultant's contract manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. ***If an individual identified below does not have a current Form 700 on file with the City Clerk for a separate agreement with the City, and is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.5 of the Master Agreement, entitled "Filing Form 700."***

			Required to File Form 700?		
Consultant's Contract Manager			**Yes Already Filed (Date Filed)**	**Yes Need to File**	**No**
Name: Daniel Teak	Phone No.: (916) 679-8842		2/24/22		
Address: 2379 Gateway Oaks, Sacramento, CA 95833-4240	E-mail: Daniel.Teak@hdrinc.com				
Other Staffing					
Name:	Assignment:	Email:			
1. Ed Woo	Sr. Geotechnical	Edwin.Woo@hdrinc.com		X	
2.					
3.					

3. **Subconsultants:** Whichever of the following is marked applies to this Approved Service Order:

☐ The Consultant cannot use any subconsultants.

☒ The Consultant can use the following subconsultants to assist in providing the required services and deliverables:

Subconsultant's Name	Area of Work
1. Bess Utility Solutions	Utility Locations
2. Cascade Drilling	Drilling
3. Towill, Inc.	Surveying
4. JHA Remediation LLC	Grass Mowing
5. Torrent Laboratory, Inc.	Analytical Laboratory Services
6. Cooper Testing	Analytical Laboratory Services
7. Gregg Drilling	Drilling
8. Confluence Technical Services	Field Investigation

4. **Contract Personnel:** Whichever of the following is marked applies to this Approved Service Order:

☒ The Consultant cannot use any Contract Personnel.

☐ The Consultant can use the following Contract Personnel to assist in providing the required services and deliverables:

Personnel/Agency Name	Area of Work
1.	
2.	
3.	

Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in **Attachment A** in accordance with this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement and **Exhibit B**, Basis of Compensation.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Task No. and Task Title from Attachment A	**Invoice Period**	**Multiplier Compensation**	**Contract Personnel**	**Reimbursable Expenses** (Including applicable markup)	**Subconsultant Costs** (Including markup)	**Total Compensation**
Task 1 - Project Management	☒ Monthly ☐ Completion of Task(s) ☐ Completion of Work	$72,476		$2,544		$75,020
Task 2 - Site Survey and Utility Location	☒ Monthly ☐ Completion of Task(s) ☐ Completion of Work	$16,359			$49,802	$66,160
Task 3 - Geotechnical Investigation	☒ Monthly ☐ Completion of Task(s) ☐ Completion of Work	$202,203		$2,007	$81,308	$285,518
Task 4 - Preliminary Design Services	☒ Monthly ☐ Completion of Task(s) ☐ Completion of Work	$273,652				$273,652
Task 5 – Funding Support	☒ Monthly ☐ Completion of Task(s) ☐ Completion of Work	$60,719				$60,719
Task 6 - Stockpile Soils Characterization	☒ Monthly ☐ Completion of Task(s) ☐ Completion of Work	$20,864		$1,411	$13,829	$36,104
	Maximum Compensation	**$646,273**	**$0**	**$5,962**	**$144,938**	**$797,173**

Attachment D: Level of Effort for Service Order 2 - Flood Protection – Design Phase

Staff List

Staff Name	Employee / Subconsultant / Contract Personnel	Role	Onsite / Offsite	Actual Hourly Salary Rate ($/hr)	Multiplier / Markup (per MCA)	Est. Billing Rate 1/1/2023 - 12/31/2023)	Est. Billing Rate 1/1/2024 - 12/31/2024)
H. Kennedy	HDR Employee	Principal-in-Charge	Offsite	$137.93	3.13	$444.67	$458.01
M. Stanley	HDR Employee	Quality Control	Offsite	$110.92	3.13	$357.59	$368.32
K. Lukas	HDR Employee	Quality Control	Offsite	$61.99	3.13	$199.85	$205.85
D. Teak	HDR Employee	Project Manager	Offsite	$68.34	3.13	$220.32	$226.93
E. Woo	HDR Employee	Sr. Geotechnical	Offsite	$111.44	3.13	$359.27	$370.05
V. Crosariol	HDR Employee	Staff Geotechnical	Offsite	$69.20	3.13	$223.09	$229.79
J. Wong	HDR Employee	Staff Geotechnical	Offsite	$50.34	3.13	$162.29	$167.16
A. Jackson	HDR Employee	Sr. CAD	Offsite	$70.47	3.13	$227.19	$234.00
A. Bennett	HDR Employee	Staff CAD	Offsite	$48.23	3.13	$155.49	$160.15
C. O'Neill	HDR Employee	Sr. Haz Mat	Offsite	$81.54	3.13	$262.88	$270.76
C. Mokri	HDR Employee	Staff Haz Mat	Offsite	$55.36	3.13	$178.48	$183.83
D. Edwards	HDR Employee	Sr. Environmental	Offsite	$76.88	3.13	$247.85	$255.29
J. Leu	HDR Employee	Funding	Offsite	$83.74	4.13	$356.22	$366.91
S. Overby	HDR Employee	Staff Civil	Offsite	$109.48	3.13	$352.95	$363.54
M. Salmon	HDR Employee	Quality Control	Offsite	$65.57	3.13	$211.39	$217.73
V. Russo	HDR Employee	Staff Civil	Offsite	$62.30	3.13	$200.85	$206.87
B. Rabatin	HDR Employee	Staff Cost	Offsite	$56.00	3.13	$180.54	$185.95
S. Young	HDR Employee	Sr. Cost	Offsite	$80.29	3.13	$258.85	$266.61
M. Rogers	HDR Employee	Project Controller	Offsite	$39.13	3.13	$126.15	$129.94
S. Gardenour	HDR Employee	Project Coordinator	Offsite	$36.53	3.13	$117.77	$121.30

