City of Alvin, Texas

Gabe Adame, Mayor

Meagan DeKeyzer, Mayor Pro-tem, District E
Scott Salter, At-Lg P2
Martin Vela, District A
Chris Vaughn, District B

Richard Garivey, District C
Ashley Davis, District D

Alvin City Council Agenda

Thursday, June 26, 2025

5:30 PM

(First Floor Conference Room)

Alvin City Hall, 216 West Sealy, Alvin, Texas 77511

Persons with disabilities who plan to attend this meeting that will require special services please contact the City Secretary's Office at 281-388-4255 or droberts@cityofalvin.com 48 hours prior to the meeting time. City Hall is wheelchair accessible, and a sloped curb entry is available at the south entrance to City Hall.

NOTICE is hereby given of a Special Meeting of the City Council of the City of Alvin, Texas, to be held on Thursday, **JUNE 26, 2025,** at 5:30 PM in the First Floor Conference Room at: City Hall, 216 W. Sealy, Alvin, Texas.

1. **CALL TO ORDER**

2. **NEW BUSINESS**

   A. Consider an Agreement with GFT Engineering for design engineering services related to the Texas General Land Office – Community Development and Revitalization (GLO-CDR) Grant No. 24-065-151-F010, for flood and drainage improvements along Durant Street and the M-1 Crossing, and authorize the Mayor to execute all necessary documents upon legal review.

3. **ADJOURNMENT**

I hereby certify that a copy of this notice was posted on the City Hall bulletin board, a place convenient and readily accessible to the general public at all times, and to the City's website: www.alvin-tx.gov, in compliance with Chapter 551, Texas Government Code, on **MONDAY June 23, 2025, at 4:00 p.m.**

/s/ Dixie Roberts
Dixie Roberts, City Secretary

Removal Date: _____

**** All meetings of the City Council are open to the public, except when there is a necessity to meet in Executive Session (closed to the public) under the provisions of Chapter 551, Texas Government Code. The Council reserves the right to convene into executive session on any of the above posted agenda items that qualify for an executive session by publicly announcing the applicable section of the Open Meetings Act, including but not limited to sections 551.071 (litigation and certain consultation with the attorney), 551.072 (acquisition of interest in real property), 551.073 (contract for gift to city), 551.074 (certain personnel deliberations), or 551.087 (qualifying economic development negotiations).**

AGENDA COMMENTARY

Meeting Date: 6/26/2025

Department: Administration - Asst. City Manager

Contact: Dixie Roberts, Asst. City Manager/City Secretary

Agenda Item: Consider an Agreement with GFT Engineering for design engineering services related to the Texas General Land Office – Community Development and Revitalization (GLO-CDR) Grant No. 24-065-151-F010, for flood and drainage improvements along Durant Street and the M-1 Crossing, and authorize the Mayor to execute all necessary documents upon legal review.

Type of Item: Action Item

Summary: The City has been awarded $6,000,500 in CDBG-MIT funding for the Durant Street and M-1 Crossing Flood and Drainage Improvement Project. Following the City's formal RFP process in 2022, GFT (formerly DEC Engineering/Gannett Fleming TranSystems) was selected as the most qualified firm to provide engineering services for this project.

As outlined in the original grant proposal submitted to the GLO, the majority of the engineering service costs will be covered by grant funds. Per GLO program guidelines, eligible engineering costs are capped at 15% of the total construction cost.

The construction budget submitted to the GLO totaled $4,939,281.90, resulting in a maximum allowable engineering allocation of $740,892.30. The City's original grant budget included $737,191.10 for engineering services (14.93%).

However, the proposed engineering fees total $869,875—which exceeds the GLO-eligible limit by $128,683. The overage will be covered by the City's Sales Tax Fund. A breakdown of the proposed fees is as follows:

- **M-1 Ditch:** $161,580
- **Durant Street:** $708,295
- **Total Proposed:** $869,875
- **Amount Over GLO-Eligible Limit:** $128,683

Staff recommends approval of the agreement with GFT.

Funding Expected: Revenue _ ExpenditureX N/A __ **Budgeted Item:** Yes __ No _ N/A X

Funding Acount: ___ **Amount:** ____ **1295 Form Required?** Yes X No __

Legal Review Required: N/A __ Required X **Date Completed:** 6/23/2025 SH

Finance Review Required: N/A __ Required X **Date Completed:** CT 6/23/2025

Supporting documents attached:

1. M-1 Crossing Proposal
2. Durant Road Proposal

Recommendation: Move to approve an Agreement with GFT Engineering for design engineering services related to the Texas General Land Office – Community Development and Revitalization (GLO-CDR) Grant No. 24-065-151-F010, for flood and drainage improvements along Durant Street and the M-1 Crossing, and authorize the Mayor to execute all necessary documents upon legal review.

Reviewed by Department Head, if applicable: __
Reviewed by Chief Financial Officer, if applicable: X
Reviewed by City Attorney, if applicable: __
Reviewed by City Manager, if applicable: X

GFT

Ingenuity That Shapes Lives™

June 4, 2025

Ms. Michelle Segovia, PE, CFM
City Engineer
City of Alvin
1100 W. Hwy. 6
Alvin, TX 77511

Subject: **M-1 Culvert Crossing at South Street**

Dear Ms. Segovia,

GFT previously DE Corp (DEC) is pleased to submit this proposal for the design of the M-1 culvert crossing replacement and improvements at South Street. DEC previously designed and submitted the 90% design plans for the M-1 culvert crossing in January 2015. GFT will leverage all data from the January 2015 90% PS&E submittal and update to current topographic conditions, standards, details, costs, and specifications.

