

April 25, 2016

Patricia L. Jackson, PE, RAS
Facilities Construction Manager
City of McKinney
221 N. Tennessee Street
McKinney, Texas 75070

via email delivery

**Re: McKinney National Airport
McKinney Air Center Hangar No. 2 (MACH2)
Proposal for Services – Revised**

Dear Ms. Jackson:

The following scope of services is provided to the City of McKinney (CITY) by KSA Engineers, Inc. (ENGINEER) for professional design and construction administration services for the completion of the McKinney Air Center Hangar No. 2 (PROJECT).

The PROJECT is located at the McKinney National Airport (AIRPORT) and funded by the CITY. The PROJECT includes the design of a 100' x 95' hangar just south of the current McKinney Air Center Hangar currently under construction, as shown on the attached exhibit. The hangar will include a 22 foot sliding door on the west side, and a restroom facility.

The PROJECT scope is based on providing the services described herein, to design the proposed PROJECT in accordance with City of McKinney requirements. Any deviations from the accepted conceptual design layout once notice has been given to the ENGINEER to begin the Design Phase may require a change to the PROJECT scope and additional fees.

It is assumed that the PROJECT will be designed as one set of Construction Documents and will be constructed as one construction project. Any deviations from this assumption once notice has been given to the ENGINEER to begin the work of this contract may require a change to the PROJECT scope and additional fees.

The PROJECT will be designed to meet the current requirements of the Federal Aviation Administration (FAA), CITY, and Texas Accessibility Standards (TAS). If standards conflict, the most stringent standard shall govern.

It is understood that the CITY shall provide the following documents to the ENGINEER:

- Design aircraft for the project area, including types of aircraft expected and the number of anticipated annual operations for each aircraft.
- Report of geotechnical investigation complete with CBR evaluations, proposed pavement analysis, and recommendations for foundation design requirements, including subgrade preparation and footing loads. The report completed for MACH will be used, if additional borings are required the ENGINEER will coordinate with the CITY.

PROJECT DESIGN SCOPE

Basic Services to be provided by the ENGINEER include the following:

A. Preliminary Design Phase

After written authorization to proceed, ENGINEER shall:

- Consult with CITY to clarify and define the scope of the PROJECT, design requirements for the PROJECT, and review available data.
- Identify and analyze requirements of governmental authorities having jurisdiction to approve the design of the PROJECT and participate in consultations with such authorities.
- Prepare preliminary design plans, specifications and opinion of probable project cost for the proposed site development improvements. Provide digital and hard copies of the conceptual design layouts and review with the CITY and AIRPORT via email submission or as required.
- Design documents shall consist of civil drawings and specifications, building foundation drawings, architectural drawings, mechanical drawings, plumbing drawings, electrical drawings, project specifications, and an opinion of estimated project cost.
- Coordinate Geotechnical Investigation with Alliance Geotechnical Group (AGG).

Note the following with respect to the ENGINEER's design:

- The existing stormwater channel to the north and east of the proposed site is believed to be at or exceeding capacity, prior to construction of the PROJECT, based on the ENGINEER's knowledge of prior projects. The PROJECT is expected to increase the volume (approximately 6 c.f.s.) of stormwater runoff from the PROJECT site to the channel. The scope of the PROJECT does not include the design or evaluation of drainage improvements outside of the project limits and assumes that stormwater exiting the PROJECT site can follow its existing drainage patterns and flow to the channel. This proposal does not include the design of any onsite stormwater detention.
- Electrical service to the site is excluded from this proposal.
- Security improvements to the site are excluded from this proposal.
- The following utilities are excluded from this proposal: fiber optic cable, phone/internet service, and cable service.
- Data outlet locations will be included in the plans.
- The hangar foundation shall be designed using a slab on grade foundation. The use of piers or a post tensioned slab will require the renegotiation of Foundation Design fees.
- If the CITY significantly alters the accepted conceptual design layout once notice has been given to the ENGINEER to begin the Final Design Phase, a change to the PROJECT scope and additional fees may be required.

The ENGINEER's services under the Preliminary Design Phase will be considered complete when the preliminary design documents have been accepted by the CITY.

