The following is a summary of the 'Scope of Services' to be included in the Contract Services Agreement with Schaaf and Wheeler for the Storm Water Trash Capture Devices – Caltrans Sites, Project No. 2017.0540

SCOPE OF SERVICES

This contract provides for the design and preparation of construction bid documents for the installation of trash capture devices (TCD) recommended in the Full Trash Capture Feasibility Study dated June 2023. This Contract will provide the necessary consulting design services to support the design and construction of Trash Capture Devices at locations 14.1 and 14.2 as described in the Caltrans Cooperative Agreement dated, Feb 12, 2025.

Construction Bid Documents:

Task 1: Project Management and Meetings

This task includes consultant costs for project management and meetings with City staff as needed to complete construction bid documents. Consultant to allow for a minimum of four (4) on-site progress and coordination meetings.

Task 2: Field Research

This task includes items related to collecting the necessary background data needed to complete design work which has not already been collected for the TCD Basis of Design report dated August 2024 by Schaaf and Wheeler and includes the following items:

- Topographic survey and boundary research
- Geotechnical investigations which include one geotechnical boring at Site 14.2. Borings will
 extend approximately 11 to 18 feet below ground surface, which is approximately 5 feet below the
 inverts of the proposed trash capture systems. Borings exclude the testing of soils for
 environmental characteristics (i.e. hazardous substances) and assumes the soil cuttings will not
 be hazardous waste by the landfill facility. Geotechnical investigations include traffic control,
 private utility locating and USA marking, no-fee encroachment permits, County drilling permits,
 backfill with cement grout and off-haul of non-hazardous spoils.
- Utility locating assumes three potholes at each project location, with one mobilization. Potholes shall be completed per City Standard Plan 144.

Task 3: Hydraulic Evaluation and Analysis

This task will develop hydraulics and hydrology necessary to support project (and updates as necessary) based on the TCD Basis of Design report dated August 2024 by Schaaf and Wheler.

Task 4: Structural Engineering for Site 14.1 Outfall at Nimitz Freeway (Caltrans Funded):

This includes structural calculations based on the 2022 CBC, and includes the following items:

 Develop 30%/70%/100% and Bid Set structural plan sheets and specifications for the channel replacement and weir. • Perform a materials forensic investigation of the existing concrete lined channel to evaluate the thickness of the existing concrete slab and walls, perform a limited scanning survey to evaluate the presence, spacing, and size of reinforcing steel, perform field concrete coring, obtain a sample of the steel reinforcement, and perform laboratory testing.

Task 5: Design Documents

This task involved the preparation of construction bid documents including, but is not limited to the following items:

- Concurrently with field investigations, 30% PS&E (Plans, Specifications, and Estimate) will be developed for review by the City and Caltrans to identify proposed structures, project configuration, coordination items, maintenance, and construction access. Assumes a table of specification contents.
- Submittal of 70% / 100% PSE. Construction drawings are to be furnished in AutoCAD using City
 format. Technical specifications are to be prepared in MS Word, in accordance with the
 Construction Specifications Institute (CSI) format. City to prepare front end special provisions.
 Dewatering plan and water pollution control plan specification sections will be developed to
 provide guidance and limitations to the contractor as part of the bid packages.
- Project assumes an inflatable weir with electronic controls: Includes electrical design sheets and specifications. Includes PG&E Application assuming 120/240 volts single phase power which is available within 200 feet of the project site.
- Structural and Geotechnical engineering design reports and review of 100% design plans for concurrence.
- Incorporate recommendations and comments from City and Caltrans reviews. This scope assumes one round of compiled comments from each agency based on the basis of design report and 70% PSE.

Task 6: Environmental Clearances and Permit Applications

This task includes the preparation, submittal, and approval of typical regulatory agency permits needed for completion of the project.

- Prepare required agency encroachment permits, including Caltrans, Alameda ACFC, and the Alameda County Mosquito Abatement District. Assumes 2 coordination meetings with each agency.
- Environmental clearances, including the following:
 - Biological Resources Assessment Report
 - Aquatic Resources Delineation Map and Data Sheets
 - CEQA IS/MND for Site 14.1
 - CEQA Catex and NOE for site 14.2
 - Regulatory Agency Coordination
- Regulatory permit applications from the Regional Water Quality Control Board (RWQCB), the California Department of Fish and Wildlife (CDFW), and the Army Corps of Engineers (Corps)
- This scope assumes one round of compiled comments from each agency based on the design report and 70% PSE.

• City will pay or reimburse Consultant for permit application fees.

Task 7: Bid Support

Provide Bid Support, responding to bidder RFI's, and issuing addenda.

Deliverables and Schedule:

Completion of all contract work for the 100% PSE and initial permit applications and regulatory reviews is expected to be complete within 22 weeks after the Notice to Proceed (NTP), based on the following deliverable schedule:

- 30% Design PS&E and Field Investigation Data 6 weeks NTP
- 70% Design PS&E, CEQA Documentation, and Permit Submittals 24 weeks after NTP.

After completion of the 70% PS&E package, the Consultant shall submit the design for regulatory agency permit reviews and comments. Completion of CEQA and regulatory permitting approvals is unpredictable, and estimated to take up to eight months. The consultant shall complete the project bid documents based on receipt of agency comments as follows:

- 100% Design PS&E 6 weeks after receipt of initial regulatory review comments on the permit applications.
- Bid Documents -4 weeks after final Regulatory Permit Approvals.