



February 8, 2024

Mr. Jason R. Anderson, PE
Director of Public Works/City Engineer
City of Marshall
344 West Main Street
Marshall, MN 56258

Re: Proposal for Professional Engineering Services
Runway 12 ILS Replacement – Planning and Design Phases
Southwest Minnesota Regional Airport (MML)

Dear Mr. Anderson:

Pursuant to our Professional Services Agreement dated March 10, 2020, TKDA is hereby authorized to proceed with the Engineering Services in connection with the **Runway 12 Instrument Landing System (ILS) Replacement Project at the Southwest Minnesota Regional Airport (MML)** hereinafter called the Project. No Federal funds will be utilized for the financing of this Project, and therefore the Provisions of Attachment B of the Professional Services Agreement shall not apply to this Proposal. Hereinafter, **City of Marshall** is referred to as the OWNER.

I. PROJECT DESCRIPTION

The Minnesota Department of Transportation Office of Aeronautics (MnDOT Aeronautics) is planning to replace the existing Instrumented Landing System (ILS) on Runway 12, hereby known as the Project. The Project includes planning and design engineering for the following major items of work:

- Install new Runway 12 Glide Slope (GS) System
- Install new Runway 12 Localizer (LOC) System
- Install new Runway 12 GS Shelter
- Install new Runway 12 LOC Shelter
- Relocate existing Runway 30 MALSF Shelter
- Relocate electrical transformer
- Improve Runway Safety Area surface grading

The OWNER has requested that TKDA provide engineering assistance for the Project. Engineering design will consist of the following, to be completed as one construction project, funded in part by the State of Minnesota:

Planning and Engineering to design structural foundations, electrical services, and civil grading improvements associated with the installation of new ILS equipment.

II. SERVICES TO BE PROVIDED BY TKDA

Based on TKDA's understanding of the Project, we propose to provide the following Planning and Civil, Electrical, and Structural Engineering services:

A. Project Formulation

1. Conduct Site Visit to evaluate existing ILS system (1 trip by Project Manager)
2. Perform a Siting Review of existing ILS system per the current ILS FAA Circulars and Orders to determine any non-standard conditions. The current applicable FAA Advisory Circulars and Orders as of January 2024 include:
 - AC 150/5220-23A Frangible Connections
 - AC 150/5300-13B Airport Design
 - AC 150/5370-10H Standards for Specifying Construction of Airports
 - AC 150/5370-2G Operational Safety on Airports During Construction
 - Order 6750.16E Siting Criteria for Instrument Landing Systems

- Order 6750.49B Maintenance of Instrumented Landing Systems (ILS) Facilities
- Order 8240.47D Determination of Instrumented Landing System (ILS) Glidepath Angle, Reference Datum Heights (RDH), and Achieved Reference Datum Heights (ARDH)

a. Known non-standard conditions include: LOC Shelter within Runway Object Free Area (ROFA)

3. Develop Project Scope and Schedule with OWNER
4. Conduct project kickoff meeting attended by design team
5. Obtain topographic survey of the Project site, including GS and LOC critical areas, equipment and shelter sites, and access roads.
6. Coordinate with subconsultant for geotechnical investigation (6 soil borings to 25-ft depth)
 - a. Prepare 1 subcontract
 - b. 1 meeting attended by Project Manager (virtual)
7. Conduct bi-weekly coordination meetings with FAA and MnDOT for findings (virtual)
 - c. Up to 5 meetings attended by Project Manager and Senior Electrical Engineer
8. Develop Exhibits showing existing and future ILS configurations
9. Submit 7460-1 Airspace Case, including the following points:
 - a. All equipment shelters – Four corners and height
 - b. Glide Slope (GS) Tower – Center of tower and height
 - c. Localizer (LOC) Antenna – Four corners and height
10. Prepare Categorical Exclusion Checklist (CATEX) and submit to the FAA Airport District Office (ADO)
11. Prepare Airport Layout Plan (ALP) Updates and/or validate with the FAA and MnDOT Aeronautics if any sheet updates are required
12. Evaluate ILS electrical service and coordinate with MMU
13. Evaluate MALSF system electrical and coordinate with MMU
14. Develop and Maintain Preliminary Project Schedule
15. Prepare Preliminary Cost Estimate for Funding
16. Conduct Project Cost Review Meeting with OWNER (Virtual)
17. Prepare MnDOT Grant Request Letter for Formulation and Design Phase

