



EXHIBIT 1
Scope of Services
For
Owner's Advisor Services
For The City of San Marcos
"New" WWTP (Project 571)

Background and Purpose - The new wastewater treatment plant project is required to treat proposed flows from the rapidly developing area in the southeast of San Marcos and may accept flows from existing adjacent basins to defer improvements needed at the existing wastewater treatment plant. The new wastewater treatment plant is anticipated to treat 2 MGD initially and be expandable to 8 MGD. The new permanent wastewater treatment plant project is heavily dependent on obtaining developer commitments (projected to go to council in January 2024). The City of San Marcos will be utilizing progressive design-build to deliver this project within a timeframe that can accommodate City and developer needs.

Additionally, the City of San Marcos will be constructing and modifying conveyance infrastructure to the new WWTP and constructing a package WWTP to treat near-term flows until the PDB WWTP is on-line. Owner's Advisor services will include monitoring and oversight of conveyance work and package plant to the extent defined by the City. This work may or may not be conducted, in whole or partially, within the progressive design-build scope.

The Engineer will execute tasks necessary to perform Owner's Advisor (OA) duties and responsibilities for planning and development, design and construction phase activities related to the proposed WWTP for the City of San Marcos as defined in this Exhibit A. The tasks associated with these engineering services is separated into the following services and tasks:

1. Project/Program Management Services
2. Package Plant and Conveyance Support
3. Basis of Design & Phasing Development
4. Legal Consultation
5. Progressive Design-Build (PDB) Procurement
6. Implementation Support



7. Additional Services
8. Construction Management & Resident Inspection

1. PROJECT/PROGRAM MANAGEMENT SERVICES

- 1.1. Conduct a project initiation meeting to identify critical success factors, brainstorm potential design solutions, and establish a clear set of objectives for the project based on client input and consultation with senior technical experts.
- 1.2. Coordinate with staff and project personnel to complete project tasks and meet project objectives.
- 1.3. Conduct monthly progress meetings throughout the project with City staff to review work completed to date, project schedule, and other issues. Provide appropriate and necessary documentation.
- 1.4. Coordinate lead/conduct project workshops needed throughout the course of the project and prepare agendas, materials, exhibits or coordinate production of same as necessary to execute required tasks.
- 1.5. Coordinate, lead/conduct, and/or participate in site visits as necessary in the execution of or required tasks.
- 1.6. Develop and maintain an overall project schedule with major milestones for all aspects and phases of the project including conveyance facilities, any temporary facilities, permanent facilities and permitting activities that may influence the critical path.
- 1.7. Generate monthly status reports and preparation of invoices to be submitted together for review and approval.
- 1.8. Develop and maintain risk matrix.
- 1.9. Develop and maintain cash flow projections to match availability of funding.
- 1.10. Develop and maintain decision log and matrix ensuring understanding of decision making processes and levels of authority.
- 1.11. Prepare for, present at, and attend public meetings as may be required through the term of the project.
- 1.12. Owner's Advisor Progress Meetings – OA will conduct monthly progress meetings pertaining to the Delivery Firm's work efforts throughout the project with City staff to review work completed to date, project schedule, and other issues. OA will provide appropriate and necessary documentation (meeting agenda and meeting notes).
- 1.13. Budget Tracking, Analysis and Management – track and update master program costs based on actual contract values and estimated costs to complete the work through substantial completion.



- 1.14. OA will work with the City to confirm/establish electronic document system/repository for use, including support and/or additional services. Selected criteria and/or protocols will try to maintain the City's Document Management system as the official project electronic document repository.
- 1.15. Workshop meetings with the City to determine communication protocols, establish project controls, generally define OA's limits of authority.
- 1.16. Define minimum requirements for Quality Program for design of all design packages including quality control and quality assurance procedures to be implemented during the permitting, design, and all subsequent phases of project.

2. PACKAGE PLANT AND CONVEYANCE SUPPORT

- 2.1. Assist City of San Marcos managing consultant(s) and contractors in the planning, procurement, construction, and startup of a new package plant and conveyance infrastructure. Integrate scope of work delineation with permanent plan progressive design-build phasing.
- 2.2. Services include permitting planning reviews and assistance, document and plan reviews, procurement/bid reviews, and resident inspection and project closeout assistance as well as startup plans.
- 2.3. Provide traditional milestone reviews as well as reviews of cost estimates for opportunities to optimize and coordinate with permanent facility.

