



2821 West 7th St • Ste. 400 • Dallas • Texas • 76107
Phone 817-877-5571 • Fax: 817-877-4245 • www.multatech.com
TBPE reg. # F351

EXHIBIT A

July 29, 2024

Mr. Christian Y. Agnew, P.E.
City Project Manager
City of Grand Prairie, Engineering
300 West Main Street
Grand Prairie, Texas
75053-4045

Re: Proposal for Professional Civil Site Engineering Services
FY 2024 Storm Drain Outfall Repair Project

Dear Mr. Agnew:

We appreciate the opportunity to submit this proposal to you to provide professional services associated with the FY 2024 Storm Drain Outfall Repair Project. MULTATECH will provide schematic plans and construction plans along with surveying, SUE, structural, geotechnical, bid phase and construction phase services to support the City of Grand Prairie for their outfall repairs associated with SDO Repair points #1102, #1926, #761, and #762.

PROJECT UNDERSTANDING

MULTATECH will perform and coordinate the basic services and special services necessary to provide engineering plan sets, specifications, bidding, and construction phase services associated with the outfall repairs for SDO Repair points #1102, #1926, #761, and #762 within the City of Grand Prairie's storm drainage network. All three sites represent outfall failures of existing headwalls and will require analysis, grading, and structural repairs to address these failures. Deliverables will require 30%, 60%, 90% and Final Design submittals.

BASIC SERVICES

MULTATECH has performed site visits on the three outfall locations outlined in FY 2024 Storm Drain Outfall Repair project. Project Location Exhibits can be found in Attachment A for all three sites. In addition, a preliminary construction cost estimate for each site above can be found within Attachment D. From our observations at the sites and reviewing the proposal our understanding of the scope of work is as follows:

SDO #1102

Scope of services in this area include the evaluation and repair of a single RCP storm drain running underground along the property line at 930 NE 33rd St. in Grand Prairie, TX as it enters a junction box just east beyond the property line and within the adjacent industry track ROW. The junction box connecting the storm drain at the property line is damaged and will require cleaning and replacement of the structures lid. The junction box receives stormwater from the south and north and exits the structure to the east via a 24" RCP pipe. The connection from the north of the junction box continues northwest of the junction box approximately 55 ft and terminates at a headwall. Erosion around the headwall has caused the headwall to separate from the pipe at this location. Review of the survey and site indicate that the repair of the existing headwall will not allow for interception of stormwater at its current location. This is due to erosion of the TXDOT embankment at the base of the abutment flume. The resulting flowline below this point is below the available outfall elevation. The separated headwall and downstream pipe going to the junction box to the south will be abandoned and removed. Grading around the structure will be corrected to establish a uniform slope. If possible, modifications to the headwall will limit repairs to limits outside the TXDOT ROW.

Anticipated services include a hydraulic and hydrologic evaluation of the existing storm drain line & contributing area and construction plans outlining the limits and methods of the repair of the junction box and headwall. This junction box, headwall, and storm drain lie completely within the private track ROW, and a drainage easement and grading easement will be prepared to allow for the construction work. Traffic control plans will not be required for this location. Geotech and Structural design are not anticipated based on the observed conditions.

SDO #1926

Scope of services in this area include the evaluation and repair of a single RCP culvert beneath Rock Island Rd. Upstream, the headwall appears intact, however, it is completely blocked and will require removal of debris. Downstream, the structure has failed, and the headwall foundation has collapsed resulting in a separation of the headwall and outfall pipe. Additionally, the roadway embankment to the east of the outfall has failed and is approaching the roadway surface. This appears to be the result of stormwater overtopping the roadway surface. Anticipated services include a hydraulic and hydrologic evaluation of the existing culvert and contributing area, recommendations for pipe sizing improvements if warranted, and construction plans outlining the limits and methods of the repair of the pipe and headwall at the outfall. Traffic control plans will be required for this location. Geotech and Structural design are not anticipated based on observed conditions as the slope failure and soil loss are limited to the washout area and no longitudinal cracks or depressions are present within the roadway surface at the time of our site visit. This headwall terminates approximately one foot from the railroad ROW and the toe of slope of the road encroaches the railroad ROW. As a result, a grading easement will be prepared to allow for the construction work. Site efforts to clean the upstream headwall and address roadway erosion will be included in the plan set.

SDO #761 & #762

Scope of services in this area includes the evaluation and repair of a 2-barrel large diameter RCP storm drain outfall running underground along Clarice St. in Grand Prairie, TX. The storm drain terminates into the Indian Hill Branch stream channel at the intersection of Clarice St. and S. Center St. via a vertical headwall structure on the east side. Evidence of differential settlement along the roadway and sidewalk combined with obvious structural cracking and undercut of the headwall merits the replacement of the headwall and affected piping. At least half of the S. Center St. roadway section will need to be replaced parallel to the headwall to address the roadway settlement and pipe separations beneath. This work will include adjustments to existing water and wastewater utilities along the east side of the roadway.

Additional channel erosion protection immediately downstream of the headwall will be added to restore and protect the outfall. The City's preferred protection is 12" grouted riprap on filter fabric with standard 4 ft deep reinforced concrete toe walls provided at the riprap outer edges. This option will be evaluated and included within the construction set if analysis permits.

Anticipated services include a hydraulic and hydrologic evaluation of the existing channel and outfall area, construction plans outlining the limits and methods of the repair of the headwall, structural design of the proposed headwall, and erosion controls within the channel. Traffic control and detour plans will be required for this location. Geotech and Structural design are anticipated based on observed conditions with one bore being placed within the roadway and one within the channel embankment. See Attachment A - Project Location Exhibits for project areas.

SPECIAL SERVICES

GEOTECHNICAL: Due to the apparent undermining of the existing structures at the SDO #761 & #762 site and the near vertical eroding side slopes, geotechnical analysis is recommended. Additionally, movement along the sidewalk and longitudinal cracking along the adjacent roadway indicates possible soil movement or loss beneath the roadway surface. MULTATECH has requested services from Alliance Geotechnical Group to perform 2 bores at this location. One bore to determine the footing stability and one bore to determine the stability of the roadway section. They will perform bore analysis and slope stability analysis and prepare a report with recommendations. Geotech is not anticipated for the other sites.

SUE: Level B SUE services will be required at all sites. Depending on the findings of the Geotech bores. Level A SUE may be needed at the SDO #761 & #762 site. This contract allocates for 2 vacuum locates on existing utilities at this site.

SURVEY: Existing surveys are available for the 3 sites and were prepared by Keeton Surveying Company. Upon review, additional survey will be required at SDO # 1926 to capture the upstream culvert condition and the expansion of the limits of erosion since the original survey date. Additionally, drainage easements, temporary construction easements, and grading easements will be prepared for SDO #1102 and SDO# 1926 to allow construction within the

affected private properties. An expansion to the existing drainage easement will be prepared for the SDO #761 & #762 site. This work will be performed by Keeton Surveying Company.

STRUCTURAL: Standard TxDOT detailing will not be adequate for the proposed headwall structure at SDO #761 & #762 since conditions exceed the parameters of the detail's height and depth limits. MULTATECH will engage JAKAN Engineering to do a headwall and footing design for this location. Included in this design will be a review of the fence attachment details.

All Subconsultant proposals can be viewed in Attachment E.

Permitting

Permitting services, processing permits, or permit fees required by public or private review agencies are not anticipated for any of the sites above. It is our understanding that the scope of work to be performed at the above sites will be in accordance with USACE Nationwide Permit 3 Maintenance requirements. This limits the construction work to repairs of the structure and channel repairs within 200 ft of the structure. Additionally, the work would be limited to any NWP activity resulting in the loss of less than 1/2-acre of waters of the US

No significant change to FEMA regulated floodplains or floodways is expected. MULTATECH will research the sites for Floodplain and floodway encroachments and evaluate the design to determine if additional permitting or documentation is needed.

Scope of Permitting in this proposal limited to analysis of jurisdictional compliance requirements and applicability of notification. USACE acreage, vicinity impacts, and FEMA fill determinations would be considered part of the scope as they are required to determine permitting requirements.

DESIGN PHASING & SCOPE OF SERVICES

MULTATECH acknowledges the Scope of work to include the 30%, 60%, 90%, Final Design, and Bid Document submittals as shown in the proposal request document.

Project phases will be broken into the following categories:

- **Project Management, Coordination & Permitting:** MULTATECH will provide communicating and reporting with the City Project manager and departments to include project meetings, subcontractor coordination, schedule updating, franchise utility meetings and documentation of project decisions. This phase also includes the production of materials or exhibits needed to aid in internal communication within the City and/or permitting efforts.
- **Conceptual Design (30% Submittal):** This phase includes a schematic design with proposed grades, construction limits, existing ROW, proposed ROW need for construction, and structures to be included with the project. The design will include an cursory analysis of affected drainage areas and proposed improvements where applicable.

MULTATECH will meet with the CITY to review decisions and options that were considered for this design and provide a design narrative resulting from the discussion of the submittal. SUE, SURVEY, and Geotechnical services will be performed during this phase and the information given to the CITY for its use. At this stage probable easements and applicable permits will be identified.

MULTATECH will prepare the submittal in hard copy and digital format for the City Project Manager and a preliminary Opinion of Probable Cost for the proposed construction will be provided.

- **Preliminary Design (60% Submittal):** MULTATECH will submit 60% plans and specifications including complete drainage tables and computations, final grades, complete construction notes and ENGINEER's Opinion of Probable Construction Cost, an updated Utility Matrix, and draft TCE and drainage easement documents. This submittal will be based on comments and design directives given at the 30% review. The 60% submittal will include all necessary sheets to convey the information to potential contractors and regulatory agencies including Cover sheet, General notes, Demolition sheets, Horizontal and Vertical control sheets, Proposed access and Staging Area plans, Plan & Profile sheets, Structural details, Erosion Control Sheets, and others as needed.

Multatech will submit applications for review and comments to all governmental agencies with jurisdiction over the project area and will prepare easement exhibits to the CITY for use in obtaining the required ROW and construction access. Final survey, Structural, and Geotech reports will be provided at this point.

Submittals will include all services and documents as outlined in the **Engineering Design Services Contract Scope of Services Guidelines for FY 2024 Storm Drain Outfall Repair Project** document. MULTATECH will shall prepare preliminary construction plans on 22" x 34" sheets with a scale of 1" = 20' horizontal and 1" = 4" vertical, except as noted for the following:

- Cover Sheet
- Standard General Notes
- Typical Sections with existing grade and proposed sections (if required)
- Preliminary Structural Detail Sheets with supporting soil boring logs shown (if required)
- Horizontal and Vertical Control Sheets (if required)
- Design Plan & Profile Sheets
- Erosion Control Plan

Owner 30% comments will be incorporated.