B. Design Phase Services

1. Prepare project scope and schedule for design
2. Conduct bi-weekly coordination meetings with FAA and MnDOT during design (virtual)
 - a. Up to 5 meetings attended by Project Manager and Senior Electrical Engineer
3. Final civil layout and grading design
 - a. ILS equipment layout
 - b. Access roads
 - c. Runway safety area grading to meet current FAA standards

4. Final Structural Foundation Design – Antennas
5. Final Structural Foundation Design – ILS Shelters
6. Final Structural Foundation Design – MALSF Shelter
7. Final Electrical Design – ILS System
8. Final Electrical Design – MALSF shelter
9. Prepare 60% Plans
10. Prepare 60% Specifications
11. Submit 60% Plans and Specifications to MnDOT and FAA for review
12. Prepare 100% Plans Bidding
 - a. Civil Engineering (shelter site design, access roads, foundation siting and elevations)
 - b. Structural Engineering (foundation design for all shelters, towers, and equipment pads)
 - c. Electrical Engineering (electrical distribution and equipment design, electrical utility coordination)
13. Prepare 100% Specifications for Bidding
14. Prepare Final Cost Estimate
15. Prepare Construction Safety and Phasing Plan (CSPP) and submit to the FAA ADO
16. Prepare Advertisement for Bids
17. Prepare Bid Package and post electronically for bidding on QuestCDN
18. Provide Bidding Assistance to Contractors
19. Conduct Pre-bid Conference
20. Issue Addenda
21. Prepare Bid Results and submit to OWNER and MnDOT Aeronautics
22. Prepare Recommendation for Contract Award
23. Airport Layout Plan (ALP) Update
24. Grant Closeout Services for Formulation and Design Phase
25. Prepare MnDOT Grant Request Letter for Construction Phase

III. ADDITIONAL SERVICES

If authorized in writing by the OWNER, we will furnish or obtain from others Additional Services of the types listed below which are not considered as basic services under this Proposal. Additional Services shall be billable on an Hourly Time and Materials basis and such billings shall be over and above any maximum amounts set forth in this Proposal.

- A. Coordination of Flight Check, and/or any Reimbursable Agreements (RA) (to be flight checked by MnDOT)
- B. Commissioning of ILS (to be commissioned by MnDOT)
- C. Grading Design for GS and LOC Critical Areas, if needed.
- D. Environmental Assessments other than CATEX.
- E. Professional Land Surveyor Services, other than those listed in SECTION II.

- F. Additional Site visits to Marshall, other than those required for services listed in SECTION II.
- G. Construction phase engineering or testing services.

IV. OWNER RESPONSIBILITIES

These responsibilities shall be as set forth in Article 9 of the Professional Services Agreement and as further described or clarified hereinbelow:

- A. Designate one individual to act as a representative with respect to the work to be performed, and such person shall have complete authority to transmit instructions, receive information, interpret and define policies, and make decisions with respect to critical elements pertinent to the Project. This individual shall be identified in the signature block area of this Proposal.
- B. Provide TKDA with access to the site as required to perform services listed in SECTION II.
- C. Provide reviews of materials furnished by TKDA in a reasonable and prompt manner so the Project schedule can be maintained.
- D. Provide equipment and shelter plans, including loading and reaction information, as supplied by MnDOT Aeronautics.

V. PERIOD OF SERVICE

We would expect to start our services promptly upon receipt of your written acceptance of this Proposal and estimate to complete SECTION II services within six (6) months.

