April 12, 2024
Proposal No.: GP23-2088-1

Denton Independent School District
Attn: Mr. Brandon Boyter
Executive Director of Construction, Planning and Growth
1307 N. Locust St.
Denton, Texas, 76201
Email: bboyter@dentonisd.org
Phone: 940-369-0202

Subject: **Proposed Engineering Services – Load Testing for Augered Cast-in-Place Piles (ACIP)**
Denton High School No. 5
Denton, Texas

Mr. Boyter:

We are pleased to submit this proposal for professional geotechnical engineering services for the development, performance and analyses of foundation load testing in support of foundation design for the referenced project. The site is located just south of US Hwy 380 along the east side of Naylor Road, north of its intersection with Sedona Lane in Cross Roads, Texas.

PROJECT DESCRIPTION

Based on the data developed during the project geotechnical investigation, we are submitting this proposal, which includes our recommendations for augered cast-in-place pile foundations (ACIP), load testing for bi-directional testing, and recommendations regarding the number of the proposed tests. We propose that four (4) load tests will be conducted at selected locations near the proposed school building footprint. Two (2) piles will be 18-inch diameter and extend to final depths on the order of 55 and 35-ft, and Two (2) piles will be 24-inch diameter and will extend to depths of about 50-ft. One additional pile will be installed as an 18-inch dummy indicator pile and will extend to a depth of about 55-ft.

SCOPE OF SERVICES

The objective of this geotechnical investigation will be to obtain subsurface data through ACIP bi-directional load testing in order to develop final foundation recommendations for the new school. All services provided will be performed in accordance with and limited to those generally accepted engineering standards prevailing at the time and in the area that the work is performed.

Pre-test

Geotex will develop the final load test configurations, including the selection of load cell depths and the number and placement of monitoring strain gauges. We anticipate that 9-inch diameter

jacks will be used that can apply loads of up to 400 kips in each direction. We typically incorporate 5 levels of strain gages (2 per level) in the longer piles and 3 or 4 levels in shorter piles. The load test designs will be submitted to the design team and the load test & drilling subcontractors for review. Geotex will engage experienced and qualified subcontractors for the assembly of the test pile instrumentation, the data collection systems and the performance of the load tests, as well as the drilling and installation of the piles.

Load Testing

Geotex will oversee the test pile excavations and installations of the instrumentation assemblies, and will test the pile grout for compressive strength. After the grout achieves sufficient strength, typically about 5 to 7 days after placement, Geotex will oversee the individual load tests and will begin to formulate initial recommendations for final design based on the real-time data observed.

Analyses and Report

Geotex will analyze the load test data provided by the instrumentation subcontractor for use in developing the final foundation recommendations for the project. The final recommendations will be submitted in memorandum format.

CONDITIONS

We respectfully request that the Project Team General Contractor provide the following:

- Suitable test locations free of conflict from future utilities
- Instrumentation assembly staging areas
- Miscellaneous equipment to occasionally assist with moving materials / components

SCHEDULE

Load test configuration development will commence upon receipt of notice-to-proceed. We anticipate this task will be completed within about 1 to 2 working days. Load test instrumentation assemblies will be assembled 1-2 days prior to the start of test pile installation. Test pile installations are anticipated to begin within 2 to 3 weeks with timely Notice-to-Proceed. Load tests should be performed about 5 to 7 days after installation. We expect that these will all be completed in 2 consecutive days. The final report will be provided to the design team within about 1 to 2 days of receipt of the load test data reports.

COMPENSATION

Geotex Engineering proposes to perform the above services for a lump sum of $219,500 as outlined below:

- Drilling & Installations (HB Farmer): $ 72,500
- Instrumentation & Testing (GRL Engineers): $ 124,250
- Load Test Designs (Geotex): $ 8,250
- Installation Monitoring and Testing (Geotex): $ 7,000
- Analysis & Final Recommendations (Geotex): $ 7,500

If additional services are desired, they may subsequently be agreed upon in writing and rendered under this agreement for additional, negotiated compensation.

Please indicate your approval of this proposal and the D&S Engineering Terms & Conditions by signing below. After you have signed, please email a copy of the entire document and retain the original for your records. Any modifications of the language must be accepted by both parties.

We appreciate the opportunity to provide you with our services. If you have any questions or wish to discuss any aspect of the project, please call us. Following your authorization, we are ready to begin work and look forward to a successful project.

Sincerely,

Geotex Engineering, LLC

Mark G. Thomas, P.E, P.G.
Vice President of Engineering

_____ April 23, 2024
Mia Price, President DISD Board of Trustees