- **Pre-Final Design (90% Submittal):**

MULTATECH will submit 90% plans and specifications including complete drainage tables and computations, final grades, complete construction notes and ENGINEER's Opinion of Probable Construction Cost, an updated Utility Matrix, and draft TCE exhibits and sealed drainage easement documents. This submittal will be based on comments and design directives given at the 60% review.

The 90% plan set will incorporate the 60% comments and design directives and represent a complete design including all improvements, utility relocations, and permitting concerns. General traffic control plans will be provided for Contractor direction.

MULTATECH will update the OPCC and provide an Excel spreadsheet itemizing the bid items and technical notes for all proposed work to be performed by the Contractor. Finalized and sealed easement documents will be provided at this time. MULTATECH will meet with the CITY to discuss this submittal and provide a design narrative of comments and direction.

Submittals will include all services above and sheets needed for construction. MULTATECH will shall prepare preliminary construction plans on 22" x 34" sheets with a scale of 1" = 20' horizontal and 1" = 4" vertical, except as noted for the following:

- Cover Sheet
- Quantity Summary Sheet
- Standard General Notes
- Typical Sections with existing grade and proposed sections (if required)
- Structural Detail Sheet(s) with supporting soil boring logs shown (if required)
- Horizontal and Vertical Control Sheets (if required)
- Demolition plan sheet with limits, dimensions and material descriptions (if required)
- Design Plan Profile Sheets
- Erosion Control Plan
- Design Cross Sections and Special construction details (if required)
- Standard Construction Details for Proposed Design
- Provide updated utility matrix and show all known utilities on the plans as provided in the SUE effort.
- Owner 60% comments incorporated.

- **Final Design (100% Submittal)**

MULTATECH will incorporate all design comments and directions from the 90 percent submittal to prepare the final Bid Set. Quantities and easements will be updated and all changes to specifications and item descriptions will be provided. The OPPC will be updated for the budgeting and submittal of the Draft Bid Book will be incorporated into the standard City Bid Documents.

Submittals will include all services above and finalization of the construction sheets. MULTATECH will shall prepare preliminary construction plans on 22" x 34" sheets with a scale of 1" = 20' horizontal and 1" = 4" vertical, except as noted for the following:

- Cover Sheet
- Quantity Summary Sheet
- Standard General Notes
- Typical Sections with existing grade and proposed sections (if required)
- Structural Detail Sheet(s) with supporting soil boring logs shown (if required)
- Horizontal and Vertical Control Sheets (if required)
- Demolition plan sheet with limits, dimensions, and material descriptions (if required)
- Design Plan Profile Sheets
- Erosion Control Plan
- Design Cross Sections and Special construction details (if required)
- Standard Construction Details for Proposed Design
- Provide updated utility matrix and show all known utilities on the plans as provided in the SUE effort.
- Owner 90% comments incorporated.

Permitting efforts will be finalized to ensure all required documentation and permit submittals are addressed. Final ROW/Easement documents including field notes and sketches as required will be submitted to the City for execution.

Revisions to the technical notes and bid items will be provided to the City in WORD and EXCEL format for implementation into the Bid Book.

- **Bidding Phase**

MULTATECH will submit proposed sealed Bid Documents for approval in pdf, word and excel, as appropriate. We will prepare PDF and AUTOCAD copies of the signed and sealed final plans, specifications, bid documents and other final documentation, including Engineer's opinion of probable construction cost in Excel file format. Construction documents will be provided as one full size and 4 half size sets of sealed plans. Construction documents will be submitted after the bid documents have been approved and the bid schedule has been set. Bid books will be prepared by MULTATECH as required by the City Project Manager. In addition to providing bid documents,

MULTATECH will assist in the bidding process by providing the CITY with documents and assistance needed to Advertise and submit the documents to CIVCAST for document distribution to eligible contractor in accordance with the approved Project Schedule and City requirements.

Additionally, MULTATECH will respond to bidder questions with CITY approved responses, assist and attend the mandatory pre-bid meeting, prepare pre-bid meeting notes & the official pre-bid meeting attendance list, provide bid analysis of the submitted bids and the bid Tabulation on City standard Excel format. Based on bid eligibility and analysis, MULTATECH will perform low bidder document review and reference checks and prepare a recommendation letter for the CITY.

Prior to contract approval, MULTATECH will compile changes identified in the bidding process and produce CONFORMED Plans in AutoCad and PDF formats. The City will produce the Conformed Bid Book and submit to MULTATECH for review and approval.

- **Construction Phase Services:** At the beginning of the Construction phase, MULTATECH will provide hard copies of the conformed Bid Plans and Bid Book: 10 half size and 3 full size hard copies of Conformed Plans and 6 bound Bid Books in standard format as required by the City project manager. MULTATECH will assist the CITY in conducting the pre-construction meeting following council award of project.

Construction Phase services include:

1. Reviewing draft Pre-construction meeting agenda and provide any comments.
2. Visiting project sites at critical stages of construction and providing written documentation.
3. Responding to RFI's as required.
4. Preparing change orders and plan revisions as needed.
5. Reviewing shop drawings, and other submittals for conformance, as required.
6. Monitoring all density and testing reports for compliance.
7. Attending the final walk-through to determine if the work has been completed according to the contract documents and assist in generating a punch list of items for correction and provide a letter of reconciliation of general project conformance and recommendation of project acceptance so the CITY can issue the contractor a letter of acceptance.
8. Assisting in preparation of final reconciliation change order.
9. Preparing the Engineer's record drawings using information of changes from the Contractor and City project manager and submit as AS-BUILT plans.

Refer to Attachment C – Project Schedule for the proposed MULTATECH timeline.

ASSUMPTIONS

The following are design assumptions:

1. Outfall structures are generally sized for their rated upstream flows and minimal or no improvements to the storm drain system is required.
2. Repairs to the storm system will be limited to the outfall structures and connecting pipes.
3. Roadway resurfacing if required will match the existing roadway profile.
4. Improvements to the existing Indian Hill Branch channel will be limited to approximately 50 ft downstream of the outfall.
5. Work within the FEMA regulated boundaries will result in minimal fill within the channel and no additional flows will be added to the stream at this location.



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STAFFING

PROJECT SCHEDULE OF CHARGES A/E BILLABLE HOURLY RATES

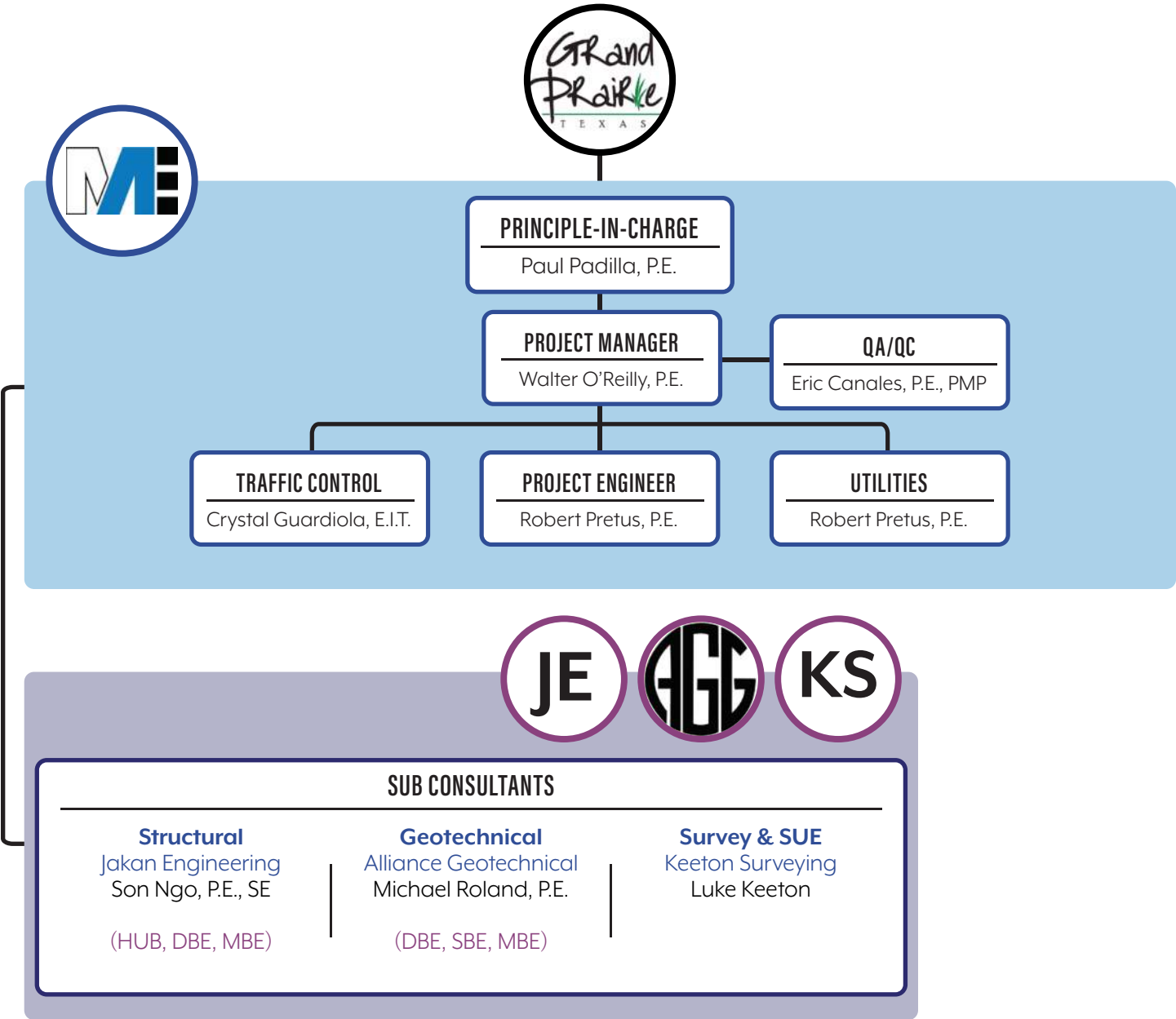
| <u>POSITION</u> | <u>LOW</u> | <u>HIGH</u> |
|---|------------|-------------|
| PRINCIPAL | \$170.00 | \$300.00 |
| SENIOR ENGINEER/ARCHITECT | 158.00 | 230.00 |
| PROJECT MANAGER | 110.00 | 225.00 |
| ENGINEER/ARCHITECT | 105.00 | 189.00 |
| SENIOR DESIGNER | 131.00 | 185.00 |
| DESIGN TECHNICIAN | 58.00 | 160.00 |
| ENGINEER-IN-TRAINING (EIT)/INTERN ARCHITECT | 89.00 | 140.00 |
| CONTRACT ADMINISTRATOR | 79.00 | 140.00 |
| CADD/TECHNICIAN | 42.00 | 110.00 |
| WORD PROCESSING/SECRETARIAL | 42.00 | 85.00 |

Ranges may be adjusted annually on January 1.

