

February 27, 2024

Linn-Mar Community School District
2999 10th Street
Marion, Iowa 52302

Attn: Mr. Andy Parke
P: (319) 447-3021
E: andy.parke@linnmar.k12.ia.us

Re: Proposal for Construction Observation and Materials Testing Services
Linn-Mar Performance Center
3111 10th Street
Marion, Iowa 52302
Terracon Proposal No. P06241020

Dear Mr. Parke:

As requested, Terracon Consultants, Inc. (Terracon) is submitting this proposal for completion of construction observation and materials testing services for the above-referenced project. This proposal outlines our understanding of the project and scope of services, provides a fee schedule and estimated cost for our services, and presents our Supplement to Agreement for Services.

Terracon provided geotechnical engineering services for the project in 2023 (Terracon Project No. 06235115). As such, we believe our experience, work on the project as the Geotechnical Engineer, and commitment to responsive quality service will continue to make Terracon a valuable asset to the project.

1.0 PROJECT INFORMATION

- Project information available for review at the time of this proposal includes:
 - Civil, structural and architectural plans dated January 9, 2024
 - Project specifications dated January 9, 2024
 - An email conversation with Andru Meiners with OPN Architects dated 1/25/2024 to discuss preliminary scope, quantities and/or schedule information
- We understand the project consists of:
 - The construction of a performance venue at the existing Linn-Mar High School

- The structure will be founded on:
 - Concrete footings bearing on a soil improved or replaced by Geopiers or rammed aggregate piers or soil/cement mixing etc
- The structural framing will be comprised of:
 - Steel columns, beams, joists and/or trusses
 - Metal deck and roof
 - Structural masonry walls
 - Reinforced concrete
 - Precast structural concrete
- Also included as part of the construction will be
 - Underground utilities
 - Concrete parking lot(s)
 - Site grading fill placement

2.0 SCOPE OF SERVICES

2.1 Field and Laboratory Services

Terracon will provide appropriately trained employees equipped to respond to the materials testing and construction observation needs of this project as scheduled by the Client or your designated representative. Based on our review of the information provided above, we understand the scope of the on-call services includes:

- Earthwork observation and testing
 - Compaction testing of newly placed fill
 - Proofroll observations
 - Subgrade observations
- Laboratory soil/aggregate testing
 - Standard Proctors
 - Atterberg Limits
- Cast-in-place concrete reinforcing steel observation
 - Bar type and grade, size, condition, lap length, cover, position and securement



- Note that we should be contacted to observe walls and columns taller than 5 feet both before and after formwork is set to enable proper viewing of the steel and to verify clearance
- Cast in-place anchor bolts
- Portland cement concrete field testing and laboratory testing
 - Perform temperature, slump, & air content testing and cast strength specimens
 - We assume that strength specimens will be 4" x 8" cylinders and that sample pickups will be performed only during normal business hours Monday through Friday unless directed otherwise. If pickups are requested outside of this timeframe, special arrangements will need to be made and additional costs will apply.
 - We assume that the concrete will be sampled as the concrete is delivered from the mixer to the conveying vehicle used to transport the concrete to the forms (ie, truck discharge) as indicated in the relevant American Concrete Institute (ACI) and American Society for Testing and Materials (ASTM) documents. If other locations for sampling are desired (such as pump discharge), we can provide this. However, we will require safe access, and additional costs may be incurred.
 - We assume that a temperature-controlled environment meeting ASTM standards will be available to us for sample storage or that it will be acceptable for us to store samples exposed on the jobsite or in a moderately controlled environment provided by us (such as a cure box). However, it is not in our scope to provide fully climate-controlled enclosures. If this is a requirement, additional costs will apply.
 - Laboratory testing
 - Compressive strength of concrete
- Structural steel and pre-cast concrete of field-made connections
 - Review welder certifications
 - Perform periodic visual observations of structural welded connections including primary framing members
 - Periodic visual observations of headed studs
 - Ultrasonic testing of full-penetration welds
 - Visual observation of bolted connections
 - We assume bolted connections will either be snug-tight or tension control bolts will be utilized if full pre-tensioning is required. Observations of other methods of pre-tensioning can be performed, but may require additional time and cost.
 - Visual observation of column anchor bolts
 - Visual observation of decking fasteners
- Structural masonry observation and testing



