

**FIRST AMENDMENT
TO PROFESSIONAL SERVICES AGREEMENT BETWEEN
GARVER, LLC
AND
THE CITY OF MIDWEST CITY**

Pursuant to Article 14 Complete Agreement and Amendment of the Professional Services Agreement dated May 23, 2022, the following amendment is hereby agreed to between the parties:

The attached Exhibit A, Scope of Services – Amendment 1; to be added to Attachment A of the Professional Services Agreement. This change is in addition to the Scope of Services currently contained in the Agreement as amended. The current Scope of Services remains in full force and effect. Compensation for services under Amendment 1 for a total lump sum fee of \$88,650.00. Total revised contract fee of \$221,550.00.

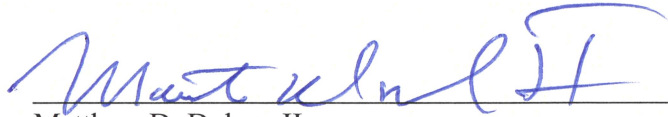
Garver, LLC:



Mary Elizabeth Mach, PE
Vice President

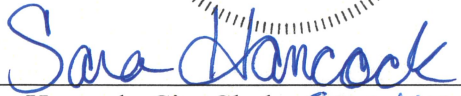
Date: March 31, 2023

For City of Midwest City:



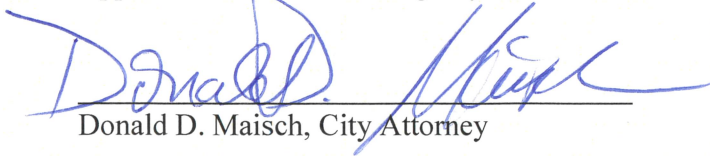
Matthew D. Dukes, II
Chairman

Date: 4-26-23



Sara Hancock, ~~City Clerk~~ *Secretary*

Approved as to form and legality:



Donald D. Maisch, City Attorney

Exhibit A - Scope of Services, Amendment 1

APPENDIX A – SCOPE OF SERVICES

Garver agrees to perform engineering services in connection with the City of Midwest City's (Owner) Water Resource Recovery Facility (WRRF) as hereinafter stated, in accordance with the stipulations in this agreement. Generally, the scope of services of this Amendment includes additional professional services related to the piloting of an alternative technology and procurement of supplemental media in the WRRF's Moving-Bed Bioreactor (MBBR) Facility.

The additional professional services include planning, bidding, and construction phase services. These additional services are due to unforeseen conditions within the MBBR that warranted the piloting of an alternative MBBR media and procuring supplemental MBBR media as part of the Media and Process Performance Evaluation project. The additional improvements and services generally include two additional tasks – Task 7 – MBBR Media Pilot Study and Task 8 – Supplemental MBBR Media Procurement.

TASK 7 – MBBR MEDIA PILOT STUDY

Garver will provide general oversight for the installation and operation of the pilot-scale process units delivered on site by the technology vendor or other contractor. One (1) technology vendor is anticipated for this work: Entex (providing Wav-Tex media). Installation and construction of the pilot units will be completed by a third-party installer. Operation of the pilot units over a six (6) month pilot period will be performed by the Owner's operators.

Garver will perform weekly site visits for oversight and sample collection assistance during the six (6) month pilot period, including startup and commissioning. Garver will also be responsible for facilitating meetings with the Oklahoma Department of Environmental Quality (ODEQ) at the beginning and ending of the pilot testing and will prepare a final report summarizing the findings. Garver's work for this project is divided in to the following four sub-tasks.

7.1 Project Management and Meetings

Garver will provide general oversight and keep the Owner updated regarding the progress of the pilot. Prior to the start of the pilot, Garver will develop and submit a Pilot Protocol to ODEQ and coordinate and attend one (1) meeting with ODEQ to present the Pilot Protocol. Any input provided by ODEQ will be used to submit one (1) revision of the testing program.

At the conclusion of the pilot, Garver will also coordinate and attend one (1) meeting with ODEQ to present the findings of the pilot testing. As this is a previously unpiloted technology for the State of Oklahoma, Garver cannot guarantee the outcomes of the pilot within the Owner's system nor can Garver ensure ODEQ's acceptability of the technology at the pilot's conclusion.