Actual Hourly Salary Rate: hourly rate paid by consultant to employee, subconsultant, contracted personnel
Multiplier rate is used for consultant employees, Markup is used for Subconsultants, and Contracted Personnel

Estimated Hours for each Consultant Staff in Fiscal Year 2022-2023

Fiscal Year				
Month	**Mar 23**	**Apr 23**	**May 23**	**Jun 23**
Hours in Each Month				
Staff Name				
H. Kennedy	1.30	1.30	1.30	1.30
M. Stanley	4.66	4.66	4.66	4.66
K. Lukas	6.72	6.72	6.72	6.72
D. Teak	30.45	30.45	30.45	30.45
E. Woo	25.36	25.36	25.36	25.36
V. Crosariol	51.65	51.65	51.65	51.65
J. Wong	14.40	14.40	14.40	14.40
A. Jackson	11.16	11.16	11.16	11.16
A. Bennett	25.45	25.45	25.45	25.45
C. O'Neill	1.20	1.20	1.20	1.20
C. Mokri	7.27	7.27	7.27	7.27
D. Edwards	3.82	3.82	3.82	3.82
J. Leu	9.25	9.25	9.25	9.25
S. Overby	4.95	4.95	4.95	4.95
M. Salmon	20.29	20.29	20.29	20.29
V. Russo	15.11	15.11	15.11	15.11
B. Rabatin	4.73	4.73	4.73	4.73
S. Young	6.07	6.07	6.07	6.07
M. Rogers	2.59	2.59	2.59	2.59
S. Gardenour	8.66	8.66	8.66	8.66
Total Hours/month	255	255	255	255

Hours in each month = number of working days in a month (e.g: 20 to 24 days) x 8 hours per day

Note: Hours Shown in this Attachment D are for estimating purposes only. Actual hours billed will be in accordance with the tems and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement and Exhibit B, Basis of Compensation.

Estimated Hours for each Consultant Staff in Fiscal Year 2023-2024

Fiscal Year												
Month	**Jul 23**	**Aug 23**	**Sep 23**	**Oct 23**	**Nov 23**	**Dec 23**	**Jan 24**	**Feb 24**	**Mar 24**	**Apr 24**	**May 24**	**Jun 24**
Hours in Each Month												
Staff Name												
H. Kennedy	1.30	1.30	1.30	1.30	1.30	1.30	1.30					
M. Stanley	4.66	4.66	4.66	4.66	4.66	4.66	4.66					
K. Lukas	6.72	6.72	6.72	6.72	6.72	6.72	6.72					
D. Teak	30.45	30.45	30.45	30.45	30.45	30.45	30.45	4.00	4.00	4.00	4.00	4.00
E. Woo	25.36	25.36	25.36	25.36	25.36	25.36	25.36					
V. Crosariol	51.65	51.65	51.65	51.65	51.65	51.65	51.65					
J. Wong	14.40	14.40	14.40	14.40	14.40	14.40	14.40					
A. Jackson	11.16	11.16	11.16	11.16	11.16	11.16	11.16					
A. Bennett	25.45	25.45	25.45	25.45	25.45	25.45	25.45					
C. O'Neill	1.20	1.20	1.20	1.20	1.20	1.20	1.20					
C. Mokri	7.27	7.27	7.27	7.27	7.27	7.27	7.27					
D. Edwards	3.82	3.82	3.82	3.82	3.82	3.82	3.82					
J. Leu	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25
S. Overby	4.95	4.95	4.95	4.95	4.95	4.95	4.95					
M. Salmon	20.29	20.29	20.29	20.29	20.29	20.29	20.29					
V. Russo	15.11	15.11	15.11	15.11	15.11	15.11	15.11					
B. Rabatin	4.73	4.73	4.73	4.73	4.73	4.73	4.73					
S. Young	6.07	6.07	6.07	6.07	6.07	6.07	6.07					
M. Rogers	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59
S. Gardenour	8.66	8.66	8.66	8.66	8.66	8.66	8.66					
Total Hours/month	255	255	255	255	255	255	255	16	16	16	16	16

