



PROPOSAL FOR ENGINEERING SERVICES

CITY OF SAN MARCOS SAN MARCOS, TEXAS

1 Scope of Services

1.1 General

Generally, the scope of services includes surveying, design, and bidding for improvements to the San Marcos Regional Airport located in San Marcos, Texas. Improvements will consist primarily of the following:

- Reconstruct Taxiway A Parallel to Runway 8-26
 - Reconstruct transition from parallel Taxiway A to Taxiway A Runway 8 entrance Taxiway
 - Reconstruct transition from Taxiway A to Taxiway B
- Reconstruct or partial-depth reconstruct/rehabilitate parallel Taxiway C from Taxiway D to Taxiway F
 - Reconstruct transition from Taxiway C to Taxiway D
 - Reconstruct transition from Taxiway C to Taxiway E
 - Reconstruct transition from Taxiway C to Taxiway F

1.2 Surveys

1.2.1 Design Surveys

Garver will provide field survey data from field work for designing the project, and this survey will be tied to the City of San Marcos's control network.

Garver will conduct field surveys, utilizing radial topography methods, at intervals and for distances at and/or along the project site as appropriate for modeling the existing ground, including locations of pertinent features or improvements. Buildings and other structures, streets, drainage features, trees over eight inches in diameter, visible utilities as well as those underground utilities marked by their owners and/or representatives, and any other pertinent topographic features that may be present at and/or along the project site, will be located. Control points will be established for use during construction.

1.3 Geotechnical Services

Garver will be responsible for obtaining, interpreting, and evaluating geotechnical data necessary for the design of this project.

1.4 Preliminary Coordination

Garver will serve as the City of San Marcos's representative in the preliminary phase of the project and furnish consultation and advice to the City of San Marcos during the performance of this service.



Garver will attend preliminary conferences alone or with City of San Marcos's representatives, local officials, state and federal agencies, utility companies and others regarding the proposed project, its general design, functions, and impact. Garver will assist the City of San Marcos by subcontracting with others to order and direct the accomplishment of such special services as soil borings and material tests as may be necessary. Garver will prepare a preliminary engineering report, supported by preliminary plans, and submit copies for review and approval to the City of San Marcos and FAA or TxDOT Aviation, if necessary. Garver will attend conferences for review and conduct coordination conference of interested agencies and utilities, if required.

1.5 Utility Coordination

Garver will furnish plans to all known utility owners potentially affected by the project at each stage of development. Garver shall conduct coordination meetings among all known affected utility owners to enable them to coordinate efforts for any necessary utility relocations. Garver will include the surveyed locations of the observable and marked utilities in the construction plans. Garver will also include proposed and/or relocated utility information in the construction plans as provided by the utility companies.

1.6 Environmental Services

No environmental services will be performed as part of this project.

1.7 Drainage Study

No drainage study is anticipated as part of this project as no added impervious is anticipated in the scope.

1.8 Electrical Engineering

The existing lighting and signage system along the taxiway may be impacted by this project. If lighting or signage is impacted by pavement geometry or if lighting or signage adjacent to improved pavement is in need of replacement, this will be assessed.

1.9 Preliminary Engineering Report (PER)

The Preliminary Engineering phase submittal will include a Preliminary Engineering Report (PER) which will include an evaluation of existing conditions, design criteria and approach, and an opinion of probable construction cost. This submittal will be for the purpose of coordinating the proposed improvements with the City of San Marcos and developing an order of magnitude cost estimate for the project. Garver will not begin preliminary design until the preliminary engineering report is approved by the City of San Marcos in writing.

1.10 Preliminary & Final Design

Garver will plan and direct the balance of soil borings and tests required for final design of the project.

Garver will prepare detailed construction drawings and specifications. Garver will not provide front end specifications (instructions to bidders, general provisions and special provisions) as these shall be provided by TxDOT Aviation Division. Contract Documents (Plans, Specifications, and Estimates) will be prepared for award of one (1) construction contract. These designs shall conform to the standards of practice ordinarily used by members of GARVER's profession practicing under similar conditions



and shall be submitted to the City of San Marcos from which approval must be obtained. Detailed specifications shall be developed using FAA "Standards for Specifying Construction for Airports" AC 150/5370-10 (latest edition) or other appropriate standards.

If requested by the City of San Marcos, Garver will submit to TxDOT Aviation advance copies of the plans and specifications and cost estimates for review. Garver will make any additions to respond to comments, and when the documents have been approved, Garver will furnish bidding documents.

Garver will also prepare documentation for a Stormwater Pollution Prevention Plan (SWPPP), but the Contractor will be responsible for obtaining the appropriate permit from TCEQ.

1.11 Bidding Documents (100%)

Following review of the final design and receipt of comments from the City of San Marcos and/or TxDOT Aviation, Garver will finalize all documents and produce a complete set of bidding documents.

1.12 Bidding Services

TxDOT Aviation will be responsible for developing the front end documents and for advertising, obtaining bids, and administering the bidding phase.

