



May 2, 2024

Kleinfelder Project No.: DFW24P167306

Ms. Jamie Brierton, PE
City of Coppell
Engineering and Public Works
816 S. Coppell Road
Coppell, Texas 75019

**Subject: Proposal for Construction Observation and Materials Testing Services
Fire Station #5
Coppell, Texas**

Dear Ms. Brierton:

Kleinfelder is pleased to present this proposal to provide construction materials testing and/or observation services for the proposed Fire Station #5 in Coppell, Texas.

BACKGROUND AND PROJECT UNDERSTANDING

Based on our discussion with you and our interpretation of the project plans, we understand that this project consists of construction of a new fire station facility to be located at 157 South Moore Road in Coppell, TX. For preparation of this proposal, we have received project plans and specifications by PGAL Architects (dated March 27, 2024). The building is generally planned to be a structural steel framed facility with reinforced concrete slab-on-grade supported on auger cast piles. The project activities will generally consist of:

- Demolition of existing building in site location and removal of foundation elements
- Observe and proof-roll existing subgrade material
- General site grading and backfill of onsite utilities
- Reinforced concrete grade beams and floor slabs over void forms
- Reinforced concrete sidewalks and paving
- Structural steel framing (welded and bolted connections)

SCOPE OF SERVICES

The following scope of services is based, in part, on project plans and specifications and is limited to providing testing and/or observations for the previously mentioned construction activities. Our services are anticipated to be performed on a part-time basis as scheduled by your designated representatives; however, certain construction activities such as drilled pier operations and moisture conditioning of the

building pad will require full-time observation and testing. *To most effectively serve the client and facilitate the construction process, our services should be scheduled 24-hour 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 on the same day as the services are needed to be performed.*

Earthwork

Perform earthwork (soils) observation and testing services including:

- Obtain field samples and perform laboratory moisture/density relations tests (standard Proctor- ASTM D698) and soil classification tests (liquid limit, plastic limit, and percent finer than no. 200 sieve analysis) for each soil type encountered during the construction process (native soils, proposed fill soils and lime-treated materials).
- Perform in-place nuclear moisture/density tests at the proposed rate of 1/2,500 square feet of fill placed for building pad and general site fill and 1 per 100 LF of utility backfill or a minimum of 3 tests per lift per day, unless otherwise directed by the client.
- Fill/backfill operations will be tested on a periodic basis as completed by the contractor.

Auger Cast Pile Foundations

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
- Observe placement of grout and perform sampling/testing as specified
- Cast grout compression specimens at a frequency of one set for every placement date or one set for every 100 cubic yards of grout or fraction thereof placed per day (A set of grout compression specimens will consist of 6 – 2"x2"x2" cubes though additional samples can be cast if approved by the client.
- Grout compressive strength tests will be performed on sample cubes with three tested at 7 days and three tested at 28 days.
- Assume trips on the following day to retrieve compression samples, unless Kleinfelder personnel are already scheduled for onsite activities.

Cast-In-Place Concrete

Perform field testing and observation services during concrete placement events for the following elements: grade beams, walls, floor slabs, site paving and flatwork. Concrete field testing and observation services will include:

- Observe and document reinforcing steel placement within grade beams, walls and floor slabs
- Observe and document installation of adhesive and mechanical anchors installed in concrete and masonry elements, as required by specifications or requested by client
- Sample concrete and record ambient air and concrete temperature measurements
- Measurement of slump and total air content

- Cast concrete sample cylinder sets at a frequency of one set for every 100 cubic yards of concrete or fraction thereof placed per day for each type of concrete placed. A concrete sample set will consist of 5 sample cylinders, though additional samples can be cast if approved by the client. Each sample cylinder will be approximately 4 inches in diameter by 8 inches high. As an alternative, 6 inch diameter by 12 inches high sample cylinders may be utilized if required by the project requirements or if requested by the client.
- Concrete compressive strength tests will be performed on sample cylinders with one tested at 7 days and three tested at 28 days. The remaining cylinder will serve as a “hold” specimen in the event that additional testing is required or if the 28-day design strength is not met.
- Additional cylinders may be cast for early-age testing, if requested and approved by the owner; however they have not been included in this proposal estimate.
- Contractor is responsible for providing means of onsite secure, proper storage of concrete samples.
- Assume separate trips for retrieval of concrete cylinder samples on the day following concrete placement, unless Kleinfelder personnel are already scheduled to be onsite for other activities.

Structural Steel

Observation of structural steel framing, which will include:

- Verify approved Welder Performance Qualification records and approved Welding Procedure Specifications applicable to the project elements
- Perform visual observations of field welded and bolted structural steel connections, according to current AWS Structural Welding Code; observations provided on a periodic basis
- Perform Ultrasonic Testing of full-penetration moment welded connections; observations/testing provided for 100% of welds, or as required by client
- Perform periodic inspections of during fabrication of structural steel; assume up to 2 visits to the fabrication shop for inspections

Masonry

Observation of masonry operations, which will include:

- Periodic observation of reinforcing steel placement and CMU spaces to be grouted prior to grouting operations
- Periodic observation and documentation of mortar/grout mixing procedures
- Ambient and mortar/grout temperature determinations
- Sample CMU grout and cast grout compressive strength specimens at the proposed rate of 1 set of 4 specimens per 5,000 square feet of wall, or as directed by client
- Compressive strength determination of grout samples with 1 tested at 7 days, and 2 tested at 28 days and 1 retained as a “hold” specimen, for additional testing as needed
- Sample masonry mortar and cast compressive strength specimens at the proposed rate of 1 set of 6 specimens per 5,000 square feet of wall, or as directed by client
- Compressive strength determination of mortar samples with 3 tested at 7 days, and 3 tested at 28 days
- Assume periodic trips for sampling/testing of CMU mortar and grout materials

- Obtain samples of composite CMU masonry prisms for compressive strength testing, to be prepared by the masonry contractor. Samples are intended to represent construction of the structural masonry walls and will consist of proposed CMU blocks constructed with grout and mortar joints.
- Anticipate 1 set of 3 masonry prisms prior to masonry wall construction, and additional sets at a frequency of 3 per 5,000 SF of wall, or as requested by the client.

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 pre-construction or pre-activity meetings, as requested by client.
- Attend project meetings as requested for the duration of the project.
- Provide general material engineering consultation as requested.

Additional Services

Additional observation or testing services (including stand-by time for contractor delays) not identified above may become necessary over the course of any given project. Kleinfelder can provide other services not listed above if these services are desired, following our receipt of appropriate authorization.

COMPENSATION

We have estimated a budget of \$68,175 for the proposed scope of work for this project. If project costs approach this amount, we will contact you for approval to increase the budget. The invoicing for this project will use the actual quantity of services and the attached Schedule of Fees. This amount will not be exceeded without prior approval. City of Coppell and Kleinfelder may subsequently agree in writing to provide for additional services to be rendered under this agreement for additional, negotiated compensation. Technician time for field services will be billed portal-to-portal in hourly increments following the minimum 1 hours. Overtime rates will apply to services provided before 7 AM and after 5 PM. Kleinfelder will communicate when the fees for services have reach 80% of the above value. Services provided by Kleinfelder will be consistent with the engineering standards prevailing at the time and in the area that the work is performed; no other warranty, express or implied, is intended.

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 by the RFP 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 August 2, 2021). 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



Landon Lancaster
Staff Professional



Joel D. Peters, PE
Senior Project Manager

Attachment:

- Fee Schedule
- Work Order
- Basis of Charges



**CITY OF COPPELL - FIRE STATION #5
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES
PROJECT ESTIMATE AND SCHEDULE OF FEES**

SERVICES	Qty.	UNIT	RATE	TOTAL
A. Earthwork Observation and Testing				
Field Technician	75.00	hourly	\$65.00	\$4,875.00
Field Technician (OT)	10.00	hourly	\$97.50	\$975.00
Nuclear Density Gauge (per day)	20.00	each	\$75.00	\$1,500.00
Standard Proctor, 4"	3.00	each	\$260.00	\$780.00
Atterberg Limits	3.00	each	\$115.00	\$345.00
Sieve Analysis -200	3.00	each	\$80.00	\$240.00
Lime Series	1.00	each	\$215.00	\$215.00
Trip Charge	20.00	trip	\$30.00	\$600.00
			Subtotal:	\$9,530.00
B. Auger Cast Pile Observation				
Field Technician	100.00	hourly	\$80.00	\$8,000.00
Field Technician (OT)	15.00	hourly	\$120.00	\$1,800.00
Grout Compression	120.00	each	\$40.00	\$4,800.00
Vehicle Charge	15.00	trip	\$30.00	\$450.00
			Subtotal:	\$15,050.00
C. Concrete/Masonry, Reinforcing Steel Observation and Testing				
Field Technician	165.00	hourly	\$65.00	\$10,725.00
Field Technician (OT)	20.00	hourly	\$97.50	\$1,950.00
Concrete Cylinders	150.00	each	\$25.00	\$3,750.00
Masonry Mortar Compression	24.00	each	\$40.00	\$960.00
Masonry Grout Compression	24.00	each	\$40.00	\$960.00
Trip Charge	40.00	trip	\$30.00	\$1,200.00
			Subtotal:	\$19,545.00
D. Structural Steel Observation and Testing				
Structural Steel Technician, CWI		Cost+10%	Estimated	\$11,000.00
			Subtotal:	\$11,000.00
E. Project Management, Administration and Final Reporting				
Project Manager	30.00	hourly	\$175.00	\$5,250.00
Senior Geotechnical Engineer	10.00	hourly	\$265.00	\$2,650.00
Dispatch / Field Coordination	30.00	hourly	\$90.00	\$2,700.00
Administration / Clerical	35.00	hourly	\$70.00	\$2,450.00
			Subtotal:	\$13,050.00
			Budget Total:	\$68,175.00

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.
 - 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

Issued Pursuant to The Client Master Services Agreement effective as of August 2, 2021 by and between City of Coppell (**Client**) and Kleinfelder, Inc. (**Kleinfelder**).

Client Name: City of Coppell

Kleinfelder Project No: TBD

Project Name: Fire Station #5

Work Order Type: (Check One)

Time-and-Materials

Fixed-Price

Kleinfelder Office: Dallas, Texas

Subcontractor Reference No:

Kleinfelder Contact Name: Joel Peters, PE

1. SCOPE OF WORK: See Proposal DFW24P167306

(Continue on additional page, if needed)

2. LOCATION/CLIENT FACILITY INVOLVED: Coppell, Texas

3. PERIOD OF PERFORMANCE: See Proposal DFW24P167306

4. AUTHORIZED FUNDING: \$68,175

5. SPECIAL PROVISIONS: See Proposal DFW24P167306

NOTICE TO PROCEED IS GIVEN ON (DATE): _____

CLIENT:

KLEINFELDER:

By: _____

By: _____

Printed Name: _____

Printed Name: _____

Title:

Title:

Address:

Address:



BASIS OF CHARGES

1. Listed herein are typical prices for services most frequently performed by Kleinfelder. Prices for other services provided by the firm or other services not listed will be given upon request, as well as special quotations for programs involving volume work.
2. Invoices will be issued on a periodic basis, or upon completion of a project, whichever is sooner. The net cash amount of this invoice is payable on presentation of the invoice. If not paid within 30 days after the date of the invoice, the unpaid balance shall be subject to a FINANCE CHARGE of 1.5% per month, which is an ANNUAL PERCENTAGE RATE of 18%.
3. A two-hour minimum charge will be made for all field services. Technical professional time for field services is billed portal-to-portal, in hourly increments following the minimum 2 hours.
4. Hours worked before 7 a.m. / after 5 p.m. Monday through Friday and time worked in excess of 8 hours per day will be charged at 1.5 times the hourly rate. Additionally, weekend (Saturday and Sunday) and holiday work will be charged at 1.5 times the hourly rate.
5. Per Diem will be charged at a rate of \$127 per day per person or expenses plus 15%, whichever is greater. Travel by vehicle will be charged at \$0.65 per mile plus personnel time. Per Diem and travel will be charged for all projects in excess of 50 miles from the local Kleinfelder office. Travel expenses, such as airfare, will be charged at cost plus 15%.
6. Outside services will include a 15% markup unless otherwise noted.
7. We are protected by Worker's Compensation Insurance (and/or Employer's Liability Insurance), and by Public Liability Insurance for bodily injury and property damage and will furnish certificates thereof upon request. We assume the risk of damage to our own supplies and equipment. If your contract or purchase order places greater responsibilities upon us or requires further insurance coverage, we, specifically directed by you, will take out additional insurance (if procurable) to protect us at your expense, but we shall not be responsible for property damage from any cause, including fire and explosion, beyond the amounts of coverage of our insurance.
8. The attached schedule of fees will be valid for one calendar year.