Hours in each month = number of working days in a month (e.g: 20 to 24 days) x 8 hours per day

Estimated Hours for each Consultant Staff in Fiscal Year 2024-2025

Fiscal Year	
Month	**Jul 24**
Hours in Each Month	
Staff Name	
H. Kennedy	
M. Stanley	
K. Lukas	
D. Teak	4
E. Woo	
V. Crosariol	
J. Wong	
A. Jackson	
A. Bennett	
C. O'Neill	
C. Mokri	
D. Edwards	
J. Leu	
S. Overby	
M. Salmon	
V. Russo	
B. Rabatin	
S. Young	
M. Rogers	2.59
S. Gardenour	
Total Hours/month	7

Hours in each month = number of working days in a month (e.g: 20 to 24 days) x 8 hours per day

Note: Hours Shown in this Attachment D are for estimating purposes only. Actual hours billed will be in accordance with the tems and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement and Exhibit B, Basis of Compensation.

Estimated Cost for each Consultant Staff in Fiscal Year 2022-2023, 2023 – 2024, and 2024 - 2025.

	Fiscal Year				
	Staff Name	Mar-23	Apr-23	May-23	Jun-23
	Billing Rate ($/hr)				
Task	**Task Title**				
Task 1	Project Management	$6,155	$6,155	$6,155	$6,155
Task 2	Site Survey and Utility Location	$16,540	$16,540	$16,540	$16,540
Task 3	Geotechnical Investigation	$25,956	$25,956	$25,956	$25,956
Task 4	Preliminary Design Services (60%)	$27,365	$27,365	$27,365	$27,365
Task 5	Funding Support	$3,795	$3,795	$3,795	$3,795
Task 6	Stockpile Soils Characterization	$3,282	$3,282	$3,282	$3,282
	Totals	$83,093	$83,093	$83,093	$83,093

Billing Rate ($/hr): For employees with Multiplier: Rate ($/hr) – hourly rate paid by consultant to employee ($/hr) x multiplier rate
For Subconsultants or Contract Personnel: Rate ($/hr) = subconsultant hourly rate ($/hr) x markup rate (maximum 5%)

	Fiscal Year												
	Staff Name	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24
	Billing Rate ($/hr)												
Task	**Task Title**												
Task 1	Project Management	$6,155	$6,155	$6,155	$6,155	$6,155	$6,155	$6,155	$1,220	$1,220	$1,220	$1,220	$1,220
Task 2	Site Survey and Utility Location												
Task 3	Geotechnical Investigation	$25,956	$25,956	$25,956	$25,956	$25,956	$25,956	$25,956					
Task 4	Preliminary Design Services (60%)	$27,365	$27,365	$27,365	$27,365	$27,365	$27,365						
Task 5	Funding Support	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795	$3,795
Task 6	Stockpile Soils Characterization	$3,282	$3,282	$3,282	$3,282	$3,282	$3,282	$3,282					
	Totals	$66,553	$66,553	$66,553	$66,553	$66,553	$66,553	$39,188	$5,015	$5,015	$5,015	$5,015	$5,015

Billing Rate ($/hr): For employees with Multiplier: Rate ($/hr) – hourly rate paid by consultant to employee ($/hr) x multiplier rate
For Subconsultants or Contract Personnel: Rate ($/hr) = subconsultant hourly rate ($/hr) x markup rate (maximum 5%)

	Fiscal Year	
	Staff Name	Mar-23
	Billing Rate ($/hr)	
Task	**Task Title**	
Task 1	Project Management	$1,220
Task 2	Site Survey and Utility Location	
Task 3	Geotechnical Investigation	
Task 4	Preliminary Design Services (60%)	
Task 5	Funding Support	
Task 6	Stockpile Soils Characterization	
	Totals	$1,220

Billing Rate ($/hr): For employees with Multiplier: Rate ($/hr) – hourly rate paid by consultant to employee ($/hr) x multiplier rate
For Subconsultants or Contract Personnel: Rate ($/hr) = subconsultant hourly rate ($/hr) x markup rate (maximum 5%)

		Column 3	Column 4	Column 5	Column 6	Column 7
Task	Task Title	**Multiplier Compensation**	**Contract Personnel**	**Reimbursable Expenses**	**Subconsultant Costs**	**Total Compensation**
Task 1	Project Management	$72,476.28		$2,544.00		$75,020.28
Task 2	Site Survey and Utility Location	$16,358.96			$49,801.50	$66,160.46
Task 3	Geotechnical Investigation	$202,203.43		$2,007.00	$81,307.80	$285,518.23
Task 4	Preliminary Design Services (60%)	$273,651.55				$273,651.55
Task 5	Funding Support	$60,719.34				$60,719.34
Task 6	Stockpile Soils Characterization	$20,864.14		$1,411.00	$13,828.50	$36,103.64
Maximum Compensation		**$646,273.70**	**$0.00**	**$5,962.00**	**$144,937.80**	**$797,173.50**