3. BASIS OF DESIGN & PHASING DEVELOPMENT

- 3.1. **Permitting and Approval Requirements** - Complete Technical Memos that identify and summarize all applicable local, state, and federal regulatory permits and approvals and associated processes as they apply to the project. Assist the City with identifying the key permits required for the project and party's roles and responsible for securing permits and approvals.
- 3.2. **Basis of Design Criteria and Technical Guidelines** – Develop Basis of Design Criteria for considerations including capacity requirements, service life, operating ranges and conditions, integration with existing and proposed infrastructure, treatment process considerations to achieve treated water quality goals and regulatory requirements, water reuse potential, constructability, life cycle cost analysis, and non-monetary factors. Non-monetary factors could include operations and maintenance considerations, safety, schedule considerations, constructability, start-up, commissioning, and acceptance testing.
- 3.3. **Siting Analysis/Finalization** – Conduct site analysis of anticipated plant site for processes(s) being contemplated, considering any temporary facilities, first, and subsequent phases of the wastewater treatment plant. Provide baseline site layouts for inclusion in the Basis of Design and Technical Guidelines.

4. LEGAL CONSULTATION



- 4.1. Provide legal consultation for the purposes of advice in procurement and PDB contract negotiations on behalf of the Owner. If needed, services will be provided on a task order basis with defined scope and rates. Legal services under this scope are not for litigation services or purposes.

5. PROGRESSIVE DESIGN-BUILD (PDB) PROCUREMENT

- 5.1. Conduct three (3) workshops with the City stakeholders to review, discuss, present procurement options. City stakeholders may include engineering, CIP groups, procurement, public works, and other departments the City deems appropriate. Considerations include formulation of construction packages, timelines, schedules, risks, and delivery methods.
- 5.2. Prepare memorandum of documenting Owner preferences, options for construction procurement, and decisions made with regard to:
 - 5.2.1. How to break work in logical construction packages
 - 5.2.2. Impact and remedy for supply chain concerns
 - 5.2.3. Impact and remedy for other critical path items (permitting, funding, additional growth, etc....)
- 5.3. Work with Owner in developing RFQ and qualification criteria.
- 5.4. Assist City of San Marcos and in negotiating with successfully selected firm(s) including assistance with scope and fee review.

6. IMPLEMENTATION SUPPORT

Upon successful selection of Delivery Firm and work has commenced, Owner's Advisor will:

6.1. Monthly Progress Meetings

Participate in and facilitate Delivery Firm monthly progress meetings from the start of the project into Initial (up to 60%) and Final design and procurement phases. For all meetings led by the Delivery Firm, Delivery Firm will prepare meeting notes and OA will review prior to distribution.

OA may coordinate, lead and/or conduct project workshops between the various deliverables and design elements needed throughout the course of the project and prepare agendas in conjunction with various project needs including materials and exhibits or coordinate production of same as necessary to execute required tasks. OA will prepare meeting agenda and meeting notes for all OA led meetings. Specialty meetings may include the following:

- 6.1.1. Process control, instrumentation, and SCADA system architecture coordination workshop(s)
- 6.1.2. Electrical power distribution coordination meeting(s)
- 6.1.3. Plant security coordination meeting
- 6.1.4. Architectural standards and design coordination meeting
- 6.1.5. Coordination meetings as needed with regulatory or permitting agencies.
- 6.1.6. Coordination meetings with Delivery Firm. OA will facilitate the coordination of Delivery Firm recommendations, and track changes and their respective impacts on cost and



schedule. The resulting implication of any revisions will be updated on Delivery Firm's cost estimate and schedule.

6.2. Design Criteria Memorandum (DCM) and Technical Guidelines

OA will coordinate with the Delivery Firm in developing and maintaining a DCM document for the design deliverables in compliance with the Basis of Design Criteria and Technical Guidelines developed by the OA. We anticipate the Delivery Firm will be updating the DCM at each major agreed upon design milestone and any changes in design criteria agreed upon by the Owner.

6.3. Deliverable Review

OA proposes to provide quality control reviews and technical reviews of all deliverables (exception requests, technical memorandum, design deliverables, etc.) for completeness, constructability, coordination with the other city facilities and standards, and lastly review of value engineering options and recommendations for each anticipated phase of design. Generally, we anticipate continued review and comment on the design as it evolves, with focus on assisting the owner in prioritizing scope adjustments and in revising performance criteria and related acceptance test protocols for the following deliverables from the Delivery Firm:

6.3.1. Design Criteria Memorandum

6.3.2. P&IDs

6.3.3. 30% Design

6.3.4. 60% Design

6.3.5. Final Design

6.3.6. Bid and Procurement packages as defined in the procurement strategy developed by the Delivery Firm.

6.4. Review project planning and scheduling prepared by Delivery Firm and evaluate impacts on overall schedule. Look for opportunities to optimize the schedule.