B. Final Design Phase

After completion of the Preliminary Design Phase, the ENGINEER shall:

- Revise the preliminary design documents based upon comments from the CITY and AIRPORT.
- After the final submittal review meeting and prior to submitting sealed design documents, the ENGINEER will coordinate final document approval with the CITY via email submission or as required.

The ENGINEER's services under the Final Design Phase will be considered complete once sealed design documents have been submitted to the CITY.

C. Bidding Phase

After completion of the Final Design Phase, the ENGINEER shall:

- The CITY will coordinate with the AIRPORT and ENGINEER to advertise the PROJECT.

- The CITY will conduct a Pre-Bid Meeting with the ENGINEER to participate.
- The CITY will prepare any required addendums with the ENGINEER to assist.
- The CITY will answer any Contractor questions with the ENGINEER to assist.
- The CITY will conduct a public Bid Opening with the ENGINEER to participate.
- The CITY will prepare a Bid Tabulation and recommendations for award of the PROJECT.

The ENGINEER's services under the Bidding Phase will be considered complete once the bid tabulation and award letter has been submitted to the CITY.

D. Construction Phase

After written authorization to proceed, ENGINEER shall:

- Prior to commencing of construction operations, the ENGINEER shall conduct a pre-construction conference with the CITY, the AIRPORT, the General Contractor, and other governmental authorities, as needed.
- The ENGINEER shall make visits to the site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress and quality of the various aspects of the CONTRACTOR's work. This proposal includes ten (10) site observations to be performed by the ENGINEER, including Final Walk-Through. Should the requirement for additional site visits be necessary, a change to the PROJECT scope and additional fees may be required.
 - The purpose of the ENGINEER's visits to the site will be to enable the ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by the ENGINEER during the Construction Phase, and, in addition, by exercise of the ENGINEER's efforts as an experienced and qualified design professional, to provide for the CITY a greater degree of confidence that the completed work of the Contractor will conform in general to the Contract Documents and that the integrity of the design concept of the completed PROJECT as a functioning whole as indicated in the Contract Documents has been implemented and preserved by the Contractor. On the other hand, the ENGINEER shall not, during such visits or as a result of such observations of the Contractor's work in progress, supervise, direct or have control over the Contractor's work, nor shall the ENGINEER have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, for safety precautions and programs incident to the work of the Contractor or for any failure of the Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor furnishing and performing the work. Accordingly, the ENGINEER neither guarantees the performance of the Contractor nor assumes responsibility for the Contractor's failure to furnish and perform its work in accordance with the Contract Documents.
 - The ENGINEER will attend a Final Walk-Through with the Contractor, AIRPORT, and CITY representatives to determine if construction work has been generally completed in conformance with the plans and specifications and prepare a list of visually non-conforming items and un-completed items of work.
- During site visits and on the basis of such observations, the ENGINEER shall provide written correspondence of the Contractor's work while it is in progress. If the ENGINEER believes that such work will not produce a completed PROJECT that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed PROJECT as a functioning whole as indicated in the Contract Documents, the ENGINEER will notify the project team. However, the ENGINEER does not have the authority to stop the Contractor's work.
- The ENGINEER shall issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents.
- The ENGINEER shall review and approve (or take other appropriate action in respect of) Shop Drawings and Samples and other data which Contractor is required to submit. This is only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed PROJECT as a functioning whole as

indicated in the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto.

- The ENGINEER shall evaluate, determine, and provide an opinion of the acceptability of substitute or "or equal" materials and equipment proposed by Contractor.
- The ENGINEER will review the Contractor's project schedule and coordinate with the CITY to verify that the project is being constructed in the manner set forth in the Contract Documents.
- The ENGINEER will review Construction Materials Testing Reports to verify compliance with the project plans and specifications.

The ENGINEER shall not be responsible for the acts or omissions of the Contractor, or of any subcontractor, any supplier, or of any other person or organization performing or furnishing any of the work unless the work is done in conformance with the plans and specifications of the ENGINEER. The ENGINEER shall not be responsible for the Contractor's failure to perform or furnish the work in accordance with the Contract Documents.