VI. COMPENSATION

Compensation to TKDA for services provided as described in SECTION II of this Proposal shall be on an Hourly Time basis in an amount not to exceed **\$94,400**, as summarized below. Our detailed Project Fee Estimate is attached.

| | |
|-------------------------------------|--------------------|
| Section II.A: Project Formulation | \$31,100.00 |
| Section II.B: Design Phase Services | \$63,300.00 |
| Total Not to Exceed Amount | \$94,400.00 |

Payment shall be made in accordance with Article 4 of our Agreement.

The level of effort required to accomplish SECTION II services can be affected by factors which are beyond our control. Therefore, if it appears at any time charges for services rendered under SECTION II will exceed the above, we agree we will not perform services or incur costs which will result in billings in excess of such amount until we have been advised by you additional funds are available and our work can proceed.

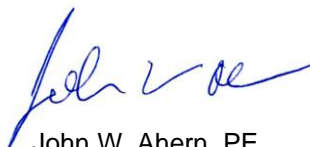
VII. CONTRACTUAL INTENT

We thank you for the opportunity to submit this Proposal. We agree this letter will constitute an authorization under our Professional Services Agreement upon signature by an authorized official of the City of Marshall and the return of a signed original to us. This Proposal will be open for acceptance for **60** days, unless the provisions herein are changed by us in writing prior to that time. Please feel free to contact Dan Sherer directly at 651.219.2224 or daniel.sherer@tkda.com if you have any questions.

Sincerely,



Daniel A. Sherer, PE
Project Manager



John W. Ahern, PE
Vice President–Aviation

Attachments: Project Fee Estimate
2024 Rate Sheet
AET Proposal

ACCEPTED FOR CITY OF MARSHALL

By: _____
Signature Printed Name/Title Date

OWNER DESIGNATED REPRESENTATIVE:

Name/Title Phone Email

DAS:JWA:dad



Project Fee Estimate

| Client: City of Marshall | | Date: 2/7/2024 | | | | | | | | | | | |
|---|--|---------------------------------|-----------------|------------------|----------------------------|-----------------------|---------------------|-----------------------|-----------------|-----------------|-----------------|------------------|------------------|
| Project: Runway 12 Instrument Landing System Replacement | | By: DAS | | | | | | | | | | | |
| Task | Task Description | Estimated Person Hours Required | | | | | | | | | | Total Hours | Total Dollars |
| | | Project Manager | Civil Engineer | Civil Technician | Senior Electrical Engineer | Electrical Technician | Structural Engineer | Structural Technician | Airport Planner | Surveyor | Admin | | |
| | | 218 | 119 | 117 | 226 | 113 | 162 | 140 | 122 | 92 | 105 | | |
| A PROJECT FORMULATION | | | | | | | | | | | | | |
| 1 | Conduct Site Visit | 8 | | | | | | | | | | 8 | \$ 1,744 |
| 2 | Perform Siting Review | 1 | 2 | | 2 | | | | | | | 5 | \$ 908 |
| 3 | Develop Project Scope with City | 4 | | | 1 | | | | | | 2 | 7 | \$ 1,308 |
| 4 | Project Kickoff Meeting | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 7 | \$ 1,095 |
| 5 | Topographic Survey and Base Maps | | | 8 | | | | | | | 16 | 24 | \$ 2,408 |
| 6 | Coordinate Geotechnical Investigation | 2 | 1 | | | | | | | | 2 | 5 | \$ 765 |
| 7 | Conduct Bi-Weekly Meetings with FAA & MnDOT | 5 | | | 5 | | | | | | | 10 | \$ 2,220 |
| 8 | Develop Exhibits of ILS configurations | 2 | 4 | 8 | 2 | 4 | | | | | | 20 | \$ 2,752 |
| 9 | Prepare 7460-1 airspace permit and submit to FAA | 2 | 4 | | | | | | | | | 6 | \$ 912 |
| 10 | Prepare CATEX and submit to FAA | | 4 | | | | | | | | | 4 | \$ 476 |
| 11 | Prepare ALP Update and coordinate with FAA | 1 | 4 | | | | | | 8 | | | 13 | \$ 1,670 |
| 12 | Evaluate ILS Electrical Service | | | | 4 | | | | | | | 4 | \$ 904 |
| 13 | Evaluate MALSF Electrical Service | | | | 2 | | | | | | | 2 | \$ 452 |
| 14 | Develop Preliminary Project Schedule | 2 | | | | | | | | | | 2 | \$ 436 |
| 15 | Prepare Preliminary Cost Estimate | 4 | 4 | | 4 | | 4 | | | | | 16 | \$ 2,900 |
| 16 | Project Cost Review meeting with City | 1 | | | 1 | | 1 | | | | | 3 | \$ 606 |
| 17 | Prepare MnDOT Grant Request Letter | 2 | | | | | | | | | 1 | 3 | \$ 541 |
| | SUBTOTAL HOURS | 35 | 24 | 17 | 22 | 5 | 6 | 1 | 8 | 16 | 5 | 139 | |
| | SUBTOTAL COST | \$ 7,630 | \$ 2,856 | \$ 1,989 | \$ 4,972 | \$ 565 | \$ 972 | \$ 140 | \$ 976 | \$ 1,472 | \$ 525 | | \$ 22,097 |
| Expenses: | | | | | | | | | | | | | |
| Travel & Subsistence (TS) | | | | | | | | | | | | \$ 580 | |
| Miscellaneous (MI) | | | | | | | | | | | | \$ - | |
| Reproduction & Reprographics (RR) | | | | | | | | | | | | \$ - | |
| Subconsultant - Geotechnical Investigation | | | | | | | | | | | | \$ 7,698 | |
| Subconsultant Mark-up | | | | | | | | | | | | 10% \$ 770 | |
| Subtotal Expenses | | | | | | | | | | | | \$ 9,048 | |
| Subtotal | | | | | | | | | | | | \$ 31,145 | |
| ROUNDED | | | | | | | | | | | | \$ 31,100 | |
| B DESIGN PHASE | | | | | | | | | | | | | |
| 1 | Prepare Design Scope and Schedule | 2 | | | | | | | | | | 2 | \$ 436 |
| 2 | Conduct Bi-Weekly Meetings with FAA & MnDOT | 5 | | | 5 | | | | | | | 10 | \$ 2,220 |
| 3 | Final Civil Layout and Grading Design | 2 | 8 | | | | | | | | | 10 | \$ 1,388 |
| 4 | Final Structural Foundation Design - Antennas | | | | | | 10 | | | | | 10 | \$ 1,620 |
| 5 | Final Structural Foundation Design - ILS Shelters | | | | | | 8 | | | | | 8 | \$ 1,296 |
| 6 | Final Structural Foundation Design - MALSF Shelter | | | | | | 4 | | | | | 4 | \$ 648 |
| 7 | Final Electrical Design - ILS System | | | | 24 | | | | | | | 24 | \$ 5,424 |
| 8 | Final Electrical Design - MALSF Shelter | | | | 10 | | | | | | | 10 | \$ 2,260 |
| 9 | Prepare 60% Plans | 4 | 8 | 16 | 8 | 40 | 8 | 24 | | | | 108 | \$ 14,680 |
| 10 | Prepare 60% Specifications | 8 | | | 4 | | 4 | | | | 4 | 20 | \$ 3,716 |
| 11 | Submit 60% Documents to MnDOT & FAA | 1 | 4 | | | | | | | | | 5 | \$ 694 |
| 12 | Prepare Final Plans (100%) | 2 | 6 | 12 | 8 | 24 | 10 | 16 | | | | 78 | \$ 10,934 |
| 13 | Prepare Final Specifications (100%) | 4 | | | 4 | | 4 | | | | 4 | 16 | \$ 2,844 |
| 14 | Prepare Final Cost Estimate | 2 | | | 2 | | 2 | | | | | 6 | \$ 1,212 |
| 15 | Prepare CSPP and submit to FAA | 2 | 8 | | | | | | | | | 10 | \$ 1,388 |
| 16 | Prepare Ad for Bids | 1 | | | | | | | | | 1 | 2 | \$ 323 |
| 17 | Prepare Electronic Bidding on QuestCDN | 1 | | | | | | | | | 2 | 3 | \$ 428 |
| 18 | Answer Bidding Questions | 4 | | | 4 | | 3 | | | | | 11 | \$ 2,262 |
| 19 | Conduct Pre-Bid Conference | 4 | | | 1 | | 1 | | | | | 6 | \$ 1,260 |
| 20 | Issue Addenda | 2 | 4 | 8 | 2 | 4 | 2 | 4 | | | 2 | 28 | \$ 3,846 |
| 21 | Prepare Bid Tabulation & Submit to MnDOT | 2 | | | | | | | | | | 2 | \$ 436 |
| 22 | Prepare Recommendation for Award | 1 | | | | | | | | | 1 | 2 | \$ 323 |
| 23 | Grant Closeout Services for Preliminary and Design | 8 | | | | | | | | | 2 | 10 | \$ 1,954 |
| 24 | Prepare Grant Request for Construction | 4 | | | | | | | | | 1 | 5 | \$ 977 |
| | SUBTOTAL HOURS | 59 | 38 | 36 | 72 | 68 | 56 | 44 | - | - | 17 | 390 | |
| | SUBTOTAL COST | \$ 12,862 | \$ 4,522 | \$ 4,212 | \$ 16,272 | \$ 7,684 | \$ 9,072 | \$ 6,160 | \$ - | \$ - | \$ 1,785 | | \$ 62,569 |
| Expenses: | | | | | | | | | | | | | |
| Travel & Subsistence (TS) | | | | | | | | | | | | \$ 520 | |
| Miscellaneous (MI) | | | | | | | | | | | | \$ - | |
| Reproduction & Reprographics (RR) | | | | | | | | | | | | \$ 250 | |
| Subconsultant | | | | | | | | | | | | \$ - | |
| Subconsultant Mark-up | | | | | | | | | | | | 10% \$ - | |
| Subtotal Expenses | | | | | | | | | | | | \$ 770 | |
| Subtotal | | | | | | | | | | | | \$ 63,339 | |
| ROUNDED | | | | | | | | | | | | \$ 63,300 | |
| TOTAL | | | | | | | | | | | | \$ 94,484 | |
| TOTAL (ROUNDED) | | | | | | | | | | | | \$ 94,400 | |



