

November 13, 2015

Mr. Jason Anderson
Economic Development Director
City of Rochelle
420 North 6th Street
Rochelle, IL 61068

Re: **Proposal for Professional Services**
Flood Modeling - Rochelle Southern Rail Expansion
Rochelle, Illinois

Dear Jason,

Fehr Graham is pleased to present you this proposal for professional services for the necessary flood modeling and associated floodway/floodplain permitting for the proposed rail extension to the southern terminus of the City's right-of-way near the Village of Steward. For purposes of this proposal, the subject site includes the City's rail right-of-way from John's Creek extending south to the Gratton/Ravnaas property line and continuing east to Steward Road. The following outlines our understanding of the project scope, fee structure, and a proposed schedule to complete the tasks described.

SCOPE OF SERVICES

SOUTHERN RAIL EXTENSION:

Topographic Survey

Utilizing the previously collected topographic data and supplementing said data as necessary, Fehr Graham will prepare a complete topographic survey of the subject site. All visible structures, utilities, equipment, roadways, and rail infrastructure will be included in said survey. The survey will be completed utilizing the Illinois State Plane Coordinate System (West Zone datum of 1983 revised) and the 1988 North American Vertical Datum (NAVD-88). The completed topographic survey will be utilized in preparing the grading plan necessary for the flood modeling.

Grading Plan

Fehr Graham will develop a grading plan to accommodate the proposed southern extension of the City's rail system. Said grading plan will be an iterative process and will be advanced in tandem with the floodplain/floodway analysis to ensure the proposed improvements will meet all IDNR and FEMA regulations. The grading plan will detail the dimensions and elevations of the proposed rail roadbed, the volume and capacity of the drainage/borrow channel, and estimated quantities. The grading plan will provide the necessary information to complete the flood modeling, as well as provide a "head start" on the formal rail design.

Hydrology and Hydraulic Modeling of Existing Conditions

Utilizing the existing City-wide flood reports and modeling information previously completed by the City of Rochelle, Fehr Graham will verify this hydrologic modeling of the current condition based upon the collected topographic data. An effective hydraulic model will then be created in HEC-RAS. This model will be calibrated and verified to ensure an accurate starting point to model the proposed rail infrastructure. Based upon mapping and field visits, the necessary parameters for the model, such as cross sections, roughness coefficients, obstructions, and flow distances will be verified for both channel and overbank locations. Using the design flow conditions for the 10-percent, 2-percent, 1-percent, and 0.2-percent rainfall events, the Base Flood Elevation (BFE) for the 10, 50, 100 and 500-year storms will be calculated and verified.

Hydrology and Hydraulic Modeling of Proposed Conditions

Using the grading plan as developed, the effective hydraulic model of the existing condition will be modified to reflect the proposed condition. Flow conditions for the 10-percent, 2-percent, 1-percent, and 0.2-percent rainfall events and the Base Flood Elevation (BFE) for the 10, 50, 100 and 500-year storms will be calculated. Sufficient evidence will be prepared to demonstrate that the proposed improvements can meet or exceed the necessary guidelines and requirements of the permitting authorities - more specifically, the ACOE, FEMA, IDNR and the City of Rochelle.

IDNR and FEMA Submittals

Upon completion of the above-described modeling and design effort, a detailed report will be prepared describing the modeling of John's Creek and John's Creek South and the proposed improvements to mitigate impacts. This includes summaries of the data collection, computational assumptions and methodologies, calibration comparisons with prior hydraulic models, analysis explanation, recommendations, engineer's opinion of probable costs, and conclusions. This work includes the preparation of formal submittals for approvals from the IDNR and FEMA.

HYDROLOGIC AND HYDRAULIC MODELING OF JOHN'S CREEK SOUTH:

The City's comprehensive flood study terminated the analysis of John's Creek South at Steward Road, as detailed on the preliminary FEMA Flood Insurance Rate Map. In order to better understand the floodplain and floodway in the south industrial area of Rochelle, Fehr Graham will study and map the section of John's Creek South between Steward Road and Interstate 39.

Topographic Survey

Fehr Graham will collect the necessary topographic data and drainage channel cross sections necessary to complete the hydrologic and hydraulic model of John's Creek South. All visible structures, utilities, equipment, roadways, and rail infrastructure will be included in said survey. The survey will be completed utilizing the Illinois State Plane Coordinate System (West Zone datum of 1983 revised) and the 1988 North American Vertical Datum (NAVD-88).