The Construction Phase will commence with the approval of Contract Documents by the City and receipt of all applicable permits required for the PROJECT or any part thereof and will terminate upon submission of the Final Closeout Documents.

E. Post-Construction Phase

After written authorization to proceed, ENGINEER shall:

- The ENGINEER will prepare PROJECT record drawings from as-constructed drawings provided by the Contractor and submit one full size set (34" x 22") of Record Drawings and digital copies (PDF, TIFF, and CADD) of the plans.
- Prepare and submit to the CITY preliminary record drawings for CITY inspectors to review prior to the Final Walk-Through.
- Prepare and submit to the CITY final record drawings including comments made during the Final Walk-Through.
- Perform a 1-Year Warranty Inspection of the PROJECT.

Additional Services to be provided by the ENGINEER include the following:

A. Field Topographic Survey

After written authorization to proceed, ENGINEER shall:

- Coordinate and Schedule Utility Locates.
- Coordinate and obtain topographic survey of the proposed project site. Payment to the ENGINEER will be made at the actual survey cost + 10% for coordination. The 10% coordination cost will cover insurance and time expended.

B. Permitting Phase

The ENGINEER shall prepare the following permits and/or authorizations, though all associated fees have been excluded from this contract, unless otherwise noted:

- CITY Development Permit Application;
- CITY Grading and Erosion Control Permit;
- CITY Utility, Paving, and Foundation Permit;
- Notice of Proposed Construction or Alternation, in accordance with the FAA's Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) requirements; and

- Register for and obtain an accessibility review and inspection of the PROJECT, in accordance with the Texas Department of Licensing and Regulation (TDLR) (fees included in this proposal).
 - Any required design changes as a result of the TDLR review shall be performed by the designer of the sealed documents.
 - The ENGINEER will work with a CITY approved TAS sub-consultant.

The preparation and associated fees for the following permits are excluded from this contract:

- CITY Building Permit;
- TCEQ Notice of Intent;
- Storm Water Pollution Prevention Plan;
- Construction Site Notice;
- Any other permits not previously mentioned.

C. Deliverables

The ENGINEER shall collect and consolidate all design drawings and specifications from all involved design firms (Architect, MEP, etc.) for distribution of deliverables to the CITY. All involved design firms shall provide digital plans (22" x 34" scale) and specifications to the ENGINEER prior to each design milestone submission. Deliverables shall be an appropriate number of plan sets. A total number of 25 complete 22" x 34" bound plan sets, 25 complete 11" x 17" bound plan sets, and 25 sets of specifications have been estimated for this project through the Post Construction Phase. If a significant number of additional plan sets are required additional fees may be required.

D. Exclusions

Exclusions to this proposal are as follows:

- Geotechnical Investigations
- Survey Site Platting
- Hangar Design
- Security Improvements
- Stormwater Detention
- Fiber Optic Cable, Phone/Internet Service, and Cable Service
- Gas Service
- Construction Materials Testing

PROJECT BUDGET

See Attachment A for a summary of Engineering Related Fees.

PROJECT SCHEDULE

We propose to perform the Basic Services in accordance with the following schedule*:

- | | |
|------------------------------|------------------------------------------------------|
| • Preliminary Design Phase | 5 Weeks from Notice to Proceed |
| • Final Design Phase | 2 Weeks from Notice to Proceed |
| • Sealed Documents Submittal | 1 Week from Final Approval of Construction Documents |
| • Permitting | As Required |

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- Bidding Phase As Required
- Construction Phase As Required
- Post-Construction Phase 45 Days from City acceptance of Construction

*The schedule above does not include review time for the City or other governing authorities.

If the proposal is to your satisfaction, KSA will prepare a contract meeting the conditions as stated herein and will send to the CITY for execution.

If you have comments or require additional information, please give me a call.

Sincerely,

KSA



Chris A. Whitfield, P.E.
Regional Manager

CAW/cp

Enclosures: Attachment A – Summary of Engineering Related Fees
Exhibit 1 – Project Conceptual Layout

pc: Eric Pratt, McKinney National Airport w/encl.