PROJECT ASSIGNED EMPLOYEES

Principle - Paul Padilla, PE
Senior Engineer – Walter O'Reilly, PE : Eric Canales, PE
Project manager – Walter O'Reilly, PE
Engineer-in-Training – Crystal Guardiola, EIT
Senior Designer – Gerry Sauls
Design Technician – Eddie Hernandez

ORGANIZATIONAL CHART:





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FEE SCHEDULE

We propose to provide the specific services described above at a hourly/not to exceed basis as listed below. Please refer to Attachment B for Task and Subtask Fee Breakdowns.

| Item | Fee Basis | Fee |
|---|---------------|---------------------|
| Project Management, Coordination & Permitting | Not to Exceed | \$3,855.39 |
| Conceptual Design (30-Percent) | Not to Exceed | \$16,664.17 |
| • Special Services | Not to Exceed | \$27,006.00 |
| Preliminary Design (60 Percent) | Not to Exceed | \$30,172.45 |
| • Special Services | Not to Exceed | \$14,057.46 |
| Pre-Final Design 90% | Not to Exceed | \$19,396.92 |
| Final Design (100% Submittal) | Not to Exceed | \$13,272.84 |
| Bidding Phase | Not to Exceed | \$6,836.01 |
| Construction Phase Services | Not to Exceed | \$8,767.06 |
| TOTAL | Not to Exceed | \$140,028.30 |

EXCLUSIONS

The following tasks are excluded from the scope of work above.

1. Permitting services, processing permits, or permit fees required by public or private review agencies. Permitting limited to USACE notifications and FEMA fill determinations.
2. Environmental Permitting - separate proposal can be provided if needed.
3. Platting - it is assumed that a lease boundary is in place or prepared by others.
4. Underground or above Ground Storage Tank (UST) Closure / Removal Process/Environmental Mitigation.
5. Offsite drainage improvements
6. On-site construction management or inspection services.

Please refer to the **Attachments** for the following project related material:

Attachment A - Project Location Exhibits

Attachment B – Task and Subtask Fee Breakdown

Attachment C – Project Schedule

Attachment D – OPCC for Each Location

Attachment E – Subconsultant Proposals

We appreciate the opportunity to submit this proposal and look forward to assisting you in the development of this project. Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Eric A. Canales, P.E.', is written over a horizontal line.

Eric A. Canales, P.E., PMP; Vice President


ATTACHMENT “A”

Project Location Exhibits

FY 2024 Storm Drain Outfall Repair Project

SDO Repair points #1102, #1926, #761, and #762..

Legend

 SDO

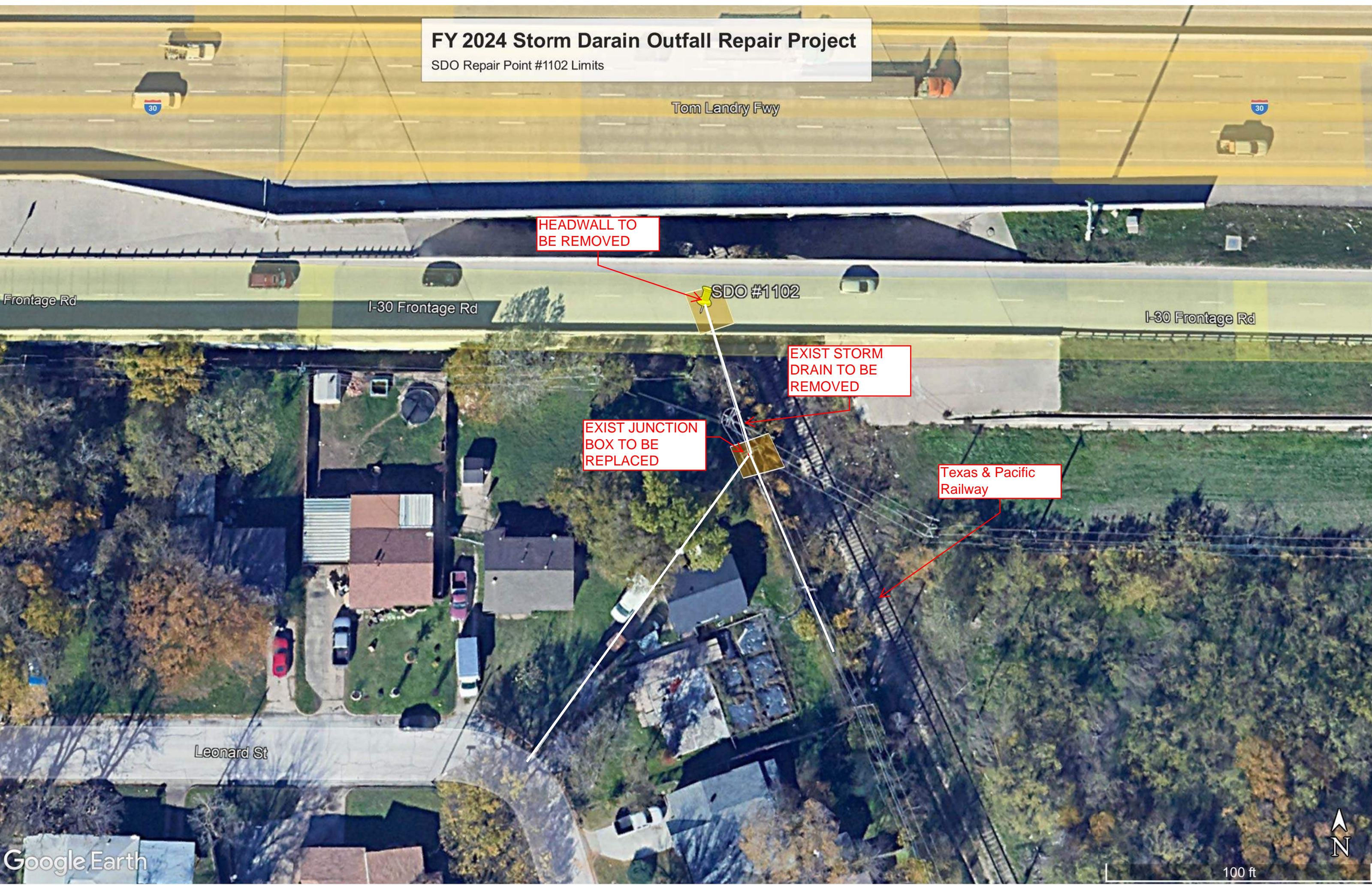
 SDO #1926

 SDO #1102

 SDO #761 & #762



FY 2024 Storm Darain Outfall Repair Project
SDO Repair Point #1102 Limits



HEADWALL TO
BE REMOVED

SDO #1102

EXIST STORM
DRAIN TO BE
REMOVED


EXIST JUNCTION
BOX TO BE
REPLACED

Texas & Pacific
Railway

FY 2024 Storm Drain Outfall Repair Project

SDO Repair Point #1962 Limits

Legend

 SDO

Trinity River Express



EXIST HEADWALL
TO BE REPLACED

EXIST SLOPE
EROSION TO BE
REPAIRED

EXIST CULVERT

INLET BLOCKAGE
TO BE REMOVED

ROCK ISLAND ROAD



ATTACHMENT “B”

Task and Subtask Fee Breakdown

Level of Effort Spreadsheet
TASK/HOUR BREAKDOWN
Design Services for
FY 2024 Storm Drain Outfall Repair Project
City of Grand Prairie Outfall Sites #1102, 1926, 761, & 762