Hydrology and Hydraulic Modeling of Existing Conditions

As an extension of the flood analysis detailed above, Fehr Graham will utilize the verified flood model and prepare a hydrologic model of the currently unmapped section of John's Creek South. A hydraulic model will then be created in HEC-RAS and calibrated/verified to ensure accuracy. Flow conditions for the 10-percent, 2-percent, 1-percent, and 0.2-percent rainfall events will be calculated. Additionally, the Base Flood Elevation (BFE) for the 10, 50, 100 and 500-year storms will be determined. Floodplain and floodway boundaries will be mapped and provided to the City for local use. Sufficient evidence will be prepared and provided to the City for future submittal to FEMA and IDNR.

In order to expedite the review of the rail related floodplain/floodway impacts, we recommend utilizing the information on this section of John's Creek South for local purposes only and consider submitting to FEMA and IDNR once the rail project has been completed. For purposes of this proposal, FEMA and IDNR submittals for the unmapped portion of John's Creek South are excluded.

The following items are **not** included in the scope of services proposed here:

- Off-site investigations and/or detailed engineering plans for municipal utilities, roadway improvements, or other off-site private utility improvements.
- Final Engineering Plans and Specifications.
- Services related to Wetland Delineations and/or Wetland Mitigation Plans.
- Archaeological Investigations and Studies.
- Preparation of easements and/or right-of-way documents necessary for on-site and off-site improvements.
- Land acquisition negotiations, surveys and plats.
- Structural analysis or design of any railroad or roadway drainage structures.
- Economic and Environmental Studies.
- Geotechnical Investigations or Studies.

Any of the above services can be performed as an additional cost to the project.

SCHEDULE

Fehr Graham can initiate this project immediately upon formal authorization to proceed with the final deliverable provided within 60 days.

FEES

We are prepared to provide these services as outlined above for the fee schedule detailed below:

| | |
|--------------------------------|----------|
| SOUTHERN RAIL EXTENSION: | |
| Topographic Survey | \$ 2,250 |
| Grading Plan | \$ 9,370 |
| Hydrologic and Hydraulic Study | \$15,870 |
| IDNR and FEMA Submittals | \$ 5,900 |

JOHN'S CREEK SOUTH MODELING:

| | |
|--------------------------------|----------|
| Topographic Survey | \$ 7,900 |
| Hydrologic and Hydraulic Study | \$12,800 |

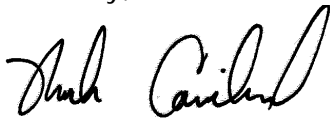
Payment for the services rendered will be requested via an invoice prepared monthly until the completion of the project.

AUTHORIZATION

I trust that the information we have provided is in line with your expectations. If you would like us to proceed, please execute the attached Agreement for Professional Services and return a copy to my attention.

Fehr Graham is willing to commit the necessary resources to this project to provide timely and competent solutions to assure that this project moves forward. We're looking forward to working with you on this project. In the interim, if you have any questions regarding this proposal, please feel free to contact me at this office.

Sincerely,



Noah Carmichael, PE
Principal

NJC:rfs

**AGREEMENT
FOR PROFESSIONAL SERVICES**

Client Mr. Jason Anderson
City of Rochelle
420 North Sixth Street
P.O. Box A
Rochelle, IL 61068

815.561.2000

Description of Services:

Rochelle - CIR Southern Extension Flood Modeling

Fehr Graham will provide professional services for the necessary flood modeling and associated floodway/floodplain permitting for the proposed rail extension to the southern terminus of the City's right-of-way near the Village of Steward. The subject site includes the City's rail right-of-way from John's Creek extending south to the Gratton/Ravnaas property line and continuing east to Steward Road.

COST: The fixed fee for performing the above services is \$54,090 as follows:

| | |
|--------------------------------|----------|
| SOUTHERN RAIL EXTENSION: | |
| Topographic Survey | \$ 2,250 |
| Grading Plan | \$ 9,370 |
| Hydrologic and Hydraulic Study | \$15,870 |
| IDNR and FEMA Submittals | \$ 5,900 |
| JOHN'S CREEK SOUTH MODELING: | |
| Topographic Survey | \$ 7,900 |
| Hydrologic and Hydraulic Study | \$12,800 |

The attached General Conditions are incorporated into and made a part of this Agreement.

