

August 26, 2025

Mr. James Meier, PE
Assistant Director of Public Works - Operations
City of Coppell
816 S. Coppell Road
Coppell, Texas 75019

Re: Professional Engineering Services Proposal for
Deforest Lift Station Rehabilitation
City of Coppell, Texas

Dear Mr. Meier:

Quiddity Engineering, LLC (Quiddity) appreciates the opportunity to present this proposal for professional engineering services to City of Coppell (the City) in connection with the design phase, construction phase, and additional services for the Deforest Lift Station Rehabilitation in the City of Coppell, Texas.

Project Understanding

Quiddity understands that the City desires to complete a lift station rehabilitation project at the DeForest Lift Station. The DeForest Lift Station is a triplex submersible lift station with a firm capacity of 14,720 gpm. The lift station site includes an influent measurement manhole, 18'-6" by 19'-2" by 39'-6" concrete wet well, valve vault, three (3) 150-HP pumps with solid-state reduced voltage starters, odor control system consisting of a single stage carbon cannister scrubber, lift station MCC, automatic transfer switch, 600-kW diesel generator, onsite PLC-based controls with connection to the City's SCADA system, and discharge force main flow meters.

After meeting onsite with City staff to observe the lift station and discuss the City's needs, Quiddity developed a rehabilitation project scope for a single package bid construction project that includes the following components:

- Blast and recoat interior of concrete wet well.
- Replacement of three (3) submersible pumps including the addition of one (1) VFDs and replacement of two (2) with SSRVs. Replacement pumps will be a direct replacement with no capacity or horsepower increase.
- Replacement of the riser piping, header, valves, fittings, guide rails, base elbows, and supports inside the wet well and valve vault including protective coatings.
- Replacement of the valve vault ventilation system with mechanical forced ventilators sized for six (6) air exchanges per hour (continuous operation).
- Replacement of the wet well fall protection grates and water tight hatches.
- Replacement of existing scrubber-type odor control system with new scrubber-type odor control system sized for up to 6 wet well air exchanges per hour and an assumed hydrogen sulfide (H₂S) concentration of 20 parts per million (ppm). It is assumed that 20 ppm is representative of the existing wet well H₂S concentration. No data is currently available to verify H₂S concentrations for odor control system sizing. Quiddity will provide an OdaLog gas logger to gather data to then be analyzed and used as the basis for unit sizing. It is also assumed that the proposed odor control system can fit in the

existing odor control room of the existing building. If it determined that the expansion of the building is required design for expansion of the building can be provided as a Supplemental Service.

- Rehabilitation of influent flow measurement manhole, remounting the flow measurement instruments, and repair of the bench grouting. This is limited to the replacement of the top approximate 3-feet of the manhole and does not include rehabilitation of the Parshall Flume.
- Replacement of building ventilation system and air-conditioning unit for the MCC room. The odor control room ventilation will be sized for six (6) air exchanges per hour and the air-conditioning unit will be sized according to the heat calculations for the electrical equipment. This scope includes preparing heat calculations.
- Replacement of the building doors and door contacts including hardware compatible with existing security system.
- Bypass pumping during the required wet well rehabilitation and riser/header piping replacement.
- Electrical improvements consisting of the addition of pump protection modules to two (2) pumps, wet well terminal box replacement, replacement of wet well level instruments and cable support grips, replacement of motor control center wireway covers, power and controls for automatic gate and keypad, and replacement of electrical components necessary for new odor control system.
- Load Bank testing and certification by manufacturer of existing diesel generator.
- Power Distribution System (main breaker, ATS, and MCC) arc flash study based on NEC requirements.
- Replacement of three panels and two columns of existing brick fence.
- Replacement of existing manual 12-foot double-swing access gate with new automatic 12-foot double swing gate and with keypad access.
- Addition of an RPZ backflow preventer and hotbox on the potable waterline.
- Additional landscaping to screen the west, south, and east sides of the lift station fence and expansion of the existing irrigation system to service the additional landscaping.

Based on our understanding of the project, the review and approval process, and the site characteristics, we prepared the following scope of services and fee proposal for your consideration.

ENGINEER SCOPE OF SERVICES

Basic Services to be provided by Quiddity include:

Task 1 – Project Management

- Perform project startup services including attendance of a kickoff meeting by up to 3 members of the design team, project directory filing and accounting set up, and development of project management plan, project quality management plan, communication plan, and design and decision logs.
- Provide project management during each project phase outlined in this proposal including managing project integration, scope, schedule, cost, quality, staff resources, sub-consultants, and communications.
- Perform a Quality Control review of each design milestone deliverable (30%, 90%, 100%, Final Contract Docs), and addenda issued during the Proposal Phase.
- Provide a written response to each comment received on the 30% design submittal stating if the comments will be addressed, and if so, how they will be addressed.



