

PROPOSAL

To: City of Killeen – Public Works/Water Utility Department
Attn: Steve Kana
From: Nicholas L. Kohel, PE
Project Name: Chaparral Road Wastewater Improvements
Project No.: 2-01612.01
Date: September 26, 2018
Xc: file

CHAPARRAL ROAD WASTEWATER IMPROVEMENTS

Walker Partners, LLC (Engineer) appreciates this opportunity to submit this Proposal to provide professional surveying and civil engineering services to the City of Killeen (Owner) in connection with the Chaparral Road Wastewater Improvements (Project). Based upon our initial meeting, we understand that the Owner intends to combine two projects, 11A and 13S, from the 2012 City of Killeen Water and Wastewater Master Plan.

The City of Killeen is currently engaged in a Owner/Developer agreement which will decommission Lift Station No. 24A and extend an 18" diameter gravity wastewater line to the approximate existing location of Lift Station No. 24A.

The Chaparral Road Wastewater Improvements Project will include several components. The first component will include the design of a 10" diameter wastewater forcemain between Lift Station No. 24 to the new 18" gravity line (proposed discharge point - formerly Lift Station No. 24A). The second component will include conversion of the existing 10" forcemain paralleling Trimmier Road into a gravity wastewater facility. Thirdly, due to topography, a new section of gravity wastewater will be constructed between Trimmier Road and Lift Station No. 24.

In order to properly address project needs, several special services will need to be employed to meet the project goals.

1. A basin study will be needed to ensure adequate capacity exists within the pipes being converted from forcemain to gravity lines.
2. Determination of pump modifications for Lift Station No. 24 and the KISD Satellite Transportation Facility grinder station.
3. Staking of preliminary alignment for the new gravity wastewater line between Trimmier Road and Lift Station No. 24. The staking will aid in determining the final alignment and serve as a visual aid during easement acquisition negotiations.
4. Easement Acquisition services include the following: survey field notes/exhibits, appraisals, as well as a ROW agent.

The scope of services, schedule, and associated fees that Walker Partners proposes to provide for this Project are outlined below:

1.00 SCOPE OF SERVICES

1.01 ENGINEERING BASIC SERVICES

A. Study Phase (Basin Study) (Phase 20)

1. Consult with Owner to define and clarify Owner's requirements for the Project and available data.
2. Identify capacity of the existing forcemain piping that is being converted to gravity wastewater lines; determine adequacy of gravity line size to serve the basin.
3. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved to Owner which Engineer recommends.

B. Analysis of Existing Lift Station Pumps (Phase 21)

1. Analyze proposed head conditions, using design flow information, for both Lift Station No. 24 and the KISD grinder station located at the KISD Satellite Transportation Facility.
2. Recommend appropriate modifications and measures to ensure both lift stations will operate under proposed head conditions.

C. Preliminary Design Phase (Phase 30)

1. Attend preliminary conferences with the Owner regarding the Project.
2. Establish the scope of any soil and foundation investigations or any special surveys and tests which, in the opinion of the Engineer, may be required; assist the Owner in arranging for such work to be done, for the Owner's account.
3. Prepare preliminary design documents on the Project in sufficient detail to indicate clearly the problems involved and the alternate solutions available to the Owner, including final design criteria, preliminary drawings, an outline of specifications, and setting forth clearly the Engineer's recommendations.
4. Prepare a preliminary Engineer's Opinion of Probable Cost.
5. Furnish the Owner the required number of copies of the preliminary plan, including preliminary layouts and cost estimates.

D. Final Design Phase (Phase 40)

1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. The Drawings to be prepared with this Phase of the Work, in general, will include the following:
 - a. General Condition Drawings – these Drawings shall be for informational, permitting, and bidding purposes and shall, in general, consist of the following:
 - i) General Notes and Project Specific Notes
 - ii) Legends, Abbreviations, and Symbols
 - iii) Survey Control Plan
 - b. Wastewater Collection System Plans and Profiles – prepare drawings for the proposed sanitary sewer system including the sewer pipes and appurtenances, manholes, clean-outs, trenching details, and other details necessary for bidding and construction.

