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FIRST AMENDMENT TO AGREEMENT

THIS FIRST AMENDMENT TO AGREEMENT (Amendment) made and entered into as of this 20th day of December, 2022, amends the Consultant Services Agreement entered into between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as CITY), and CDM Smith, Inc., a Massachusetts Corporation (hereinafter referred to as CONSULTANT).

RECITALS

WHEREAS, the CITY and the CONSULTANT entered into a Consultant Services Agreement on February 1, 2022 (Agreement) to provide professional consulting services for Environmental Groundwater Remedial Action and Regrading Design for the Fresno Sanitary Landfill Superfund Site for a total fee of $429,850; and

WHEREAS, the CITY and the CONSULTANT now desire to expand the scope of services and extend the agreement to December 31, 2023, to expand requirements from the US Environmental Protection Agency; and

WHEREAS, due to the need for additional services, the parties desire to increase the total compensation by an additional $230,600 to complete the expanded Scope of Services; and

WHEREAS, with entry into this Amendment, CONSULTANT agrees that it has no claim, demands, or disputes against the CITY.

AGREEMENT

NOW, THEREFORE, the CITY and the CONSULTANT agree that the aforesaid Agreement be amended as follows:

1. Exhibit A of the Agreement is amended to expand the scope of services and extend the Agreement to December 31, 2023, as indicated in **Exhibit A2**, attached hereto and incorporated herein by reference.

2. Section 3(a) of the Agreement is amended in its entirety to read as follows:

"(a) CONSULTANT'S sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee of Six Hundred Sixty Thousand Four-Hundred Fifty Dollars ($660,450.00). Such fee includes all expenses incurred by CONSULTANT in performance of the services."

3. Except as otherwise provided herein, the Agreement entered into by the CITY and the CONSULTANT on February 01, 2022, remains in full force and effect.

[SIGNATURES FOLLOW ON THE NEXT PAGE.]

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IN WITNESS WHEREOF, the CITY and the CONSULTANT have executed this First Amendment at Fresno, California, the day and year first above written.

CITY OF FRESNO,
a California municipal corporation

By: DocuSigned by: 12/20/2022
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Brock D. Buche, PE PLS
Director of Public Utilities

APPROVED AS TO FORM:
RINA M. GONZALES
Interim City Attorney

By: DocuSigned by: Angela M. Karst 12/5/2022
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Angela M. Karst Date
Deputy City Attorney

ATTEST:
TODD STERMER, CMC
City Clerk

By: DocuSigned by: Tina M. Your 12/20/2022
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Deputy Date
Tina M. Your

CDM Smith, Inc.,
a Massachusetts corporation

By: DocuSigned by: Hala Titus 12/4/2022
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Name: Hala Titus

Title: Senior Vice President
(If corporation or LLC., Board Chair, Pres. Or Vice Pres.)

By: DocuSigned by: Servando Molina 12/5/2022
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Name: Servando Molina

Title: Vice President
(If corporation or LLC., CFO, Treasurer, Secretary or Assistant Secretary)

Attachment: Exhibit A2 – Additional Professional Services

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EXHIBIT A2

ADDITIONAL PROFESSIONAL SERVICES

Supplemental Scope of Work and Budget for Year 2022 (supplemental) and Budget for Year 2023 - Revised Fresno Sanitary Landfill

Introduction

Provided below are descriptions of work tasks to be performed by CDM Smith Inc. (Consultant) on behalf of the City of Fresno (City) as part of ongoing operations at the Fresno Sanitary Landfill Superfund Site ("FSL" or "Site"). Ongoing activities are being performed as part of Operable Unit No. 1 (OU-1 – landfill control system operations and maintenance) and OU-2 (groundwater remediation system operations and maintenance). The ultimate objective of the continued work is to achieve formal closure of the FSL Superfund Site under the oversight of the U.S. Environmental Protection Agency (EPA).