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- Provide a written response to each comment received on the 90% design submittal stating if the comments will be addressed, and if so, how they will be addressed.
- Provide a written response to each comment received on the 100% design submittal stating if the comments will be addressed, and if so, how they will be addressed.

Task 2 – Design Phase

- Attend up to seven (7) design progress meetings with the City, excluding comment resolution meetings. Up to two (2) members of the design team will attend the meetings.
- Review City provided record drawings of all projects at the existing facilities.
- Perform a field visit by up to four (4) members of the design team to investigate the existing facilities, to make measured drawings thereof, or to verify accuracy of existing record drawings or other information furnished by the City.
- Due to the nature of the project scope all construction drawings will be prepared in AutoCAD 2023 2D and utilize Engineer's CAD standards.
- All technical specifications will utilize Construction Specification Institute's 16 Division format, be based on City of Coppell standard Specifications for those that exist, and based on Engineer's standards for non-existing City of Coppell standard specifications.
- Prepare a 30% design submittal consisting of a major equipment list, completed project scope as authorized by the City, and an Association for the Advancement of Cost Engineering (AACE) Class III Engineer's Opinion of Probable Construction Cost (OPCC).
- Attend a 30% milestone submittal meeting with the City. Up to four (4) members of the design team will attend the meeting.
- Prepare a 90% design submittal consisting of draft Divisions 1-16 technical specifications, 90% construction drawings consisting of a cover page, sheet index, legends, general notes and details, site civil plans, mechanical plan and profiles, bypass pumping plans, electrical layouts and details, landscaping plan and AACE Class III OPCC.
- Attend a 90% milestone comment resolution meeting with the City. Up to four (4) members of the design team will attend the meeting.
- Prepare a 100% design submittal consisting of draft Divisions 1-16 technical specifications, 100% construction drawings consisting of a cover page, sheet index, legends, general notes and details, site civil plans, mechanical plan and profiles, bypass pumping plans, electrical layouts and details, and landscaping plan.
- Attached a 100% milestone comment resolution meeting with the City. Up to four (4) members of the design team will attend the meeting.
- Prepare a proposal package consisting of signed and sealed technical specifications and construction drawings, for a single construction package.
- Prepare a bid form. The City will incorporate its standard bidding documents (General Conditions, Special Conditions, Instruction to Bidders, Agreement, etc.) with the technical specifications and construction drawings to create a proposal package. Quiddity will review the provided bidding documents and provide input on requirements it feels should be included, but the City is responsible for determining the completeness and accuracy of these documents.

- List of Deliverables
 - One (1) digital (PDF) copy of 30%, 90%, and 100% design submittal documents.
 - One (1) digital (PDF) copy of bid set drawings, technical specifications, and bidding documents.
 - One (1) digital (PDF) copy of conformed contract documents.
 - Three (3) original sets of conformed contract documents printed on bond paper (1 for Client, 1 for Attorney, and 1 for Contractor).

Task 3 – Bidding Phase

- The City will coordinate project advertisement, post all bidding documents for review by prospective bidders, pay all advertisement fees, and coordinate site visit access for prospective bidders.
- Attend the pre-bid meeting and give a presentation at the meeting summarizing and outlining the project for prospective bidders including an overview of the project, special construction requirements, known shutdowns of existing facilities, required coordination with other contractors, and review materials furnished by the City.
- Respond to questions from prospective bidders at the pre-bid meeting.
- Prepare meeting minutes of the pre-bid meeting.
- Prepare up to three (3) addenda to respond to questions submitted by prospective bidders. Addenda will be provided to the City and the City will be responsible for posting addenda for review by prospective bidders.
- Conduct a high-level review of contractor proposals received focused on experience and performance of Offerors, experience and qualifications of proposed key personnel, and project approach.
- Conduct reference checks on the low bidder's past performance and report on reference checks findings to the City.
- Prepare a Letter of Recommendation.
- List of Deliverables
 - One (1) digital (PDF) copy of the Engineer's Recommendation of Award.
 - One (1) digital (PDF) copy of the bid tabulation.
 - Digital copies (PDFs) of addenda.

Task 4 – Landscape & Irrigation

- Conceptual Design
 - Schedule and conduct a site visit with the City to take inventory of the current site conditions. Quiddity's Licensed Irrigator subconsultant will conduct an audit of the irrigation system, zone by zone, and will inspect the current condition of the irrigation controller. The preparation of a report with findings and analysis from the inspection is included.
 - Engage a testing lab to conduct a soil test with no less than three (3) samples, a minimum of one quart in size and between the soil surface and 6" depth, of the pervious area surrounding the lift station. The soil testing laboratory will provide results and preparation recommendations of the planting bed areas prior to landscape installation. The soil report shall contain recommendations for soil preparation and backfill mix, pre-plant fertilizer applications, amendments for any other soil related issues, and a fertilizer program for the establishment period and for long-term maintenance. Laboratory test fees are to be paid by Quiddity and reimbursed by the Client.