- i. Details – provide project-specific details, municipality standard details, and state agency (TxDOT) standard details as required for permitting, bidding, and construction purposes.
2. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project; assist Owner in consultations with such authorities; and revise the Drawings and Specifications in response to directives from such authorities.
3. Advise Owner of any adjustments to the opinion of probable Construction Cost known to Engineer.
4. Prepare and furnish 95% complete Bidding Documents for review by Owner, its legal counsel, and other advisors, and assist Owner in the preparation of other related documents.
5. Revise the Bidding Documents in accordance with comments and instructions from the Owner, as appropriate, and submit final copies (by .pdf and 3 hard copies) of the Bidding Documents, a revised opinion of probable Construction Cost, and any other deliverables to Owner.

The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is one (1). If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.

E. Bidding or Negotiating Phase (Phase 50)

1. Assist Owner in advertising for and obtaining bids or proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-Bid conferences, if any, and receive and process contractor deposits or charges for the Bidding Documents.
2. Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.
3. Provide information or assistance needed by Owner in the course of any negotiations with prospective contractors.
4. Consult with Owner as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors for those portions of the Work as to which such acceptability is required by the Bidding Documents.
5. Attend the Bid opening, prepare Bid tabulation sheets, and assist Owner in evaluating Bids or proposals and in assembling and awarding contracts for the Work.

F. Construction Administration Phase (Phase 60)

1. Assist in the preparation of formal Contract Documents.
2. *Pre-Construction Conference.* Participate in a Pre-Construction Conference prior to commencement of Work at the Site.
3. *Schedules.* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
4. Make periodic visits to the site (as distinguished from the continuous services of a resident Project Representative) to observe the progress and quality of the executed work and to determine in general if the work is proceeding in accordance with the Contract Documents.

In performing these services, the Engineer will endeavor to protect the Owner against defects and deficiencies in the work of the contractor, but he cannot guarantee the performance of the contractor, nor be responsible for the actual supervision of construction operations or for the safety measures that the contractor takes or should take.

5. Consult and advise with the Owner; issue all instructions to the contractor requested by the Owner; and prepare and issue routine change orders with Owner's approval.
6. Review samples, catalog data, schedules, shop drawings, laboratory, shop and mill tests of material and equipment and other data which the contractor submits. This review is for the benefit of the Owner and covers only general conformance with the information given by the Contract Documents. The contractor is to review and stamp his approval on submittals prior to submitting to Engineer, and review by the Engineer does not relieve the contractor of any responsibility such as dimensions to be confirmed and correlated at the job site, appropriate safety measures to protect workers and the public, or the necessity to construct a complete and workable facility in accordance with Contract Documents.
7. Obtain and review monthly and final estimates for payments to contractors, and furnish to the Owner any recommended payments to contractors and suppliers; assemble written guarantees which are required by the Contract Documents.
8. Conduct, in company with the Owner, a final inspection of the Project for compliance with the Contract Documents, and submit recommendations concerning project status, as it may affect Owner's final payment to the contractors.
9. Produce "Record Drawings" to memorialize any changes to project during construction. City employed Inspectors will be providing construction record keeping. Record Drawings will be based solely upon information provided by the City Inspectors.

1.02 SPECIAL SERVICES

A. Boundary Verification (Phase 9)

1. Perform Deed Research of Subject Tracts for the purpose of reconciling tract lines.
2. Perform a Boundary Survey based upon North American Datum of 1983 (NAD83) State Plane Coordinates and in accordance with the General Rules of Procedures and Practices as set forth by the Texas Board of Professional Land Surveying and laws of the State of Texas, unless otherwise specified by client.

B. Topographic Survey (Phase 12)

1. Perform an on-the-ground field survey to obtain the topography (terrain data) and other visible and apparent surface features (manmade or natural) such as ditches, swales, channels, embankments, drainage structures, catch basins and inlets, manholes, above-grade utility appurtenances, pavements, significant trees (hardwoods greater than 8 inches in diameter), fences, building structures, water's edge, etc. For underground utilities, Walker Partners will coordinate with Texas 811. The approximate locations of underground utilities will be shown based upon utility locators' markings.
2. Establish vertical control at the site and place benchmarks based upon North American Vertical Datum of 1988 (NAVD88), unless otherwise specified by client.