- Observation-structural masonry construction in general accordance with Level C except as noted below
 - In general, Level C includes being onsite for continuous observations of site prepared mortar, construction of mortar joints, location of vertical and horizontal reinforcement, condition of cells to be grouted, cold or hot weather masonry practices as applicable, and the preparation of samples. The structural plan sheet S001, however, has some observations as periodic. The proposal will budget per the structural plan sheet and further discussions could be had to determine if proposal needs to be adjusted for full time observation.
- Material sampling
 - Measure grout flow/slump and temperature and cast 3" x 6" grout prisms. For estimating purposes, we assume that cardboard grout sample boxes will be allowed due to the low cost and convenience. However, they are not recognized as an approved mold by ASTM. If the client wishes grout prisms to be formed in general accordance with ASTM C1019, we will need access to forming materials and a protected space onsite to make the samples, and additional costs will apply.
- Laboratory testing
 - Compressive strength of grout
- Post-installed anchor installation observation
 - Hole depth, diameter and cleanliness prior to installation
 - Installation process for epoxy or mechanical anchors
 - Anchor embedment depth
- Project Management
 - Attendance at pre-construction and project meetings at Client's request
 - Technical consulting at Client's request
 - Supervision of laboratory and field services
 - Preparation and review of project reports and invoices

If we have misunderstood any aspect of the proposed project, please advise us at once so we can evaluate the scope of services and make any necessary adjustments prior to finalizing the contract. Once the project is underway, you can request additional services. We will confirm your request by sending you a short supplemental agreement form that states the additional services, making them part of the original agreement.

2.2 Scheduling

Terracon's services will be performed on an as-requested basis with scheduling by the Client or the client's designated representative. Terracon will not be responsible for scheduling our

services and will not be responsible for tests or observations that are not performed due to failure to schedule our services on the project. Since our personnel will not be at the site on a resident basis, it will be imperative that we be advised when work is in progress. Services should be scheduled a minimum of 24 hours in advance. Scheduling personnel will be on an as-available basis which may require changes in personnel assigned to the project. For instances of short-notice requests, personnel may have to be utilized which have a higher rate than those normally assigned and this higher cost may be passed on to the client.

All requests for services should be submitted to the Cedar Rapids, Iowa office at the following phone number: (319) 221-7300. Services should not be scheduled through our field personnel.

We recommend the scope of services described in this proposal be provided to the person(s) responsible for scheduling our services so they are aware of the services that are proposed.

2.3 Data Collection and Reporting

All field technicians are responsible to provide a daily report identifying what work was found to be in compliance with the project specifications and drawings and report any non-conformances. The field technicians are required to immediately communicate any non-conformances to the site superintendent and our Project Manager. Effective and timely communication is essential for non-conforming items. Our Project Manager will be responsible for reviewing each technician's reports, keeping non-conformance lists up to date, and communicating test results in a timely manner.

To ensure our project manager and field personnel meet the goals we have set for report turnaround, we have developed report tracking software to evaluate the status of any test result or report within our system. This allows us to achieve better communication, more consistency, and faster turnaround of reporting on the project. Data, observations, and other testing and inspection information are easily entered into the system allowing for immediate availability for quality review and electronic distribution of reports.

Terracon will maintain non-conformance logs and lists for all testing types performed by us. The list will be maintained electronically in our database and can be updated and e-mailed or printed at any time.

2.3.1 CMELMS™ Management System

In order to provide our clients with real-time field and laboratory data management and reporting, Terracon developed and maintains an automated application that we call CMELMS. The acronym stands for **Construction Materials Engineering Laboratory Management System** and is utilized by construction materials engineering and testing operations in our offices.



CMELMS is a complete and comprehensive field and laboratory testing data and results management system. It automates the delivery of our testing and inspection information and can be used anywhere with an internet connection or through a wireless device. Data (test results and inspections) can be entered into the application right from the project site so that project managers and engineering staff have real-time access to the field data. Final Client Reports are produced in the same application, which allows us to achieve better communication, more consistency, and faster turnaround of reports on the project.

2.3.2 Report Turnaround Time

Our Project Managers and/or field technicians will report failing tests or non-conformance items immediately to the designated parties and will typically have digitally-signed reports distributed by the end of the next business day. As stated, using our CMELMS software and our field reporting and communication services and capabilities, the test results and inspection information is quickly entered into the system and a report produced. Non-deviation reports will typically be digitally signed and distributed within 3 to 5 business days of service. Laboratory test reports will typically be digitally signed and distributed within 2 business days of the completion of each test. Our reports can be sent digitally via email, posted to our Client Document Website (CDW), or posted to a designated ftp website.

3.0 COMPENSATION

Fees for services provided will be based on the attached Unit Rate Schedule. These rates will apply for the duration of the project.

on our review of the above-referenced information, our estimated cost to perform the proposed scope of services is \$28,497.00. A breakdown of our cost is provided in the attached Cost Estimate. For the purposes of developing this estimate, the quantities were estimated based on typical means and methods utilized by contractors/subcontractors in this area.

It should be noted the Client would be billed only for the amount of service provided, i.e. Terracon will not bill for the total budget if the total booked is less than the budget. Please note this is only a budget estimate and not a not-to-exceed price. Many factors, including those out of our control, such as weather and the contractor's schedule, responses to requests for information, and how often we are called to the site, will dictate the final fee for our services. Furthermore, all costs associated with deviations, re-testing and re-inspections of failing items, on-site standby time, overtime, and short-notice premiums are not included in our estimated cost.



