



December 3, 2025

McKinney National Airport  
Ken Carley, A.A.E.  
1508 E Industrial Blvd Ste 201  
McKinney, Texas 75069

Telephone: (972) 562-4053  
Email: kcarley@flytki.com

**Re: Construction Materials Observation, Engineering, and Testing Services  
TKI Taxiway C and Airport Roundabout  
McKinney National Airport, Terminal C, McKinney, Texas  
Terracon Consultants Inc. Proposal No. P94251853**

Dear Mr. Carley,

Thank you for selecting Terracon Consultants, Inc. (Terracon) to provide construction materials testing, observation services, or special inspection services for the above referenced publicly funded project. We were selected to perform these engineering services based upon the criteria outlined in the Texas Board of Professional Engineers and Surveyors Professional Services Procurement Act. We are presenting this budget estimate to confirm our understanding of the services to be performed for this project, to obtain written authorization to provide these services, and to present the estimated fee to provide these services. The following sections outline our understanding of the project and provide a description of the tasks to be performed.

#### **A) PROJECT INFORMATION**

| <b>Topic</b>        | <b>Overview Statement</b>  |
|---------------------|--|
| Project Information | New Taxiway C and FM 546 Roundabout with associated site improvements located at McKinney National Airport   |
| Sitework            | <ul style="list-style-type: none"><li>• New Parallel taxiway with an approximate length of 2,800 LF</li><li>• New Roundabout off FM 546</li><li>• Concrete pilot channels</li><li>• Site utilities</li></ul> |

Terracon was provided with the following construction documents for preparation of this proposal:

- Preliminary Civil Drawings by Garver dated 08/22/2025
- Specifications dated 08/22/2025
- Geotechnical Report G24-3464 by STL dated 04/23/2025

#### **B) WHY TERRACON?**

Dallas  
8901 John W. Carpenter Freeway #100  
Dallas, TX 75247  
(214) 630-1010

Fort Worth  
1801 Handley Ederville Road  
Fort Worth, TX 76118  
(817) 268-8600

Frisco  
5908 Stone Creek Drive #120  
Lewisville, TX 75056  
(469) 347-6000

Explore with us

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## Construction Materials Testing & Special Inspection Services

Our team of inspectors, technicians, and engineers is experienced with providing materials testing, special inspections, and/or observations of concrete, soils, aggregate, masonry, structural steel, foundations, fireproofing, and asphalt pavement in the local area and are familiar with the recognized building jurisdiction requirements.

# Compass



Compass is Terracon's latest client interfacing tool and elevates the way we do business. Within Terracon Compass, you can access your projects and their associated data, including environmental and geotechnical projects. When you open a materials project within Compass, you will see your materials tests and observations placed on a map. This geographic reference allows you to find your information by the "where", rather than the "when." Other features of Compass include:

- Filters for Date Performed, Service Type and Test Result Status
- Deviation for Non-Conformance Summary: Image overlays to reference multiple plan pages to your test results
- Map layer options: Test results are inserted into Compass as soon as the report has been reviewed and distributed. It becomes easier than ever to view and close deviations with an option to display within a map while also showing them in a table format.



Corporate Ridge - Lot U

**Activities Calendar**

**Client & Other Parties**

- Boehr, Valerie PMA Engineering
- Back, Randy McCorn Gordon Construction LLC
- Demo, Client Portal RIOC Geotechnical Consulting Engineers, PLLC
- Finn, Daniel Phelps Engineering, Inc.
- Foster, Ellen Finkle-Williams Inc
- Goddard, Nathan McCorn Gordon Construction LLC
- Hackenmiller, Ryan VanTrust Real Estate LLC
- Hackenmiller, Ryan TSVIC Inc
- Lee, Wayne TSVIC Inc
- Nimz, Andy George J Shaw Construction
- Settle, Steve Fordyce Concrete Co Inc
- Webber, Casey McCorn Gordon Construction LLC

**Terracon Project Team**

- Project Map
- View Map
- View Map in Tab
- Project Reports
- View Reports

**Options**

- ☒ Project
- ☒ Project borders
- ☐ Terracon Geotechnical Data
- ☒ Test (Show labels ☐)
- ☒ Retested/Accepted (Show labels ☐)
- ☒ Deviation (Show labels ☐)
- ☒ Project Photos

**Filters**

Service Type:

Task Name:

Materials Testing Date Range:

Today Yesterday This Week Last Week This Month Last Month All Custom ...

