



December 22, 2017
Project No.: LOCALMKT.WEOH

City of Coppell
Engineering-Public Works
816 S. Coppell Road
Coppell, Texas 75019

Attention: Mr. Kent Collins, PE
Assistant Director of Engineering

**Subject: Construction Materials Engineering & Testing Services Proposal
Freeport Parkway (Dividend Drive to West Bethel Road)
Coppell, Texas**

Dear Mr. Collins:

Kleinfelder is pleased to submit this revised proposal for construction materials engineering and testing and/or observation (CoMET) services for the Freeport Parkway project. The project consists of reconstructing of roadway, piers, sidewalk, hike/ bike trail, and utilities. The project will take place in the City of Coppell. This revision includes adjustments to our scope and estimate due to revisions in the proposed construction related to utilities and removal of lime-treated pavement subgrade.

PROJECT INFORMATION

Based on our understanding of the project plans, prepared by J. Volk Consulting, we understand that this project will generally consist of the construction of the following structures and site features:

- Misc. 11" Reinforced Concrete Paving, approximately 50,000 SY.
- Misc. Reinforced Concrete, approximately 79,000 SF.
- Misc. Utilities Removal and Installation
- Drilled Pier Observation
- Bridge Construction

SCOPE OF SERVICES

The following scope of services is based on project plans and our discussions with the City of Coppell's project representatives. Our construction materials engineering & testing services scope is limited to providing periodic testing and/or observations for the previously mentioned construction activities. We anticipate for this project that services will be provided on a periodic or call-out basis, with the exception of drilled shaft operations, which will be covered on a

full-time basis during construction. We understand that City of Coppell personnel will be scheduling our services, and the number of hours and level of effort that we based our proposal on should be considered approximate since it is not based on a published construction schedule. If a schedule becomes available, we can review this schedule against our assumptions and be more definitive in our scoping.

We agree to provide a technician(s) to provide the construction materials field testing and observation services as follows. *To most effectively serve the client and facilitate the construction process, our services should be scheduled 24-hours in advance. We understand that the construction process incorporates a large degree of variability and as such, we will do our best to accommodate scheduling calls made on the same day as our services are needed but we cannot guarantee that we can satisfy service requests made after-hours or on the same day as the services are needed to be performed.*

Earthwork

Perform earthwork (soils) observation and testing services including:

- Obtain and perform laboratory moisture/density relations (standard proctor- ASTM or TxDOT methods) and soil classification tests (liquid limit, plastic limit and percent finer than no. 200 sieve analysis) for each client-requested soil type.
- Perform in-place moisture/density tests in accordance with the project and City specifications for utility backfill materials and concrete pavement subgrades.

Drilled Pier Foundation Observation

Perform field testing and observation services during installation of drilled shaft foundations. These services will include:

- Observe and document drilling operations on a full-time basis
- Record diameter of drilled shafts
- Record top elevation of each shaft (information obtained from plans or contractor)
- Record depth to the bearing stratum and penetration depth into the bearing stratum
- Record if casing was used
- Record if plumbness of drilled shafts is within specification tolerance
- Record reinforcing steel length, horizontal and vertical bar quantity and size
- Record condition of drilled shafts excavation before concrete placement
- Observe placement of concrete and sample and test concrete as specified

Reinforcing Steel

Reinforcing steel installation observation will typically be performed by the City of Coppell inspection staff. If requested, an engineering technician from our office will perform observation services on concrete reinforcing steel prior to concrete placement as follows:

- Perform reinforcing steel observation as requested and coordinated with City Inspectors to complement the City's reinforcing steel inspection.

The following assumptions were made for estimating the quantities for our concrete reinforcing steel services:

- Reinforcing steel observations will be performed immediately prior to concrete placement and will not require a separate trip to the project site.

Cast-In-Place Concrete

Perform testing during concrete placement events including:

- Ambient air and concrete temperature field-measurement
- Entrained air content of concrete field-measurement
- Concrete slump field-measurement
- Cast four-inch by eight-inch concrete test cylinders at the rate of 5 cylinders for every 100 cubic yards of concrete or fraction thereof placed per day, or as directed by the City's representative.

