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March 8, 2022

Eric W. Larson, PE, AICP, CFM, CPSWQ Assistant County Manager Effingham County Board of Commissioners 601 N. Laurel Street Springfield, GA 31329

Re: Effingham County – Professional Transportation Design Services Fee Proposal –
Effingham Parkway at Blue Jay Road - Roundabout Evaluation and Concept Design

Pond & Company (Pond) is pleased to submit this proposal for transportation engineering design services for the above project. The paragraphs below describe the professional services and fees to accomplish this work.

PROJECT UNDERSTANDING:

Effingham County is looking to evaluate the intersection of Effingham Parkway at Blue Jay Road for the feasibility of a roundabout alternative. Tasks will include traffic analysis, as well as the development of concept layout and associated costs to identify impacts including adjacent properties, utilities, etc.

PROFESSIONAL SERVICES:

Pond will provide all labor, materials, and equipment necessary to assist Effingham County in completing the tasks as described herein.

Scope of Work

Task 1: Traffic Analysis

Task 1A. Traffic Data – Pond will utilize the approved design traffic volumes from the GDOT Effingham Parkway from SR 30 to Blue Jay Road (PI #006700) project. Traffic volumes will be projected into a revised open year (2023) and design year (2043) based on the growth rates and methodology developed for the Effingham County Transportation Master Plan (TMP).

Task 1B. Traffic Analysis – Pond will analyze the traffic at the intersection of Effingham Parkway at Blue Jay Road to determine the operations of the previously proposed stop-controlled configuration and a roundabout.

A review of crash history will be completed utilizing GDOT's GEARS and Numetric databases. Capacity analysis will be performed for each intersection using Synchro Software. This analysis will be performed for the AM and PM peak hours of the existing year, opening year, and design year. Analysis of the opening and design years will include a no-build condition as well as the previously proposed stop-controlled condition and a roundabout condition. This analysis will be used to determine what improvements and alternatives are necessary to obtain acceptable operations.



Task 1C. Traffic Engineering Technical Memorandum – Pond will document the analysis results and recommendations in a Traffic Engineering Technical Memo.

Pond will submit the Report to Effingham County for comment/approval. This task includes one
meeting with the county to discuss the plans. We will respond to (1) round of comments and
incorporate appropriate comments into the memo.

Deliverables for (Task 1)

• Traffic Engineering Technical Memo

Task 2: Concept Layout

Task 2A: Base Mapping Setup: Pond will utilize the electronic design files (i.e. DGN, DWG, etc) provided by Effigham County to develop the basemapping. This includes topographic survey, parcel data, roadway data, utility data, and contour information. This information will be overlayed on high-resolution aerial imagery.

Task 2B: Concept Layout – Pond will utilize the basemapping from Task 2A to prepare a concept layout for the intersection of Effingham Parkway at Blue Jay Road. The alternative will consist of the following:

- Alternative 1 Roundabout
 - This alternative will identify the horizontal geometric improvements needed for a single lane roundabout.
 - Evaluation will include swept path analysis of the design vehicle determined for this intersection, along with performance checks (i.e. fastest path analysis).

The concept layout will indicate the proposed improvements and potential impacts, including property/right-of-way, utility, etc.

Includes (1) meeting with Effingham County staff and addressing (1) round of comments.

Task 2B: Cost Estimate – Pond will prepare a concept-level cost estimate for the concept layout, including right-of-way/property costs.

Deliverables (Task 2)

- Concept Layout for Roundabout Alternative
- Cost Estimate for Roundabout Alternative

Schedule

Pond understands the importance of expediting the delivery of this project, and we are confident that the draft of the concept layout can be completed within (5) weeks from Notice-to-Proceed.

ASSUMPTIONS:

The concept plans will be prepared as a Effingham County let and funded project.

Services or tasks <u>not</u> specifically outlined above are excluded and would be considered additional services. Services not included in the scope:

Design/Engineering Plans

Additional Concept Alternative



- Roundabout Alternative
- GDOT Forecasting and Methodology Process
- Traffic Analysis (Beyond Task 1)
- Right-of-Way Plans
- GDOT Plan Development Process (PDP)
- Staging Plans
- Topographic Survey
- Subsurface Utility Engineering (SUE) Services
- Landscape/Hardscape Plans

- GDOT Concept Report
- Additional Meetings
- MS4 Analysis/Documentation
- Environmental Services
- Erosion Control Plans/Inspection
- Utility Coordination
- Public Involvement
- Geotechnical Services

PROFESSIONAL FEES:

Pond proposes to accomplish Task 1 through Task 2 for a total Lump-Sum fee of \$31,500.

Total Fee: \$31,500 (Lump-Sum fee is inclusive of labor, expenses, and direct costs)

If this fee and scope is acceptable, Pond & Company is available to begin work immediately. If you have any questions or would like us to discuss/modify the scope, please contact myself or Zach Puckett, who will serve as the Project Manager. If you need any additional information, please feel free to contact me at (678) 336-7740.

Sincerely,

POND & COMPANY

Richard Fangmann, PE, PTOE

Vice-President

Cc:

Melissa Phillips, Client Liaison Zach Puckett, PE, IMSA II