6.5. Review and compare proposed vendors with Owner approved vendor list.

6.6. Construction Procurement Plan Coordination and Review

6.6.1. Assist in review, and comment on procurement process by the Delivery Firm

6.6.1.1. Breaking work into logical construction packages.

6.6.1.2. Construction delivery methods most applicable to each desired bid package.

6.6.2. Review Early Work Packages. Review Bid documents/Bids/Subcontractor recommendations/Selections.

6.6.3. Review Balance of Plant Packages. Review Bid Documents//Bids/Subcontractor recommendations/Selections.

6.6.4. Review final pricing proposal prepared by Delivery Firm. Assist the city to negotiate final pricing and contingency with Delivery Firm.



- 6.7. Monitoring of the collaborative delivery firm's materials, equipment, and subcontractor procurement process, including participation in best-value evaluation of solicitation responses on behalf of the owner; for packages on which collaborative delivery firm is proposing, the OA may oversee the procurement process.
- 6.8. Provide quality control reviews and technical reviews of all evaluations and recommendations, technical memoranda, reports, and design packages.
- 6.9. Work with City Project Manager (and other designated City personnel) to coordinate City reviews of work products. Work with internal project team to document and incorporate City comments.
- 6.10. Review cost estimates prepared by Delivery Firm at contractual milestones; Evaluate and compare to reconcile project construction cost and propose cost-effective alternatives as needed.
- 6.11. Review other construction management and quality control plans (construction emergency response plan, construction site safety plan, quality management plan, environmental management plan, etc.) prepared by Delivery Firm.
- 6.12. Regulatory Coordination and Oversight
 - 6.12.1. Regulatory Approval Oversight Coordination with staff and project personnel to complete project tasks and meet project objectives.
 - 6.12.2. Attend meetings with regulatory agencies such as TCEQ for providing support in obtaining approvals and exceptions.
 - 6.12.3. Regulatory Requirements: Review documents generated by the Delivery Firm for each of the three design deliverables to update previously identified applicable local, state, and federal regulatory requirements and parameters including references for all aspects of design for all components of project.
 - 6.12.4. Permitting and Approval Requirements: Review documents generated by the Delivery Firm for each of the design deliverables to update previously identified applicable local, state, and federal regulatory permits and approvals and associated processes as they apply to the project. Assist the City in updating previously identified key permits required for the project and parties' roles and responsible for securing permits and approvals.
- 6.13. Review and endorsement of commissioning and start-up plans and acceptance test requirements.
- 6.14. Monitoring of the design builders internal design RFI process
- 6.15. Monitoring of the delivery firm's QA/QC program for contract compliance
- 6.16. Review and recommendation of pay estimates and invoices up to commencement of construction.

7. ADDITIONAL SERVICES

- 7.1. Provide additional services as requested by the City, clearly defined by additional scope document, including but not limited to studies, evaluations, cost estimates, meeting attendance, exhibits,



regulatory coordination, engineering support, construction services, and startup and commissioning assistance.

- 7.2. Provide and allocate hours for various staff levels to assist the City with tasks as requested and assigned from the City, to include, but not be limited to additional engineering support, field support, project controls, cost estimating, contract procurement and review, project budget review, permitting and regulatory assistance, and other tasks as defined by the City.