7.2 Coordination with Technology Vendors and Third-Party Installer

Garver will serve as the point of contact for the technology vendor and the third-party installer on behalf of the Owner. The Owner will contract directly with the technology vendor and the third-party installer and pay them directly for the pilot equipment and installation. Additionally, Garver will coordinate the testing program development, interface with the third party installer on the delivery and installation of the pilot units, assess the status of start-up, operation of the pilot units, and assist with the coordination of demobilization of the pilot equipment. As the equipment may remain in operation for an interim period of time after the pilot, demobilization may not include full removal of the equipment. Under this scenario, Garver will assist in coordinating any modifications needed at the pilot units to operate until full-scale modifications can be put into place.

Because the pilot installation involves temporary equipment, Garver is not providing design services as part of this Amendment. Garver will develop a scope of work and provide conceptual plan sheets of the

mechanical, electrical, and structural connections needed for the pilot installation to the third-party installer. It is anticipated that the scope of work and conceptual plan sheets will be utilized to solicit proposals from third-party installers. Upon receiving proposals from third-party installers, Owner will contract directly with the chosen installer using Owner's standard professional service agreement documents. Garver will send one (1) person three (3) times per week for up to 2 weeks during installation and start-up.

Based on the information received from the technology vendor, Garver will work with the on-site operators to make changes on the pilot units during check-in site visits. Garver will also provide technical oversight during the installation of the pilot units at the WRRF MBBR site. Owner's staff will provide all logistical support to the third-party installer, such as location of piping, ensuring sufficient air supply is available, and coordinating WRRF operations during installation. Additional electrical hookups, power control centers, etc., if needed, are all to be provided by the third-party installer. Garver is not responsible for site security, including security of the pilot units.

7.3 Site Visits, Sample Collection Oversight, and Operations Support

Garver will conduct weekly site visits after the start-up of the pilot units for up to six (6) months. During site visits, Garver will monitor the pilot equipment and biofilm development on the media and summarize progress in a weekly emailed report to the Owner. When necessary, information will be provided to the technology vendor or operations staff to make adjustments to the pilot units. Garver will not be responsible for pilot operation, sampling, or troubleshooting.

Owner's staff will collect samples for Chemical Oxygen Demand (COD) and ammonia (NH₃) from each of two (2) MBBR trains as well as three (3) of the individual zones within each MBBR train (total of six sample locations) at a schedule developed with the technology vendor and approved by ODEQ as discussed in the Pilot Protocol. These samples will be delivered and evaluated by a contract analytical laboratory or the Owner's WRRF laboratory for sample analysis. All costs for the analytical laboratory and any shipping will be paid by the Owner. Owner should ensure in their agreements with the analytical laboratory that coordination with Garver's site visits occurs.

7.4 Analyze Results and Prepare Pilot Report

Based upon the data collected during the operation of the pilot units, Garver will generate a Pilot Report summarizing the data collected, evaluating pilot performance, degree of snail infestation, and overall media condition. Data collected by WRRF staff through existing on-line sensors as well as analytical results of the samples collected from the pilot units will be utilized during this effort.

The Pilot Report will also summarize opinion of probable construction cost (OPCC) for a full-scale Entex installation. All OPCCs that are developed shall include professional services, contractor overhead and profit, and contingency. The costs will include material procurement and construction. For planning level estimates, Garver will consider these costs as estimates, which should be utilized by Owner for budget authorization or control. The expected range of accuracy for this type of estimate is -30 to +50% of the actual project estimate. Garver does not guarantee or warranty that proposals, bids, or actual projects costs will not vary from Garver's opinions of probable construction cost.

Additionally, a 25-year net present worth evaluation of the Entex technology, based on the site-specific outcomes of the pilot, will be performed. Garver will incorporate the findings of this evaluation in the Media and Process Performance Technical Memorandum (as part of this Agreement under Task 5).

7.5 Task 7 Deliverables

The following will be submitted to the Owner, or others as indicated, by Garver:

1. Electronic copy of the draft Pilot Protocol to Owner and ODEQ
2. Two (2) copies of the Third-Party Installer Scope of Work and Conceptual Plan Sheets
3. Two (2) copies of the final Pilot Protocol to Owner and ODEQ
4. Two (2) copies of the Pilot Report to Owner and ODEQ

TASK 8 – SUPPLEMENTAL MBBR MEDIA PROCUREMENT

Task 8 involves services necessary to assist the Owner in procuring supplemental MBBR media (coin or wagon-wheel geometry) due to previous losses/breakage of the existing MBBR media. Garver will provide planning and bidding phase services as part of this Task 8.