2024 SCHEDULE OF ACTUAL HOURLY BILLING RATES

| <u>Classification</u> | <u>Range of Direct Hourly Billing Rates*</u> | | |
|---|--|----|-------------|
| Senior Management (CEO, Vice President) | \$ 67.00 | to | \$ 100.00 |
| Senior Registered Engineer, Architect, Landscape Architect, Senior Scientist, Senior GIS Analyst or Senior Planner | \$ 37.00 | to | \$ 100.00 |
| Engineering, Architectural, Planning, or GIS Specialist II | \$ 33.00 | to | \$ 95.00 |
| Engineering, Architectural, Planning, or GIS Specialist I | \$ 29.00 | to | \$ 58.00 |
| Registered Engineer, Architect, Landscape Architect, Planner, GIS Analyst, Professional Land Surveyor, Scientist, or Certified Interior Designer | \$ 23.00 | to | \$ 71.00 |
| Graduate Engineer, Planner, Interior Designer, Scientist, GIS Analyst, or Land Surveyor | \$ 23.00 | to | \$ 50.00 |
| Architectural Designer or Landscape Architectural Designer | \$ 23.00 | to | \$ 42.00 |
| Technician III | \$ 30.00 | to | \$ 44.00 ** |
| Technician II | \$ 21.00 | to | \$ 40.00 ** |
| Technician I | \$ 15.00 | to | \$ 34.00 ** |

* Rates effective until December 31, 2024.