GFT is currently reviewing if the box culverts at the crossing can be precast and meet the current design standards or if the box culverts need to be cast in place. The existing crossing is to be removed and replaced within the existing limits. The culvert crossing South Street at an extreme skew which is more than the allowable skew angle for traditional precast box culverts. Due to the crossing angle, skew, of approximately 68 degrees (plus or minus) the design span exceeds 20 feet and the cover over the structure is less than 2 feet, therefore the culvert is classified as a bridge class culvert. Bridge-size culverts are defined as any structure, whether of single-span or multiple-span construction, with an interior width greater than or equal to 20 feet when measured horizontally along the centerline of the roadway from face-to-face (inside) of the extreme abutments or sidewalls. The use of precast culverts is typically ideal structure for skews less than 30 degrees. Skewed units may need more reinforcement and thicker slabs and/or sidewalls. The use of skewed units will increase the cost of the culvert due to increased fabrication costs. At this time, GFT has reached out to Forterra/Rinker for their technical input as to the maximum allowable skew for precast reinforced concrete box structures.

The following are assumptions used for the proposed scope and fee:

- Box culverts are to be designed and cast in place.
- No public or private utility improvements are proposed.
- Utility conflicts and utility relocations will be addressed.

Presented below is a scope of work, engineering fees and schedule for the project.

SCOPE:

1. **Data Collection**

Topographic survey was completed by Gormly Survey and a geotechnical investigation was completed by Apex GeoScience in 2014. An update to the survey including verification of project benchmarks and/or establishment of benchmarks, if the previous benchmarks has been destroyed. Kuo surveying will perform the survey update. GFT will prepare a limited survey data request, where necessary, to update the previously obtained survey data, including public and private utilities.

2. **Design**

GFT will perform engineering services for the preparation of the PS&E for the proposed M-1 culvert crossing replacement and improvements at South Street. GFT will leverage all data from the January 2015 90% PS&E submittal. The list of sheets below from the January 2015 will be revised and updated:

- Cover Sheet
- Notes
- Survey Control
- Culvert Crossing Demo
- Culvert Crossing and Channel Improvements
- Culvert Crossing Profile & Sections
- Cast-In-Place Box Culvert Plan
- Cast-In-Place Box Culvert Details
- TxDOT Concrete Wingwalls Detail
- Pavement Details
- Traffic Control Plan
- Storm Water Pollution Prevention Plan
- Storm Water Pollution Prevention Details
- Concrete Channel Lining Details
- Culvert Crossing Miscellaneous Details
- Bridge Railing Standard Details

The PS&E will include the following:

- Plan Update – 50% Submittal and Approval
  - Update proposed project drawings.
  - Update preliminary quantities, cost estimate, and project manual, including specifications.
- Final Plan Review – 90% Submittal and Approval
  - Prepare/revise final construction plans, cost estimate, and draft specifications.
  - Obtain approval signatures from utility and/or pipeline companies, other governmental agencies, or municipalities.
- Final Plan Approval – 100% Submittal and Approval
  - Submit digital and two hard copies of the Final Plans.
  - Submit Final Project Manual.
  - Submit opinion of probably construction cost.

3. **Project Management**

Project management include internal and external coordination, including the preparation or agendas and meeting minutes.

4. **Bid Phase Services**

GFT will provide bid phase services for the project including attending the pre bid meeting, preparing the bid tabulation, checking references, and providing a letter of recommendation.

5. **Limited Construction Phase Services**

GFT will conduct limited construction phase services for the project. Construction Phase Services will include the following tasks:

- Preconstruction meeting
  - GFT will prepare for and attend the preconstruction meeting. Meeting minutes will be prepared and provided to the City for preparation of an addendum to the contract documents.
- Project Site Visits and Construction meetings
  - GFT will attend up to 3 monthly construction progress meetings and prepare meeting minutes.
  - Routine Construction Site Visits - GFT will visit the sites after each construction progress meeting 3 to observe the progress and look for items that should be addressed.
- Review and respond to submittals
  - GFT will review submittals and shop drawings to ensure they conform to the contract documents. GFT will keep a submittal tracking log with the date received, date returned and the status of the submittal.
- Respond to Requests for information (RFI)
  - GFT will review and provide clarity to contractor request for information. The RFI will be reviewed, and direction will be provided in a timely manner.
- Review Change Orders to the Plans
  - If the contractor submits a change order for unforeseen conditions or possible cost reduction measures GFT will review the contractor scope and cost breakdown and provide a recommendation to the City of approving or denying the change order.
- Substantial Completion Walk-thru
  - Once the contractor reaches a substantially complete level of construction and once the contractor requests that a substantially complete walk-thru be scheduled, GFT will attend the walk-thru and create a punch list of items that need to be addressed prior to accepting the project. The punch list will be agreed upon by the City and contractor prior to completing the walk-thru.
- Final Completion Walk-thru
  - When the contractor notifies the City that the construction is completed, and all the punch list items have been addressed a final completion walk-thru

will be scheduled. GFT will attend the walk-thru and if completed provide a recommendation to the City to accept the construction is completed.

- Prepare Record Drawings for the City
    - GFT will compile the redline drawings from the contractor and prepare record drawings for submittal to the City.

6. **Other Direct Costs**

Other direct costs for this project include mileage and supplies. The cost of the survey is estimated for this proposal and will not exceed $5,000.

Any changes to the assumptions above will results in a revised scope and fee.

The engineering fees for the above tasks is $161,580 are presented in detail on Attachment 1. The time for completion of the PS&E will be approximately 6 months from approval of this proposal.

We appreciate the opportunity to present this proposal and to continue working with the City of Alvin on this project. Should you have any questions or need additional information, please do not hesitate to call me at 713-527-6328.