- Design Phase
 - Provide Landscape Architecture design services that meet the applicable minimum screening requirements for the property and the City of Coppell landscape ordinance. Services are limited to planting bed area(s) immediately adjacent to the existing masonry wall around the lift station perimeter and are to include the creation one (1) Landscape Planting Plan specifying the treatment of these exterior landscape areas, including plant names, plant location and size, and any calculations as required by the permitting authority for meeting code minimum requirements. This fee includes Landscape Planting Specifications and Details to provide the contractor with technical direction required to install the landscape planting improvements.
 - Provide one (1) Irrigation Plan specifying the treatment of all exterior landscape areas within the limits of work on the lift station property, including schematic location of PVC pipes, irrigation heads, controllers, valves, and quick couplers. The system will be designed to conserve water and limit maintenance costs. This fee includes Irrigation Specifications and Details to provide the Contractor with technical direction required to install the irrigation improvements.
 - Attend up to four (4) virtual project meetings with the City. Coordination of City review and approval of plans prepared (up to two (2) rounds of responses and minor revisions based on City comments) is included. The milestone submittals requested by the City will follow the engineering submittals and meetings scheduled through the design phase.
 - Provide limited construction phase services to answer Contractor RFI's (request for information) and review Contractor submittals, including change orders and material specifications. If requested by the City, Quiddity will make up to one (1) site visit at the completion of the project, to ensure the landscaping and irrigation was installed per plan.

Task 5 – Construction Phase

- Collect all addenda and incorporate such information into the drawings and technical specifications to create conformed documents for construction phase.
- Attend the pre-construction meeting with the Contractor. Up to two (2) members of the design team will attend the meeting.
- Attend up to seven (7) construction progress meetings with the City and/or the Contractor. Up to one (1) members of the design team will attend the meetings.
- Attend up to four (4) additional site visits in conjunction with the construction progress meetings noted above to observe the progress of work. Up to two (2) members of the design team will attend the site visit. Prepare a site visit report summarizing observations and observed non-conforming work.
- Perform a site visit by up to three (3) members of the design team. Determine if the completed construction conforms with the design. Prepare a list of deficiencies to be corrected by the Contractor (punch list) to be issued after the project is considered substantially complete and before final payment is released.
- Attend a site visit to review the project to determine if all punch list items were addressed. Up to two (2) members of the design team will attend this site visit.
- Provide services noted below for a duration not to exceed seventy-five (75) consecutive weeks from the date of Notice to Proceed to the contractor including:
 - Monitor and report on project scope, schedule, cost, quality, staff resources, communications, and invoicing.



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- Use the forms and workflows provided by the City for contract administration and processing payment application requests, submittals, request for information (RFIs), test results, equipment installation documentation, and project closeout.
 - If the construction period extends beyond the date of final completion provided for in the Contract Documents, then additional work required of Quiddity shall be considered as Supplemental Services and require additional compensation.
- Provide up to forty (40) reviews of contractor submittals for compliance with Engineer's design to complete the submittal review process.
- Review of Contractor submitted Operation and Maintenance Manuals (O&M).
- Review up to ten (10) RFIs from the contractor and provide written responses.
- Review up to five (5) Contractor's Change Proposals and provide a recommendation of the technical merits of the Change Proposal. Provide an engineer's opinion on cost and time impacts of changes in the recordation letter as well as the changes required to the plans specifications.
- Prepare record drawings at the conclusion of the construction phase that incorporates information furnished by Contractor to the City showing changes in the Project made during construction.
 - Provide the City with on draft electronic copy of the Record Drawings for review and commenting.
 - Provide the City with final electronic copy of Record Drawings.
- List of Deliverables
 - One (1) digital (PDF) copy of the Engineer's Recommendation of Award.
 - One (1) digital (PDF) copy of conformed contract documents.
 - One (1) digital (PDF) copy of the Contractor's Notice to Proceed.
 - Three (3) originals of the Certificate of Substantial Completion (1 for Client and 1 for Contractor).
 - One (1) digital (PDF) copy of Certificate of Substantial Completion.
 - One (1) digital (PDF) copy of Contractor punch list.
 - Three (3) originals of the Certificate of Acceptance (1 for Client and 1 for Contractor).
 - One (1) digital (PDF) copy of Certificate of Acceptance.
 - One (1) digital (PDF) copy of record drawings.
 - One (1) digital (PDF) copy of O&M manuals.

Task 6 – Project Expenses

- Reproduction expenses and lab testing for soil services. This task does not include project permit fees or other things not explicitly stated in this proposal.

Excluded Services

Any service not explicitly described above is not part of this scope and compensation proposal and shall not be required unless agreed in writing by the City and Quiddity. Should the City want or need any supplemental services during the project, these services can be performed for additional compensation if authorized by the City. The list below is not all-inclusive but provides common supplemental services.

- Perform field investigation services including Quality Level "A" and "B" Sub Surface Engineering (SUE) Services, geotechnical investigation, or an on-the-ground topographic survey of the project area.
- Provide an Irrigation Plan specifying the treatment of all landscape areas within the limits of work.



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- Redesign of any portion of the scope noted above to accommodate changes in published codes or regulations. All design elements will be performed to codes and regulations that are published at the date of this proposal (August 2025).
- Evaluation of alternative odor control systems that will not require expansion of the existing building including.
- Design of larger/different odor control system than that described above including building expansion for the odor control system if it is determined that the proposed odor control system cannot fit inside the existing building.
- Prepare modifications to the plans or specifications to provide for bid alternatives within the bounds of the scope described above.
- Perform, through a third-party specialist, any required or non-required building analyses, TDLR (ADA) reviews, Registered Accessibility Specialist reviews for TAS purposes, TDI windstorm application and certification submittals, TDLR (ADA) inspections, outside of what is included in the scope above.
- Review or evaluate Contractor claims that are due to any circumstances outside of Quiddity's control.

SERVICES TO BE PROVIDED BY CLIENT

- Provide as-built records of completed construction projects at the existing sites and along the project.
- Provide front end contract documents and bidding documents including General Conditions, Special Conditions, Instruction to Bidders, Agreement, and liquidated damages/incentives (if any) language and amounts to be included in the contract.
- Convey the Client's risk tolerance, the resultant limits, and types of insurance coverage for construction to match that tolerance.
- Set bonding requirements per the Client's risk tolerance.

COMPENSATION

Compensation will be on a lump sum basis for each phase as shown below:

Task 1 – Project Management	\$25,000
Task 2 – Design Phase	\$187,000
Task 3 – Bidding Phase	\$20,000
Task 4 – Landscape & Irrigation	\$20,000
Task 5 – Construction Phase	\$50,000
Task 6 – Project Expenses	\$5,000
<u>Supplemental Services Allowance*</u>	<u>\$50,000</u>
Total	\$357,000

*The supplemental services allowance does not, and is not intended to, serve as a total dollar amount to perform all possible supplemental services noted above. This value is purely an allowance as the need and/or scope limits of the supplemental services cannot be determined at this time.



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PROJECT SCHEDULE

Quiddity will complete the scope of services designed herein according to the following schedule.

- Design Phase 240 Calendar days from NTP
- Bidding Phase Services 30 Calendar days from Contract Document Approval
- Construction Phase: 550 Calendar days from Contractor NTP**

** Duration presented is contingent on agency approval to begin construction and is out of Quiddity's control.

* This duration assumes a 30-day duration for review and approval by City of Coppell. The actual duration may vary based on actual review time which is beyond Quiddity's control.

SPECIAL CONSIDERATIONS

This proposal is based on the following special considerations:

1. This proposal will be subject to the Professional Services Agreement between Quiddity and the City executed for this specific project.
2. Services requested by the City that are outside the scope of this proposal will be performed for additional compensation under a separate work authorization.
3. It is assumed by all parties to this contract that the existing sites are suitable for this project without encumbrance, defect, unknown wastes or gasses, and the Client accepts the current published requirements to locate new building finished floors and equipment no less than 2.5-feet above the 1.0% annual chance floodplain or 2-feet feet above 0.2 % annual chance floodplain, whichever is higher, as published in the Flood Insurance Rate Map (FIRM) at the date of this authorization (August 2025) to have an acceptable risk of flooding.
4. Neither Quiddity nor the City have any control over the cost of labor, materials, or equipment, construction contractors, their means and methods, their methods of developing pricing, or over the cost competitive bidding, market, or negotiating conditions. Accordingly, Quiddity cannot and does not warrant or represent that the bids or negotiated prices will not vary from the project budget or from any estimate of the project cost prepared by Quiddity.
5. This proposal shall be valid for sixty (60) days from this date and may be extended upon approval by the signatories of this proposal or their management team.

We thank you for the opportunity to submit this proposal and look forward to working with you on this project. Should you have any questions, please call at 972.488.3880.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bethany A. Miller'.

Bethany A. Miller, PE
Vice President

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Drew Crow'.

C. Drew Crow, PE
Senior Vice President

BAM/vss

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