The following assumptions were made for estimating the quantities for cast-in-place concrete:

- Pavement concrete placement will consist of pour events with a minimum of 50 cubic yards placed per event.
- Miscellaneous concrete pour events such as the sidewalk, hike/bike trail, pier foundation, sanitary sewer encasement, drive intersections, and pavement segments will consist of pour events with less than 50 cubic yards placed per event.

Hot Mix Asphalt

Perform HMA observation and testing services including:

- Verify approved HMA mix designs are being utilized during placements
- Perform in-place density tests on a periodic basis to verify Contractor's QC testing during placement operations
- Perform periodic laboratory testing of fresh asphalt samples to determine the following HMA mix properties: asphalt content (ignition oven method), lab molded unit weight (gyratory method), maximum theoretical specific gravity (rice gravity)

Project Administration, Dispatching, and Reporting

Kleinfelder's office staff, including administrators and supervisory technicians will assist in the management of the project as follows:

- Coordinate field and laboratory services with the client or their designated representative and dispatch our field staff as scheduled.
- Process, finalize, and distribute all field and laboratory test reports.

Project Management & Construction Meeting Attendance

A project manager from our office will manage this project and attend meetings as follows:

- Manage the project operation and services delivery, review and finalize field and laboratory reports, and coordinate with the client and contractor(s) throughout the duration of the project.
- Attend a pre-construction meeting.
- Attend project meetings as requested for the duration of the project.
- Provide general material engineering consultation as requested.

ESTIMATED FEES

Based on the general scope of work indicated above and take-off quantities, presumed construction procedures, phasing, and schedule, we estimate that the construction materials engineering and testing fees for this project will be approximately **\$236,705**. Included in Attachment A are the unit rates that will be used to invoice this project.

The invoicing for this project will use the attached Schedule of Fees and *the actual quantity of work performed*. The estimated total will not be exceeded without prior approval. The City of Coppell and Kleinfelder may subsequently agree in writing to provide additional services to be rendered under this agreement for additional, negotiated compensation.

COMPENSATION, TERMS AND CONDITIONS AND BASIS OF CHARGES

At the time of this proposal, a proposed construction schedule was not available for use in performing our fee estimate. We anticipate that our services will be scheduled on an on-call, as-needed basis by the City of Coppell, or their designated representative, in accordance with the contractor's sequencing of construction activities.

Our fees for performing the referenced services are presented in the attached fee schedule. The schedule of fees will be valid through December 31, 2017. An updated fee schedule may take effect thereafter. However, we will not change the unit fees once the project is started.

LIMITATIONS

Our work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

Even with diligent monitoring, construction defects may occur. In all cases the contractor is solely responsible for the direction and the quality of the work, adherence to plans and specifications, and repair of defects.

This proposal is valid for a period of 45 days from the date of this proposal, unless a longer period is specifically required in which case that time frame will apply. This proposal was prepared specifically for the client and its designated representatives and may not be provided to others without Kleinfelder's express permission.

TERMS OF ENGAGEMENT

Services will be provided in accordance with the existing Master Services Agreement between Kleinfelder and the City of Coppell (dated June 14, 2016). Please indicate your approval of the proposal by signing and returning the attached Work Order and returning to our office. A fully executed copy will be returned to you. Any modifications of the attached language must be accepted by both parties, and may result in an increase in scope and compensation. Acceptance of the proposal indicates the City of Coppell's review and understanding of the scope of services, budget and terms.

We appreciate the opportunity to provide you with this proposal, and look forward to working with you on this project. If you have any questions or wish to discuss, please contact Joel Peters at 214-876-5559 or jdpeters@kleinfelder.com. You can also reach us at the office at 972.868.5900.

Sincerely,

KLEINFELDER, INC.