Sincerely yours,

GFT

Amy E. Dziuk, P.E.
H&H Project Manager

Attachments

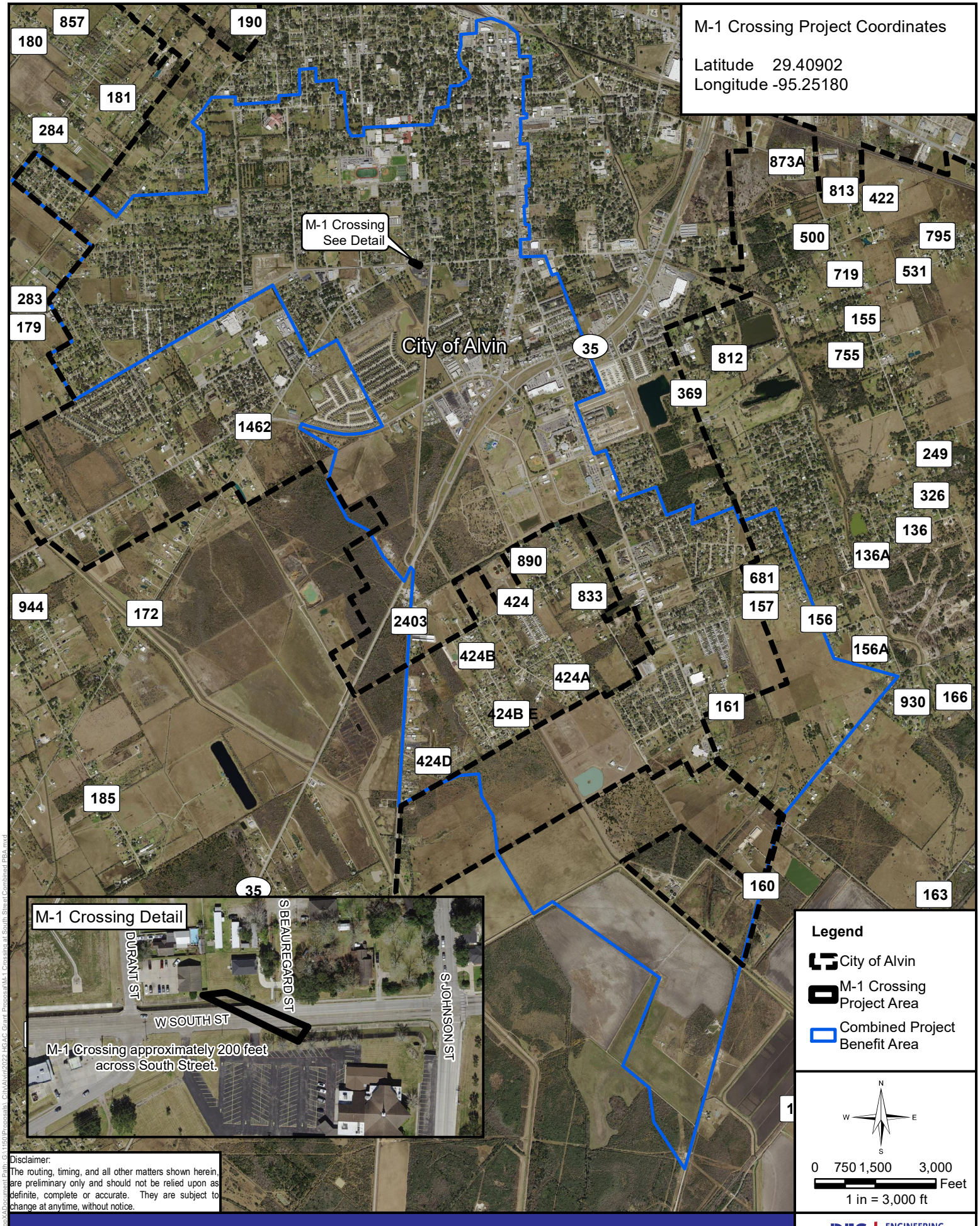
1. Fee Estimate

ATTACHMENT 1

M-1 Culvert Crossing at South Street

FEE ESTIMATE

TASK DESCRIPTION	Principle $350.00	Project Manager $275.00	Engineer IV $180.00	CADD Designer $150.00	Clerical $105.00	Total Labor Hours	TOTAL COST/ TASK
PS&E							
1. DATA COLLECTION	**0**	**2**	**10**	**8**	**0**	**20**	$3,550.00
SURVEY REQUEST			4	2		6	$1,020.00
CONFIRM EXISTING AND PROPOSED UTILITIES		1	2	2		5	$935.00
COORDINATE WITH PRIVATE UTILITIES & CONFLICT RESOLUTION		1	4	4		9	$1,595.00
2. DESIGN	**0**	**56**	**227**	**182**	**6**	**471**	$84,190.00
COVER SHEET			2	4		6	$960.00
NOTES			2	4		6	$960.00
SURVEY CONTROL			2	4		6	$960.00
CULVERT CROSSING DEMO			2	8		10	$1,560.00
CULVERT CROSSING AND CHANNEL IMPROVEMENTS			4	8		12	$1,920.00
CULVERT CROSSING PROFILE AND SECTIONS			4	8		12	$1,920.00
CAST IN PLACE BOX CULVERT PLAN		4	40	8		52	$9,500.00
CAST IN PLACE BOX CULVERT DETAILS - 3 SHEETS		4	40	16		60	$10,700.00
TxDOT CONCRETE WINGWALLS DETAIL			2	6		8	$1,260.00
PAVEMENT DETAILS			4	4		8	$1,320.00
TRAFFIC CONTROL PLAN		1	2	6		9	$1,535.00
TRAFFIC CONTROL DETOUR PLAN		1	2	6		9	$1,535.00
STROM WATER POLLUTION PREVENTION PLAN			2	2		4	$660.00
STORM WATER POLLUTION PREVENTION DETAILS				2		2	$300.00
CONCRETE CHANNEL LINING DETAILS		1	4	2		7	$1,295.00
CULVERT CROSSING MICVELLANEOUS DETAILS - 2 SHEETS		1	4	12		17	$2,795.00
BRIDGE RAILING STANDARD DETAILS		1		4		5	$875.00
PREPARE SIGNING AND PAVEMENT MARKING PLAN		1	2	4		7	$1,235.00
PREPARE SIGNING AND PAVEMENT MARKING STANDARDS			2	4		6	$960.00
BORING LOGS			1	4		5	$780.00
50% PLAN UPDATE							
50% Cost Estimate		4	8	8		20	$3,740.00
QAQC of (PS&E) @ 50%		4	8	8		20	$3,740.00
Preparation of Project Manual 50%		4	16			20	$3,980.00
Preparation of Submittals (PS&E) @ 50%			4	4	2	10	$1,530.00
Submittal Coordination/Response		4	4	4		12	$2,420.00
90% FINAL PLAN REVIEW							
90% Cost Estimate		4	8	8		20	$3,740.00
QAQC of (PS&E) @ 90%		4	8	8		20	$3,740.00
Preparation of Project Manual 90%		4	16			20	$3,980.00
Preparation of Submittals (PS&E) @ 90%			4	4	2	10	$1,530.00
Submittal Coordination/Response		4	4	4		12	$2,420.00
100% FINAL PLAN APPROVAL							
100% Cost Estimate		2	4	4		10	$1,870.00
QAQC of (PS&E) @ 100%		4	8	8		20	$3,740.00
Preparation of Project Manual 100%		2	8			10	$1,990.00
Preparation of Submittals (PS&E) @ 100%			4	4	2	10	$1,530.00
Submittal Coordination/Response		2	2	2		6	$1,210.00
3. PROJECT MANAGEMENT	**4**	**18**	**10**	**2**	**4**	**38**	$8,870.00
PREPARE MONTHLY INVOICES		8			2	10	$2,410.00
ATTEND ALVIN PROJECT MEETINGS (2 Meetings)	4	8	8		2	22	$5,250.00
COORDINATE WITH SUBCONSULTANTS (KUO)		2	2	2		6	$1,210.00
4. BID PHASE SERVICES	**2**	**18**	**16**	**0**	**8**	**44**	$9,370.00
ATTEND PREBID MEETING		6				6	$1,650.00
EVALUATE BID		6	8		2	16	$3,300.00
PREPARE ENGINEER LETTER OF RECOMMENDATION		2	2		4	8	$1,330.00
PREPARE BID TABULATION		2	4		2	8	$1,480.00
ATTEND CITY COUNCIL MEETING	2	2	2			6	$1,610.00
5. CONSTRUCTION PHASE SERVICES	**0**	**78**	**90**	**56**	**10**	**234**	$47,100.00
PRECONSTRUCTION MEETING		6	6			12	$2,730.00
PROJECT SITE VISITS AND CONSTRUCTION MEETINGS		16	16		4	36	$7,700.00
REVIEW AND RESPOND TO SUBMITTALS		4	6	6	2	18	$3,290.00
REVIEW SHOP DRAWINGS		12	12	10	2	36	$7,170.00
REVIEW SHORING AND FORMING DETAILS		8	12	2		22	$4,660.00
RESPOND TO RFIs		12	12	10	2	36	$7,170.00
ASSIST CHANGE ORDER REVIEW & PREPARATION		8	10	4		22	$4,600.00
REVIEW MATERIAL TESTING		4	4			8	$1,820.00
PREPARE FINAL COMPELTION & ACCEPTANCE LETTER		4	4			8	$1,820.00
PREPARE RECORD DRAWINGS		4	8	24		36	$6,140.00
DIRECT EXPENSES							$3,500.00
TRAVEL							$2,500.00
50%, 90%, AND 100% P,S,& E DRAWING SETS (Two Sets Each)							$1,000.00
TOTAL ENGINEERING SERVICES BASIC FEE	**6**	**172**	**353**	**248**	**28**	**807**	**$ 156,580.00**
TOPOGRAPHIC SURVEY							**$ 5,000.00**
TOTAL							**$ 161,580.00**



June 5, 2025

Ms. Michelle Segovia, PE, CFM
City of Alvin
1100 W. Hwy. 6
Alvin, Texas 77511

RE: **Durant Street Storm Sewer and Pavement Improvements**

Dear Ms. Segovia:

GFT previously DE Corp is pleased to submit this proposal for the analysis and design of the proposed roadway and storm sewer improvements on Durant Street in an effort to reduce street flooding for the 5-year event. A Drainage Impact Analysis (DIA) and 30% Preliminary Engineering Report (PER) for roadway and drainage design will be completed for Durant Street. The results of the DIA and PER (Preliminary Engineering Report) will be used to produce a construction plan set for the proposed improvements on Durant Street. See attached Exhibit 1 for proposed the proposed Durant Street Construction project limits.

The following are assumptions used for this proposal:

- 30 foot wide roadway with 4 foot sidewalks (5 foot wide if adjacent to curb) on East side of road
- Concrete curb and gutter road
- Removal and replacement of driveways along project area will be considered
- Lateral connections from side streets to main trunkline will be considered
- Durant Street crossing over M-1 is to be replaced with a wider curb return radii
- Side streets and offsite areas connecting to proposed storm sewer to be left as is
- Existing street lighting system is to be left as is
- No utility improvements are proposed
- Utility conflicts and utility relocations will be addressed

The tasks and associated costs that will be required for the proposed analysis and design are listed below:

1.0 **<u>Data Collection</u>**

A survey of existing storm sewer pipes, manholes, inlets, etc. along Durant Street and the surrounding area will need to be completed. Survey for the M-1 crossing project will be included in the Durant Road project. A geotechnical investigation will be required for the proposed project.

2.0 Drainage Impact Analysis & 2011 M-1 Ditch Watershed Study Update

To optimize the size of the proposed storm sewer and ensure no interim downstream impacts on M-1, the existing and proposed conditions will be modeled using XP-SWMM. The model will also include inlet analysis and enhancements to the lateral side streets. Drainage areas for the existing and proposed condition will be delineated and peak flows for these areas will be calculated using the Rational Method. Small Watershed Hydrographs will then be created. The hydrographs will be used as inputs at the proper locations into the XP-SWMM model. The XP-SWMM model will calculate the existing and proposed conditions peak out flows and hydraulic grade line. The proposed condition results will be compared with existing conditions to show that the proposed improvements will not cause adverse impacts. The M-1 HEC-RAS model will be updated with the proposed outfall flows at Durant Street and proposed condition M-1 water surface elevations will be reviewed for impacts. A letter drainage impact analysis (DIA) report will be prepared and submitted as an Appendix to the M-1 Watershed Study to document the proposed improvements.

3.0 30% Preliminary Roadway & Drainage Design

A 30% preliminary roadway design will be completed for Durant Road. GFT will prepare a PER documenting the proposed improvements, design constraints, utility conflicts, opinion of construction cost and construction time duration.