** For hours worked over 40 hours per week individuals are billed at one and one-half times the above rates.

In addition to hourly charges, TKDA shall be reimbursed for direct expenses actually incurred. Unless otherwise approved by the Client, direct expenses for travel and subsistence will be billed at or up to applicable IRS and US GSA published rates. TKDA shall be reimbursed for subconsultant fees at the amount billed TKDA plus 10%.

Notes:

- Overhead Costs shall be calculated as the Direct Hourly Rate times TKDA's Overhead Multiplier Rate of 165.2%. This is slightly lower than our MnDOT audited rate.
- For Hourly Rate Authorizations, Direct Rates will be subject to an Hourly Rate Multiplier of 3.05, which includes Overhead Costs and Fee (Profit).
- For Hourly Cost Reimbursement Plus Fixed Fee Authorizations, the Fixed Fee shall be 15% of the Direct Salary Costs and Overhead Costs amount initially approved under the Authorization.

January 31, 2023



Mr. Daniel Sherer, PE
TKDA
444 Cedar Street, Suite 1500
Saint Paul, MN 55101
daniel.sherer@tkda.com

RE: Proposal for Geotechnical Services
Proposed SW MN Regional Airport Runway Instrument Landing System Replacement
Marshall, Minnesota
AET #P-0030474

Dear Mr. Sherer:

American Engineering Testing, Inc. is pleased to submit a proposal for this project. In this proposal, we present our understanding of the project, an outline of the scope of services we are to provide, a fee schedule, and an estimate of charges for our services.

Purpose

The purpose of this geotechnical work is to explore the subsurface conditions at the site, and based on our characterization of the obtained data, to prepare a geotechnical engineering report presenting comments and recommendations to assist you and your design team in planning and construction.

Project Information

We understand that you are planning to replace a runway instrument landing system at the Southwest Minnesota Regional Airport in Marshall, Minnesota. The proposed structure will include antenna foundations and shelter buildings. The RFP provides the proposed design pressures and structure categories.

Scope of Services

Field Exploration

As requested by you, our subsurface exploration program will consist of the following:

- Perform six (6) standard penetration test borings (ASTM:D1586) to a depth of 25 feet each.
- Seal the boreholes per Minnesota Department of Health requirements.
- Dimension and document boring locations based on the existing surface features.
- Obtain surface elevations at each boring location based on provided/assumed benchmarks.

We have not had an opportunity to observe the project site; we assume that the proposed boring locations will be accessible to our truck mounted equipment. It is our understanding that TKDA will provide and stake the boring locations and elevations.

We will drill the borings using hollow stem augers or by rotary mud drilling, and sampling by the split-barrel method (ASTM D1586). Our crew will keep field logs noting the methods of drilling and sampling, the Standard Penetration Values (N-values, "blows per foot"), preliminary soil classification, and observed

1603 Halbur Road | Marshall, MN 56258

Phone (507) 532-0771 | (800) 972-6364 | Fax (651) 659-1379 | teamAET.com | AA/EEO

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groundwater levels. Representative portions of recovered samples will be sealed in jars to prevent moisture loss and submitted to our laboratory for review, testing and final classification. We will backfill the boreholes and soundings to comply with the Minnesota Department of Health Regulations.

The pavement/parking lot will be patched with bituminous/concrete. Even after backfilling, some sloughing of the backfill may occur, resulting in a potential tripping hazard to pedestrians. We assume that the property owner will backfill and repair any boreholes that may slough after our exploration is complete. AET cannot accept any liability associated with pedestrian injury. Accessing the boring locations may leave ruts in the ground. We assume that property owner will perform any site restoration work. We have not included a fee for site restoration in our cost estimate.