8. CONSTRUCTION MANAGEMENT

8.1. Pre-Construction

- 8.1.1. Schedule and conduct the pre-construction meeting; record and disseminate minutes from pre-construction meeting.
- 8.1.2. Utilize the City's Project Management information system (if applicable): set communications protocol and contract administration procedures, establish progress meeting schedule and submittal schedule.
- 8.1.3. Provide agenda for meeting: Key milestone dates, pay application procedures, schedule, public notification issues and procedures, utility coordination issues, traffic control, permitting, property owner notification and coordination, temporary facilities, etc.
- 8.1.4. Construction Administration and Management Services
 - 8.1.4.1. Act as the City's on-site representative administering the contract for construction and providing overall project oversight, maintain record of decisions and changes made.
 - 8.1.4.2. Meetings: Schedule and conduct construction progress meetings; review Delivery Firm's minutes from construction progress meetings and distribute.
 - 8.1.4.2.1. Schedule monthly progress meetings to review the following: work progress and schedule, outstanding issues, status of submittals and responses shop drawings unforeseen issues and changes to the work.
 - 8.1.4.2.2. Coordinate additional meetings as necessary to discuss and resolve problems and provide guidance in a timely manner.
 - 8.1.4.2.3. Coordinate/monitor the following: utility relocation activities for compliance, utility installation verification, reporting, record management and as-built drawings.
 - 8.1.4.2.4. Attend all utility coordination, construction, and scheduling meetings.
- 8.1.5. Manage Construction
 - 8.1.5.1. All final documentation is required in electronic/digital format.
 - 8.1.5.2. As field problems arise, notify the City Project Manager of proposed solutions to resolve problems.
 - 8.1.5.3. Review and update as-built documents regularly with Delivery Firm.



- 8.1.5.4. Monitor and ensure adherence to approved project baseline schedule. Review Delivery Firm's schedule monthly, ensure compliance with City's intended schedule, and provide recommendations as needed to retain and regain schedule if needed.
- 8.1.5.5. Prepare monthly summary report of construction activities with outstanding issues outlined for review. Monthly progress information associated with the project will be submitted to the Project Manager for review and approval.
- 8.1.5.6. Record weather conditions on jobsite daily.
- 8.1.5.7. Monitor, on an on-going basis, cost impacts (both increase and decrease) and track with schedule of values. Identify any potential cost impacts related to project delays and/or potential change orders and notify Owner as appropriate.
- 8.1.5.8. Coordinate work of contractor with external agencies and utility companies. Coordinate contractor's operations with regard to other City contracts and construction as well as with property owners for planned service outages, street closures, and access control issues to properties including notifications.
 - 8.1.5.8.1. Verify construction conformance and compliance with TCEQ, NOI and NOT.
 - 8.1.5.8.2. Verify construction conformance with permitted activities such as: City of San Marcos permits, U.S. Army Corps of Engineers permits, TxDOT roadway permits, and any Railroad agreements.
- 8.1.5.9. Maintain records of all decisions, actions, and activities with regard to construction operations (i.e. Daily Reports, Change Orders, RFIs and responses, Submittals and responses, Request for Proposals, correspondence, SWPPP inspections.)
- 8.1.6. Resident Inspection Services
 - 8.1.6.1. Provide full-time on-site technical observation of Delivery Firms's activities to verify and ensure all work materials, structures, equipment, and workmanship comply with the Contract Documents including Addenda, and Change Orders. Confirm that Contractor maintains good construction practices and professional standards prevailing in the local, City, County, and State of Texas.
 - 8.1.6.1.1. Notify the City Project Manager if Delivery Firm's work is not in compliance with the Contract Documents or specifications. Notify the City Project Manager of any failure of the Delivery Firm to take measures to repair and bring work in compliance.
 - 8.1.6.1.2. Issue Advisory Notices to Delivery Firm for work that is not in compliance with approved construction documents.
 - 8.1.6.1.3. Issue Non-Compliance Reports to Delivery Firm if non-conforming work is not brought into compliance or if plan of action to bring work into compliance is not conducted in timely manner.



- 8.1.6.1.4. Inspect and observe the materials and equipment being incorporated into the work, according to furnished submittal data, to assure that they are handled, stored, and installed in accordance with the Contract Documents and specifications. Report to the City Project Manager regarding these activities.
 - 8.1.6.1.5. Inspect and observe electrical and instrumentation installation utilizing personnel specifically trained in those disciplines.
 - 8.1.6.2. Identify, record, and notify City of any problems or failures to meet performance requirements in a timely manner to minimize delay in the progress of the project, make recommendation(s) for appropriate solution to the City Project Manager and Delivery Firm.
 - 8.1.6.3. Prepare and maintain daily progress log or daily construction reports, photographs, records and track quantities.
 - 8.1.6.4. Ensure Delivery Firm reviews and approves daily reports and quantities.
 - 8.1.6.5. Verify Delivery Firm has obtained necessary permits and is maintaining any Traffic Control, public notification and Storm Water Pollution Prevention Plans, facilities, equipment, or arrangements in accordance with contract documents.
 - 8.1.6.6. Attend and participate in progress meetings.
 - 8.1.6.7. Immediately notify the City Project Manager in the event of an on-site accident. Record and note conditions, activities, and witnesses to the event.
 - 8.1.6.8. Maintain Resolution Log and respond to citizen complaints.
 - 8.1.6.9. Consult with City Project Manager and Delivery Firm in advance of scheduled major work operations, tests, inspections or start of important phases of project.
- 8.1.7. Pay Applications
 - 8.1.7.1. Review, verify and enter quantities provided by contractor for all work in compliance with contract documents.
 - 8.1.7.1.1. Review work conducted daily on daily inspection reports and material installed measurements submitted by Delivery Firm; verify work conducted and bid item quantities; meet monthly to review pay estimate and quantities with Delivery Firm
 - 8.1.7.1.2. Review progress pay application with OA for approval or revision prior to submittal to City.
 - 8.1.7.1.3. Finalize pay application with signatures from Delivery Firm and OA certifying quantities and amounts.
 - 8.1.7.1.4. Notify City Project Manager when all electronic signatures are completed for invoice processing.