This scope of work presented below describes work to be performed during the fourth quarter of 2022 and extends through the end of 2023. The existing agreement between the City and Consultant reflects work activities to be performed during 2022. One of these work activities consisted of planning and implementation of a vapor intrusion investigation to be performed in the vicinity of the FSL. During development of the work plan for this field investigation, EPA required an expansion of the scope for the field investigation with the addition of several work elements. The scope of work presented below reflects the expanded investigation requirements. Additionally, this scope of work includes work activities to be performed during Year 2023. These scope of work activities are a continuation of work performed under the previous contract with the City during the four-year period 2016 through 2019 and during the Year 1 Extension (2020) and the Year 2 Extension (2021). Work described below is defined in terms of the five project tasks listed below:

Task 1 – Performance Monitoring Program

Task 2 – Remedial Action Systems Operations Assistance

Task 3 – This task will not be used during 2023.

Task 4 – Field Investigation Activities (OU-1)

Task 5 – Project Management/Project Meetings

Task 6 – Landfill Regrading Program – Pre-Construction Period Services

Table A-1 consists of a summary of the estimated costs for this scope of work. The total cost for this work is $230,600 for the fourteen-month period of performance (November 2022 through December 2023).

Task 1 – Performance Monitoring Program

Objectives

- Provide oversight during implementation of the annual performance monitoring program as part of the Groundwater Remedial Action at the FSL.
- Monitor and evaluate progress of groundwater remediation.

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- Document the performance monitoring activities and laboratory analytical results in an annual report and an interim data transmittal to the EPA.
- Prepare responses to review comments from EPA (and other State regulatory agencies).

Activities

- Groundwater Monitoring Program – The Groundwater Monitoring Program at the FSL has been ongoing for several years. City personnel performs the quarterly field sampling activities, including making arrangements with the analytical laboratory (e.g., analyses to be performed, sampling containers, delivery of sampling containers to the Site) and sample collection from the groundwater monitoring wells, groundwater extraction wells, and the groundwater treatment plant (GTP) influent and effluent sampling ports. Consultant will coordinate with the City in the ongoing implementation of this program. The activities described below are to be performed during the year 2023.

  Quarterly sampling events are scheduled to be performed during January, April, July, and October. As part of this task, Consultant will be responsible for the following activities:

  – Coordinate with City field personnel during field sampling events to be performed in January, April, July, and October. This includes making City staff aware of modifications to the performance monitoring program activities. Recommended modifications to the sampling program (e.g., increasing/decreasing frequency of sampling for individual monitoring wells) are to be proposed as part of the annual performance monitoring report.

  – Identify and work to resolve issues that come up regarding laboratory analytical results (e.g., apparent mislabeling between two sample locations, investigate what appears to be anomalous analytical data, etc.).

  – Prepare the two deliverables associated with the Groundwater Monitoring Program, including the Interim Data Transmittal and the Annual Performance Monitoring Program Report. These deliverables are described below.

- Environmental Database – Maintain the environmental database, including upload of analytical data upon receipt from the analytical laboratory following each quarterly sampling round. Database management will include performing data queries and preparing data summary tables that will be included in the interim data transmittal (electronic transmittal) and the annual performance monitoring program report (hard copy submittal and/or electronic transmittal).
- Responses to Regulatory Agency Review Comments (RTCs) – EPA and the State regulatory agencies typically submit review comments on a range of project submittals. This task will involve preparing RTCs for technical deliverables scheduled for submittal to EPA including the OU-1 Annual Report, OU-2 Interim Data Transmittal, and OU-2 Annual Performance Monitoring Program Report.

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Assumptions

- Analysis of organic constituents is currently being performed by BSK Associates Engineers & Laboratories (BSK) in Fresno, CA under direct bill contract with the City. The analytical laboratory may be changed at the discretion of the City.
- Analysis of inorganic constituents is currently being performed by the City of Fresno Wastewater Management Division Analytical Laboratory (WMD) in Fresno, CA, under direct bill arrangements with the City.

