

May 7, 2024

Ms. Alison Bruton
Purchasing Agent
Effingham County Purchasing Department
601 N. Laurel Street
Springfield
GA 31329

Re: 21-007 Indefinite Delivery Contract for Professional Engineering & Arch. Services Work Order for Low Ground Rd Improvements from Blue Jay Rd to McCall Rd

Dear Ms. Bruton,

Atlas Technical Consultants is pleased to submit, as requested, a fee proposal to provide the full professional design services option for the Low Ground Road improvement project as well as the resurfacing option that will not have any geometric improvements or the multi-use path that Effingham County is planning for this road. Below is an outline of our estimated project costs:

OPTION A: DESIGN AND RIGHT OF WAY SERVICES

| Survey (6.5 miles) | \$239,245 |
|------------------------------------|-----------|
| Traffic Study | \$18,560 |
| Concept / Alternatives Analysis | \$56,510 |
| Environmental Surveys & Permitting | \$58,916 |
| Preliminary Design | \$230,140 |
| R/W Plans | \$35,920 |
| Soil Survey & Pavement Evaluation | \$69,676 |
| Final Design / Plan Prep | \$103,071 |
| TOTAL DESIGN COST | \$812,038 |

SCHEDULE

| Database | 9 months from NTP |
|-----------------------------|--------------------|
| Concept Analysis Complete | 9 months from NTP |
| Preliminary Plans Submitted | 22 months from NTP |
| R/W Plans Submitted | 24 months from NTP |
| Final Plans | 30 months from NTP |
| Utility Certification | 36 months from NTP |
| Environmental Certification | 36 months from NTP |

OPTION B: RESURFACING

The cost for Atlas to perform services related to the resurfacing option in lieu of the full design option would be \$77,516.

Soil survey and Pavement Analysis/Evaluation \$69,676 Resurfacing log \$7,840

We understand that this project would be County-let and 100% locally funded. Plans will be developed to meet current GDOT, AASHTO, and EPD guidelines. We assumed that this project would require an MS4 study as the project is inside the MS4 permit area. A detailed scope of work is attached.

If you have any questions or need additional information, please do not hesitate to contact me at 770.263.5945 or on my cell at 404-931-3792.

Sincerely,

L.N. Manchi

L. N. Henrille of

National Director – Program Management & Quality Management

cc: Tim Callanan

Rob McCall

Jonathan Hulme

Danielle Carver

Will Murphy

Brad Hale

Todd Long

Option A: Full Design Scope of Work

CONCEPT DEVELOPMENT PHASE

Upon receipt of NTP from Effingham County, Atlas will begin work on the existing traffic and environmental surveys that would help with the conceptual layouts of the design options.

Traffic Study – The traffic work will include a comprehensive traffic analysis of the roadway corridor. The following tasks will be performed:

- 1. Collect existing traffic and accident data for the study area.
- 2. Conduct a capacity analysis of the intersection for Existing, Open Year, and Design Year.
- 3. Prepare a memorandum describing the findings of the study.

Environmental Surveys & Permitting - This work will consist of the following activities

- Ecology survey to identify state or federally jurisdictional water resources.
- History survey for Section 106 compliance needed for Section 404 permit.
- Archaeology survey. Also needed for Section 404 permit. Expect findings to be negative.

Upon completion of the required environmental surveys and traffic study, we will analyze 2 design alternatives.

ALT 1: Improve roadway to include 2, 12' lanes with 6' rural shoulders (2' paved + 4' grassed) and ditches on both sides. The profile of the roadway may need to be raised to maintain positive drainage flow in the ditches and to provide clearance over cross drain pipes. The horizontal geometry will be improved to meet a 55 mph speed design.

ALT 2: Same typical section and geometric design parameters as ALT 1 with a 10' multi-use path added on the outside of the ditch on one side.

Conceptual layouts for each of the alternatives above will be prepared on aerial photography. The alternatives will be evaluated with respect to traffic/safety, cost, right-of-way impacts, environmental impacts, and utility impacts. Atlas will prepare a report outlining this analysis that includes our recommendation for the County's review.

DATABASE PREPARATION

We will begin work on this phase upon written authorization by the County to proceed with this work. We will establish control throughout the project with the horizontal control being referenced to NAD 1983 and the vertical control being tied to the NAVD 1988.

The database will be prepared in Open Roads. We will perform courthouse research, obtaining all available plats and deeds of all properties affected by the project. We will then compile a property owners' data file consisting of:

- Owners' names
- Owners' addresses
- Tax parcel numbers
- Land lot and district numbers
- Deed book and page numbers
- Plat book and page numbers
- Existing lot area

We will establish the following:

- 1. Locate and identify all existing surface-evident utility facilities, sanitary sewers, stormwater systems, drainage features, existing ground features, driveways, side streets, and any other planimetric structure essential to the project's design.
- 2. Locate right-of-way, property lines, and any other information necessary to design and obtain right-of-way and easements for the project.

- 3. Establish a centerline or baseline for all roadways and driveways. Stationing for the centerline or baseline of all roadways will be painted/pinned and identified.
- 4. Establish profile, as necessary, of all roadways, driveways, and surrounding terrain needed to design roadways, any detours to maintain traffic, design of major drainage structures, design of storm systems, detention, realignment of roads, etc.

PRELIMINARY PLANS PHASE

Upon the County's approval of the concept and development of the project database, our team will develop the project's horizontal and vertical alignments. The horizontal and vertical alignments will be developed, considering the project footprint and construability. In addition, initial quantities and right-of-way footprint will be developed prior to preliminary plan review and right-of-way plan submission. The following is a list of the tasks associated with the Preliminary Design of the project:

- Development of typical sections
- Development of proposed vertical and horizontal alignments
- Evaluation of existing drainage system and development of proposed design improvements
- Development of cross sections
- Preparation of staging and traffic control plans
- Preparation of signing and marking plans
- Utility coordination of existing utilities. 1st submission utility
- Soil survey, pavement coring, existing pavement evaluation, and preparation of pavement design
- Preparation of preliminary erosion control plan
- Establishment of preliminary right of way and construction easements
- Development of preliminary construction cost estimate
- QC/QA throughout the development of the preliminary construction documents

RIGHT OF WAY PHASE

After the successful completion and approval of the preliminary plans, our team will begin preparing the required right-of-way plans. Based on our preliminary review, we estimate that the project will impact approximately 103 parcels.

FINAL PLANS PHASE

After the final right-of-way plans have been submitted and approved by the County, our team will begin developing the final construction plans and construction documents needed to let the project. This will include preparing final construction cost estimates, special provisions, final utility coordination of proposed utilities, and obtaining all the necessary permits, if applicable, as identified below:

- Prepare Section 404 permit.
- Coordinate with the local issuing authority and or GA Environmental Protection Division to determine whether identified resources are considered buffered resources. Prepare necessary stream buffer variances.