| Task No. | Task Description | Labor (hours) | | | | | | Total Labor Cost | Expense | | | | Total Expense Cost | Task Sub Total |
|------------|--|------------------|-----------------|------------------|-------|-------|----------------|------------------|---------------|----------|--------|--------------|--------------------|----------------|
| | | Project Director | Project Manager | Project Engineer | EIT | CADD | Administrative | | Subconsultant | | Travel | Reproduction | | |
| | | Rate | | | | | | | MWBE | Non-MWBE | | | | |
| | | \$226 | \$226 | \$207 | \$113 | \$146 | \$30 | | | | | | | |
| 1.0 | Project Management, Coordination & Permitting | 0 | 6.5 | 10 | 0 | 2 | 0 | \$3,825 | \$0 | \$0 | \$30 | \$0 | \$30 | \$3,855 |
| 1.1 | Managing the Team | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1.1.1 | Coordination with Subconsultant (Survey, Geotech, SUE) | 0 | 2 | | 0 | 0 | 0 | \$451 | \$0 | \$0 | \$0 | \$0 | \$0 | \$451 |
| 1.1.2 | Internal design meetings (weekly) | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1.2 | Communications and Reporting | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1.2.1 | Pre-Design Coordination Meeting | 0 | 2 | | 0 | 2 | 0 | \$744 | \$0 | \$0 | \$0 | \$0 | \$0 | \$744 |
| 1.2.2 | Monthly Project Update Meetings | 0 | 0 | 4 | 0 | 0 | 0 | \$826 | \$0 | \$0 | \$0 | \$0 | \$0 | \$826 |
| 1.2.3 | Prepare Baseline Schedule | 0 | 1.5 | | 0 | 0 | 0 | \$338 | \$0 | \$0 | \$0 | \$0 | \$0 | \$338 |
| 1.2.4 | Prepare Monthly Progress Reports | 0 | 1 | | 0 | 0 | 0 | \$226 | \$0 | \$0 | \$0 | \$0 | \$0 | \$226 |
| 1.2.5 | Attend quarterly franchise Utility Meetings | 0 | 0 | 4 | 0 | 0 | 0 | \$826 | \$0 | \$0 | \$30 | \$0 | \$30 | \$856 |
| 1.3 | Invoicing | 0 | 0 | 2 | 0 | 0 | 0 | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | \$413 |
| 2.0 | Conceptual Design (30-Percent) | 0 | 2 | 42.5 | 0 | 50.5 | 0 | \$16,624 | \$0 | \$0 | \$40 | \$0 | \$40 | \$16,664 |
| 2.1 | On-Site review | 0 | 0 | 2.5 | 0 | 2.5 | 0 | \$882 | \$0 | \$0 | \$40 | \$0 | \$40 | \$922 |
| 2.2 | Data Collection | 0 | 0 | 1 | 0 | 2 | 0 | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | \$499 |
| 2.3 | Processing SUE & Survey | 0 | | 1 | 0 | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | \$499 |
| 2.4 | Hydrology and Hydrologic Analysis | 0 | | 6 | | 2 | | \$1,532 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,532 |
| 2.5 | Utility Clearance Modeling | 0 | | 3 | | 2 | | \$913 | \$0 | \$0 | \$0 | \$0 | \$0 | \$913 |
| 2.6 | Grading Modeling | 0 | | 2 | | 1 | | \$560 | \$0 | \$0 | \$0 | \$0 | \$0 | \$560 |
| 2.7 | Structural Review | 0 | | 2 | | | | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | \$413 |
| 2.8 | USACE PERMIT research | 0 | | 2 | | 1 | | \$560 | \$0 | \$0 | \$0 | \$0 | \$0 | \$560 |
| 2.9 | FEMA Impact Analysis | 0 | | 3 | | 2 | | \$913 | \$0 | \$0 | \$0 | \$0 | \$0 | \$913 |
| 2.10 | Design Drawings | 0 | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 2.10.1 | Schematic grading | 0 | | 2 | | 4 | | \$999 | \$0 | \$0 | \$0 | \$0 | \$0 | \$999 |
| 2.10.2 | Plan Profile | 0 | | 4 | | 12 | | \$2,583 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,583 |
| 2.10.3 | Structure Modification Sheet | 0 | | 1 | | 4 | | \$792 | \$0 | \$0 | \$0 | \$0 | \$0 | \$792 |
| 2.10.4 | DAM & Drainage Calcs | 0 | | 3 | | 4 | | \$1,205 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,205 |
| 2.11 | QA/QC 30% Review Submittal 1 | 0 | 1 | 2 | 0 | 6 | 0 | \$1,517 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,517 |
| 2.12 | QA/QC 30% Record Submittal | 0 | 1 | 2 | 0 | 2 | 0 | \$932 | \$0 | \$0 | \$0 | \$0 | \$0 | \$932 |
| 2.13 | Prepare Utility Matrix | 0 | 0 | 2 | 0 | 2 | 0 | \$706 | \$0 | \$0 | \$0 | \$0 | \$0 | \$706 |
| 2.15 | Prepare Project Decision Log | 0 | 0 | 2 | 0 | 0 | 0 | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | \$413 |
| 2.16 | Prepare Preliminary Cost Estimate | 0 | 0 | 2 | 0 | 2 | 0 | \$706 | \$0 | \$0 | \$0 | \$0 | \$0 | \$706 |
| 3.0 | Preliminary Design (60 Percent) | 0 | 6 | 60.5 | 0 | 111 | 0 | \$30,102 | \$0 | \$0 | \$70 | \$0 | \$70 | \$30,172 |
| 3.1 | Design Submittal Review Meeting | 0 | 0 | 3 | 0 | 3 | 0 | \$1,059 | \$0 | \$0 | \$30 | \$0 | \$30 | \$1,089 |
| 3.2 | On-Site review | 0 | 0 | 2 | 0 | 2 | 0 | \$706 | \$0 | \$0 | \$40 | \$0 | \$40 | \$746 |
| 3.3 | Grading & TIN Modeling | 0 | | 1.5 | | | | \$310 | \$0 | \$0 | \$0 | \$0 | \$0 | \$310 |
| 3.4 | Design Drawings | 0 | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3.4.1 | Cover Sheet | 0 | 0 | 1 | 0 | 4 | 0 | \$792 | \$0 | \$0 | \$0 | \$0 | \$0 | \$792 |
| 3.4.2 | Quantity Summary Sheet | 0 | | 6 | | 4 | | \$1,825 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,825 |

| Task No. | Task Description | Labor (hours) | | | | | | Total Labor Cost | Expense | | | | Total Expense Cost | Task Sub Total |
|----------|---|------------------|-----------------|------------------|-----|------|----------------|------------------|---------------|------|--------|--------------|--------------------|----------------|
| | | Project Director | Project Manager | Project Engineer | EIT | CADD | Administrative | | Subconsultant | | Travel | Reproduction | | |
| | | | | | | | | | Rate | MWBE | | | | |
| 3.4.3 | Standard General Notes | 0 | 0 | 1 | 0 | 3 | 0 | \$646 | \$0 | \$0 | \$0 | \$0 | \$0 | \$646 |
| 3.4.4 | Typical Sections | | | 4 | | 12 | | \$2,583 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,583 |
| 3.4.5 | Structural Details Sheet | | | 3 | | 8 | | \$1,791 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,791 |
| 3.4.6 | Horizontal & Vertical Control Sheet | 0 | 0 | 1 | 0 | 4 | 0 | \$792 | \$0 | \$0 | \$0 | \$0 | \$0 | \$792 |
| 3.4.7 | Demolition Plan | | | 2 | | 6 | | \$1,292 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,292 |
| 3.4.8 | Plan Profile | | | 5 | | 16 | | \$3,375 | \$0 | \$0 | \$0 | \$0 | \$0 | \$3,375 |
| 3.4.9 | DAM & Drainage Calcs | | | 5 | | 4 | | \$1,619 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,619 |
| 3.4.10 | Erosion Control Plan | | | 2 | | 6 | | \$1,292 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,292 |
| 3.4.11 | Utility relocation Plan | | | 4 | | 4 | | \$1,412 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,412 |
| 3.4.12 | Construction Details | 0 | 0 | 2 | 0 | 6 | 0 | \$1,292 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,292 |
| 3.4.13 | Traffic Control Plans | | 1 | 3 | | 10 | | \$2,309 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,309 |
| 2.5 | Update Utility Matrix | 0 | 0 | 2 | 0 | 0 | 0 | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | \$413 |
| 2.5 | Update Project Design Decision Narrative | 0 | 0 | 1 | 0 | 0 | 0 | \$207 | \$0 | \$0 | \$0 | \$0 | \$0 | \$207 |
| 2.6 | Update Opinion of Probable Cost | 0 | 0 | 3 | 0 | 1 | 0 | \$766 | \$0 | \$0 | \$0 | \$0 | \$0 | \$766 |
| | QA/QC 60% Review Submittal 1 | 0 | 1 | 2 | 0 | 6 | 0 | \$1,517 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,517 |
| | QA/QC 60% Record Submittal | 0 | 1 | 1 | 0 | 4 | 0 | \$1,018 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,018 |
| | Prepare draft Bid Item List and Technical Notes for Preliminary bid documents | 0 | 2 | 3 | 0 | 0 | 0 | \$1,071 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,071 |
| | Update Project Schedule | 0 | 1 | 0 | 0 | 0 | 0 | \$226 | \$0 | \$0 | \$0 | \$0 | \$0 | \$226 |
| 3.9 | Update ROW Exhibits | | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 3.1 | Provide Temp Construction Easement Sketches | | | 2 | | 6 | | \$1,292 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,292 |
| | Printing | 0 | 0 | 1 | 0 | 2 | 0 | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | \$499 |
| 4.0 | Pre-Final Design 90% | 0 | 7 | 45 | 0 | 58 | 0 | \$19,367 | \$0 | \$0 | \$30 | \$0 | \$30 | \$19,397 |
| 4.1 | Design Submittal Review Meeting | | | 2 | | 2 | | \$706 | \$0 | \$0 | \$30 | \$0 | \$0 | |
| 4.2 | Design Drawings | | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.1 | Cover Sheet | 0 | 0 | 0.5 | 0 | 2 | 0 | \$396 | \$0 | \$0 | \$0 | \$0 | \$0 | \$396 |
| 4.2.2 | Quantity Summary Sheet | | | 3 | | 2 | | \$913 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.3 | Standard General Notes | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.4 | Typical Sections | | | 2 | | 4 | | \$999 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.5 | Structural Details Sheet | | | 2 | | 6 | | \$1,292 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.6 | Horizontal & Vertical Control Sheet | | | 0.5 | | 2 | | \$396 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.7 | Demolition Plan | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.8 | Plan Profile | | | 3 | | 3 | | \$1,059 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.9 | DAM & Drainage Calcs | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.10 | Erosion Control Plan | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.11 | Utility relocation Plan | | | 4 | | 8 | | \$1,998 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.12 | Construction Details | 0 | 0 | 1 | 0 | 2 | 0 | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | \$499 |
| 4.2.13 | Traffic Control Plans | | 1 | 2 | | 6 | | \$1,517 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,517 |
| 4.3 | QA/QC Pre-Final Review Submittal 1 | 0 | 2 | 2 | 0 | 4 | 0 | \$1,450 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,450 |
| 4.4 | QA/QC Pre-Final Record Submittal | 0 | 2 | 1 | 0 | 3 | 0 | \$1,097 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,097 |
| 4.5 | Update Utility Matrix | 0 | 0 | 1 | 0 | 0 | 0 | \$207 | \$0 | \$0 | \$0 | \$0 | \$0 | \$207 |
| 4.6 | Update Project Schedule | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 4.7 | Submit draft WORD Bid Book | | 1 | 5 | 0 | 0 | 0 | \$1,259 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,259 |
| 4.8 | Draft Excel Proposal for and items | 0 | 1 | 4 | 0 | 0 | 0 | \$1,052 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,052 |
| 4.9 | Prepare Draft Opinion of Probable Construction Costs | 0 | 0 | 2 | 0 | 2 | 0 | \$706 | \$0 | \$0 | \$0 | \$0 | \$0 | \$706 |
| 4.10 | Provide ROW Exhibits | 0 | 0 | 2 | 0 | 0 | | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.11 | Provide Construction Easement Sketches | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |

| Task No. | Task Description | Labor (hours) | | | | | | Total Labor Cost | Expense | | | | Total Expense Cost | Task Sub Total |
|------------|---|------------------|-----------------|------------------|----------|-----------|----------------|------------------|---------------|------------|-------------|--------------|--------------------|-----------------|
| | | Project Director | Project Manager | Project Engineer | EIT | CADD | Administrative | | Subconsultant | | Travel | Reproduction | | |
| | Rate | \$226 | \$226 | \$207 | \$113 | \$146 | \$30 | | MWBE | Non-MWBE | | | | |
| 4.12 | Prepare final Bidding and Contract Documents. | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 4.13 | Project Decision Logs (pre-final%) | | | 2 | | | | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | \$413 |
| | Printing | 0 | 0 | 1 | 0 | 2 | 0 | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | \$499 |
| 4.0 | Final Design (100% Submittal) | 0 | 6 | 36 | 0 | 30 | 2 | \$13,243 | \$0 | \$0 | \$30 | \$0 | \$30 | \$13,273 |
| 4.1 | Design Submittal Review Meeting | | | 2 | | 2 | | \$706 | \$0 | \$0 | \$30 | \$0 | \$0 | |
| 4.2 | Design Drawings | | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.1 | Cover Sheet | 0 | 0 | 0.5 | 0 | 1 | 0 | \$250 | \$0 | \$0 | \$0 | \$0 | \$0 | \$250 |
| 4.2.2 | Quality Summary Sheet | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.3 | Standard General Notes | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.4 | Typical Sections | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.5 | Structural Details Sheet | | | 1 | | 2 | | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.6 | Horizontal & Vertical Control Sheet | | | 0.5 | | 1 | | \$250 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.7 | Demolition Plan | | | 0.5 | | 1 | | \$250 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.8 | Plan Profile | | | 1.5 | | 1.5 | | \$529 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.9 | DAM & Drainage Calcs | | | 1 | | 1 | | \$353 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.10 | Erosion Control Plan | | | 1 | | 1 | | \$353 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.11 | Utility relocation Plan | | | 1.5 | | 2 | | \$603 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.2.12 | Construction Details | 0 | 0 | 1 | 0 | 2 | 0 | \$499 | \$0 | \$0 | \$0 | \$0 | \$0 | \$499 |
| 4.2.13 | Traffic Control Plans | | 1 | 1 | | 3 | | \$871 | \$0 | \$0 | \$0 | \$0 | \$0 | \$871 |
| 4.3 | QA/QC 100% Review Submittal 1 | 0 | 2 | 2 | 0 | 1.5 | 0 | \$1,084 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,084 |
| 4.4 | QA/QC 100% Record Submittal | 0 | 0 | 1 | 0 | 1.5 | 0 | \$426 | \$0 | \$0 | \$0 | \$0 | \$0 | \$426 |
| 4.5 | Update Utility Matrix | 0 | 0 | 1 | 0 | 0 | 0 | \$207 | \$0 | \$0 | \$0 | \$0 | \$0 | \$207 |
| 4.6 | Update Project Schedule | 0 | 1 | 0 | 0 | 0 | 0 | \$226 | \$0 | \$0 | \$0 | \$0 | \$0 | \$226 |
| 4.7 | Submit draft WORD Bid Book | 0 | 1 | 5 | 0 | 0 | 0 | \$1,259 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,259 |
| 4.8 | Final Draft (100%) Construction Specifications City & TxDOT | 0 | 1 | 4 | 0 | 0 | 0 | \$1,052 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,052 |
| 4.9 | Prepare final Opinion of Probable Construction Costs | 0 | 0 | 4 | 0 | 1 | 0 | \$973 | \$0 | \$0 | \$0 | \$0 | \$0 | \$973 |
| 4.10 | Provide Final ROW Exhibits | 0 | 0 | 1 | 0 | 0 | | \$207 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.11 | Provide FINAL Construction Easement Sketches | | | 0.5 | | 0.5 | | \$176 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| 4.12 | Prepare final Bidding and Contract Documents. | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 4.13 | Project Decision Logs (100%) | | | 2 | | | | \$413 | \$0 | \$0 | \$0 | \$0 | \$0 | \$413 |
| | Printing | 0 | 0 | 1 | 0 | 2 | 2 | \$559 | \$0 | \$0 | \$0 | \$0 | \$0 | \$559 |
| 5.0 | Bidding Phase | 0 | 1 | 19 | 9 | 11 | 1 | \$6,806 | \$0 | \$0 | \$30 | \$0 | \$30 | \$6,836 |
| 5.1 | Place Bid onto CivCast | 0 | 0 | 1 | 6 | 0 | 0 | \$883 | \$0 | \$0 | \$0 | \$0 | \$0 | \$883 |
| 5.2 | Answer Bid Questions | 0 | 0 | 3 | 0 | 3 | 0 | \$1,059 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,059 |
| 5.3 | Prepare Bid Addenda | 0 | 0 | 2 | 0 | 1 | 0 | \$560 | \$0 | \$0 | \$0 | \$0 | \$0 | \$560 |
| 5.4 | Prepare and Attend Pre-Bid Meeting | 0 | 0 | 2 | 0 | 2 | 0 | \$706 | \$0 | \$0 | \$30 | \$0 | \$30 | \$736 |
| 5.5 | Review & Tabulate Bids | 0 | 0 | 3 | 1 | 0 | 0 | \$733 | \$0 | \$0 | \$0 | \$0 | \$0 | \$733 |
| 5.6 | Contact bid references | 0 | 0 | 2 | 1 | 0 | 0 | \$526 | \$0 | \$0 | \$0 | \$0 | \$0 | \$526 |
| 5.7 | Provide CONFORMED bid documents and plans | 0 | 1 | 3 | 1 | 5 | 1 | \$1,720 | | | | | | |

| Task No. | Task Description | Labor (hours) | | | | | | Total Labor Cost | Expense | | | | Total Expense Cost | Task Sub Total |
|----------|--|------------------|-----------------|------------------|-------|-------|----------------|------------------|---------------|----------|--------|--------------|--------------------|----------------|
| | | Project Director | Project Manager | Project Engineer | EIT | CADD | Administrative | | Subconsultant | | Travel | Reproduction | | |
| | Rate | \$226 | \$226 | \$207 | \$113 | \$146 | \$30 | | MWBE | Non-MWBE | | | | |
| | | | | | | | | | | | | | | |
| 5.8 | Prepare Letter of Recommendation for selected Bidder | 0 | 0 | 3 | 0 | 0 | 0 | \$620 | \$0 | \$0 | \$0 | \$0 | \$0 | \$620 |
| 6.0 | Construction Phase Services | 0 | 0 | 24 | 2 | 24 | 0 | \$8,697 | \$0 | \$0 | \$70 | \$0 | \$70 | \$8,767 |
| 6.1 | Review draft Pre-construction meeting agenda and provide any comments. | 0 | 0 | 2 | 2 | 0 | 0 | \$639 | \$0 | \$0 | \$30 | \$0 | \$30 | \$669 |
| 6.2 | Construction Support | 0 | 0 | 4 | 0 | 5 | 0 | \$1,558 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,558 |
| 6.2.1 | Project Site Visits | 0 | 0 | 2 | 0 | 2 | 0 | \$706 | \$0 | \$0 | \$0 | \$0 | \$0 | \$706 |
| 6.2.2 | Submittal & Testing Reviews | 0 | 0 | 4 | 0 | 1 | 0 | \$973 | \$0 | \$0 | \$0 | \$0 | \$0 | \$973 |
| 6.2.3 | Request for Information/Change Order Review | 0 | 0 | 3 | 0 | 0 | 0 | \$620 | \$0 | \$0 | \$0 | \$0 | \$0 | \$620 |
| 6.2.4 | RFI Plan Modifications | 0 | 0 | 3 | 0 | 8 | 0 | \$1,791 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,791 |
| 6.2.5 | Final Walk Through and Punch List | 0 | 0 | 4 | 0 | 4 | 0 | \$1,412 | \$0 | \$0 | \$40 | \$0 | \$40 | \$1,452 |
| 6.3 | Record Drawings | 0 | 0 | 1 | 0 | 4 | 0 | \$792 | \$0 | \$0 | \$0 | \$0 | \$0 | \$792 |
| 6.4 | City Acceptance Letter | 0 | 0 | 1 | 0 | 0 | 0 | \$207 | \$0 | \$0 | \$0 | \$0 | \$0 | \$207 |
| | | | | | | | | | | | | | | |
| | SPECIAL SERVICES | 0 | 1 | 5 | 0 | 1 | 0 | \$1,405 | \$25,431 | \$14,228 | \$0 | \$0 | \$39,659 | \$41,063 |
| 7.0 | Survey\ Level B SUE | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$6,878 | \$0 | \$0 | \$6,878 | \$6,878 |
| 7.1 | Design Survey | | | | | | | \$0 | \$0 | \$1,500 | \$0 | \$0 | \$1,500 | \$1,500 |
| 7.2 | Easement Field Notes and Preparation | | | | | | | \$0 | \$0 | \$5,050 | \$0 | \$0 | \$5,050 | \$5,050 |
| 7.3 | Construction Survey | | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 8.0 | Permitting Submittal | 0 | 1 | 5 | 0 | 1 | 0 | \$1,405 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 | \$1,405 |
| 8.1 | FEMA | | | 3 | | | | \$620 | \$0 | \$0 | \$0 | \$0 | \$0 | \$620 |
| 8.2 | USACE | | | 1 | | | | \$207 | \$0 | \$0 | \$0 | \$0 | \$0 | \$207 |
| 8.3 | ADA & TAS | | 1 | 1 | | 1 | | \$579 | \$0 | \$0 | \$0 | \$0 | \$0 | \$579 |
| 9.0 | Structural design + 5% | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$7,087.50 | \$0.00 | \$0.00 | \$0.00 | \$7,088 | \$7,088 |
| 9.1 | Headwall/ Footing Design | | | | | | | \$0 | \$6,750 | \$0 | \$0 | \$0 | \$6,750 | \$6,750 |
| 10.0 | Geotechnical Evaluation + 5% | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$18,343.50 | \$0.00 | \$0.00 | \$0.00 | \$18,344 | \$18,344 |
| 10.1 | Perform 2 Bores | | | | | | | \$0 | \$11,647 | \$0 | \$0 | \$0 | \$11,647 | \$11,647 |
| 10.2 | Provide Report with recommendations | | | | | | | | \$5,823 | \$0 | \$0 | \$0 | \$5,823 | \$5,823 |
| 11.0 | SUE + 5% | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | \$0 | \$7,350 | \$0 | \$0 | \$7,350 | \$7,350 |
| 11.1 | Level A (2 locates) | | | | | | | \$0 | | \$7,000 | | | \$7,000 | \$7,000 |
| | | 0 | 29.5 | 242 | 11 | 287.5 | 3 | \$100,070 | \$25,431 | \$14,228 | \$300 | \$0 | \$39,959 | \$140,028 |

| Special Engineering Services | | | |
|---|-------------|-------------|-------------|
| Item | Fee Basis | | Fee |
| Project Management, Coordination & Permitting | \$3,855.39 | \$0.00 | \$3,855.39 |
| Conceptual Design (30-Percent) | \$16,664.17 | \$27,006.00 | \$43,670.17 |
| Preliminary Design (60 Percent) | \$30,172.45 | \$14,057.46 | \$44,229.91 |
| Pre-Final Design 90% | \$19,396.92 | \$0.00 | \$19,396.92 |
| Final Design (100% Submittal) | \$13,272.84 | \$0.00 | \$13,272.84 |
| Bidding Phase | \$6,836.01 | \$0.00 | \$6,836.01 |
| Construction Phase Services | \$8,767.06 | \$0.00 | \$8,767.06 |















| Site Summary | |
|---------------------------|---------------------|
| Total Hours | 573 |
| Total Labor | \$100,070 |
| Total Expense | \$39,959 |
| MBE/SBE Subconsultant | \$25,431 |
| Non-MBE/SBE Subconsultant | \$14,228 |
| MBE/SBE Participation | 18.2% |
| Total Project Cost | \$140,028.30 |