8.1 Coordination with Media Suppliers and Third-Party Installer

Garver will serve as the point of contact for the wagon wheel media suppliers and the third-party installer on behalf of the Owner. The Owner will contract directly with the media supplier and the third-party installer and pay them directly for the media procurement, delivery, and installation. Garver will assist in coordination and will solicit installation proposals from third-party installers. Garver will also develop up to one (1) set of bidding documents, utilizing standard City service procurement forms (the same forms utilized for the pilot installer).

Based on information received from media suppliers, Garver will develop a technical specification for supplemental media suitable for operation with the existing WRRF MBBR facility. Garver will also provide technical oversight during the installation of the supplemental media at the WRRF MBBR site. This oversight will include recommendations on which zones are suitable for redistributing existing media within the MBBR basins before adding supplemental media and installing the Entex pilot. Garver will also provide recommendations on viable strategies to redistribute existing media within the MBBR basins consistent with previous practices during construction of the MBBR. Owner's staff will provide all logistical support to the media supplier and media transfer before addition of the supplemental media and will purchase media transfer pumps/equipment directly outside of this contract.

8.2 Supplemental Media Bidding

During the bidding phase of Task 8, Garver will:

1. Prepare draft Advertisement for Bids to Owner for Owner publication in newspapers and/or trade publications. Owner will pay advertising costs outside of this contract.
2. Incorporate the supplemental media specification into Owner's standard Purchase Agreement documents.
3. Bid documents will comply with the Oklahoma Competitive Bidding Act of 1974 and all amendments thereto.
4. Support the bidding documents by preparing addenda, as appropriate.
5. Participate in a pre-bid meeting, if necessary.
6. Prepare bid tabulation.
7. Evaluate bids and recommend award, including attending a City Council meeting, if necessary.

8.3 Task 8 Deliverables

The following will be submitted to the Owner, or others as indicated, by Garver:

1. Electronic copy of the draft Supplemental Media Specification to Owner
2. Electronic copies of any Addenda necessary to Owner
3. Electronic copy of Bid Tabulation and Recommendation of Award to Owner

EXTRA WORK

The following items are not included under this agreement and will be considered as extra work:

- (a) Design services of any kind.
- (b) Redesign or rework for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
- (c) Submittals or deliverables in addition to those listed herein.
- (d) Property line monumentation, including preparation of a survey plat, lot line adjustment, and lot split.
- (e) Design, Bidding, or Construction Phase Services of any Special Environmental Projects (SEPs)
- (f) Geotechnical services of any kind.
- (g) Construction materials testing of any kind.
- (h) ODEQ coordination of any kind beyond the Pilot Protocol and Study, including NPDES discharge permit renewal.
- (i) Any work associated with a solid waste landfill located on the Owner's property.
- (j) Coordination with FEMA and preparation/submittal of a CLOMR and/or LOMR.
- (k) Operational services after pilot demobilization.
- (l) City of Midwest City permitting, beyond informal review and approval.
- (m) Alternative Project Delivery ("Design-Build"), including pre-purchasing bids.
- (n) Operations Training, outside of coordinating training from the pilot vendor.
- (o) ODEQ public meetings.
- (p) Receiving Stream Modeling.
- (q) SCADA programming, computer hardware or software procurement, software upgrades, or software license purchases.

Extra Work will be as directed by the Owner in writing for an addition fee as agreed upon by the Owner and Garver.

SCHEDULE

Garver shall begin work under this Agreement within ten (10) days of a Notice to Proceed (NTP) and shall complete the work in accordance with the schedule below.

| Phase Description | Calendar Days |
|--|--|
| Submit Pilot Protocol to ODEQ | 14 days from receipt of written NTP |
| Coordinate installation of pilot with vendor and third-party installer | 90 days from ODEQ acceptance of Pilot Protocol |
| Presentation of Pilot Study to ODEQ | 45 days from completion of the pilot testing |
| Supplemental Media Bidding Specification | 14 days from receipt of written NTP |

Exhibit B

**City of Midwest City
MBBR Media and Process Performance Evaluation
Amendment No. 1**

FEE SUMMARY

| Basic Services Section | Estimated Fees |
|---|-----------------------|
| TASK 7 - MBBR Media Pilot Study | \$ 75,800.00 |
| TASK 8 - Supplemental MBBR Media Procurement | \$ 12,850.00 |
| Subtotal for Basic Services Section | \$ 88,650.00 |
| | |
| Additional Services Section | Estimated Fees |
| N/A | \$ - |
| Subtotal for Additional Services Section | \$ - |
| | |
| Total All Services | \$ 88,650.00 |