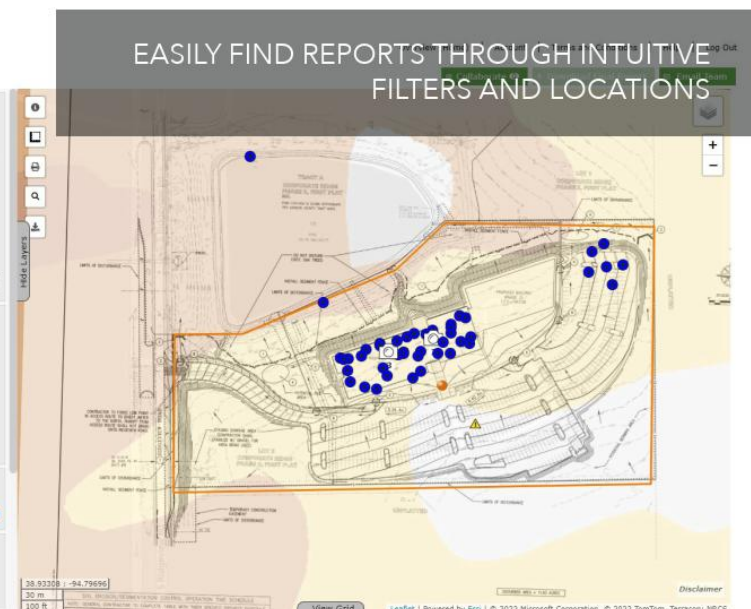
From: 06/01/2017 To: 07/01/2017

**Images**

- ☒ SitePlan
- ☐ CivilPage2

**Layers**

- ☒ Basemap Only
- ☐ National
- ☐ ESRI World Imagery



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### Laboratory Capabilities

Our DFW Metro laboratories are accredited by AASHTO Re:source which is recognized by ASTM E329 Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection. The scope of accreditation includes the field of Soils, Aggregates, and Portland Cement Concrete. As a requirement of accreditation, we regularly participate in the Proficiency Sample Programs of both AASHTO Re:source and the Cement and Concrete Reference Laboratory (CCRL). Our office includes a fully equipped laboratory and employs engineering technicians and special inspectors certified by many agencies including the American Concrete Institute (ACI), American Welding Society (AWS), and the International Code Council (ICC). We provide a rigorous internal training program where our staff are evaluated in specific field and laboratory test procedures by internal Terracon auditors and external agencies.

- Accredited by AASHTO Materials Reference Laboratory (AMRL)
- Inspected by Concrete and Cement Reference Laboratory (CCRL)
- Validated by United States Army Corps of Engineers (USACE)

### C) SCOPE OF SERVICES

Based on our review and understanding of the documents listed above, Terracon proposes the following scope of services:

#### Earthwork Observations and Testing:

- Sample materials to be used as utility trench backfill, general fill, and pavement subgrades. Prepare and test the samples for Atterberg Limits (ASTM D4318), Minus #200 Sieve (ASTM D1140), and moisture-density relationship (ASTM D698, ASTM D1557 and ASTM D558).
- Observe proofrolling operations of the paving subgrades.
- Perform in-place moisture and density tests of utility trench backfills, wall backfill, general fill, and pavement subgrades using the nuclear method (ASTM D6938) to determine the moisture content and percent compaction of the soil materials.
- Perform field gradations on the pulverized lime or cement soil mixture to document the percent of soil passing through the required sieve sizes after the final pulverization process has been completed.
- Perform lime or cement depth checks to verify the actual in-place depth of the lime treatment once the pavement has been trimmed to the final grade.
- Perform a laboratory lime series from on-site soils using the PI and/or pH method.