ATTACHMENT “C”



Project schedule















City of Grand Prairie
FY 2024 Outfall Repair
Schedule

| ID | <div><div></div><div>i</div></div> | Task Name | Duration | Start | Finish | Predecessors | Resource Names | Timeline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|------------------------------------|--|----------|-------|--------|--------------|----------------|--------------|---|---|---|---|---|---|--------------|---|---|---|---|---|---|--------------|---|---|---|---|---|---|--------------|----|---|---|---|---|---|--------------|--|--|--|--|--|
| | | | | | | | | Half 1, 2024 | | | | | | | Half 2, 2024 | | | | | | | Half 1, 2025 | | | | | | | Half 2, 2025 | | | | | | | Half 1, 2026 | | | | | |
| N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | | | | | | |
| 1 | | City Council Development Committee Review and Funding Approval | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | Award of Design Contract Phase 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | Notice to Proceed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | In Person Kickoff Meeting | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | |
| 5 | | Submit 30% Plan Design for review | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | |
| 6 | | Return Comments to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | | | | | | | | | | | |
| 7 | | Submit 60% Plan Design for Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | | | | | | | | | | | |
| 8 | | Return Comments to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | | | | | | | | | | | |
| 9 | | Submit 90% Plan Design for Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | | | | | | | | | | | |
| 10 | | Return Comments to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 | | | | | | | | | | | |
| 11 | | Submit Updated 90% Plan Design for Review | | | | | | | | | | | | | | | | | | | | | | | | | | | | 10 | | | | | | | | | | | |
| 12 | | Return Comments to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 11 | | | | | | | | | | | |
| 13 | | Pre-final Plan, draft Technical Notes and Proposal and Easement document Submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | 12 | | | | | | | | | | | |
| 14 | | Return Comments to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 | | | | | | | | | | | |
| 15 | | Updated Pre-final Plan and Technical Notes and Proposal Submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | 14 | | | | | | | | | | | |
| 16 | | Review Comments to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | | | | | | | | | | | |
| 17 | | ROW TCEs Acquired | | | | | | | | | | | | | | | | | | | | | | | | | | | | 14 | | | | | | | | | | | |
| 18 | | Draft City Project Bid Schedule to Multatech for Review and Edits | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16 | | | | | | | | | | | |
| 19 | | Multatech submits draft Bid Schedule Edits for Bid Schedule determination | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | | | | | | | | | | | |
| 20 | | Approved Bid Schedule and Appendix F ROW Information & Exhibits PDF to Multatech for Bid Book Completion | | | | | | | | | | | | | | | | | | | | | | | | | | | | 19 | | | | | | | | | | | |
| 21 | | Pre-Bid Document Submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 | | | | | | | | | | | |
| 22 | | City Review to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 21 | | | | | | | | | | | |
| 23 | | Sealed Cover sheet PDF submission | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 | | | | | | | | | | | |
| 24 | | City Signed Cover sheet PDF to Multatech | | | | | | | | | | | | | | | | | | | | | | | | | | | | 23 | | | | | | | | | | | |

| | | | | | | | | | | |
|--|-----------|--|--------------------|---|-----------------------|---|--------------------|---|-----------------|---|
| Project: GP-FY2024 Outfall Repair Date: Tue 7/16/24 | Task |  | Project Summary |  | Manual Task |  | Start-only |  | Deadline |  |
| | Split | | Inactive Task | | Duration-only | | Finish-only | | Progress | |
| | Milestone |  | Inactive Milestone |  | Manual Summary Rollup |  | External Tasks |  | Manual Progress |  |
| | Summary |  | Inactive Summary |  | Manual Summary |  | External Milestone |  | | |

City of Grand Prairie
FY 2024 Outfall Repair
Schedule

| ID |  | Task Name | Duration | Start | Finish | Predecessors | Resource Names | | | | | | | | | | | | | | | Half 1, 2024 | | | | | | | Half 2, 2024 | | | | | | | Half 1, 2025 | | | | | | | Half 2, 2025 | | | | | | | Half 1, 2026 | | | | | | | Half 2, 2026 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|--|---|----------|--------------|--------------|--------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|---|---|---|---|---|---|--------------|---|---|---|---|---|---|--------------|---|---|---|---|---|---|--------------|--|--|--|--|--|--|--------------|--|--|--|--|--|--|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | Sample Bid Documents Digital (PDFs,WORD,Excel) submission | 10 days | Fri 10/31/25 | Thu 11/13/25 | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | City Approval of Bid Electronic Documents | 1 day | Fri 11/14/25 | Fri 11/14/25 | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | Sample Plans and Bid Books submission | 7 days | Mon 11/17/25 | Tue 11/25/25 | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | First Advertisement in Newspaper | 0 days | Sun 11/30/25 | Sun 11/30/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | Bid Documents Available to Bidders - Uploaded to CivCast | 2 days | Mon 12/1/25 | Tue 12/2/25 | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | Second Advertisement in Newspaper | 0 days | Sun 12/7/25 | Sun 12/7/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | | Mandatory Pre-Bid Meeting | 0 days | Tue 12/9/25 | Tue 12/9/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | | Bid Opening | 12 days | Mon 12/1/25 | Tue 12/16/25 | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | | Bid Tabulation | 0 days | Wed 12/17/25 | Wed 12/17/25 | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | | Check References/Letter of recommendation to City | 0 days | Thu 12/18/25 | Thu 12/18/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | | City staff preparation of Council Communication | 2 days | Fri 12/19/25 | Mon 12/22/25 | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | | Presented to CCD Committee for Funding Approval | 11 days | Tue 12/23/25 | Tue 1/6/26 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | | City staff preparation of Council Communication | 5 days | Wed 1/7/26 | Tue 1/13/26 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 38 | | Presented to City Council for Approval and Award | 5 days | Wed 1/14/26 | Tue 1/20/26 | 37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | | Low Bidder is sent Contract forms for signatures and request for insurance evidence | 3 days | Wed 1/21/26 | Fri 1/23/26 | 38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | | Pre-Construction Meeting | 10 days | Mon 1/26/26 | Fri 2/6/26 | 39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 41 | | Low Bidder Returns Executed Contract Forms | 10 days | Mon 1/26/26 | Fri 2/6/26 | 39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 42 | | Contract Book to CMO for signatures | 0 days | Mon 2/9/26 | Mon 2/9/26 | 41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 43 | | Contract Book Returned from CMO | 21 days | Mon 2/9/26 | Mon 3/9/26 | 42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | | Issue Notice to Proceed | 2 days | Tue 3/10/26 | Wed 3/11/26 | 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45 | | Begin Construction | 8 days | Thu 3/12/26 | Mon 3/23/26 | 44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 46 |   | Construction Time (Calendar Days) | 150 days | Mon 3/23/26 | Wed 8/19/26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | | End Construction | 0 days | Wed 8/19/26 | Wed 8/19/26 | 46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | |
|--|-----------|--|--------------------|---|-----------------------|---|--------------------|---|-----------------|---|
| Project: GP-FY2024 Outfall Repair Date: Tue 7/16/24 | Task |  | Project Summary |  | Manual Task |  | Start-only |  | Deadline |  |
| | Split | | Inactive Task | | Duration-only | | Finish-only | | Progress | |
| | Milestone |  | Inactive Milestone |  | Manual Summary Rollup |  | External Tasks |  | Manual Progress |  |
| | Summary |  | Inactive Summary |  | Manual Summary |  | External Milestone |  | | |

ATTACHMENT “D”

OPCC for Each Location

Opinion of Probable Construction Cost
ITEM BREAKDOWN
Construction Services for
FY 2024 Storm Drain Outfall Repair Project
City of Grand Prairie Outfall Sites #1102, 1926, 761, & 762