4.0 AUTHORIZATION

This proposal may be accepted by executing the attached Supplement to Agreement for Services and returning it along with this proposal to Terracon. **We reserve the right to withhold our reports until the signed Agreement has been received by Terracon.** This Agreement, including the limitations it contains, shall constitute the exclusive terms, conditions and services to be performed for this project. This proposal is valid only if authorized within sixty days from the listed proposal date.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. Please call the undersigned if you have any questions or would like to review this proposal.

Sincerely,
Terracon Consultants, Inc.

Vito T. Aiello
Assistant Project Manager

Peng Cavan
Project Manager

Copies to: Addressee (1 pdf)

Attachments: Unit Rate Schedule
Cost Estimate
Agreement for Services



Unit Rate Schedule

	Rate	Unit
PERSONNEL		
1215 Field Technician	\$68.00	hour*
1205 Senior Technician	\$90.00	hour*
1275 Structural Steel Technician	\$110.00	hour*
1140 Field Engineer	\$100.00	hour*
1141 Project Coordinator	\$85.00	hour
1127 Project Manager	\$120.00	hour
1126 Senior Project Manager	\$165.00	hour
1107 Senior Geotechnical Engineer	\$185.00	hour
LABORATORY TESTING		
2039 Standard Proctor, Soil	\$200.00	each
2040 Standard Proctor, Rock	\$240.00	each
2001 Atterberg Limits (three point)	\$125.00	each
3324 Compressive Strength Cylinder (made by Terracon)	\$20.00	each
3325 Compressive Strength Cylinder (made by others)	\$30.00	each
4007 Compressive Strength of Grout Prism	\$40.00	each
FIELD EQUIPMENT/MATERIALS		
1670 Floor Flatness Gauge	\$175.00	day
1683 Structural Steel Testing Equipment	\$150.00	day
1630 Nuclear Density Gauge	\$50.00	day
1635 Cone Penetrometer or Field Vane Shear	\$20.00	trip
Miscellaneous Charges	Cost + 20%	
EXPENSES		
1620 Vehicle Charge	\$30.00	trip
1622 Regional Vehicle Charge (Structural Steel Inspector)	\$150.00	trip
1106 Project Setup	\$300.00	each
4040 Expedited Services Charge	\$40.00	each

*Overtime is defined as all hours in excess of eight (8) per day, outside of the normal hours of 7:00AM to 5:00PM Monday through Friday, and all hours worked on Saturdays, Sundays, and holidays. Overtime rates will be 1.5 times the hourly rate quoted (2 times the hourly rate for Sundays and holidays).

A 3-hour minimum charge per task is applicable to all site visits. Field services time will be rounded up to the nearest 0.5 hour. Trip charge includes vehicle and mileage costs. Expedited service charges may apply to all field services (per trip) with less than a 4 business hour notice and all rush laboratory services.

Rates provided above are valid only if authorized within 90 days from the listed proposal date.

You will be invoiced on a periodic basis for services actually performed as authorized or requested by you or your designated representative.



COST ESTIMATE

Service Type	No. of Services	Hr(s)/ service	Rate	Unit	Cost
EARTHWORK OBSERVATION AND TESTING					
Field Technician					
Sample Pickup	1	3.00	\$68.00	hour	\$204.00
Site Grading Fill Placement	5	3.00	\$68.00	hour	\$1,020.00
Foundation Wall Backfill Placement	5	3.00	\$68.00	hour	\$1,020.00
Granular Base Placement	2	3.00	\$68.00	hour	\$408.00
Senior Technician					
Subgrade Observation/Proofroll	3	3.00	\$90.00	hour	\$810.00
Trip Charge*					
Vehicle Charge	16		\$30.00	trip	\$480.00
Field Equipment					
Nuclear Density Gauge	12		\$50.00	day	\$600.00
Subtotal =					\$4,542.00
LABORATORY SOIL / AGGREGATE TESTING					
Standard Proctor, Soil	3		\$200.00	each	\$600.00
Standard Proctor, Rock	1		\$240.00	each	\$240.00
Atterberg Limits (three point)	3		\$125.00	each	\$375.00
Subtotal =					\$1,215.00
REINFORCED CONCRETE OBSERVATION					
Senior Technician					
Reinforcing Steel Observation	35	1.00	\$90.00	hour	\$3,150.00
Trip Charge*					
Vehicle Charge	0		\$30.00	trip	\$0.00
Subtotal =					\$3,150.00
PORTLAND CEMENT CONCRETE TESTING					
Field Technician					
<i>Standard testing (temp, slump, air content, compressive/flexural strength samples)</i>					
Casting of 1 Set of Cylinders	30	2.00	\$68.00	hour	\$4,080.00
Casting of 2 Sets of Cylinders	5	3.00	\$68.00	hour	\$1,020.00
Compressive Strength Sample Pickup	15	3.00	\$68.00	hour	\$3,060.00
Trip Charge*					
Vehicle Charge	50		\$30.00	trip	\$1,500.00
Laboratory Testing					
Compressive Strength Cylinder (made by Terracon)	120		\$20.00	test	\$2,400.00
Subtotal =					\$12,060.00