Texas Registered Engineering Firm F-16438



Joel Peters, PE
Project Manager



Cody Solvin, CET
Construction Services Manager

Attachments:

Fee Schedule
Work Order



**CITY OF COPPELL - FREEPORT PARKWAY
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES
PROJECT ESTIMATE AND SCHEDULE OF FEES**

SERVICES	Qty.	UNIT	RATE	TOTAL
A. Earthwork				
Field Technician	1000.00	hourly	\$54.00	\$54,000.00
Field Density Test	450.00	each	\$26.00	\$11,700.00
In Place Sieve Analysis (Lime)	0.00	each	\$15.00	\$0.00
Lime Depth Checks	0.00	each	\$15.00	\$0.00
Trip Charge	300.00	trip	\$25.00	\$7,500.00
			Subtotal:	\$73,200.00
B. Concrete Testing & Inspection				
Field Technician	1200.00	hourly	\$54.00	\$64,800.00
Concrete Cylinders	1200.00	each	\$30.00	\$36,000.00
Trip Charge	300.00	trip	\$25.00	\$7,500.00
			Subtotal:	\$108,300.00
C. Asphalt Testing & Inspection				
Field Technician	70.00	hourly	\$70.00	\$4,900.00
Field Density Test	50.00	each	\$26.00	\$1,300.00
Trip Charge	20.00	trip	\$25.00	\$500.00
			Subtotal:	\$6,700.00
D. Lab Testing				
Standard Proctor, 4"	10.00	each	\$250.00	\$2,500.00
Atterberg Limits	10.00	each	\$80.00	\$800.00
Sieve Analysis -200	10.00	each	\$75.00	\$750.00
Lime Series	0.00	each	\$175.00	\$0.00
Asphalt Content by Ignition Oven	4.00	each	\$150.00	\$600.00
Asphalt Unit Weight by Gyrotory Method	4.00	each	\$370.00	\$1,480.00
Asphalt Maximum Theoretical Specific Gravity	4.00	each	\$150.00	\$600.00
			Subtotal:	\$6,730.00
E. Drilled Pier Observation				
Field Technician	250.00	hourly	\$70.00	\$17,500.00
Vehicle Charge	25.00	trip	\$25.00	\$625.00
			Subtotal:	\$18,125.00
F. Project Management, Administration and Final Reporting				
Project Manager	80.00	hourly	\$145.00	\$11,600.00
Dispatch / Field Coordination	80.00	hourly	\$75.00	\$6,000.00
Administration / Clerical	100.00	hourly	\$58.00	\$5,800.00
Vehicle Charge	10.00	trip	\$25.00	\$250.00
			Subtotal:	\$23,650.00
			Budget Total:	\$236,705.00

Notes & Assumptions

- Overtime rates will be charged at 1.5 times standard hourly rate, and apply to hours worked before 7 AM and after 5 PM.
- A minimum one (1) hour is applied for field services.
- All vehicle charges account for a roundtrip originating at Kleinfelder's Irving, Texas office to the project site.
- This construction materials engineering and testing services estimate is based on estimated quantities of materials and typical and accepted construction procedures and schedule. At the time this estimate was prepared, neither a detailed construction schedule nor anticipated material quantities by the general contractor were available for our use.
- Additions or deletions to this work scope (estimated quantities) will be adjusted based on the established unit prices shown. This total estimate will not be exceeded without prior written approval of the client.

WORK ORDER DFW17P64693R1

Issued Pursuant to The Client Master Services Agreement effective as of June 14, 2016 by and between City of Coppell (**Client**) and Kleinfelder, Inc. (**Kleinfelder**).

Project Name: **Freeport Parkway**

Work Order Type: (Check One)

Time-and-Materials

Fixed-Price

Kleinfelder Office: Dallas, Texas

Kleinfelder Contact Name: Joel Peters, PE Phone: 972.868.5900

1. SCOPE OF WORK: See Proposal DFW17R64693R1

(Continue on additional page, if needed)

2. LOCATION/CLIENT FACILITY INVOLVED: Coppell, Texas

3. PERIOD OF PERFORMANCE: See Proposal DFW17R64693R1

4. AUTHORIZED FUNDING: See Proposal DFW17R64693R1

5. SPECIAL PROVISIONS: See Proposal DFW17R64693R1

NOTICE TO PROCEED IS GIVEN ON (DATE): _____

CLIENT:

KLEINFELDER:

By: _____

By: _____

Printed Name: _____

Printed Name: _____

Title:

Title:

Address:

Address: