WORK AUTHORIZATION NO. 2

PROJECT: On Call Design Engineering Services for Small Drainage and Small Roadway Projects

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>May 31, 2022</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Gray Engineering, Inc.** (the "Engineer").

- Part1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.
- Part 2. The maximum amount payable for services under this Work Authorization without modification is \$50,000.00.
- Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.
- Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on **November 30, 2024**. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.
- Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.
- Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.
- Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this day of, 20	
ENGINEER:	COUNTY:
Gray Engineering, Inc.	Williamson County, Texas
By: Signature	By: Bill Gravell (Nov 10, 2022 10:29 CST) Signature
David W. Gray, PE Printed Name	Bill Gravell, Jr. Printed Name
President Title	County Judge Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

Attachment A - Services to be Provided by County

Williamson County Road & Bridge Division personnel will provide:

- Project direction, review and oversight
- Existing LIDAR contours and apparent ROW (Wilco's GIS Department)
- Any existing culvert sizes and elevations
- Construction oversight, administration and management

Attachment B - Services to be Provided by Engineer

Project Locations:

As identified by Williamson County Engineer's Office

Task 1: Project Management

Attend progress review meetings with Road & Bridge Division as requested. Prepare monthly progress reports and invoices. Maintain project schedule and perform QA/QC.

Task 2: LIDAR Contours and Apparent R.O.W.

To be provided by the County's GIS Department. GEI to review provided County survey information and request from County elevation verifications of centerline roadway and roadside channel and culvert flow lines as needed to justify LIDAR contours elevations as provided by County.

Task 3: Preliminary Engineering

Delineate drainage area boundaries and perform runoff calculations for 5-yr, 10-yr, 25-yr, and 100-yr storm events within the project limits, including data collection and field reconnaissance. Provide a scroll plot (1" = 200') showing drainage area boundaries, time of concentration path, drainage area I.D., 2' LIDAR contours and aerial background provided by the County. Provide table showing runoff and other design calculation results as needed.

Task 4: Geotechnical

Investigations
To be provided by the
County (pavement design)

Task 5: Environmental

Studies N/A

Task 6: Utility

Coordination N/A

Task 7: FEMA

Coordination N/A

Task 8: Final Engineering

Calculate capacity of existing drainage and roadway facilities. Identify culverts in apparent need of replacement due to either existing condition, inadequate capacity, or safety treatment. For each project location (county road) listed above, provide the following:

Plan Sheets (11" x 17"):

- Estimate of Quantities Summary
- Survey Controls

- Construction Notes & Typical Sections
- Drainage Area Map and Calculations
- Traffic Control Plan and Detour Plan (if necessary)
- TxDOT Standards
- Roadway Plan Sheets (1" = 50") (showing roadway centerline, stationing, apparent ROW, 1" LIDAR contours and aerial background) (As Required)
- Culvert Plan & Profile Sheets (1" = 50") (showing roadway centerline, stationing, apparent ROW, 1' LIDAR contours and aerial background) (As Required)

In addition to the above plan sheets, the Engineer will provide the following:

- Estimate of Quantities Summary
- General Notes

Task 9: Bidding Phase Services N/A

Task 10: Construction Phase Services N/A

Deliverables:

50% Submittal:

- Scroll plot of design calculations
- 11"x 17" plan sheets, estimates and quantities

100% Submittal:

- Scroll plot of drainage areas and runoff calculations for each roadway as needed
- 11"x 17" plan sheets for each project

Final Signed and Seal Submittal:

• 11"x 17" plan sheets for each project as needed

Attachment C - Work Schedule

As directed by Williamson County Engineer's Office.

Attachment D - Fee Schedule

Consultant Category	Hourly Rate
Principal	\$325.00
Project Manager	\$250.00
Project Engineer	\$200.00
EIT	\$150.00
Designer	\$130.00