Underground Utilities

Before we drill, we will contact Gopher State One Call to locate public underground utilities. Gopher State One Call does not currently charge for this service, but they will not locate private underground utilities or structures. Examples of private utilities include, but are not limited to, propane lines, sewer laterals, storm sewer, sprinkler systems, site lighting, and electric and data lines between buildings. **The property owner is responsible for locating all private underground utilities and structures.** Please provide us with any maps, plans and records showing the location of all private utilities and structures.

We can provide you with names and contact information for private utility locators. These companies usually charge a fee for their services. Also, please note that private locators cannot guarantee that all private utilities will be located. For the private locator to be accurate and effective, the property owner must provide maps, plans and records showing the location of all private utilities and structures. The property owner must also provide a knowledgeable site representative to meet with the private locator and AET personnel.

AET shall be entitled to rely upon the accuracy of all location information supplied by any source. We will not be responsible for any damages to underground utilities or structures not located or incorrectly identified by the property owner, any maps, plans or records, or public or private utility locator providers.

Laboratory Testing

Our services will include index laboratory testing of selected soil samples to aid in judging engineering properties of the soils. The requested laboratory testing is as follows:

| <u>Test</u> | <u>Quantity</u> | <u>Unit Price</u> | <u>Cost</u> |
|---|-----------------|--------------------------|-------------------|
| Moisture Content (ASTM:D2216) | 30 | \$15.00 | \$450.00 |
| Moisture Content/Density (ASTM:D7263) | 2 | \$70.00 | \$140.00 |
| Atterberg Limits (ASTM:D4318) | 1 | \$132.00 | \$132.00 |
| Grain Size Distribution w/o hydrometers (ASTM:D422) | -- | \$110.00 | \$-- |
| Unconfined Compressive Strength (ASTM:D2166) | 1 | \$110.00 | \$110.00 |
| Grain Size Distribution w/hydrometers (ASTM:D422) | 2 | \$208.00 | \$416.00 |
| Standard Proctor (ASTM:D698) | -- | \$184.00 | \$-- |
| | | <u>Total Cost</u> | \$1,248.00 |



Engineering Report

Upon completion of the drilling and laboratory work, we will prepare a geotechnical report describing the subsurface conditions encountered and presenting our foundation recommendations for the runway instrument landing system. The report will also discuss earthwork recommendations. Our geotechnical engineering opinions and recommendations regarding the following:

- Grading procedures to prepare the area for structural support, including comments on the suitability of the on-site soils for reuse as fill.
- Foundation types and depths, including allowable soil bearing capacity and estimates of foundation settlement.
- Backfilling procedures, including material types and compaction requirements.
- Ground floor slab support, including recommendations on the need for a vapor or capillary water barrier.
- Comments on other items which may affect final performance or constructability, such as frost heave and drainage considerations.

Insurance

For the mutual protection of you and American Engineering Testing, we maintain both general and professional liability insurance. Certificates of such insurance can be provided at your request.

Project Direction

Services we perform on your project will be done under the direction of an experienced geotechnical engineer registered in the State of Minnesota.

Fees

The scope of work defined in this proposal will be performed on a time and materials basis in accordance with the attached schedule of fees. For the scope of work described above, the estimated cost will be as follows:

| Task | Cost |
|-------------------------------------|-------------------|
| Mobilization/Demobilization | No Charge |
| Clear Utilities/Layout soil borings | \$100.00 |
| Soil Borings | \$4,500.00 |
| MDH Sealing Record | \$150.00 |
| Laboratory Testing | \$1,248.00 |
| Report and Project Management | \$1,700.00 |
| TOTAL | \$7,698.00 |

We would not exceed \$7,698.00 without prior authorization. If additional drilling is required for proper soil evaluation it would be charged at a unit rate of \$35/foot.

In the event the scope of our services needs to be revised due to unanticipated conditions or for proper evaluation, we will review such scope adjustments and the associated fees with you and receive your approval before proceeding.