3. Locate potholes and "measure downs" related to the forcemain to gravity conversion. The potholing to be performed by the City. The pothole locations to be collected by Walker Partners during the topographic survey.
3. Prepare a topographic map from the topographic survey depicting the physical features as described above and with elevation contours at a 1-foot interval.

C. Construction Staking (Phase 65)

The Engineer shall provide line and grade staking for the wastewater improvements, one-time, on behalf of the Owner, for the wastewater collection system.

D. Property Acquisition

1. Easements (Phase 16)

Walker Partners will prepare metes and bounds descriptions along with accompanying drawings of the properties to be used as an attachment to documents (*as prepared by City legal counsel*). The descriptions and drawings will be delivered to the City legal counsel for their use in preparing each document for filing for record. Walker Partners will set iron rods at the property corners after completion of construction.

2. Title Search / Title Letter (First Title Company of Waco) (Phase 100)

First Title Company of Waco will perform a title search on the deed of the current property owner and make a "run sheet" of the documents / instruments found. Prepare a Title Letter describing the instruments and summarizing the findings of the title search. Note: no title opinion will be given.

2.00 SCHEDULE FOR SERVICES

Walker Partners acknowledges the importance to the Owner of the project schedule and agrees to put forth its best professional efforts to perform its services under this proposal in a manner consistent with that schedule. The Owner understands, however, that Walker Partners' performance must be governed by sound professional practices. If requested, Walker Partners will be pleased to develop a project schedule outlining each of the items included previously described in the scope of services.

3.00 FEES

For the ENGINEERING SERVICES, outlined above, the Owner agrees to pay Walker Partners a lump sum fee of **Two Hundred Fifty-Nine Thousand, One Hundred Ten Dollars (\$259,110.00)** to be invoiced monthly at a percentage of the work completed.

Below is an itemized breakdown of the proposed fees:

Phase No.	Description	Lump Sum Fee
09	Boundary Verification*	\$ 11,520.00
12	Topographic Survey	\$ 28,440.00
16	Easements (9 EA)	\$ 12,980.00
17	Preliminary Alignment Staking	\$ 8,720.00
20	Study Phase (Basin Study)	\$ 5,000.00
21	Analysis of Existing Lift Station Pumps	\$ 10,000.00
30	Preliminary Design Phase	\$ 46,000.00
40	Final Design Phase	\$ 80,000.00
50	Bidding or Negotiating Phase	\$ 5,000.00
60	Construction Administration Phase	\$ 14,000.00
65	Construction Staking	\$ 32,950.00
100	Title Letter (9 EA)	\$ 4,500.00
	TOTAL LUMP SUM FEE	\$ 259,110.00

*** This phase will be taxed unless proof of tax exemption is provided**

4.00 EXCLUSIONS

The following items are excluded from this proposal. If there are questions about any other services not listed here, they shall be clarified prior to approval and acceptance of this proposal.

4.01 The proposed engineering services do not include the following:

- Off-site water and wastewater design and drawings
- Design work related to LEEDS certification(s)
- Geotechnical Investigation
- Environmental Investigation
- Wetlands determination and permitting
- Determination of any listed endangered or threatened species
- Determination of any designated critical habitats in the Project area
- Demolition plans
- Retaining wall design
- Design of screening walls, light pole bases, transformer or generator pads, hardscape features, pavers and/or site signage
- "As-built" Survey
- Construction staking (except as noted)
- Subsurface utility engineering survey
- Assistance to the Owner and/or the Contractor in filing the Notice of Intent (NOI) for the proposed construction activities
- Design of any "dry" utility facilities (i.e. gas, electric, phone, cable TV, etc.)

4.02 Any major changes involved after Construction Documents have been completed and approved will be charged on a time basis per hourly rates attached herewith.

5.00 ACCEPTANCE OF PROPOSAL

If the Scope of Services, Schedule, and Fees outlined herein are acceptable to City of Killeen (Owner), Walker Partners will prepare a "Standard Form of Agreement for Professional Services" for review, approval, and execution.