



Land Surveying · Civil Engineering · Planning · Architecture · Project Funding · GIS · Environmental · Renewable Energy · Landscape Architecture

November 1, 2023

Mike Yoder
Town of Bristol
303 E Vistula St
Bristol, IN 46507

RE: Bristol Business Route/ South Development Zone Storm Water Study

Dear Mike:

Thank you for contacting Jones, Petrie, Rafinski (JPR) to provide design and engineering services for the Town of Bristol. JPR welcomes the opportunity to bring our services to this project.

Project Understanding

As the Town of Bristol continues to further economic development to the south of town, it is imperative to maintain suitable drainage of the area. Proposed improvements will affect the drainage patterns of the surrounding watershed well beyond the area of improvements. While all new development sites are required to develop and maintain internal stormwater management facilities, the Town will need to understand similar obligations for Town developed assets.

The area of interest for evaluation is outlined on Figure One attached to the end of this proposal. To finalize the drainage study, several tasks will need to be completed. These tasks include gathering topographic data, determining drainage and watershed areas, performing time of concentration calculations, determining flow methods, and calculating anticipated discharge to the various drainage ways. The engineering team will also need to identify and evaluate known or apparent runoff from topographic features south of the Town. This information will aid in deciding necessary structure modifications in the watershed and subsequent downstream locations.

Further analysis not included in this proposal will entail the hydraulic design of structures in need of modification and determining the appropriate sizing of structures.

Scope of Services

The following are the tasks that JPR will perform.

Task 1 – Data Accumulation:

This effort will include:

- Research and obtain data pertaining to the study area including but not limited to topographic features, protected wetlands, hydrologic factors, and rainfall estimates.
- Delineate storm shed areas based on area of interest detailed on Figure One.
- Calculate the time of concentration for each drainage area.
- Determine anticipated discharge into public rights of way and waterways based on proposed economic development.
- Determine capacities of culverts downstream that may require modifications.
- Identify suspected private drain tiles.
- Identify suspected sub-surface natural seeps or springs.
- Conduct volumetric cross sections of existing drainage ways.

Task 2 – Analysis:

- Prepare models for storm sheds using acceptable local practices.
- Initiate computer simulation of storm events pre- and post-development.
- Provide preliminary report.

Task 3 – Prepare Report

- Conduct a review of the preliminary report with the Town and County Drainage Board (if needed).
- Prepare final report including phased recommendation opinion of cost and implementation.

Compensation

The lump sum fee to provide the tasks outlined in the Scope of Services is as follows:

Task 1 – Data Accumulation	\$20,000.00
Task 2 - Analysis	\$19,000.00
	(Allowance)
Task 3 – Prepare Report	\$5,000.00
Total	\$44,000.00

Reimbursable Expenses

At this stage of the project, reimbursable expenses of \$1,000 are anticipated.

Note: All reimbursable expenses are billed at 1.1 times the cost.

Exclusions

Please note the following assumptions and clarifications regarding our fees above:

1. Out-of-scope services are not included in this proposal but can be provided as an Additional Service at our standard hourly rates (work will not commence on any out-of-scope services unless and until approved by the client).
2. Hydraulic Design of affected culverts and bridges is not included in this proposal.
3. Permitting

Jones Petrie Rafinski appreciates the opportunity to be of service on this project and is prepared to commence work immediately upon your acceptance of this proposal. Since the project will be ongoing, our services will be billed monthly. Payment is due upon receipt of our invoice. Work can be suspended on any account that is 30 days past due until the account is paid in full. We reserve the right to charge monthly interest at the rate of 1.5% if the account is past due (18% annually). Should you have any questions or comments concerning our services or charges during the course of the work, please bring them to our attention immediately so that any problem can be resolved quickly.

If you have any questions about this proposal, please do not hesitate to contact me. If acceptable, please execute the proposal by signature, where indicated, and return a copy to my attention by email at kenjones@JPR1source.com.

Again, thank you for this opportunity. We look forward to being of service.

Sincerely,

A handwritten signature in blue ink that reads "Ken Jones". The signature is fluid and cursive, with the first name "Ken" and last name "Jones" clearly legible.

Kenneth K. Jones, PS
President

PROPOSAL ACCEPTANCE

This **PROPOSAL FOR BRISTOL BUSINESS ROUTE DRAINAGE STUDY, BRISTOL, INDIANA**, is hereby accepted, and authorization to proceed hereby granted:

Accepted By: _____ Date: _____

Printed Name and Title: _____

Business Name: _____

Billing Address: _____

Billing/Account Manager: _____

Account Manager Phone Number: _____

Account Manager E-mail Address: _____

Please note: Jones Petrie Rafinski offers electronic invoicing if requested. Please sign below if you would prefer that option.

I prefer my invoice transmitted through electronic email: _____