

**MODIFICATION NO. 5 TO ON-CALL AGREEMENT FOR
ENVIRONMENTAL PROFESSIONAL ENGINEERING SERVICES YEARLY CONTRACT
(ORIGINAL RFQ NO. 2017-307, RENEWAL 2017-307/R1)
FOR LANDFILL CLOSURE CONSTRUCTION OVERSIGHT**

THIS MODIFICATION NO. 5 is made to the On Call Agreement for Environmental Professional Engineering Services Yearly Contract (RFQ No. 2017-307) ("Agreement") by and between the City of Lee's Summit, Missouri, a Missouri Constitutional Charter City (hereinafter "City"), and Stearns, Conrad and Schmidt, Consulting Engineers, Inc. dba SCS Engineers (hereinafter "Engineer") to authorize performance of On-Call Services associated with Landfill Closure Construction Oversight, Testing, Documentation, and Observation.

SCS Engineers will be responsible for the day-to-day oversight of the construction work necessary to close the landfill after receipt of final waste. Specific tasks associated with the project are described below:

Task 1: Final Permit Coordination

Engineer will complete final permitting coordination to include:

- US Army Corps of Engineers Nationwide Permit 43 Pre-Construction Notification: Prepare figures and letter to USACE describing the sedimentation basin construction that will impact the small wetland in Browning Property Area 1. The letter will also include Engineer's wetland report and describe other wetlands identified where impact could be avoided. The notification will also include other agency notifications required of this permit.
- City Land Disturbance Permit: Work with City to include Borrow Source A and Browning Property into City's MDNR Land Disturbance Permit
- City Floodplain Permit: Complete Floodplain disturbance permit application for Borrow Source A

Task 2: CQA Plan Modification

SCS will work with MDNR to modify the surveying requirements in the currently-approved CQA Plan to address how to verify thickness when settlement has occurred under the cover system. This will incorporate the use of settlement plates and identify the procedure for thickness verification where survey data indicates soil thickness is inadequate.

Task 3: Pre-Construction Meeting

Engineer will participate in a pre-construction meeting with the selected Contractor and City prior to the beginning of construction. Engineer will prepare pre-construction meeting agenda, prepare for the meeting, attend the meeting, and provide notes summarizing the meeting.

Task 4: Construction Management/Project Management

Engineer will provide construction oversight and project management services over the 6-month (26-week) period. During this time Engineer will perform the following:

- Address Contractor questions and requested changes and clarifications
- Communicate with Missouri Department of Natural Resources for site visits and information
- Participate in phone calls with Contractor and City
- Provide progress reports
- Process pay applications
- Verify Contractor progress payment quantities
- Track soil usage and soil balance
- Provide input regarding Contractor challenges

General assumptions include approximately 10 hours per week for the project manager and 8 hours per week for the project engineer.

Task 5: Meetings

Engineer will participate in up to two meetings per month for the 6-month project duration (May through October). Project Manager and Project Engineer are available to attend meetings, although participation by both may not be necessary.

Task 6: Daily Oversight

Engineer will provide full-time oversight during critical components of construction, including compacted soil layer construction, geosynthetics installation, and geocomposite drain construction. The daily oversight estimates assume 11 or 12-hour days, and quality control verification in the office. Contract includes the following oversight:

- Soil construction: 6 days per week for 14 weeks
- Geosynthetics construction: 7 days per week for 5 weeks (includes geosynthetic drain)
- Partial oversight days: 5 days per week over 8 weeks

Task 7: Surveying

Engineer will complete initial construction staking and conformance surveying for the project. Initial construction staking will include waste boundary and the boundary between the Subtitle D and pre-Subtitle D areas, borrow source boundaries, temporary benchmark installation, and rough grade stakes.

Conformance surveying will include up to nine trips for the surveyor. Some trips will require multiple days due to the number of points to survey. Verification surveying will be completed on the following layers:

- Top of subgrade (bottom of compacted soil layer, to include setting settlement plates with Contractor)
- Extents of geosynthetics and anchor trench
- Top of nominally compacted soil layer

- Top of uncompacted soil layer
- Perimeter channel as-built
- Geocomposite drain

Settlement plates may be used to verify thickness in areas where settlement is expected to occur; in these locations, it will be necessary to probe through the overlying soil layer to reach the underlying settlement plate after the cover is constructed. Engineer may utilize a Geoprobe direct push unit to reach the settlement plate with minimal impact to the cover system. Other methods may be explored as well.

Task 8: Construction Quality Assurance Report

Engineer will prepare a CQA Report at the completion of construction activities. This report will detail all on-site activities including soil characterization and testing, soil testing data, geosynthetics material properties, geosynthetics installation and testing, geocomposite drain installation, seeding activities, and borrow source reclamation. The City will receive a draft of this CQA Report for review and comment prior to submission to the MDNR.

Soil samples will be collected to verify the quality of the soil used for the compacted soil layer at a rate of 1 sample for 5,000 or 10,000 cubic yards of layer construction. Sample frequency is dependent on testing requirements in accordance with the CQA Plan. Laboratory testing is also required on geosynthetic seams at a rate of 1 test per 500 linear feet of seam. Engineer will coordinate with third-party laboratory for seam testing as well; assumes 70 destructive seam samples will be collected and tested.

Task 9: Infrastructure Extensions and Well Abandonment

Engineer will extend existing HDPE and PVC infrastructure around the landfill to accommodate the thickness of the final cover system. The extensions will occur after the Contractor has completed final grading of the subgrade and the lengths of the needed extensions are known. Includes multiple pieces of infrastructure such as valves, gas wells, access risers, leachate collection sumps, etc.

Engineer will also coordinate abandonment of two domestic water supply wells on the Browning Property borrow source near the old homestead location. Engineer will abandon wells in accordance with Missouri well abandonment regulations; work will be completed by a certified well driller. Engineer or driller will submit appropriate documentation to the MDNR after abandonment is complete.

The total fees (hourly fees and expenses) for the On-Call Services added by this Modification No. 5 shall not exceed the total sum of four-hundred twenty-seven thousand eight-hundred dollars (\$427,800.00) without a modification to the contract. The estimated budget for the work under this Modification No. 5 is identified in the table below.

On-Call Services added by this Modification No. 5 will be billed hourly at the rates set forth in Attachment A of Modification No. 2 to the Agreement. Expenses incurred to

provide such On-Call Services shall also be billed as set forth in Attachment A of Modification No. 2.

Task 1	Final Permit Coordination	\$8,800
Task 2	CQA Plan Modification	\$6,900
Task 3	Pre-Construction Preparation and Meeting	\$4,300
Task 4	Construction Management/Project Management	\$87,700
Task 5	Meetings	\$17,800
Task 6	Daily Oversight	\$163,500
Task 7	Surveying	\$58,800
Task 8	CQA Report and Conformance Testing	\$48,600
Task 9	Infrastructure Extensions and Well Abandonment	\$31,400
	Tasks 1 through 9	\$427,800

Individual task budgets for information purposes. Budget is an overall number for all tasks.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the
18 day of March 2019.

CITY OF LEE'S SUMMIT

Stephen A. Arbo, City Manager

APPROVED AS TO FORM:

Nancy K. Yendes, Chief Council of Infrastructure and Planning,
Office of City Attorney

SCS ENGINEERS:

Anastasia Welch

BY: Anastasia Welch

TITLE: Vice President

ATTEST:
