



EXHIBIT A

WORK ORDER NO. 4

CITY OF BAY CITY

WWTP Improvements Design & Bid Phase

Project No. 20W09156

This WORK ORDER (“Work Order”) is made by and between the **City of Bay City** (hereinafter referred to as “Owner”) and **Garver, LLC**, (hereinafter referred to as “Garver”) in accordance with the provisions of the MASTER AGREEMENT FOR PROFESSIONAL SERVICES executed on October 27, 2020 (the “Agreement”).

Under this Work Order, the Owner intends to make the following improvements for **Bay City WWTP Improvements Design**.

Generally, the scope of services generally includes professional services necessary for the final design, bid phase, and other services as noted in Appendix A for the City of Bay City (COBC) improvements to the Bay City Wastewater Treatment Plant (WWTP). The work also includes incorporating the Cottonwood Lift Station rehabilitation design into the WWTP construction package.

Garver will provide professional services as described herein. Terms not defined herein shall have the meaning assigned to them in the Agreement.

1. SCOPE OF SERVICES

1.1. Refer to APPENDIX A – SCOPE OF SERVICES.

2. PAYMENT

2.1. The lump sum amount to be paid under this Agreement is \$3,151,198.00. For informational purposes, a breakdown of Garver’s estimated costs is included in APPENDIX B – FEE SUMMARY.

3. APPENDICES

3.1. The following Appendices are attached to and made a part of this Work Order:
Appendix A – Scope of Services
Appendix B – Fee Summary



This Work Order may be executed in two (2) or more counterparts each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

The effective date of this Work Order shall be the last date written below.

CITY OF BAY CITY

GARVER, LLC

By: _____
Signature

By: _____
Signature

Name: Robert K. Nelson
Printed Name

Name: Daniel N. Olson, P.E.
Printed Name

Title: Mayor

Title: Vice President

Date: _____

Date: _____

Attest: _____

Attest: _____

APPENDIX A – SCOPE OF SERVICES

General

The scope of services includes professional services necessary for the final design, bid phase, and other services as noted in this document for the City of Bay City (COBC) improvements to the Bay City Wastewater Treatment Plant (WWTP). In prior agreements, Garver developed conceptual engineering reports and provided preliminary planning services for the work. Additionally, Garver participated in securing funding for the work through the Texas Water Development Board's (TWDB) State Revolving Funds (SRF). The COBC is both owner and the client for this project.

Engineering and construction for this project are intended to be financed through the TWDB SRF process. Construction for this work is expected to be executed under two design-bid-build construction contracts. The WWTP and associated facilities are included in this scope. The future professional services contracts are expected to be developed for construction phase engineering and management services.

The works identified under the preliminary engineering report and DIMs are to be included under the Facilities Work Contract. The scope of services includes the design of the following elements:

1. Overall Facility Design Criteria and Mass Balance
2. Facility Hydraulics
3. Influent Pump Station
4. Headworks
5. Aeration Basins
6. Blower Building
7. Clarifiers
8. RAS/WAS Pumping
9. Disinfection and Contact Basin
10. Non-Potable Water System
11. Sludge Holding Tanks
12. Dewatering Facility
13. Site Civil and Yard Piping
14. Structural Design Criteria and Foundation Design
15. Electrical System
16. SCADA System
17. Administration Building
18. Building Design Criteria
19. Construction Sequencing/Maintenance of Plant Operations
20. Opinion of Probable Construction Cost.

The Offsite improvements at the Cottonwood Lift Station are also going to be included under the Facilities Work Contract.

1. Task I: Project Management

This task is for the anticipated preliminary design phase, final design phase, and bidding phase only and is anticipated to be 12 months long.

Garver will provide and develop project control tools including progress reports, action items log, decision log, design team meetings, workshops, and schedule and invoicing. Garver shall provide professional services in this Task as follows:

- 1.1. Prepare a Project Work Plan (Garver form), a document to be used by all participants to ensure communication on the understanding of project goals, scope, and tasks. This project plan will serve all design phases. It will address:
 - Project schedule.
 - Project budget.
 - Quality Management Plan.
 - Change Management Plan.
 - Communications Plan.
- 1.2. Schedule and direct regular coordination meetings with the design team to coordinate task assignments, action items, and to prepare for progress meetings with the Owner. Garver will maintain an Action Item Log/ Decision Log to monitor activity. Coordinate with subconsultants to confirm all project elements are compatible and integrated. Coordinate with the Owner as needed.
- 1.3. Schedule and conduct up to eight progress meetings with the Owner. In addition to reviewing progress at each meeting, review project deliverable status, current schedule, outstanding action items, and project bottlenecks that could impact schedule, budget status, and decisions made. Prepare agenda and meeting materials, direct and document meetings to review progress, and facilitate the exchange of ideas and information. Prepare draft meeting minutes, to include action lists and decision lists, within ten business days to submit to the Owner for review and approval. Final minutes will be issued after receipt of review comments. The first progress meeting will include a project start-up meeting to confirm project scope, personnel, lines of communication, security protocols, change management, and schedule.
- 1.4. Prepare monthly Project Summary Reports and submit monthly invoices. The report shall contain the following elements:
 - Summary of work completed to date.
 - Schedule.
 - Summary of action items/decisions.
 - Upcoming activities.
 - Potential changes in scope, costs, or schedule.

Task I Deliverables:

- Meeting Agendas - Agendas to be submitted 3 days in advance of meetings (PDF document).
- Draft and final meeting minutes (PDF document).
- Monthly status reports (PDF document).
- Monthly schedule updates (PDF document).
- Monthly invoices (PDF document).

2. TASK II: Facility Package Design Development (60%)

- 2.1. During the design development (60%) phase of the project, Garver will incorporate comments from the 30% workshops and reviews to progress the design across all disciplines. This submittal will

include a drawing set that builds on the 30% drawing set, specifications, and an OPCC updated based on the latest design data.

- 2.2. Garver and the TWDB's standard contract forms including documents from the EJCDC will be used, along with Garver's standard drawing format and technical specifications. Garver will utilize the Texas Water Development Board (TWDB) and Engineers Joint Council Documents Committee (EJCDC) standard documents as a base for developing the project's front-end documents.

EJCDC's standard General Conditions shall be utilized with edits being provided by the Supplemental Conditions. Standard forms, as required by the funding source, will be incorporated.

- 2.3. During this task, Garver will coordinate with the Owner for potential deductive alternates.

- Garver will include up to two (2) designed deductive alternates to provide award flexibility to match with available project funding.
- Multiple design scenarios or bid packages are not included as part of the level of effort provided with this scope of work.

- 2.4. 60% SCADA Controls Review

Garver will conduct a review of the SCADA control deliverable. This review will focus on the process and instrumentation diagrams and control narratives to check they are progressing in alignment with review comments made at the 30% deliverable.

- 2.5. Prepare up to three (3) preselection equipment packages. It is anticipated that the equipment packages will be for the procurement of the submersible pumps, headworks equipment, and up to one additional process unit. This effort includes the following:

- Preparation of the procurement package, including preliminary drawings and specifications for review purposes.

- 2.6. Garver will lead a 60% Design Review Workshop at the Owner's office to solicit comments and feedback from the Owner. A BIM model will be developed to review constructability and operability at this workshop.

- 2.7. Garver will prepare the 60% Design Submittal Documents.

- 2.8. Garver will prepare the responses to the 60% Design review comments.

- 2.9. Quality Assurance (QA): Provide QA/Quality Control (QC).

Garver will conduct internal QA/QC of each deliverable prior to delivery to the Owner. Garver will prepare for, plan, and participate in one (1) QC review meeting with the Owner. The meetings will be held at the 60% stage. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during each of the meetings.

Task II Deliverables:

- Two (2) hard copies of the draft 60% Design Documents (including half-size drawings) and a PDF copy.

3. TASK III: Facility Package Final Design (90%)

- 3.1. During the Final Design (90%) phase of the project, Garver will incorporate the comments from the 60% reviews to complete the design. This submittal will include all drawings, specifications, and an OPCC updated for all final design elements.
- 3.2. Garver will continue the development of (2) designed deductive alternates to provide award flexibility to match with available project funding.
- 3.3. 90% Operability/Functionality/SCADA Controls Review:

Garver will review the 90% design deliverable for overall functionality and operability. This review will focus on the process and instrumentation diagrams and control narratives. The review will also focus on the electrical control diagrams, the I/O List, and the conduit and conductor schedules to check for consistency throughout and to check they are progressing in alignment with review comments made in previous reviews.

- 3.4. Garver will lead a 90% Design Review Workshop at the Owner's office to solicit comments and feedback from the Owner. A BIM model will be available to review constructability and operability at this workshop.
- 3.5. Garver will continue the development of the project's front-end documents.

EJCDC's standard General Conditions shall be utilized with edits being provided by the Supplemental Conditions. Standard forms, as required by the funding source, will be incorporated.

- 3.6. During Final Design, an O&M workshop will be conducted to solicit input from staff on the final design documents.
- 3.7. Garver will prepare the 90% Design Submittal Documents.
- 3.8. Garver will prepare the responses to the 90% Design review comments.
- 3.9. Quality Assurance (QA): Provide QA/Quality Control (QC).

Garver will conduct internal QA/QC of each deliverable prior to delivery to the Owner. Garver will prepare for, plan, and participate in one (1) QC review meeting with the Owner. The meetings will be held at the 90% stage. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during each of the meetings.

Task III Deliverables:

- Two (2) hard copies of the draft 90% Design Documents (including half-sized drawings) and a PDF copy.
- Required copies for Funding Agency.

4. TASK IV: Facility Package Permitting Set

- 4.1. A summary letter will be developed, and a sealed permitting set will be compiled to submit to TWDB and TCEQ for construction approval. This set will include all drawings and specifications as required by TWDB and TCEQ. It is anticipated that TWDB will provide the primary design reviews for the

submittals, and letters of notification will be required to notify TCEQ that TWDB is providing the review of the documents. Responses to TWDB/TCEQ comments will be coordinated with the Owner and addressed in the final documents.

4.2. Quality Assurance (QA): Provide QA/Quality Control (QC).

Garver will conduct internal QA/QC of each deliverable prior to delivery to the Owner. Garver will prepare for, plan, and participate in one (1) QC review meeting with the Owner. The meetings will be held at the Facility Package Permitting Set stage. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during each of the meetings.

Task IV Deliverables:

- Required copies for State Permitting Agency.

5. TASK V: Facility Package Contract Documents (100%)

5.1. During the Contract Documents (100%) phase of the project, Garver will incorporate the comments from the 90% reviews to create the biddable design documents. This submittal will include all drawings, specifications, and an OPCC updated for all final design elements.

5.2. The Contract Documents will consist of drawings and specifications that set forth requirements for construction of the improvements and shall include proposal forms, notice to bidders, bid forms, bond forms, and other information as required by the Owner to competitively bid the work.

5.3. Conduct preselection activities for the preselection equipment packages noted in Section 2.5. This effort includes the following:

- Finalizing the procurement documents.
- Prepare for and attend any pre-submittal conferences/phone discussions for preselected equipment.
- Review and address questions submitted by potential equipment suppliers.
- Prepare addenda responses, as necessary.
- Evaluate the equipment proposals and provide a recommendation of award for the selected equipment.
- Incorporate information from the preselection documents, including vendor proposals, into the final bid-ready construction documents.

5.4 Quality Assurance (QA): Provide QA/Quality Control (QC):.

Garver will conduct internal QA/QC of each deliverable prior to delivery to the Owner. Garver will prepare for, plan, and participate in one (1) QC review meeting with the Owner. The meetings will be held at the Facility Package Permitting Set stage. Project documents appropriate to the submittal stage will be provided a minimum of 5 working days before the review meeting. Prepare a meeting memorandum documenting major revisions and decisions made during each of the meetings.

Task V Deliverables:

- Five (5) hard copies of the 100% Design Documents (including half-size drawings) and a PDF copy.

6. TASK VI: Bidding Phase Services

6.1. Bidding Assistance – Facility Work Package

The bidding assistance period is anticipated to be a 70-day duration. During the bidding period phase of the project, Garver will:

- 6.1.1. Prepare and submit Advertisement for Bids to the City for newspaper publication as directed by the Owner. The owner will submit to the newspaper and will pay advertising costs outside of this contract.
- 6.1.2. Post advertisement for bids, construction contract documents, and any associated information to the Owner to be posted by Garver on its Website for download by prospective bidders.
- 6.1.3. Support the contract documents by preparing addenda as appropriate.
- 6.1.4. Prepare for and participate in one pre-bid meeting.
- 6.1.5. Prepare a pre-bid meeting agenda.
- 6.1.6. Participate and lead a construction site tour following the pre-bid meeting by interested pre-bid meeting attendees and other interested parties.
- 6.1.7. Attend the bid opening.
- 6.1.8. Prepare bid tabulation.
- 6.1.9. Evaluate bids and recommend awards.
- 6.1.10. Attend and participate in reporting recommendation of award to Owner Council.
- 6.1.11. Prepare construction contracts.
- 6.1.12. Prepare conformed documents.

Task VI Deliverables:

- Draft and final bid advertisement (PDF document).
- Draft and final pre-bid meeting agenda (PDF document).
- Prepare addendum for the bid package (PDF document).
- Draft and final pre-bid meeting memorandum (PDF document).
- Draft and final bid tabulation (PDF document).
- Draft and final Recommendation of Award.
- Draft and final presentation for Council Award.
- Construction contracts (5 hard copies and PDF document).
- Conformed documents (10 half-size sets of drawings, 5 copies of specifications, and searchable PDF document).

7. TASK VII: TWDB Coordination

Garver will assist the Owner in meeting the funding program requirements of the TWDB's Clean Water State Revolving Fund (CWSRF).

7.1. Garver will perform the following tasks:

- 7.1.1. Provide design deliverables to the TWDB at each phase.

- Deliver report, plans, and/or specifications at each design deliverable to the Owner for submittal to the TWDB.
- 7.1.2. Coordinate bid documents with the TWDB to provide program compliance.
- Coordinate with the TWDB to address comments regarding the design deliverables.
- 7.1.3. Coordinate with the TWDB regarding questions and comments for bidding documents and bidding requirements.
- Garver will be responsible for all other TWDB coordination, forms, and reimbursement requests.

8. Work Not Included/Extra Work

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

1. Environmental Information Document.
2. Asbestos investigation or remediation plan.
3. Construction Phase Engineering Services.
4. Construction Phase On-site Construction Management Services.
5. Construction materials testing.
6. Geotechnical services.
7. The survey, property boundary survey, easement research services, or bathymetric survey.
8. Easement coordination of easement documents.
9. SSES, I&I analysis, and/or sewer system survey.
10. Design of improvements off-site.
11. Utility relocation coordination or design.
12. Hydraulics and hydrology for floodway No-Rise Certification and Individual 404 permit.
13. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
14. Preparation of a Storm Water Pollution Prevention Plan (SWPPP).
15. Environmental Handling and Documentation beyond those previously identified, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
16. Perform work on an application for a new discharge permit or a major permit amendment.
17. Water quality modeling.
18. Prepare to serve or serve as an expert witness on behalf of the Owner.
19. Provide technical or procedural support if the proposed permit amendment is protested.
20. Sludge Management Plan.
21. Warranty Assistance.
22. Water Reuse Master Plan.
23. Utility Rate Study.
24. Water Conservation Plan.
25. Jar Testing Services.
26. Sampling Services.
27. Additional meetings beyond those identified in the scope.
28. Software licenses.

Proposed Project Schedule

City of Bay City
Bay City WWTP
Design and Bid Phase Services

Proposed Milestone Schedule
Tuesday, June 29, 2021

Milestone	Milestone / Deliverable	Duration ^{1,2}	Anticipated Delivery ³
1	Project NTP	--	Monday, July 19, 2021
2	60% Design Submittal	Within 70 working days of NTP	Thursday, October 28, 2021
3	90% Design Submittal	Within 80 working days from receipt of written comments on 60% review submittal	Wednesday, March 9, 2022
4	Regulatory Review Submittal	Within 10 working days from submittal of 90% review submittal	Wednesday, April 20, 2022
5	100% Bid-set Documents (Front End Documents, Drawings, Specification, Details)	Within 20 working days from receipt of Regulatory Review Comments from TWDB and Receipt of City/OR Comments on 90% submittal	Wednesday, June 1, 2022

1. Duration shown is intended to be the contractual delivery date.

2. Working days do not include weekends (Saturday/Sunday) and standard Garver Holidays/observed holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Thanksgiving Friday, Christmas Eve, Christmas Day).

3. Anticipated delivery date shown is based on durations noted. Reference detailed, critical path schedule attached. It is noted that delays in preceding milestones (such as extended client review periods or delays in Regulatory Reviews) could delay delivery of subsequent submittals.

Appendix B

City of Bay City WWTP Improvements Design

FEE SUMMARY

Basic Services Section	Estimated Fees
TASK I - Project Management	\$ 245,722.00
TASK II - Facility Package Design Development - 60%	\$ 1,127,378.00
TASK III - Facility Package Final Design - 90%	\$ 1,117,018.00
TASK IV - Facility Package Permitting Set	\$ 83,752.00
TASK V - Facility Package Contract Documents - 100%	\$ 389,208.00
TASK VI - Facility Package Bid Phase Services	\$ 143,556.00
TASK VII - TWDB Coordination	\$ 44,564.00
Subtotal for Basic Services Section	\$ 3,151,198.00