- 8.1.7.1.5. Track and record requests for rain or other delays with potential to add to Contract Time in Daily Reports in Master Works via Daily Reports.
 - 8.1.7.1.6. Review and coordinate with the City to provide recommendation for Substantial Completion or Final Acceptance. (See Close-out Section)
- 8.1.8. Document Control
 - 8.1.8.1. Receive, route, track and log all Delivery Firm communications, Submittals, Change Orders, RFIs, Pay Applications and Citizen Complaint/Resolution Log; communicate with Contractor the status of submittal reviews; review submittal and RFI log to ensure timely responses; notify City Project Manager of time critical issues.
 - 8.1.8.1.1. Respond to RFIs when such response does not require the City's opinion or expertise or direction from City.
 - 8.1.8.1.2. Assemble and maintain notes, comments, sketches, and supportive data relative to the Project to facilitate the revision of drawings to conform to the final as-built conditions. Review Delivery Firm's record keeping periodically to ensure completeness, timeliness, and progress.
- 8.1.9. Change Orders
 - 8.1.9.1. Prepare and issue request for proposals in a timely manner. Review RFP and Delivery Firm proposal for additional work with City Project Manager for approval. Ensure the status of RFP and Responses from Delivery Firm, City and OA are uploaded/logged and tracked.
 - 8.1.9.2. Provide recommendation on technical matters as an advocate for the City. Evaluate Delivery Firm's response/proposal for merit, cost, time, accuracy, and price practicality. Negotiate with Delivery Firm on City's behalf if required.
 - 8.1.9.3. Prepare Change Order and documentation including signatures of Delivery Firm, OA, and Construction Manager for City review.
- 8.1.10. Testing Laboratory Services
 - 8.1.10.1. Coordinate testing laboratory activities with Delivery Firm's activities. Review test reports for compliance with Contract Documents. Log, track and retain test reports. Review results with Delivery Firm. Monitor any corrective action and re-testing for compliance. Maintain compliance with City's specifications
 - 8.1.10.2. Review lab test reports and log any failures.
 - 8.1.10.3. Review Invoicing from Laboratory to daily activities.
- 8.1.11. Project Completion and Close out
 - 8.1.11.1. Provide list of deliverables for substantial completion walk through/inspection. Schedule and conduct project walk through upon receipt of Delivery Firm's notification of substantial completion. Include City Project Manager and others as directed. Prepare a list of non-conforming work based on visual inspections.



Record and monitor Delivery Firm's corrective efforts and schedule. Schedule final completion inspection for any remaining corrections.

- 8.1.11.2. Coordinate and obtain signatures and seal on Substantial Completion certificate and Final Completion and Acceptance certificate.
- 8.1.11.3. Review and compile any Operation and Maintenance documents required from the Delivery Firm for review. Ensure Delivery Firm's closeout documents are uploaded. Review for completeness and accuracy, including affidavits of final payment, final pay estimates, as built records, redlines and drawings. Once received, notify the City Project Manager when completed and upload.
 - 8.1.11.3.1. Upon completion of close out items, provide recommendation for City's Substantial Completion/Final Acceptance certificate.
 - 8.1.11.3.2. Provide indexed project files, redline plans, and as built or record drawings.
- 8.1.11.4. Conduct Project Close-Out Meeting.
- 8.1.11.5. Prepare and recommend final payment application. (Prepare job record logs transmittals, and correspondence reports in an organized file for delivery to City.)
- 8.1.11.6. Consult with City on any potential Warranty items requiring repair or replacement.