4.0 Durant Road Plans, Specifications, & Cost Estimate

4.1 Preliminary Plan Layout (Redline Design) – 60% Submittal and Approval

1. Prepare preliminary drawings. (Layout, project control, and profile)
2. Prepare preliminary quantities, cost estimate, and a list of specifications.

4.2 Final Plan Review – 90% Submittal and Approval

1. Prepare/revise final construction plans, cost estimate, and draft specifications.
2. Obtain approval signatures from utility and/or pipeline companies, other governmental agencies or municipalities.

4.3 Final Plan Approval – 100% Submittal and Approval

1. Submit 2 paper copies of the Final Plans and 1 digital copy, signed and sealed by a Professional Engineer.
2. Submit Specifications, unbound, signed and sealed by a Professional Engineer.
3. Submit opinion of probable construction cost.

5.0 Limited Construction Phase Services

GFT will conduct limited construction phase services such as; evaluation of bid, prepare engineer letter of recommendation and prepare bid tabulation. Construction Phase Services will also include the following tasks:

- Preconstruction meeting
    - GFT will prepare for and attend the preconstruction meeting. Meeting

minutes will be prepared and provided to the City for preparation of an addendum to the contract documents.

- Project Site Visits and Construction meetings
  - GFT will attend up to 12 monthly construction progress meetings and prepare meeting minutes.
  - Routine Construction Site Visits - GFT will visit the sites after each construction progress meeting 12 to observe the progress and look for items that should be addressed.
- Review and respond to submittals
  - GFT will review submittals and shop drawings to ensure they conform to the contract documents. GFT will keep a submittal tracking log with the date received, date returned and the status of the submittal.
- Respond to Requests for information (RFI)
  - GFT will review and provide clarity to contractor request for information. The RFI will be reviewed, and direction will be provided in a timely manner.
- Review Change Orders to the Plans
  - If the contractor submits a change order for unforeseen conditions or possible cost reduction measures GFT will review the contractor scope and cost breakdown and provide a recommendation to the City of approving or denying the change order.
- Substantial Completion Walk-thru
  - Once the contractor reaches a substantially complete level of construction and once the contractor requests that a substantially complete walk-thru be scheduled, GFT will attend the walk-thru and create a punch list of items that need to be addressed prior to accepting the project. The punch list will be agreed upon by the City and contractor prior to completing the walk-thru.
- Final Completion Walk-thru
  - When the contractor notifies the City that the construction is completed, and all the punch list items have been addressed a final completion walk-thru will be scheduled. GFT will attend the walk-thru and if completed provide a recommendation to the City to accept the construction is completed.
- Prepare Record Drawings for the City
  - GFT will compile the redline drawings from the contractor and prepare record drawings for submittal to the City.

6.0 Project Management

GFT will attend progress meetings with the City of Alvin staff, coordinate with sub-consultants, and perform QA/QC prior to all milestone submittals.

The cost for the tasks associated with pavement and drainage improvements is shown in the table below.

TOTAL PRELIMINARY ENGINEERING SERVICES BASIC FEE	$182,310.00
TOTAL PLANS, SPECIFICATIONS, AND ESTIMATE BASIC FEE	$476,085.00
TOTAL ENGINEERING SERVICES BASIC FEE	$658,395.00
KUO & ASSOCIATES, INC.	$ 36,400.00
TERRACON ENGINEERING, INC.	$ 12,000.00
ADS (TAS Review)	$ 1,500.00
TOTAL PROJECT COST	**$708,295.00**

A breakdown of the task is provided in the attached fee estimate. The time for completion of the 30% Preliminary Roadway Design and Drainage Impact Study is 4 months (includes sub consultant field investigation). The time for completion of the 100% Durant Road Design is 8 months from the City's approval of the 30% PER and DIS.

We appreciate the opportunity to present this proposal and to continue working with the City of Alvin on this important project. If you have any questions or comments concerning this proposal, please feel free to contact me at 713-527-6323 or adziuk@gftinc.com.

Sincerely yours,
GFT

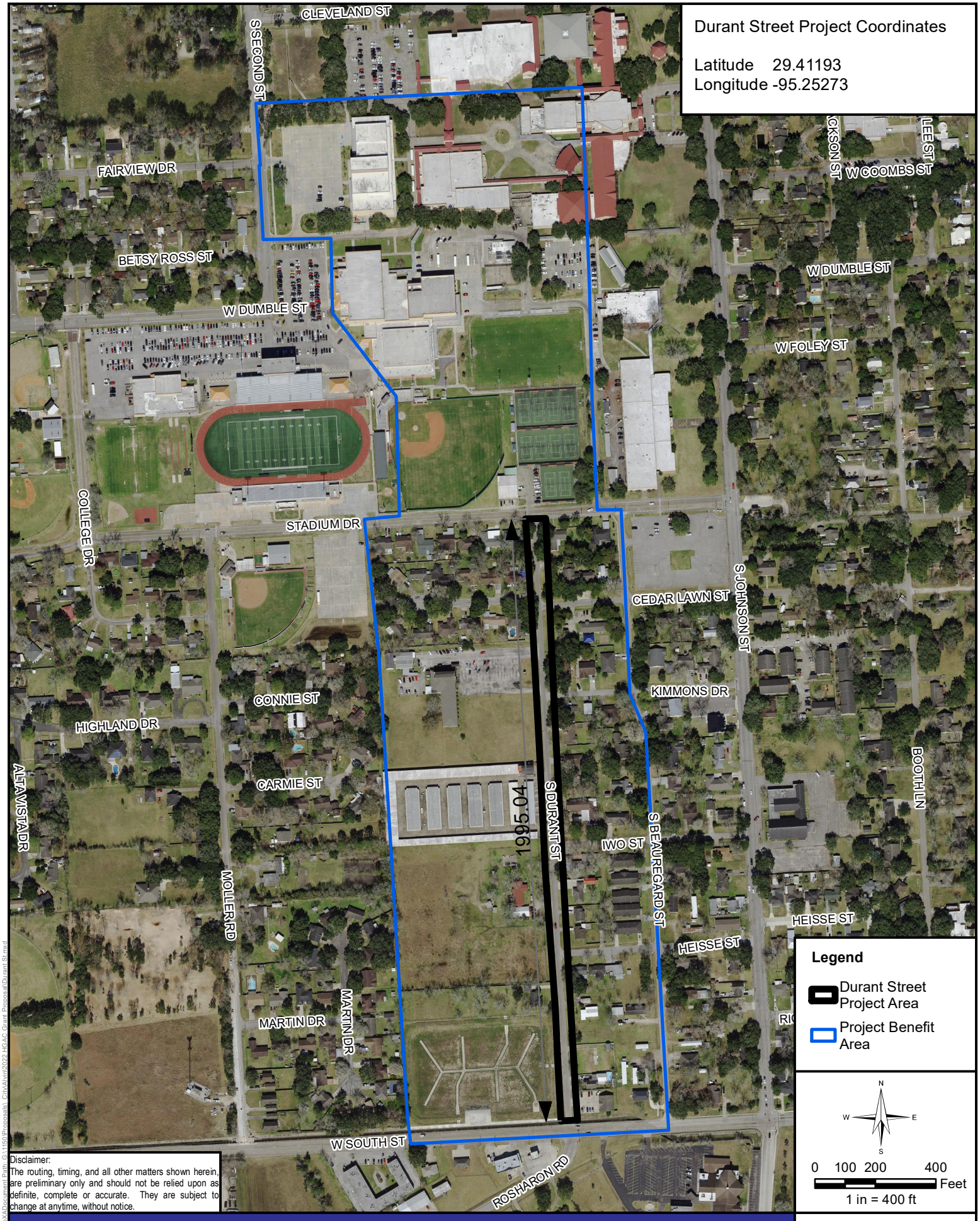
Amy E. Dziuk, P.E., CFM
H&H Project Manager