Minnesota Department of Health Fees

Effective July 1, 2019, the Minnesota Department of Health (MDH) has changed the borehole sealing and notification requirements. For sites where borings are drilled to a depth of 15 feet or deeper, all



licensed drilling companies are required by law to grout the boreholes upon completion. For borings 25 feet in depth or deeper all licensed drilling companies must submit written notification to the MDH prior to drilling along with a fee of \$75. Projects that span multiple properties will require multiple notifications. The MDH also requires that a Sealing Record be submitted to the MDH, with a copy to you, after the borings are completed. The above fee estimate for our geotechnical services includes the MDH fee for the proposed scope of drilling; however, because final boring depths can change, for example, due to possible unanticipated poor soil conditions, the final MDH fee (including an administrative charge of \$75 per notification) will be added, if necessary, to our final invoice to you.

The MDH Notification and Sealing Record requires the Property Owner name and mailing address (the Property Owner will also receive a copy of the Sealing Record). Please provide this information below.

Property Owner's name/company name:

Property Owner's mailing address:

Performance Schedule

Weather permitting; we anticipate drilling operations can begin within about three (3) to four (4) weeks after receiving authorization to proceed. Verbal results of the drilling activities can be obtained shortly after completion of the drilling. We anticipate the geotechnical report can be prepared within about one (1) week to two (2) weeks after completion of the field work. We are available to review special schedule needs with you.

Environmental Concerns

This proposal is presented for engineering services to evaluate the structural properties of the soil at the specified site. This proposed does not cover environmental assessment of the site or environmental testing of the soil or groundwater. If you wish to have us provide these additional services, please contact us.

Terms and Conditions

our Revised Subcontract Agreement dated January 2, 2006.

All AET Services are provided subject to the Terms and Conditions set forth in the ~~enclosed Master Service Agreement~~, which, upon acceptance of this proposal, are binding upon you as the Client requesting Services, and your successors, assignees, joint venturers and third-party beneficiaries. Please be advised that additional insured status is granted upon acceptance of the proposal.

Acceptance

AET requests written acceptance of this proposal in the Proposal Acceptance box below, but the following actions shall constitute your acceptance of this proposal together with the Terms and Conditions and Amendments: 1) issuing an authorizing purchase order for any of the Services described above, 2) authorizing AET's presence on site or 3) written or electronic notification for AET to proceed with any of the Services described in this proposal. Please indicate your acceptance of this proposal by signing



below and returning a copy to us. When you accept this proposal, you represent that you are authorized to accept on behalf of the Client.

~~We have enclosed with this proposal a copy of the "Environmental/Geotechnical Service Agreement-Terms and Conditions." The terms contained in this attachment are incorporated herein and are an integral part of this contract for professional engineering services.~~

If you have any questions regarding our services, or need additional information, please do not hesitate to contact us.

Sincerely,
American Engineering Testing, Inc.

Handwritten signature of Tom James in blue ink.

Tom James
Manager – Marshall
Phone: 507-532-0771
Fax: 651-659-1379
Email: tjames@teamaet.com

Handwritten signature of Gregory A. Guyer in black ink.

Gregory A. Guyer, PE
Senior Engineer
Phone: 507-387-2222
Fax: 651-659-1379
Email: gguyer@teamaet.com

TJ/GG/as

Attachments
Master Service Agreement (15 pages)

ACCEPTANCE AND AUTHORIZATION: AET Proposal No. P-0030474

SIGNATURE: _____
PRINTED NAME: _____
COMPANY: _____
ADDRESS: _____
PHONE NUMBER AND EMAIL: _____
DATE: _____

INVOICING INFORMATION (Provide Company AP Department Information, if present.)

AP CONTACT NAME: _____
BILLING/MAILING ADDRESS: _____
AP PHONE NUMBER AND INVOICE EMAIL: _____
P.O. NO./ PROJECT NO.: _____