Deliverables

1. Interim Data Transmittal – The Interim Data Transmittal will consist of data summary tables and figures for the July and October groundwater monitoring events. The Interim Data Transmittal will be submitted directly to EPA via e-mail in January 2022.
2. Annual Performance Monitoring Program Report (Annual Report) – The Annual Report will cover the July and October 2022 and the January and April 2023 groundwater monitoring events. A draft document will be submitted to City staff for review. Consultant will incorporate revisions from City staff and prepare final report for submittal to the EPA. The Annual Report, to be submitted to EPA in July 2023, will include the following elements:

   – Compilation of quarterly monitoring data (field and analytical laboratory data) and GTP operational data.

   – Preparation of data summary tables and graphics. Data summary tables will include groundwater extraction well operational data, groundwater treatment unit performance monitoring data, volatile organic compound (VOC) mass removal, groundwater level measurements, head differential measurements (well clusters), VOC analytical data, inorganic constituent data, and quality control data. Graphics will include groundwater elevation contours for two of the quarterly monitoring events and VOC concentration trend plots.

   – Based on the Long Term Monitoring Optimization Plan (Plan) (CDM Smith, 2007), Consultant will perform an evaluation of the groundwater monitoring wells included in the monitoring program and will make recommendations in accordance with the criteria defined in the Plan. This evaluation will be completed following the April performance groundwater monitoring event. The results of this evaluation will be documented in the Annual Report.

Task 2 – Remedial Action Systems Operations Assistance

Objectives

- Support the high-quality performance of the landfill environmental control systems, including the landfill cover, landfill gas (LFG) control, and stormwater management systems.
- Assist City staff in the ongoing operations, monitoring, and maintenance of the groundwater remediation system and the landfill control systems at the FSL.

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Activities

Under this task, Consultant will assist the City in ongoing operations and maintenance of the groundwater treatment system and the landfill control systems. This task will consist of on-site and office activities necessary to maintain effective operation of the groundwater collection and treatment system, the LFG control system, and the function of the final landfill cover/stormwater management systems. This task includes the following activities:

- Operable Unit 1 Annual Report (Annual Activity) – Consultant will prepare a report, which is intended to document operations and maintenance activities associated with the landfill (LFG) control elements, including the landfill cover, stormwater management, and LFG control systems. The OU-1 Annual Report, to be submitted to EPA in February, will address operations during the prior year. The OU-1 Annual Report will consist of the following elements:

  – Summary of LFG flare operating data. This summary would include a listing of the LFG flare downtimes, including downtimes resulting in operation of the GTP in LFG flare bypass mode.

  – Compilation of perimeter LFG monitoring probe data.

  – Assessment of the condition of the landfill cover system and the stormwater management system. The assessment would rely on information generated during inspections of the landfill cover and stormwater management system performed by Consultant and/or City staff. Of particular importance is the inspection scheduled early fall, prior to onset of rainy weather.

  – Overview of maintenance activities performed on the landfill control systems and description of repairs or equipment replacements.

- Surface Emissions Monitoring (SEM) – Consultant is currently preparing the SEM Work Plan (to be submitted in October 2022) for the City's use in implementation of the SEM program at the FSL. City staff will be responsible for performing the SEM on a quarterly basis. Federal guidelines allow a reduction in frequency to annual monitoring if methane is not detected above 500 ppm for three consecutive quarters. Consultant will be available to provide input to City staff in terms of refinements to the SEM program at the FSL and to prepare a brief technical memorandum following each monitoring period. The objectives of the technical memorandum are to document the SEM program activities and to present the monitoring data. The technical memorandum will be submitted to EPA.

- Landfill Inspection and Maintenance Assistance – Activities to be performed under this subtask will be focused on assisting the City in planning and performing landfill inspection and maintenance activities.

  – Annual Landfill Inspection (Annual Activity) – The annual landfill inspection will be performed during the Fall of 2023. At the request of the City, additional inspections may be performed following heavy precipitation events that could impact landfill control systems function. A description of landfill inspection activities/procedures is provided below:

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- Focus of the inspections will be on the landfill control system elements, including landfill cover system, surface water management system, and LFG control system.
- Highlight the need for performing routine maintenance activities related to the landfill control systems.
- Highlight the need for performing corrective action activities to address damage, inoperable conditions, or failure of the landfill control systems. The descriptions will be specific to each of the landfill control system elements.
- Prepare report to document inspection and to describe maintenance, repair, and corrective actions.
- Identify landfill regrading needs identified as part of the landfill inspections.