APPROVED BY THE CITY OF ALVIN

_____ Dated:_____

Attachments

1. Proposed Project Cost Estimate
2. Exhibit 1 Proposed Project Limits



Durant Street

DEC | ENGINEERING EXCELLENCE

Date: November 2022 Page 1 of 1

GFT

DURANT STREET DESIGN - 11 MONTHS DESIGN

TASK DESCRIPTION	Principle $350.00	Senior Engineer $275.00	Engineer IV $180.00	CADD Designer EIT $150.00	Clerical $105.00	Total Labor Hours	TOTAL COST/ TASK
PRELIMINARY ENGINEERING [3 MONTHS] (FROM DURANT STREET M-1 CROSSING TO STADIUM DRIVE)							
REVIEW EXISTING DATA	**0**	**22**	**24**	**16**	**0**	**62**	$12,770.00
OBTAIN AND REVIEW ALVIN PLANS [School, Water, Sanitary, Drainage]		2	2			4	$910.00
OBTAIN AND REVIEW ALVIN DESIGN CRITERIA AND STANDARDS		2	2	2		6	$1,210.00
DETERMINE EXISTING AND PROPOSED UTILITIES		6	6	8		20	$3,930.00
PREPARE AND ATTEND UTILITY COORDINATION MEETINGS		4	6			10	$2,180.00
REVIEW EXISTING STUDIES AND CONSTRUCTION PLANS		2	2	4		8	$1,510.00
REVIEW GEOTECHNICAL INVESTIGATION REPORT		4	4			8	$1,820.00
REVIEW SURVEY DATA AND PREPARE EXISTING DTM (GIS)		2	2	2		6	$1,210.00
ROADWAY DESIGN	**0**	**52**	**98**	**136**	**0**	**286**	$52,340.00
DETERMINE GEOMETRIC DESIGN		4	4			8	$1,820.00
CREATE DTM [Surveyor]						0	$0.00
PREPARE EXISTING CROSS SECTIONS			8	4		12	$2,040.00
DEVELOP HORIZONTAL ALIGNMENT DESIGN		4	8	4		16	$3,140.00
DEVELOP VERTICAL ALIGNMENT DESIGN		4	8	4		16	$3,140.00
DEVELOP SIDEWALK ALIGNMENT		4	8	4		16	$3,140.00
DEVELOP ROADWAY DESIGN		4	8	4		16	$3,140.00
DESIGN PAVEMENT SECTION (Terracon)						0	$0.00
DESIGN WIDENING OF MOLLER CROSSING OVER M-1 AT SOUTH STREET		4	4	4		12	$2,420.00
PREPARE TITLE/COVER/INDEX SHEET		2	4	8		14	$2,470.00
PREPARE PROJECT LAYOUT (1"=200')		2	2	8		12	$2,110.00
PREPARE EXISTING TYPICAL SECTIONS		4	6	8		18	$3,380.00
PREPARE PROPOSED TYPICAL SECTIONS		4	6	8		18	$3,380.00
PREPARE ROADWAY PLAN AND PROFILE (1"=20')		8	16	40		64	$11,080.00
PREPARE EXISTING AND PROPOSED UTILITY P&P (Combine with Roadway)		8	16	40		64	$11,080.00
DRAINAGE IMPACT ANALYSIS & DESIGN	**0**	**20**	**184**	**204**	**2**	**410**	$69,430.00
DEVELOP DRAINAGE AREAS AND FLOW PATTERNS FOR EXISTING & PROPOSED CONDITIONS		4	24	8		36	$6,620.00
DEVELOP PEAK FLOWS FOR EXISTING & PROPOSED CONDITIONS		2	16			18	$3,430.00
DEVELOP HYDROGRAPHS FOR XP-SWMM MODEL			8			8	$1,440.00
DEVELOP XP-MODEL FOR EXISTING & PROPOSED CONDITIONS		4	80	80		164	$27,500.00
UPDATE M-1 HEC-RAS MODEL			8	16		24	$3,840.00
DRAINAGE IMPACT ANALYSIS LETTER REPORT (TEXT, TABLES & EXHIBITS)		2	24	20	2	48	$8,080.00
PREPARE DRAINAGE PLAN AND PROFILE (1"=20')(Combine with Roadway)(6 Sheets)		8	24	80		112	$18,520.00
PRELIMINARY ENGINEERING REPORT SUBMITTAL	**2**	**38**	**70**	**56**	**12**	**178**	$33,410.00
DETERMINE/CHECK QUANTITIES		8	16	40		64	$11,080.00
PREPARE OPINION OF CONSTRUCTION COST		8	16	8		32	$6,280.00
PREPARE OPINION OF CONSTRUCTION TIME DETERMINATION		4	4			8	$1,820.00
PREPARE DRAFT PRELIMINARY ENGINEERING SUBMITTAL		6	16		8	30	$5,370.00
CONDUCT QC ON PRELIMINARY ENGINEERING	2	4	6			12	$2,880.00
SUBMIT DRAFT PRELIMINARY ENGINEERING SUBMITTAL			2		2	4	$570.00
ADDRESS ALVIN COMMENTS		8	8	8		24	$4,840.00
SUBMIT FINAL PRELIMINARY ENGINEERING SUBMITTAL			2		2	4	$570.00
PRELIMINARY PROJECT MANAGEMENT (3 MONTHS)	**10**	**22**	**16**	**0**	**6**	**54**	$13,060.00