City of Grand Prairie Outfall Site #1102

| Item | Item Description | Quantity | Unit | Unit Price | |
|------|--|----------|------|-----------------|--------------------|
| 1 | Site preparation including mobilization, clearing and grubbing, structure removals and site cleaning, work fully performed as per specifications. | 1 | EA | \$2,000.00 | \$2,000.00 |
| 2 | Removal and replacement of existing Junction Box | 1 | EA | \$7,000.00 | \$7,000.00 |
| 3 | Removal of existing cast-in-place Headwall Structure & Pipe | 1 | EA | \$1,875.00 | \$1,875.00 |
| 4 | Construction of new TxDOT cast-in-place Headwall Structure 18" | 0 | EA | \$7,500.00 | \$0.00 |
| 5 | 18" RCP storm pipe furnish and install | 0 | LF | \$120.00 | \$0.00 |
| 6 | Barricading and traffic control, complete in place. | 0 | EA | \$5,500.00 | \$0.00 |
| 7 | Silt fence, furnish and install complete in place as per details and specifications | 0 | LF | \$10.00 | \$0.00 |
| 8 | Sawcut, remove, and replace existing HMAc pavement, replace with New HMAc repair section, including curb and gutter, work fully performed. | 0 | SY | \$220.00 | \$0.00 |
| 9 | St. Augustine or Bermuda grass solid sod, furnish and install complete in place. | 4 | SY | \$150.00 | \$600.00 |
| 10 | 8" PVC SDR 35 Wastewater line, remove old, furnish and install new complete in place, including embedment. BY OPEN CUT | 0 | LF | \$85.00 | \$0.00 |
| 11 | Trench safety, furnish and install, complete in place, including sheeting, shoring and bracing where required by OSHA Standards that are in effect at the time of bid opening. | 0 | LF | \$5.00 | \$0.00 |
| 12 | 8" DR18 C900 PVC Water line, furnish and install by open cut, new complete in place, including embedment. | 0 | LF | \$95.00 | \$0.00 |
| 13 | 8" gate valve and box, remove old, furnish and install new complete in place. | 0 | EA | \$2,200.00 | \$0.00 |
| 14 | Connect to Existing Water, furnish, work fully performed | 0 | EA | \$2,500.00 | \$0.00 |
| 15 | Sawcut, remove, and replace existing reinforced concrete pavement (5" to 8" thick) with Asphalt Overlay, including curb and gutter, work fully performed. | 0 | SF | \$890.00 | \$0.00 |
| 16 | TxDOT MBGF, , furnish and install per detail along roadway edge | 0 | LF | \$30.00 | \$0.00 |
| 17 | TxDOT MBGF, furnish and install per detail along top of headwall | 0 | LF | \$40.00 | \$0.00 |
| 18 | Chain link fencing, , furnish and install posts, fabric, and connect to existing fencing per detail | 0 | LF | \$275.00 | \$0.00 |
| 19 | Crushed Stone for Pipe Embedment, furnish and install, as per details | 0 | CY | | \$0.00 |
| 20 | Select fill for backfill and slope preparation, furnish and install, as per details | 4 | CY | \$450.00 | \$1,800.00 |
| 21 | Rock Rubble Riprap: Furnish and Install including Filter Fabric Underlayment and Placement | 0 | CY | \$250.00 | \$0.00 |
| 22 | TxDOT MBGF ANCHOR TERMINAL, furnish and install per detail | 0 | EA | \$1,000.00 | \$0.00 |
| | | | | Subtotal | \$13,275.00 |
| | | | | 25% Contingency | \$3,318.75 |
| | | | | TOTAL | \$16,593.75 |

City of Grand Prairie Outfall Site # 1926

| Item | Item Description | Quantity | Unit | Unit Price | |
|------|--|----------|------|------------|-------------|
| 1 | Site preparation including mobilization, clearing and grubbing, structure removals and site cleaning, work fully performed as per specifications. | 1 | EA | \$8,272.80 | \$8,272.80 |
| 2 | Removal and replacement of existing Junction Box Lid | | EA | \$1,500.00 | \$0.00 |
| 3 | Removal of existing cast-in-place Headwall Structure | 1 | EA | \$2,150.00 | \$2,150.00 |
| 4 | Construction of new TxDOT cast-in-place Headwall Structure 36" | 1 | EA | \$8,600.00 | \$8,600.00 |
| 5 | 36" RCP storm pipe furnish and install | 8 | LF | \$180.00 | \$1,440.00 |
| 6 | Barricading and traffic control, complete in place. | 1 | EA | \$5,500.00 | \$5,500.00 |
| 7 | Silt fence, furnish and install complete in place as per details and specifications | 100 | LF | \$10.00 | \$1,000.00 |
| 8 | Sawcut, remove, and replace existing HMAc pavement, replace with New HMAc repair section, including curb and gutter, work fully performed. | | SY | \$220.00 | \$0.00 |
| 9 | St. Augustine or Bermuda grass solid sod, furnish and install complete in place. | 75 | SY | \$150.00 | \$11,250.00 |
| 10 | 8" PVC SDR 35 Wastewater line, remove old, furnish and install new complete in place, including embedment. BY OPEN CUT | | LF | \$85.00 | \$0.00 |
| 11 | Trench safety, furnish and install, complete in place, including sheeting, shoring and bracing where required by OSHA Standards that are in effect at the time of bid opening. | | LF | \$5.00 | \$0.00 |
| 12 | 8" DR18 C900 PVC Water line, furnish and install by open cut, new complete in place, including embedment. | | LF | \$95.00 | \$0.00 |
| 13 | 8" gate valve and box, remove old, furnish and install new complete in place. | | EA | \$2,200.00 | \$0.00 |
| 14 | Connect to Existing Water, furnish, work fully performed | | EA | \$2,500.00 | \$0.00 |
| 15 | Sawcut, remove, and replace existing concrete pavement (5" to 8" thick) with Asphalt Overlay, including base material, work fully performed. | 25 | SY | \$650.00 | \$16,250.00 |
| 16 | TxDOT MBGF, , furnish and install per detail along roadway edge | | LF | \$30.00 | \$0.00 |
| 17 | TxDOT MBGF, furnish and install per detail along top of headwall | | LF | \$40.00 | \$0.00 |
| 18 | Chain link fencing, , furnish and install posts, fabric, and connect to existing fencing per detail | | LF | \$275.00 | \$0.00 |
| 19 | Crushed Stone for Pipe Embedment, furnish and install, as per details | | CY | | \$0.00 |
| 20 | Select fill for backfill and slope preparation, furnish and install, as per details | 45 | CY | \$450.00 | \$20,250.00 |

| | | | | | |
|----|--|----|----|-----------------|--------------------|
| 21 | Rock Rubble Riprap: Furnish and Install including Filter Fabric Underlayment and Placement | 10 | CY | \$250.00 | \$2,500.00 |
| 22 | TxDOT MBGF ANCHOR TERMINAL, furnish and install per detail | 0 | EA | \$1,000.00 | \$0.00 |
| | | | | Subtotal | \$77,212.80 |
| | | | | 25% Contingency | \$19,303.20 |
| | | | | TOTAL | \$96,516.00 |

City of Grand Prairie Outfall Sites #761, & 762

| Item | Item Description | Quantity | Unit | Unit Price | |
|------|--|----------|------|-----------------|---------------------|
| 1 | Site preparation including mobilization, clearing and grubbing, structure removals and site cleaning, work fully performed as per specifications. | 1 | EA | \$32,586.84 | \$32,586.84 |
| 2 | Removal and replacement of existing Junction Box Lid | | EA | \$1,500.00 | \$0.00 |
| 3 | Removal of existing cast-in-place Headwall Structure | 1 | EA | \$10,000.00 | \$10,000.00 |
| 4 | Construction of new engineered cast-in-place Headwall Structure 2-54" | 1 | EA | \$40,000.00 | \$40,000.00 |
| 5 | 54" RCP storm pipe furnish and install | 16 | LF | \$475.00 | \$7,600.00 |
| 6 | Barricading and traffic control, complete in place. | 1 | EA | \$5,500.00 | \$5,500.00 |
| 7 | Silt fence, furnish and install complete in place as per details and specifications | 100 | LF | \$10.00 | \$1,000.00 |
| 8 | Sawcut, remove, and replace existing HMA pavement, replace with New HMA repair section, including curb and gutter, work fully performed. | | SY | \$220.00 | \$0.00 |
| 9 | St. Augustine or Bermuda grass solid sod, furnish and install complete in place. | 25 | SY | \$150.00 | \$3,750.00 |
| 10 | 8" PVC SDR 35 Wastewater line, remove old, furnish and install new complete in place, including embedment. BY OPEN CUT | 60 | LF | \$85.00 | \$5,100.00 |
| 11 | Trench safety, furnish and install, complete in place, including sheeting, shoring and bracing where required by OSHA Standards that are in effect at the time of bid opening. | 60 | LF | \$5.00 | \$300.00 |
| 12 | 8" DR18 C900 PVC Water line, furnish and install by open cut, new complete in place, including embedment. | 60 | LF | \$95.00 | \$5,700.00 |
| 13 | 8" gate valve and box, remove old, furnish and install new complete in place. | 2 | EA | \$2,200.00 | \$4,400.00 |
| 14 | Connect to Existing Water, furnish, work fully performed | 1 | EA | \$2,500.00 | \$2,500.00 |
| 15 | Sawcut, remove, and replace existing reinforced concrete pavement (5" to 8" thick) with Asphalt Overlay, including curb and gutter, work fully performed. | 98 | SY | \$890.00 | \$87,220.00 |
| 16 | TxDOT MBGF, , furnish and install per detail along roadway edge | 20 | LF | \$30.00 | \$600.00 |
| 17 | TxDOT MBGF, furnish and install per detail along top of headwall | 65 | LF | \$40.00 | \$2,600.00 |
| 18 | Chain link fencing, , furnish and install posts, fabric, and connect to existing fencing per detail | 80 | LF | \$275.00 | \$22,000.00 |
| 19 | Crushed Stone for Pipe Embedment, furnish and install, as per details | | CY | | \$0.00 |
| 20 | Select fill for backfill and slope preparation, furnish and install, as per details | 45 | CY | \$450.00 | \$20,250.00 |
| 21 | 12" grouted rock riprap w/ 4' deep toewall on all outer edges | 45.9 | CY | \$850.00 | \$39,037.04 |
| 22 | TxDOT MBGF ANCHOR TERMINAL, furnish and install per detail | 0.0 | EA | \$1,000.00 | \$0.00 |
| 23 | Gabion Blanket Side Channel Protection | 66.7 | SY | \$210.00 | \$14,000.00 |
| | | | | Subtotal | \$304,143.88 |
| | | | | 25% Contingency | \$76,035.97 |
| | | | | TOTAL | \$380,179.85 |

| SUMMARY TABLE | | COST |
|---|--|---------------------|
| City of Grand Prairie Outfall Site #1102 | | \$16,593.75 |
| City of Grand Prairie Outfall Site # 1926 | | \$96,516.00 |
| City of Grand Prairie Outfall Sites #761, & 762 | | \$380,179.85 |
| TOTAL OPCC | | \$493,289.60 |

ATTACHMENT “E”

Subconsultant Proposals



GEOTECHNICAL ENGINEERING
ENVIRONMENTAL CONSULTING
CONSTRUCTION MATERIALS ENGINEERING AND TESTING
CONSTRUCTION INSPECTION

April 4, 2024

Mr. Walter O'Reilly, P.E.
Project Manager
Multatech
2821 West 7th Street, Suite 400
Fort Worth, Texas 76107

Phone: 817-877-5571
Cell: 817-995-4401
Email: WOREilly@multatech.com

Re: Proposal for Geotechnical Investigation
Proposed Headwall Replacement & Creek Bank Stabilization
Grand Prairie, Texas
AGG Proposal No. P24-0405E

Mr. O'Reilly,

We are pleased to submit this proposal for geotechnical engineering services for the project referenced above. We understand that Alliance Geotechnical Group (AGG) has been selected based on qualifications in accordance with the Professional Services Procurement Act for providing geotechnical services this proposal includes project requirements, scope of work, fee, and proposed project schedule.