The following is the standard TxDOT Aviation Bidding Scope for Engineering consultants and are made part of this scope of services

After written authorization to proceed with the Bidding Phase, Engineer shall:

1. Submit an electronic copy of all approved final design specifications, Proposal and Geotechnical Report. Proposal in both MS Word and PDF format. In order to reduce PDF file sizes, the use of scanned images should be kept to a minimum. Individual pages of the PDF files should be generated from the source application. If individual pages must be scanned the image resolution should be produced at a maximum resolution of 300 dpi.

Electronic submission

- a. Cost Estimate for Construction
- b. Table of Contents of Technical Specs.
- c. All Technical Specs as one file and in the order as specified in the Table of Contents
- d. Geotechnical Report
- e. Drawing Index
- f. Bid Form (TxDOT AVN Form 2506, fillable PDF Format
- g. Front cover page of document- signed, sealed and dated

2. Submit final approved plan drawings electronically or via TxDOT FTP drop box in a single file PDF format at a resolution of 300 dpi on a maximum sheet size of 11"x 17". Plan sheets should be scanned in black and white. Reproducible drawings (Mylar or Vellum) are not required.

3. Submit addenda in Adobe PDF format, with a maximum size of 10MB, as appropriate to interpret, clarify or expand the Bidding Documents to Agent.



4. Conduct a pre-bid conference to discuss the requirements of the Project with prospective bidders, subcontractors and suppliers. The Engineer shall prepare and distribute minutes of the conference to the attendees.

5. Conduct the bid opening, prepare bid tabulation sheets, evaluate bids and recommend bid award. Submit all bid packages to TxDOT, Aviation Division.

1.13 Construction Phase Services

Construction phase services are not included as part of this scope of work. It is anticipated that Construction Phase Services will be contracted directly with TxDOT Aviation prior to construction.

1.14 Project Deliverables

The following will be submitted to the City of San Marcos, or others as indicated, by Garver:

1. 3 copies of the Preliminary Engineering Report.
2. Three copies of the Preliminary Design (70%) with opinion of probable construction cost.
3. Three copies of the Final Design (95%) with opinion of probable construction cost.
4. Three copies of the Bidding Documents (100%) with opinion of probable construction cost.
 - a. CAD files will be included with this design
5. All submittals will include electronic files (pdf)

1.15 Extra Work

The following items are not included under this agreement but will be considered as extra work:

1. Property Survey: Locate existing monumentation representing right of way and/or easements based on record data which will be provided by the City.
2. Redesign for the City of San Marcos's convenience or due to changed conditions after previous alternate direction and/or approval.
3. Submittals or deliverables in addition to those listed herein.
4. Design of any utilities relocations.
5. Retaining walls or other significant structural design beyond that required for a similar Taxiway Improvement project.
6. Preparing and obtaining appropriate permit from TCEQ. The construction contract documents will require the Contractor to prepare, maintain, and submit a SWPPP to TCEQ.
7. Construction materials testing.
8. Environmental Handling and Documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items.
9. Coordination with FEMA and preparation/submittal of a CLOMR and/or LOMR.

Extra Work will be as directed by the City of San Marcos as a change-in-service in writing for an additional fee as agreed upon by the City of San Marcos and Garver.



2 Schedule

Garver shall begin work under this Agreement within ten (10) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

<u>Phase Description</u>	<u>Calendar Days</u>
Preliminary Engineering Report (PER)	60 days from start date
Preliminary Design (70%)	60 days from Approval of PER
Final Design (95%)	40 days from Approval of Preliminary Design
Final Documents (100%)	20 days from approval of Final Design
Bidding Services	TBD

Note: This does not include time for review by City of San Marcos and TxDOT Aviation

3 Proposed Fee

For the work described in this SCOPE OF SERVICES, Garver's fee for services on a hourly not to exceed basis is summarized below.

The table below presents a summary of the fee amounts and fee types for this contract.

WORK DESCRIPTION	FEE AMOUNT	FEE TYPE
Preliminary Engineering Report (PER)	\$84,100	Hourly Not to Exceed
Surveying	\$36,300	Reimbursable with Markup
Geotechnical Investigation	\$28,200	Reimbursable with Markup
Preliminary Design	\$105,000	Hourly Not to Exceed
Final Design	\$90,300	Hourly Not to Exceed
Bidding Documents	\$24,600	Hourly Not to Exceed
Bidding Services	\$14,100	Hourly Not to Exceed
TOTAL FEE	\$382,600.00	Hourly Not to Exceed

4 Appendix

The following Appendices and/or Exhibits are attached to and made a part of this scope:

Appendix A – Fee Summary and Details Scope of Services

Appendix B – Project Layout Plan

APPENDIX A

SAN MARCOS REGIONAL AIRPORT TAXIWAY IMPROVEMENTS PROJECT

FEE SUMMARY

Title I Services	Estimated Fees
Preliminary Engineering Report	\$84,100.00
Surveying - Gonzalez De La Garza	\$36,300.00
Geotechnical - HVJ Associates	\$28,200.00
70% Preliminary Design	\$105,000.00
95% Final Design	\$90,300.00
100% Bidding Documents	\$24,600.00
Bidding Services	\$14,100.00
Subtotal for Title I Services	\$382,600.00

APPENDIX B - PROJECT LAYOUT PLAN

San Marcos Regional Airport
San Marcos, TX HYI
Taxiway Rehabilitation Concepts
23 May 2017 DRAFT