PREPARE MONTHLY INVOICES (Three Months)		6			6	12	$2,280.00
ATTEND ALVIN PROJECT MEETINGS (1 Meeting)	4	4	4			12	$3,220.00
ATTEND PUBLIC MEETING (One Meeting)	4	4	4			12	$3,220.00
COORDINATE WITH SUB-CONSULTANTS	2	8	8			18	$4,340.00
DIRECT EXPENSES							$1,300.00
TRAVEL							$1,000.00
TWO PRELIMINARY ENGINEERING SUBMITTAL COPIES							$300.00
TOTAL PRELIMINARY ENGINEERING SERVICES BASIC FEE	**12**	**154**	**392**	**412**	**20**	**990**	$182,310.00
PS&E [FINAL][8 MONTHS] (FROM DURANT STREET M-1 TO STADIUM DRIVE)							
ROADWAY DESIGN [60, 90, 100 Percent]	**0**	**162**	**174**	**344**	**0**	**680**	$127,470.00
REVIEW DATA		2	2	2		6	$1,210.00
PREPARE TITLE/COVER/INDEX SHEET		2	2	6		10	$1,810.00
LEGEND		2	2	4		8	$1,510.00
GENERAL NOTES		4	4	8		16	$3,020.00
PREPARE PROJECT LAYOUT (1"=200')		2	2	8		12	$2,110.00
SURVEY CONTROL MAP		2	2	4		8	$1,510.00
PREPARE EXISTING TYPICAL SECTIONS		2	2	4		8	$1,510.00
PREPARE PROPOSED TYPICAL SECTIONS		4	4	8		16	$3,020.00
PREPARE DEMO SHEETS & CALCULATE REMOVAL QUANTITIES		2	4	4		10	$1,870.00
PREPARE ROADWAY PLAN AND PROFILE (1"=20')		40	40	80		160	$30,200.00
PREPARE SIDE STREET PLAN AND PROFILE (1"=20')		40	40	80		160	$30,200.00
ROADWAY CROSS SECTION SHEETS		20	20	40		80	$15,100.00
DRIVEWAY SCHEDULE		8	16	24		48	$8,680.00
CALCULATE ROADWAY, CROSS STREETS, DRIVEWAY, AND SIDEWALK QUANTITIES		16	16	40		72	$13,280.00
CALCULATE FAST TRACK PAVING QUANTITIES		4	6	8		18	$3,380.00
ALIGNMENT DATA		2	2	2		6	$1,210.00
PRPEARE SOIL BORING LOG SHEETS		2	2	6		10	$1,810.00
PREPARE ROADWAY STANDARDS		8	8	16		32	$6,040.00
DRAINAGE [60, 90, 100 Percent]	**0**	**56**	**108**	**196**	**0**	**360**	$64,240.00
EXISTING RUNOFF COMPUTATIONS & DRAINAGE AREA MAP		2	8	6		16	$2,890.00
PROPOSED RUNOFF COMPUTATIONS & DRAINAGE AREA MAP		2	8	6		16	$2,890.00
PREPARE DRAINAGE PLAN AND PROFILE (1"=20')(Combine with Roadway)(2 sheets)		16	20	80		116	$20,000.00
PREPARE DRAINAGE LATERAL PROFILES		8	16	24		48	$8,680.00
M-1 CULVERT PLAN AND PROFILE		8	16	24		48	$8,680.00
PRE-FABRICATED RCB JUNCTION BOX		8	16	16		40	$7,480.00
PREPARE DRAINAGE STANDARD SHEETS		8	8	16		32	$6,040.00
CALCULATE DRAINAGE QUANTITIES		4	16	24		44	$7,580.00
UTILITY COORDINATION (Preliminary and Final)	**0**	**31**	**57**	**62**	**2**	**152**	$28,295.00
CONFIRM EXISTING AND PROPOSED UTILITIES		4	6	6		16	$3,080.00
PREPARE AND ATTEND UTILITY COORDINATION MEETINGS (One Meetings during PS&E)		3	3			6	$1,365.00
PREPARE EXISTING AND PROPOSED UTILITY P&P (1'=20')(PS&E)		12	24	40		76	$13,620.00
PREPARE UTILITY STANDARDS(PS&E)		4	8	8		20	$3,740.00
COORDINATE WITH PRIVATE UTILITIES & CONFLICT RESOLUTION		8	16	8	2	34	$6,490.00
SWPPP	**0**	**16**	**30**	**46**	**0**	**92**	$16,700.00
PREPARE SWPPP TEXT		4	4	6		14	$2,720.00
PREPARE SWPPP STANDARDS [PS&E]		4	4	10		18	$3,320.00
PREPARE SWPPP PLAN (1"=20')(PS&E)		4	16	24		44	$7,580.00
CALCULATE SWPPP QUANTITIES [PS&E]		4	6	6		16	$3,080.00
TRAFFIC CONTROL PLANS	**0**	**26**	**28**	**54**	**0**	**108**	$20,290.00
PREPARE TRAFFIC CONTROL PLANS (1"=200')(PS&E)		8	8	16		32	$6,040.00
PREPARE TRAFFIC CONTROL PLAN DETOUR		8	8	16		32	$6,040.00
PREPARE TRAFFIC CONTROL PLAN NOTES		2	4	4		10	$1,870.00
PREPARE TRAFFIC CONTROL STANDARDS [PS&E]		4	4	10		18	$3,320.00
CALCULATE TRAFFIC CONTROL QUANTITIES [PS&E]		4	4	8		16	$3,020.00