#### Cast-in-Place Concrete Observations and Testing:

- Sample and test the fresh concrete for each mix. Perform tests for slump, air content, ambient and concrete temperatures, and unit weight; and cast test specimens (ASTM C172, C31, C143, C231, C1064, C138). Terracon understands that the contractor will be responsible for providing a secure

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location and sources of water and electrical power for initial curing of concrete strength test specimens as required by ASTM C31.

- We have assumed the concrete will be sampled at a frequency of one set of five test cylinders every 100 cubic yards or fraction thereof per mix per day for all concrete excluding fire lanes.
- We have assumed the concrete will be sampled at a frequency of one set of five test cylinders every 50 cubic yards or fraction thereof per mix per day for fire lane concrete.
- We have assumed the concrete will be sampled at a frequency of one set of two test beams every 1 subplot or fraction thereof per mix per day for all taxiway concrete (P-501)
- Terracon requests that a copy of the approved mix design(s) be provided to us prior to placement of the concrete.
- Perform compressive strength tests of concrete test cylinders and flexural strength of beams cast in the field (ASTM C31, C39 and C78). Five 4" x 8" concrete cylinders will be prepared for structural concrete having nominal maximum size aggregate of 1 inch or less. One cylinder will be tested at 7 days, three cylinders will be tested at 28 days, and one cylinder will be held for 56 days (or tested at an age requested by others). Two 6" x 6" x 20" concrete beams will be prepared and tested at 28 days.

### **Reinforcing Steel Observations:**

- Verify the size, number and placement of reinforcing steel and check general form dimensions prior to placement of concrete, per construction drawings.
- Terracon recommends scheduling a minimum of 24 hours prior to concrete placement.

### **Asphaltic Concrete Observation and Testing:**

- Perform density tests of the base and surface materials using the nuclear method (ASTM D6938) to determine the percent compaction of the materials. Terracon will utilize the Theoretical Maximum Specific Gravity provided by the material supplier.

### **Project Management and Administration:**

- A project manager will be assigned to the project to review the daily activity and assist in scheduling the work. Field and laboratory tests will be reviewed prior to submittal. The project manager will be responsible for monitoring the project budget and will oversee the preparation of the final report.

## **D) REPORTING**

Results of field tests will be submitted verbally to available personnel at the site. Written reports of field tests and observations will be distributed within five business days. Test reports will be distributed via electronic distribution unless otherwise requested. Please provide Terracon with a report distribution list prior to the beginning of the project. The list

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should include the company name, address, contact person name, phone number, and e-mail address for each person.

Our reported test locations will typically be estimated by pacing distances and approximating angles and elevations from local control data (staking and layout lines) provided by others on site. The accuracy of our locations will be dependent on the accuracy, availability and frequency of the control points provided by the client and/ or contractor.

### **E) SCHEDULING**

Field testing services will be provided on an “as requested” basis when scheduled by your representative. A minimum of 24-hour notice is required to properly schedule our services. To schedule our services please contact our dispatcher at (214) 630-1078. The dispatch office hours are from 7:00 a.m. to 5:00 p.m. Messages left after business hours will be checked the following business day.

**Terracon shall not be held responsible for tests not performed as a result of a failure to schedule our services or any subsequent damage caused as a result of a lack of testing. Terracon recommends that a copy of this proposal be provided to the general contractor, so they understand our scope of services and schedule us accordingly. Please note that the number of tests and trips described in the Scope of Services does not constitute a minimum or maximum number of tests or trips that may be required for this project.**

#### **Scheduling Retests:**

**It is the responsibility of your representative to schedule retests in a like manner to scheduling our original services. Terracon shall not be held responsible for retests not performed as a result of a failure to schedule our services or any subsequent damage caused as a result of a lack of retesting.**

#### **Additional Observation and Testing Services:**

If you would like us to perform additional observation and testing services, please contact us and we will issue a short Supplement to Agreement form, or Supplemental Proposal, that outlines the additional work to be performed and associated fees. To authorize us to begin additional Observation and testing services, you simply return a signed copy of the Supplemental agreement.

### **F) COMPENSATION**

Based on the project information available for our review, we propose a budget estimate of **\$158,521.50**. Services provided will be based on the unit rates included in the attached Fee Estimate. Please note that this is only a budget estimate and not a not-to-exceed price. Many

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factors beyond our control, such as weather and the contractor's schedule, will dictate the final fee for our services.