COST ESTIMATE

Service Type	No. of Services	Hr(s)/service	Rate	Unit	Cost
STRUCTURAL STEEL OBSERVATION					
Structural Steel Technician					
Visual Observation of Welded and Bolted Connections	6	8.00	\$110.00	hour	\$5,280.00
Trip Charge*					
Regional Vehicle Charge (Structural Steel Inspector)	6		\$150.00	trip	\$900.00
Field Equipment					
Structural Steel Testing Equipment	6		\$150.00	day	\$900.00
Subtotal =					\$7,080.00
STRUCTURAL MASONRY OBSERVATION AND TESTING					
Senior Technician					
Reinforcing Steel and Masonry Cell Observation, Sample Preparation	8	3.00	\$90.00	hour	\$2,160.00
Compressive Strength Sample Pickup	4	3.00	\$90.00	hour	\$1,080.00
Trip Charge*					
Vehicle Charge	12		\$30.00	visit	\$360.00
Laboratory Testing					
Compressive Strength of Grout Prism	32		\$40.00	each	\$1,280.00
Subtotal =					\$4,880.00
POST INSTALLED ANCHORS OBSERVATION					
Senior Technician					
Observe Size, Placement and Installation Procedure for Expansion/Adhesive Anchors	2	4.00	\$90.00	hour	\$720.00
Trip Charge*					
Vehicle Charge	2		\$30.00	visit	\$60.00
Subtotal =					\$780.00
PROJECT MANAGEMENT					
Project Administration					
Project Coordinator	25		\$85.00	hour	\$2,125.00
Project Manager	30		\$120.00	hour	\$3,600.00
Senior Project Manager	5		\$165.00	hour	\$825.00
Project Setup	1		\$300.00	each	\$300.00
Subtotal =					\$6,850.00
ESTIMATED OBSERVATION AND TESTING FEE					
ESTIMATED TOTAL = \$28,497.00					

*We anticipate providing multiple services during some trips; therefore, the quantity of services estimated may not equal the quantity of trips estimated.

It should be noted the client is billed only for the amount of service provided, i.e. Terracon will not bill for the total Cost Estimate if the total booked is less than the estimate. The number of tests, trips, and hours on-site are primarily controlled by the contractor's schedule. We recommend the contractor review our estimated number of tests, trips, and duration of on-site time to determine if our estimate is compatible with their production. The estimated cost can then be revised if necessary.

SUPPLEMENT TO AGREEMENT FOR SERVICES

CHANGE TO SCOPE OF SERVICES AND FEES

This SUPPLEMENT to AGREEMENT FOR SERVICES to the original Agreement for Services (original Agreement dated 07/18/2023) is between Linn-Mar Community School District ("Client") and Terracon Consultants, Inc. ("Consultant") for additional or changed Services to be provided by Consultant for Client on the Project, as described in the Agreement for Services. This Supplement is incorporated into and part of the Agreement for Services.

1. Scope of Services. The scope of the additional or changed Services are described in the Scope of Services section of the Consultant's Supplemental Proposal, unless Services are otherwise described below or in Exhibit B to this Supplement (which section or exhibit are incorporated into the Supplement).

See Proposal No. P06241020 dated February 9, 2024

2. Compensation. Client shall pay compensation for the additional or changed Services performed at the fees stated in the Supplemental Proposal unless fees are otherwise stated below or in Exhibit C to this Supplement (which section or exhibit are incorporated into the Supplement).

See Proposal No. P06241020 dated February 9, 2024

All terms and conditions of the Agreement for Services shall continue in full force and effect. This Supplement is accepted and Consultant is authorized to proceed.

Consultant: Terracon Consultants, Inc.
By:  Date: 2/27/2024
Name/Title: Peng Cavan / Project Manager
Address: 2640 12th St SW
Cedar Rapids, IA 52404-3440
Phone: (319) 366-8321 Fax: (319) 366-0032
Email: Peng.Cavan@terracon.com

Client: Linn-Mar Community School District
By: _____ Date: _____
Name/Title: Barry Buchholz, Board President
Address: 2999 N 10th Street
Marion IA 52302
Phone: 319-447-3008 Fax: 319-377-9252
Email: jon.galbraith@Linnmar.k12.ia.us