



T. SMITH INSPECTION & TESTING SERVICE

GEOTECHNICAL & CONSTRUCTION
MATERIAL ENGINEERING, INSPECTION
AND TESTING SERVICES

April 2, 2013

Johnson County, Texas
2 N. Main Street
Cleburne, Texas 76033
Attn: Judge Roger Harmon

Re: Geotechnical Investigation for Precinct 3 Sub-Courthouse
206 N. Baugh St.
Alvarado, Texas
TSIT Proposal P13122

Judge Harmon:

In accordance with your request, TSIT is pleased to submit our proposal to provide geotechnical subsurface investigations at the referenced project site.

This proposal is prepared based on the concept site layout and information provided by Magee Architects. If there are any deviations from the initial information, TSIT will revise this proposal to accommodate these deviations.

We appreciate your confidence in our expertise, and look forward to working with you on this project. If you have any questions, please call.

Sincerely,

TSIT
Firm Registration F-5278

Kemp E. Akeman, PE
Principal Engineer

Attachment

Cc: Magee Architects



1 PROJECT SCOPE

The project consists of construction a single story Sub-Courthouse structure (approximately 12,600 square feet). The structure will be located at 206 N. Baugh Street, Alvarado, Texas. A geotechnical investigation is required to aid the planning, design and construction teams for this project site. A site plan showing the boring locations was provided by Magee Architects.

2 GEOTECHNICAL SUBSURFACE INVESTIGATIONS

2.1 Proposed Drilling and Sampling

In accordance with ASCE guidelines, TSIT proposes investigating the site by drilling a total of two (2) soil test borings in the building footprint and two (2) in the pavement as follows:

- *Building footprint area: two (2) soil borings, maximum depth of 25 feet below the existing grades.*
- *Pavement area: two (2) borings, maximum depth of 5 feet below the existing grades.*

Cohesive soils will be sampled with thin-walled tube samplers. Standard penetration tests will be performed on very sandy or cohesionless soils. The sampling intervals will be at each change in material or a maximum of 5 feet.

Any unweathered bedrock encountered will be evaluated by means of the Texas Highway Department's Cone Penetrometer Test. All samples will be extruded in the field and packaged to protect them from disturbance and preserve their in-situ moisture.

2.2 Utilities

TSIT assumes that you have the right of entry to the property and that the boring locations are accessible to drilling equipment during normal working days. Items to be provided by the client include the right of entry to conduct the exploration and an awareness and/or location of any private subsurface utilities existing on the property. Client shall provide documents i.e. surveys.

TSIT will request DIGTESS to clear public utilities (electric, water lines, sewer lines, fiber glass, cable etc.) prior to our firm performing drilling services. This service may take up to 3 days to have DIGTESS locaters clear the site.

2.3 Laboratory Testing

Laboratory tests will be performed on representative samples to establish the pertinent engineering properties of the various strata. We anticipate these tests will primarily consist of moisture content and dry density determinations, Atterberg Limits, unconfined compression tests and absorption swell tests. Laboratory testing of rock core will consist primarily of unconfined compression testing.

2.4 Engineering Report

The results of all field and laboratory studies will be compiled into an engineering report with our comments and recommendations on various appropriate design parameters and construction procedures. Electronic PDF reports with original seals will be furnished. The report will include the following:

1. Logs of borings, laboratory test results, and groundwater observations.
2. Recommended foundation types, depths and design parameters (e.g. bearing capacities, skin friction values etc.) with alternatives if appropriate.
3. Recommendations for support of slabs on grade will be provided. These will include estimated post construction movements and methods to reduce these movements.
4. The presence of groundwater and its effect on foundation installation.
5. Discussions and recommendations regarding site grading and drainage. These will include the use of on-site materials as fill, fill placement and compaction, and recommended requirements for off-site borrow.

TSIT will, of course, remain available throughout the project to consult on geotechnical matters with you and other members of the design team.

2.5 Time Estimate

It is estimated that the project will require 10 to 15 working days to complete all field and laboratory work and prepare the final report with our analyses and recommendations. The schedule does not include delays due to inclement weather. We can begin field operations at the site within 5 working days after we receive notice to proceed.

The estimated cost does not include surveying the boring locations and establishing ground elevations. The boring program is based on the assumption that soil conditions will be relatively uniform across the site. Should unusual soil conditions be encountered, we will call you with a recommendation and cost estimate to explore these unusual conditions.

3 ESTIMATED BUDGET

The cost of performing the complete geotechnical subsurface investigations (Drilling (interior plus slab coring), Sampling & Field Testing; Laboratory Testing; and Engineering Analysis & Report) is \$2,800.00. Our terms are net 30 days from the date of the invoice.

Any additional costs beyond this figure will be subject to approval by the client. This cost is a budget figure and will not be exceeded, for the described scope of work, without prior approval.

4 SOIL TEST BORINGS

All soil borings will be located per the site plan provided by Magee Architects and will be staked per site layout (to be provided by client) prior to drilling.

5 CONSTRUCTION MATERIALS TESTING & INSPECTIONS

This proposal does not include construction materials testing and inspection services. The amount of testing and inspection required for this project will depend on the results of the geotechnical subsurface investigation, specifications set forth in the final structural and civil design drawings (foundation plans, earthwork and grading plans, utility plans etc). TSIT will provide an estimate of cost for these services upon receipt of project plans and specifications, if we are selected on the basis of qualifications.

6 CLOSURE

If you approve of this proposal, please execute and return one copy to us as authorization for our services. We appreciate this opportunity to provide our services.

Approved by CLIENT:

Signature: 

Name: Roger Harman

Title/Firm: Johnson County Judge

4-22-13