For services provided on an "as requested" basis, overtime is defined as all hours in excess of eight hours per day or outside of the normal hours of 7:00 a.m. to 5:00 p.m. Monday through Friday, and all hours worked on weekends and holidays. Overtime rates will be 1.5 times the hourly rate quoted.

**A two-hour minimum charge is applicable to all trips made portal to portal (our laboratory) to provide our testing, observation and consulting services. A minimum charge is not applicable for trips to the project site for sample pickup only. All labor, equipment and transportation charges are billed on a portal-to-portal basis from our office.**

You will be invoiced on a monthly basis for services actually performed and/or as authorized or requested by you or your designated representative. Terracon's total invoice fee is due within thirty days following final receipt of invoice. Quantities and costs associated with re-tests, cancellations and stand-by time are not included in our estimated fee.

### **G) SITE ACCESS AND SAFETY**

Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the services and will execute any necessary site access agreement. Terracon will be responsible for supervision and site safety measures for its own employees but shall not be responsible for the supervision or health and safety precautions for any third parties, including Client's contractors, subcontractors, or other parties present at the site.

### **H) TESTING AND OBSERVATION**

Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Terracon will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive and are conducted to reduce – not eliminate – project risk. Client agrees to the level or amount of testing performed and the associated risk. Client is responsible (even if delegated to contractor) for notifying and scheduling Terracon so Terracon can perform these services. Terracon shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Terracon's performance of testing and observation services shall not relieve contractor in any way from its responsibility for defects discovered in its work or create a warranty or guarantee. Terracon will not supervise or direct the work performed by contractor or its subcontractors and is not responsible for their means and methods.

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**I) AUTHORIZATION**

This proposal for services and accompanying limitations 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 this opportunity of working with you and we look forward to working with you in the future.

Sincerely,  
Terracon Consultants, Inc.  
(Texas Registration No. F-3272)