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DURANT STREET DESIGN - 11 MONTHS DESIGN

TASK DESCRIPTION	Principle $350.00	Senior Engineer $275.00	Engineer IV $180.00	CADD Designer EIT $150.00	Clerical $105.00	Total Labor Hours	TOTAL COST/ TASK
SIGNING AND PAVEMENT MARKINGS [60, 90, 100 Percent]	**0**	**16**	**16**	**30**	**0**	**62**	$11,780.00
PREPARE SIGNING AND PAVEMENT MARKING PLAN		8	8	16		32	$6,040.00
PREPARE SIGNING AND PAVEMENT MARKING STANDARDS		4	4	8		16	$3,020.00
CALCULATE SIGNING AND PAVEMENT MARKING QUANTITIES		4	4	6		14	$2,720.00
FINAL ENGINEERING SUBMITTAL	**0**	**66**	**116**	**80**	**20**	**282**	$53,130.00
DETERMINE/CHECK QUANTITIES		8	4	16		28	$5,320.00
PREPARE OPINION OF CONSTRUCTION COST		8	8	8		24	$4,840.00
PREPARE OPINION OF CONSTRUCTION TIME DETERMINATION		8	4			12	$2,920.00
PREPARE GENERAL NOTES		8	8	4		20	$4,240.00
PREPARE SPECIFICATIONS		8	40	16	8	72	$12,640.00
PREPARE BID DOCUMENTS		8	40	16	8	72	$12,640.00
CONDUCT QC ON FINAL ENGINEERING		16	8	16		40	$8,240.00
PREPARE AND SUBMIT FINAL ENGINEERING SUBMITTAL (ALVIN)		2	4	4	4	14	$2,290.00
FINAL PROJECT MANAGEMENT (8 MONTHS)	**8**	**50**	**34**	**16**	**16**	**124**	$26,750.00
PREPARE MONTHLY INVOICES (8 Months)		16			8	24	$5,240.00
ATTEND ALVIN PROJECT MEETINGS (2 Meetings)		8	8		2	18	$3,850.00
INTERNAL COORDINATION	2	8	8	8	2	28	$5,750.00
EXTERNAL COORDINATION	2	8	8	8	2	28	$5,750.00
GA CONSULTANT COORDINATION	2	6	6		2	16	$3,640.00
QA/QC	2	4	4			10	$2,520.00
DURANT BID PHASE SERVICES	**2**	**20**	**24**	**10**	**10**	**66**	$13,070.00
ATTEND PREBID MEETING		6	6	6		18	$3,630.00
BID ADVERSTISEMENT			2		2	4	$570.00
EVALUATE BID / BID TABULATION		6	8		4	18	$3,510.00
RESPONSE TO BIDDER QUESTIONS & ADDENDUMS		4	4	4		12	$2,420.00
PREPARE ENGINEER LETTER OF RECOMMENDATION		2	2		4	8	$1,330.00
ATTEND CITY COUNCIL MEETING	2	2	2			6	$1,610.00
DURANT LIMITED CONSTRUCTION PHASE SERVICES (12 MONTHS)	**3**	**202**	**218**	**158**	**18**	**599**	$121,430.00
PRECONSTRUCTION MEETING		6	6			12	$2,730.00
PROJECT SITE VISITS AND CONSTRUCTION MEETINGS (1 PER MONTH - 12 MONTHS)		48	48		12	108	$23,100.00
SPECIAL CONSTRUCTION SITE MEETINGS (2 MEETINGS)		8	8	8		24	$4,840.00
REVIEW AND RESPOND TO SUBMITTALS		16	24	40		80	$14,720.00
REVIEW SHOP DRAWINGS		16	16	10	2	44	$8,990.00
REVIEW SHORING AND FORMING DETAILS		8	8	2		18	$3,940.00
RESPOND TO RFIs	1	12	12	10	2	37	$7,520.00
RESPOND TO GENERAL QUESTIONS	1	8	8	4		21	$4,590.00
ASSIST CHANGE ORDER REVIEW & PREPARATION	1	16	24	24		65	$12,670.00
REVIEW PAY APPLICATIONS		24	16			40	$9,480.00
REVIEW MATERIAL TESTING		16	16			32	$7,280.00
SUBSTANTIAL COMPLETION WALK-THRU		6	6			12	$2,730.00
FINAL CONSTRUCTION WALK-THRU		6	6			12	$2,730.00
PREPARE FINAL COMPLETION & ACCEPTANCE LETTER		2	4		2	8	$1,480.00
PREPARE RECORD DRAWINGS		10	16	60		86	$14,630.00
DIRECT EXPENSES							$6,000.00
TRAVEL							$5,000.00
60%, 90%, AND 100% P,S,& E DRAWING SETS (Two Sets Each)							$1,000.00
TOTAL PLANS, SPECIFICATIONS, AND ESTIMATE BASIC FEE	**11**	**625**	**781**	**986**	**56**	**2459**	$476,085.00
TOTAL ENGINEERING SERVICES BASIC FEE	**23**	**779**	**1,173**	**1,398**	**76**	**3449**	$658,395.00

KUO & ASSOCIATES, INC.	$36,400.00
TERRACON ENGINEERING, INC.	$12,000.00
ADS (TAS Review)	$1,500.00
TOTAL PROJECT COST	$708,295.00