– Wet Weather Inspections – Inspections will be performed during wet weather months (considered to be October through March). City staff will be responsible for performing these inspections, including completing the inspection form for submittal to Consultant who will review and submit to EPA.

– Quarterly Inspections – Given overlap with the other scheduled landfill inspections (Annual and wet weather Inspections, only one quarterly inspection during the year (June). City staff will be responsible for performing this inspection, including completing the inspection form for submittal to Consultant who will review and submit to EPA.

- Annual Evaluation of Extraction Well Performance (Annual Activity) – Consultant will perform an evaluation of the performance of each extraction well on an annual basis. Performance factors to be considered during the performance evaluation will include specific capacity (pumping rate per foot of drawdown) and changes in pumping rate and drawdown over time, with comparison to historical data.
- New Well Evaluations (Periodic Activity) – Consultant will perform groundwater modeling evaluations of proposed new water supply wells (agricultural and residential) in the vicinity of the FSL. The purpose of the new well evaluations is to assess the potential for impact to the existing groundwater remediation system at the FSL from operation of proposed new wells. Under the current arrangement, the County of Fresno, Department of Public Health, Environmental Health Division (Fresno County) notifies the City when a permit application for a new or replacement water supply well is submitted in a location within the well assessment zone. Based on groundwater modeling results, Consultant will either recommend that the well not be installed or recommend design modifications for the proposed well (e.g., depth of well, depth of annular seal, and length of screen zone). It is assumed that Consultant will perform two evaluations per year for the duration of the period of performance.

Assumptions

1. With requests from Consultant, City staff will provide Consultant with information listed below in a timely manner. The requested information constitutes critical

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information for reporting to EPA (e.g., Quarterly Progress Reports, OU-2 Annual Performance Monitoring Report, OU-1 Annual Report).

– Downloads of the SCADA system with operations data for the groundwater remediation system (data from extraction well operations and groundwater treatment plant operations) and for the landfill gas (LFG) flare system (LFG flare operations). Consultant will compile these data and make necessary assumptions and calculations for filling data gaps.

– Weekly maintenance summaries for the groundwater remediation system and the LFG flare.

Deliverables

1. OU-1 Annual Report (Annual Deliverable). A draft report will be submitted to the City for review. The report will be revised based on review comments from the City and finalized for submittal to EPA.
2. Annual Extraction Well Performance Evaluation Technical Memorandum (Annual Deliverable). The technical memorandum, which will document the performance evaluation on each of the groundwater extraction wells, will be submitted to the City. This technical memorandum is not intended as a formal submittal to EPA.
3. New Well Evaluations (Periodic Deliverables). At the conclusion of each new well evaluation that is performed, a letter to the City will be prepared for submittal to the City which documents groundwater modeling results and provides well construction recommendations.
4. There may be deliverables associated with As-needed services that are authorized by the City under Task 2.

Task 3 – Superfund Site Delisting Pathway – Planning and Implementation

There will be no Task 3 services performed during 2023.

Task 4 – Field Investigation Activities (Operable Unit 1)

Objective

- Provide funding for supplemental field activities performed during the initial round of sampling.

Activities

The initial round of the vapor intrusion investigation sampling was performed during October 2022. EPA required a number of field investigation activities that expanded Consultant's scope of work for the soil vapor intrusion field activities during 2022. Added elements of work included indoor air sampling in both the Control Building located in the groundwater treatment plant yard and the City's elevated trailer (located on Jensen Avenue, outdoor air samples (collected both 7 with HVAC system operating and with HVAC system not operating), background air samples, and a second round of sampling for the landfill perimeter monitoring probes.

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Assumptions

- Budget for this Task 4 consists of funding for supplemental work elements required by EPA as part of the vapor intrusion sampling program performed in October 2022.
- EPA will not require additional sampling beyond the second round of sampling described above.
- EPA will have one round of comments in response to information provided in the Vapor Intrusion Investigation Data Transmittal (Data Transmittal).

Deliverables

1. Data Transmittal. Analytical data summary from the initial round of the vapor intrusion investigation. Data Transmittal will describe the investigation program details for 2022 and present the analytical results. The Data Transmittal will be submitted to EPA.
2. RTCs to EPA comments will be prepared.

Activities

The activities described below are to be performed during 2023.

- Perform routine project management activities, which will include staff oversight, budget management, invoicing and coordination with the City on budget and scope of work development.
- Prepare schedule updates, as needed.
- Participate in project meetings and project conference calls, including prepare meeting agendas and other handouts.
- Prepare quarterly reports providing status updates regarding remedial actions implemented at the FSL. Consultant will submit draft quarterly reports to the City.

Assumptions

- The City will finalize the quarterly reports with transmittal to EPA.
- The budget reflects participation in monthly project conference calls for the first quarter of 2023 followed by quarterly project conference calls. In addition, there will be one project status meeting at the FSL Site during 2023.

Deliverables

1. Project Quarterly Reports prepare during January, April, July, and October during 2023.
2. Monthly invoices to the City documenting Consultant work performed.
3. Agenda and handouts for periodic project meetings or teleconferences.

Task 6 – Landfill Regrading Program – Pre-Construction Period Services (OU-1) for Design #1

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During 2021, the City began implementation of a Landfill Regrading Program to address differential settlement that has occurred on the landfill. The Landfill Regrading Program was developed as two design projects. During 2023, Consultant will provide pre-construction period services associated with Design #1. Design #1 was focused on regrading the eastern side of the landfill, addressing settlement along the eastern side slopes, eastern perimeter drainage channel and eastern access road. Additionally, repairs were required of the landfill gas control system.

Objectives

Provide pre-construction period support services associated with construction of Design #1.

Activities

Pre-construction support services will consist of review of requests-for-information (RFIs) from prospective Contractors and participation in pre-construction meetings at the FSL. It is assumed that this task is limited to 40 labor hours.

Assumptions

- This task is limited to pre-construction activities leading up to the construction project for Design #1.
- The City intends to provide additional scope and budget for Consultant prior to the beginning of construction activities for the Design #1 project.

Deliverables

Prepare responses to Contractor RFIs during or following the bid period.

Schedule

The scope of work and budget presented above reflects project duration from January through December 2023. The schedule for project deliverables is provided below:

Annual and or Periodic Deliverables

1. Quarterly Reports – January, April, July, and October during 2023.
2. Interim Data Transmittal – January 31, 2023.
3. OU-1 Annual Report – February 31, 2023.
4. Technical Memorandum to document the annual well performance evaluation – June 2023.
5. Spring 2023 Annual Performance Monitoring Program Report – July 31, 2023.
6. New Well Evaluations – The results of groundwater modeling to evaluate proposed new agricultural or domestic water supply wells will be documented in a brief letter report to the City. This work will be performed on an as-needed basis throughout 2023.

One-time Deliverables

1. Vapor Intrusion Evaluation Report of Findings – June 30, 2023
2. Task 6.1 Design Deliverables:

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- Responses to Construction Contractor Requests for Information (RFIs) during pre-construction activities As needed

Budget

The cost for the work described above is $230,600. A cost breakdown is provided on Table 1 – Groundwater and Landfill Remediation Services, Budget for Year 2022 (Supplemental) and Year 2023, Fresno Sanitary Landfill (OU-1 and OU-2). This estimate constitutes the budget for services during Year 2022 (Supplemental) and Year 2023.

Table 1.

Groundwater and Landfill Remediation Services Budget for Year 2022 (Supplemental) and Year 2023 Fresno Sanitary Landfill (Operable Unit-1 and Operable Unit-2

Task	Description	Fee
1	Performance Monitoring Program	$65,850
2	Remedial Action Systems Operations Assistance	$61,230
3	Superfund Site Delisting Pathway – Planning	$0
4	Field Investigation Activities	$52,200
5	Monthly Meetings	$44,320
6	Landfill Regrading/Control Systems Repair Design	$7,000
TOTALS		$230,600