  
Reynaldo Mirasol  
Senior Project Manager

  
Drew Baze  
Department Manager, Materials

**Attachments:**

(1) Fee Estimate



## Fee Estimate

### Materials Services

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| DESCRIPTION  | RATE      | QUANTITY | UNITS | TRIPS | TOTAL QUANTITY | TOTAL         |
|--|-----------|----------|-------|-------|----------------|---------------|
| <b>1 Earthwork Observations and Testing</b>                      |           |          |       |       |                | \$ 56,666.50  |
| <b>1.1 Full-Time</b>   |           |          |       |       |                | \$ 22,099.00  |
| Soils Technician   | \$ 68.00  | 8        | hours | 20    | 160            | \$ 10,880.00  |
| Soils Technician, Overtime                                       | \$ 102.00 | 4        | hours | 20    | 80             | \$ 8,160.00   |
| Nuclear Gauge (Equipment)  | \$ 72.45  | 1        | days  | 20    | 20             | \$ 1,449.00   |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 20    | 20             | \$ 1,610.00   |
| <b>1.2 Part Time</b>   |           |          |       |       |                | \$ 26,347.50  |
| Soils Technician   | \$ 68.00  | 4        | hours | 50    | 200            | \$ 13,600.00  |
| Soils Technician, Overtime                                       | \$ 102.00 | 1        | hours | 50    | 50             | \$ 5,100.00   |
| Nuclear Gauge (Equipment)  | \$ 72.45  | 1        | days  | 50    | 50             | \$ 3,622.50   |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 50    | 50             | \$ 4,025.00   |
| <b>1.3 Sample Pick-Up</b>  |           |          |       |       |                | \$ 866.00     |
| Soils Technician   | \$ 68.00  | 2        | hours | 4     | 8              | \$ 544.00     |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 4     | 4              | \$ 322.00     |
| <b>1.4 Laboratory Testing</b>                                    |           |          |       |       |                | \$ 7,354.00   |
| Standard Proctor (ASTM D698)                                     | \$ 185.00 | 6        | tests | 1     | 6              | \$ 1,110.00   |
| Modified Proctor (ASTM D1557)                                    | \$ 205.00 | 6        | tests | 1     | 6              | \$ 1,230.00   |
| Cement Treated Base ASTM D558                                    | \$ 200.00 | 8        | tests | 1     | 8              | \$ 1,600.00   |
| Lime Series  | \$ 315.00 | 2        | tests | 1     | 2              | \$ 630.00     |
| Wash 200 ,Soil (ASTM D1140)                                      | \$ 48.00  | 4        | tests | 1     | 4              | \$ 192.00     |
| Oversized Particle Correction (ASTM D4718)                       | \$ 30.00  | 2        | tests | 1     | 2              | \$ 60.00      |
| CTB Compressive Strength (ASTM D1663)                            | \$ 80.00  | 16       | tests | 1     | 16             | \$ 1,280.00   |
| Atterberg Limits Determination (3 pt.) (ASTM D4318)              | \$ 78.00  | 14       | tests | 1     | 14             | \$ 1,092.00   |
| Sieve Analysis, Combined Coarse and Fine (ASTM C136)             | \$ 80.00  | 2        | tests | 1     | 2              | \$ 160.00     |
| <b>2 Concrete and Reinforcing Steel Observations and Testing</b> |           |          |       |       |                | \$ 81,160.00  |
| <b>2.1 Taxiway</b>   |           |          |       |       |                | \$ 30,249.00  |
| Concrete Technician  | \$ 65.00  | 6        | hours | 18    | 108            | \$ 7,020.00   |
| Concrete Technician, Overtime                                    | \$ 97.50  | 6        | hours | 18    | 108            | \$ 10,530.00  |
| Compressive Strength of 4" x 8" Cylinder (ASTM C39)              | \$ 27.00  | 15       | tests | 18    | 270            | \$ 7,290.00   |
| Flexural Strength of Concrete Beam (ASTM C78)                    | \$ 55.00  | 4        | tests | 18    | 72             | \$ 3,960.00   |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 18    | 18             | \$ 1,449.00   |
| <b>2.2 Roundabout</b>  |           |          |       |       |                | \$ 20,766.00  |
| Concrete Technician  | \$ 65.00  | 6        | hours | 12    | 72             | \$ 4,680.00   |
| Concrete Technician, Overtime                                    | \$ 97.50  | 6        | hours | 12    | 72             | \$ 7,020.00   |
| Compressive Strength of 4" x 8" Cylinder (ASTM C39)              | \$ 27.00  | 25       | tests | 12    | 300            | \$ 8,100.00   |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 12    | 12             | \$ 966.00     |
| <b>2.3 Miscellaneous Placements</b>                              |           |          |       |       |                | \$ 16,215.00  |
| Concrete Technician  | \$ 65.00  | 5        | hours | 30    | 150            | \$ 9,750.00   |
| Compressive Strength of 4" x 8" Cylinder (ASTM C39)              | \$ 27.00  | 5        | tests | 30    | 150            | \$ 4,050.00   |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 30    | 30             | \$ 2,415.00   |
| <b>2.4 Sample Pick-Ups</b>                                       |           |          |       |       |                | \$ 12,630.00  |
| Concrete Technician  | \$ 65.00  | 2        | hours | 60    | 120            | \$ 7,800.00   |
| Vehicle Charge   | \$ 80.50  | 1        | trips | 60    | 60             | \$ 4,830.00   |
| <b>2.5 Rebar Only</b>  |           |          |       |       |                | \$ 1,300.00   |
| Concrete Technician  | \$ 65.00  | 4        | hours | 5     | 20             | \$ 1,300.00   |
| <b>3 Administration</b>  |           |          |       |       |                | \$ 20,695.00  |
| Project Manager  | \$ 168.00 | 80       | hours | 1     | 80             | \$ 13,440.00  |
| Project Assistant  | \$ 74.00  | 50       | hours | 1     | 50             | \$ 3,700.00   |
| Authorized Project Reviewer                                      | \$ 237.00 | 15       | hours | 1     | 15             | \$ 3,555.00   |
| <b>Total</b>   |           |          |       |       |                | \$ 158,521.50 |