

EXHIBIT A
DESCRIPTION OF
BASIC ENGINEERING SERVICES AND RELATED MATTERS

Design services are described in the Scope of Services as outlined in Exhibit “C” with the exception of the following clarifications and/or changes.

Liberty Road Sidewalk Project Design and Bidding-Related Services

The basic services outlined in this Scope of Services document includes final design and bidding-related services for roadway improvements along the southside of Liberty Road from Winchester Road to connect to the existing sidewalk just east of Dallas Avenue.

Scope of Services

CONSULTANT will provide the following Services to OWNER:

A. Survey

1. Establish survey control including temporary benchmarks for use during construction.
2. Research deeds and plats available at the Fayette County Clerk's Office.
3. Locate boundary monuments found during the topographic survey.
4. Calculate parcel boundary lines for determination of public right-of-way and necessary easements.
5. Conduct topographic survey of Liberty Road including:
 - a. Cross sections extending to the front of the buildings and taken at 50-foot intervals, driveways, sidewalks, and steps.
 - b. Locate existing pavement edges, sidewalks, driveway entrances, pavement markings, and signage.
 - c. Locate existing property features including structures, fences, and retaining walls.
 - d. Locate existing overhead and underground utilities.
 - e. Locate and provide structure data information for storm and sanitary sewer structures.
 - f. Locate and identify trees and vegetation.

B. Preliminary Design

1. Provide roadway drawings including:
 - a. Plan and profile drawings with street addresses, property lines, proposed alignment, existing storm and sanitary sewers and proposed modifications, and identify anticipated utility impacts.
 - b. Prepare typical sections using LFUCG standard drawings and pavement sections. OWNER to provide any geotechnical services required.
 - c. Proposed critical cross sections.

2. Contact utility providers to obtain facility maps, access anticipated impacts, and review avoidance measures.
3. Prepare preliminary opinion of probable construction cost.
4. Submit and deliver two paper copies to OWNER and one paper copy to each utility company of the preliminary drawings.
5. Attend a review meeting with OWNER.
6. Provide basic planimetric information to OWNER for OWNER's use in preparing environmental clearance documentation.

C. Final Design

1. Provide roadway drawings including:
 - a. Cover sheet.
 - b. Quantity summary, survey control, and general notes.
 - c. Typical sections.
 - d. Plan and profile drawings.
 - e. Proposed cross sections.
 - f. Typical sections.
 - g. Detail sheets including the intersection of Dallas Avenue.
 - h. Erosion and sediment control drawing.
2. Prepare final design opinion of probable construction cost for the project and submit to OWNER.
3. Review and provide recommendations for OWNER-provided bidding documents including front end documents and technical specifications. Provide the front end documents that require the contractor to name CONSULTANT as an additional insured on contractor's General Liability and Automobile Liability insurance policies and to indemnify CONSULTANT to the same extent that the contractor insures and indemnifies OWNER.
4. Submit final design drawings, comments on Bidding Documents, and final design opinion of probable cost to OWNER for review.
5. Attend a review meeting with OWNER.
6. Incorporate OWNER's review comments into the drawings and bidding documents. Submit and deliver one paper copy to OWNER and one paper copy to each utility company.
7. Submit and deliver the following documents to the OWNER:
 - a. Three paper copies of the final drawings and contract documents.
 - b. Electronic drawings and digital specification file.

D. Public Acquisition Plats.

1. Prepare up to two minor acquisition plats to acquire right-of-way at the intersection of Liberty Road and Dallas Avenue.
2. Set field monumentation as required.
3. Prepare legal descriptions as required for up to 2 easements.

E. Bidding-Related Services.

1. Provide bidding-related services for up to two separate bids including:
 - a. Prepare addenda and answer questions during bidding.
 - b. Attend bid opening, tabulate and analyze bid results, and assist OWNER in the award of the construction contract.

Schedule and Completion

The CONSULTANT shall meet the following schedule. Calendar days are counted from the date that a written notice to proceed is received by the CONSULTANT which is anticipated on January 4, 2019. Exact times of meetings shall be arranged by the CONSULTANT; locations of meetings shall be at either the sites of proposed improvements or at the offices of the OWNER, as appropriate.

Schedule

<u>Service</u>	<u>Schedule</u>
Project kickoff meeting	10 days
Submission of preliminary drawings	60 days
Meeting to review preliminary plans	70 days
Submission revised preliminary plans	90 days
Submission final plans	120 days
Meeting to review final plans	130 days
Submission of completed final plans	150 days
Submission of public acquisition plats	160 days

Compensation

OWNER shall compensate CONSULTANT for Services a lump sum of \$38,800.