PROJECT DESCRIPTION

The project consists of replacing the existing headwall and partial replacement of the double barrel culverts located east of the intersection of Center Street and Clarice Street in Grand Prairie, Texas. In addition to constructing a new headwall, the downstream slopes of the creek will be stabilized.

SCOPE OF WORK

The geotechnical investigation performed for the referenced project will consist of field and laboratory investigations, engineering analysis, and a report prepared by a Registered Professional Engineer.

FIELD INVESTIGATION

The field investigation will consist of drilling two (2) test borings within close proximity of the proposed new headwalls. One (1) test boring will be drilled between the two existing culvert pipes, and the other test boring will be drilled near the creek bank. The test borings will be drilled to depths of 30 feet below the existing ground surface. The borings will be cored prior to drilling. In



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3228 Halifax Street, Dallas, Texas 75247
Tel: 972-444-8889 • Fax: 972-444-8893 • www.aggengr.com





addition, the existing sidewalk near the headwall will be cored, hand-held DCP testing will be performed where possible at the creek bottom.

Subsurface soil samples will be secured with thin-walled tube and/or split spoon samples depending on soil type and consistency. Rock encountered in the borings will be evaluated using the Texas Department of Transportation Penetrometer (TxDOT Cone). In addition, AGG will perform relative elevation cross-sections slope survey (not licensed surveyors) along the subject slopes to assist with the global stability analyses. All samples will be properly logged, packaged, sealed, and placed in a core box for transportation to the laboratory.

Alliance Geotechnical Group understood that the client has the right of entry to this roadway during normal working hours. It is assumed that the boring location will be accessible with a conventional truck mounted drilling rig during normal working hours. Traffic control will be required to drill the borings along the proposed alignment. Traffic control will consist of using signs, safety cones and flagger. Extensive traffic control consisting of arrow board, crash truck, etc. has not been included in this proposal. Should unusual soil conditions be encountered, AGG will contact the client to discuss recommendations and fee impacts for exploring these unusual conditions.

Alliance Geotechnical Group will contact Texas811 and the City of Grand Prairie's Water Department to have them locate underground utilities. However, these utility locators will not mark underground utilities on private property. AGG is not responsible for damage to underground utilities that are not properly identified prior to drilling.

Laboratory Investigation

Laboratory tests will be conducted to classify the soil and to evaluate the volume change potential and strength of the soil and rock present at the site. Soil classification tests will consist of Atterberg limits (plasticity index), percent passing #200 sieve, moisture content, and dry unit weight. The volume change potential of the soils will be evaluated by swell tests. The strength of the soil will be estimated using hand penetrometer strength testing and unconfined compressive strength tests. In addition, a direct shear test will be performed to assist with global stability analysis. Soluble sulfate tests will be performed to determine the corrosivity to buried concrete.

Engineering Analyses

Results of field and laboratory work will be presented in an engineering report. The report will include our recommendations to guide the design and construction of the foundations and will include the following:

1. Site reconnaissance, boring staking, and utility clearance coordination.
2. Plan of borings, boring logs, water level observations, and laboratory test results.
3. Foundation recommendations for the proposed new headwall.
4. Evaluate the global stability of the subject creek banks.
5. Provide recommendations for creek bank stabilization.
6. Recommendations for site grading and compaction of earthwork will be presented.



Proposal for Geotechnical Investigation
Proposed Headwall
Grand Prairie, Texas
AGG Proposal No. P24-0405E

GEOTECHNICAL FEES

Based on the proposed scope of work, we will provide the geotechnical investigation for this project for a lump sum fee of **\$17,470.00**.

TERMS AND CONDITIONS

If this proposal meets with your approval, please sign below to authorize Alliance Geotechnical Group to perform the work. Please contact us after reviewing our proposal if you have any questions. We look forward to working with you on this project.

Sincerely,

ALLIANCE GEOTECHNICAL GROUP

A blue ink signature of Rupesh Thapa, written in a cursive style.

Rupesh Thapa, E.I.T.
Staff Engineer

A blue ink signature of Michael D. Roland, written in a cursive style.

Michael D. Roland, P.E.
Vice President

ACCEPTED BY:

Name

Date

Title

KEETON SURVEYING COMPANY

Registered Professional Land Surveying
2037 Dalworth Street
Grand Prairie, Texas 75050
Ph# 972-641-0843 TBPELS Firm No. 10090500
Email Address: ksc4019@sbcglobal.net

Proposal for Professional Surveying Services

May 22, 2024

In order to make clear my understanding of your requirements and our agreements, they are set forth in the following writing:

FACTS: The particular Tract we discussed is:

Outfall 1926 – W. Rock Island at RR tracks, City of Grand Prairie, Dallas County, Texas.

PURPOSE:

-Prepare drainage easements and dimensioned TCE exhibits within private ROW centered on the outfall and extending approx. 45' east and west

\$850 each easement

-Additional topographic shots of the increased erosion limits on the north side of Rock Island Rd. and upstream headwall and flowline

\$1,500

PROPOSAL:

Field and Office = \$ 2,350

FEE /PAYMENT SCHEDULE: Based on the above specifications the fee schedule for these services is: Please sign and return for work to begin. Payment due upon completion.

Client's Signature

Printed Name

Address

City

State

Zip

Date

Phone number

KEETON SURVEYING COMPANY

Registered Professional Land Surveying
2037 Dalworth Street
Grand Prairie, Texas 75050
Ph# 972-641-0843 TBPELS Firm No. 10090500
Email Address: ksc4019@sbcglobal.net

Proposal for Professional Surveying Services

May 22, 2024

In order to make clear my understanding of your requirements and our agreements, they are set forth in the following writing:

FACTS: The particular Tract we discussed is:

Outfall 1102 – Leonard St., City of Grand Prairie, Dallas County, Texas.

PURPOSE:

Establish control on boundary for Lot 3 and prepare drainage easements and dimensioned TCE exhibits on Lot 3, Forterra Addition, from the existing junction box to approx. 15 feet beyond the outfall structure

PROPOSAL:

Field and Office = \$ 2,500

FEE /PAYMENT SCHEDULE: Based on the above specifications the fee schedule for these services is: Please sign and return for work to begin. Payment due upon completion.

Client's Signature

Printed Name

Address

City

State

Zip

Date

Phone number

KEETON SURVEYING COMPANY

Registered Professional Land Surveying
2037 Dalworth Street
Grand Prairie, Texas 75050
Ph# 972-641-0843 TBPELS Firm No. 10090500
Email Address: ksc4019@sbcglobal.net

Proposal for Professional Surveying Services

May 22, 2024

In order to make clear my understanding of your requirements and our agreements, they are set forth in the following writing:

FACTS: The particular Tract we discussed is:

Outfall 761 & 762, City of Grand Prairie, Dallas County, Texas.

PURPOSE:

-Confirm and establish ROWs and property owners and prepare permanent drainage easement along the north side extending from the existing easement to the parking lot and along the channel from the headwall to approx. 50' downstream from the wall.

\$850

-Prepare temporary construction easement dimensions exhibits each side of the headwall parallel to the roadway to cover placement of new headwall

\$850

PROPOSAL:

Field and Office = \$ 1,700

FEE /PAYMENT SCHEDULE: Based on the above specifications the fee schedule for these services is: Please sign and return for work to begin. Payment due upon completion.

Client's Signature

Printed Name

Address

City

State

Zip

Date

Phone number



May 9, 2024

Walter O'Reilley, PE
Multatech
2821 West 7th Street
Suite 400
Fort Worth, Texas 76107

**Subject: City of Grand Prairie
Intersection of Clarice St. & S. Center St.
Double Barrel Culvert HW Design**

Dear Mr. O'Reilley:

We appreciate the opportunity to provide you with this proposal for our professional services regarding the structural design for the above referenced project. The following are our fees for the associated scope of work requested.

1.0 Scope of Basic Services

Jakan Engineering proposes the following basic scope of services:

- Design and signed and sealed plans for a new double culvert headwall to replace the ex. cracked headwall.
- 1 site visit
- Coordination with design team
- Bid phase support

2.0 Scope of Optional Services

The following are not included in the Basic Services and will be considered as *Additional Services (rate of \$200 per hour)*, if required or requested:

- Any other services not specifically included in *Basic Services*.

3.0 Compensation

Jakan Engineering proposes to perform the **Basic Services** outlined above on the basis of **Per Diem at \$200 per hour not to exceed \$6,750.**



4.0 Authorization

Please indicate your approval by signing one copy of the proposal and returning it to us. Any modifications to the attached language must be accepted by both parties.

We thank you for considering Jakan Engineering for this project. Should you have any questions please feel free to call.

Yours truly,

JAKAN ENGINEERING, PLLC

A handwritten signature in blue ink, appearing to read "Son Ngo", is written over a light blue grid background.

Son Ngo, P.E., MLSE
President

Agreed & Accepted

By: _____

Name: _____

Title: _____

Date: _____



Date: 6/18/2024

Operator: Multatech Architects -Engineers

Project: Grand Prairie -Hydrovac -Location of Utilities

Mulholland Energy Services, LLC is pleased to submit a bid for hydro excavation services to Multatech Architects -Engineers. Our services for this job will be to exploratory dig at 2 different locations directed by our client. We estimate 2 days maximum until completion of needed potholing.

Function 1: (1) Hydro Excavation Truck w/ Operator and Technician (12-hour day) Pricing included disposal -2 days -TOTAL -\$7,000.00

Clarifications:

-Pricing assumes water will be provided onsite.

-Price is not to exceed the given total and estimated two days of work unless addition work is needed and instructed by our client. Any digging after the two days at the given rate will be subject to an hourly rate of \$270.00/HR.

-Work performed is subject to a 4-hour minimum.

-Any necessary consumables, safety training, educational courses or certifications will be billed at cost plus 25%

We appreciate your consideration and look forward to an opportunity to work with you. If you have any questions, please contact Adam Herrera at 214-766-2925.