Summary of Engineering Related Fees



CLIENT: McKinney National Airport/City of McKinney
PROJECT: McKinney Air Center Hangar No. 2 (MACH2)
CITY NO.: AI-4377
KSA NO.: MK.056
DATE: 4/25/2016

Item No.	Description	Invoicing Method	Total Amount
Basic Services			
1	Study and Report Phase	Lump Sum	Not Included
2	Preliminary Design Phase	Lump Sum	\$ 31,600.00
3	Final Design Phase	Lump Sum	\$ 24,800.00
4	Bidding Phase	Lump Sum	\$ 3,700.00
5	Construction Phase	Lump Sum	\$ 25,300.00
6	Post-Construction Phase	Lump Sum	\$ 6,000.00
Subtotal:			\$ 91,400.00
Additional Services			
7	Field Topographic Survey	Hourly	\$ 6,900.00
8	Geotechnical Engineering Investigation	Direct Cost + 10%	Not Included
9	Permitting Phase	Lump Sum	\$ 3,900.00
10	Reimbursables (Not to Exceed)	Direct Cost	\$ 4,300.00
11	Construction Survey - Control Points	Hourly	Not Included
12	Construction Materials Testing	Direct Cost + 10%	Not Included
13	Program Management Services	Hourly	Not Included
14	Resident Project Representative	Hourly	Not Included
Subtotal:			\$ 15,100.00
Total Estimated Engineering Related Fees:			\$ 106,500.00

Notes:

- 1 Above stated fees for Basic Design Services does not include environmental determinations.
- 2 Design Phase fees were developed with an assumption of one (1) review meeting and one (1) periodic progress meeting by the ENGINEER. Any additional meetings required may require a change to the PROJECT scope and additional fees.
- 3 Permitting Phase fees were developed with an assumption of no required permit fees, with the exclusion of the TDLR Fee's
- 4 Construction Administration Phase fees were developed with an assumption of ten (10) site visits by the ENGINEER, including the Final Walk-Through. Any additional site visits required may require a change to the PROJECT scope and additional fees.
- 5 Hourly rates shown on Page 2 of 2 on this Attachment



2016 SCHEDULE OF HOURLY FEES

Principal	\$205.00 /hour
Senior Environmental Planner	\$200.00 /hour
Environmental Planner	\$160.00 /hour
Senior Aviation Planner	\$190.00 /hour
Aviation Planner	\$140.00 /hour
Electrical Engineer	\$170.00 /hour
Mechanical Engineer	\$150.00 /hour
Senior Project Manager	\$165.00 /hour
Project Manager	\$140.00 /hour
Senior Project Engineer	\$130.00 /hour
Project Engineer	\$120.00 /hour
Senior Design Engineer	\$110.00 /hour
Design Engineer	\$100.00 /hour
Senior Project Architect	\$140.00 /hour
Project Architect	\$120.00 /hour
Design Architect	\$100.00 /hour
GIS Analyst	\$130.00 /hour
GIS Specialist	\$110.00 /hour
SR. Engineering Technician	\$110.00 /hour
Engineering Technician	\$100.00 /hour
Senior Design Technician	\$95.00 /hour
Design Technician	\$90.00 /hour
Project Assistant	\$65.00 /hour
Senior CAD Technician	\$85.00 /hour
CAD Technician	\$75.00 /hour
Senior Project Representative	\$75.00 /hour
Project Representative	\$70.00 /hour
Graphic Designer	\$60.00 /hour
Administrative Assistant	\$55.00 /hour
Secretary	\$45.00 /hour
Four-Man Survey Crew	\$175.00 /hour
Three-Man Survey Crew	\$150.00 /hour
Two-Man Survey Crew	\$120.00 /hour
Registered Surveyor	\$110.00 /hour
Survey Technician	\$75.00 /hour
Mileage	\$0.58 /mile
ATV (4-Wheeler)	\$100.00 /day

Reimbursable Expenses (Air Travel, Lodging, Copies, Printing)	Actual Cost
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Outside Consultants	Cost + 15%
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*Subject to adjustments on annual basis.