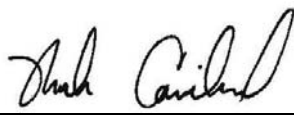
ACCEPTED AND AGREED TO:

I/we, the undersigned, authorize Fehr Graham to provide services as outlined above, and also agree that I/we are familiar with and **ACCEPT THE TERMS OF THE ATTACHED GENERAL CONDITIONS.**

CLIENT:

CONSULTANT:

Signature _____
Name _____
Title _____
Date Accepted _____

By  _____
Name Noah J. Carmichael, PE
Title Principal / Branch Manager
Date Proposed November 13, 2015

GENERAL CONDITIONS TO AGREEMENT FOR PROFESSIONAL SERVICES

1. The Client requests the professional services of Fehr Graham hereinafter called "The Consultant" as described herein.
2. The Consultant agrees to furnish and perform the professional service described in this Agreement in accordance with accepted professional standards. Consultant agrees to provide said services in a timely manner, provided, however, that Consultant shall not be responsible for delays in completing said services that cannot reasonably be foreseen on date hereof or for delays which are caused by factors beyond his control or delays resulting from the actions or inaction of any governmental agency. Consultant makes no warranty, expressed or implied, as to his findings, recommendations, plans and specifications or professional advice except that they were made or prepared in accordance with the generally accepted engineering practices.
3. It is agreed that the professional services described in the Agreement shall be performed for Client's account and that Client will be billed monthly for said services. A 1½% per month service charge will be incurred by Client for any payment due herein and not paid within 30 days of such billing which is equal to an ANNUAL PERCENTAGE RATE OF 18%. Partial payments will be first credited to the accrued service charges and then to the principal.
4. The Client and the Consultant each binds himself, his partners, successors, executors, and assigns to the other party to this agreement and to the partners, successor, executors, and assigns of such other party in respect to this agreement.
5. The Client shall be responsible for payment of all costs and expenses incurred by the Consultant for his account, including any such monies that the Consultant may advance for Client's account for purposes consistent with this Agreement.
6. The Consultant reserves the right to withdraw this Agreement if not accepted within 30 days.
7. A claim for lien will be filed within 75 days of the date of an invoice for services (last day of services rendered) unless the account is paid in full or other prior arrangements have been made. All attorney fees incurred by the Consultant due to the filing of said lien or the foreclosure thereof shall be borne by the Client.

In the event suit must be filed by Consultant for the collection of fees for services rendered, Client will pay all reasonable attorney's fees and court costs.

If Client defaults in payment of fees or costs due under the terms of this Agreement and Consultant incurs legal expenses as a result of such failure, Client shall be responsible for payment for Consultant's reasonable attorney fees and costs so incurred.

8. The Consultant shall present, for the consideration of the Client, engineering and technical alternatives, based upon its knowledge and experience in accordance with accepted professional standards, with selection of alternatives and final decisions as requested by the client to be the sole responsibility of the Client.
9. Construction Phase Activities (When applicable) - In connection with observations of the work of the Contractor(s) while it is in progress the Consultant shall make visits to the site at intervals appropriate to the various stages of construction as the Consultant deems necessary in Agreement to observe as an experienced and qualified design professional the progress and quality of the various aspects of the Contractor(s)'s work. Based on information obtained during such visits and on such observation, the Consultant shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and the Consultant shall keep the Client informed of the progress of the work.

The purpose of the Consultant's visits to the site will be to enable the Consultant to better carry out the duties and responsibilities assigned to and undertaken by the Consultant during the Construction Phase, and, in addition, by exercise of the Consultant's efforts as an experienced and qualified design professional, to provide for the Client a greater degree of confidence that the completed work of the Contractor(s) will conform generally to the Contract Documents and that the integrity of the design concept as reflected in the Contract Documents has been implemented and preserved by the Contractor(s). The Consultant shall not, during such visits or as a result of such observations of Contractor(s)' work in progress, supervise, direct or have control over Contractor(s)' work nor shall the Consultant have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor(s), for safety precautions and programs incident to the work of Contractor(s) or for any failure of Contractor(s) to comply with laws, rules, regulations, ordinances, codes, or orders applicable to Contractors(s) furnishing and performing their work. Accordingly, the Consultant can neither guarantee the performance of the construction contracts by Contractor(s) nor assume responsibility for Contractor(s)' failure to furnish and perform their work in accordance with the Contract Documents.
10. Estimates of Fees - When fees are on a time and material basis the estimated costs required to complete the services to be performed are made on the basis of the Consultant's experience, qualifications, and professional judgment, but are not guaranteed. If the costs appear likely to exceed the estimate in excess of 20%, the Consultant will notify the Client before proceeding. If the Client does not object to the additional costs within seven (7) days of notification, the increased costs shall be deemed approved by the Client.
11. The Consultant is responsible for the safety on site of his own employees. This provision shall not be construed to relieve the Client or the Contractor(s) from their responsibility for maintaining a safe work site. Neither the professional services of the Consultant, nor the presence of his employees or subcontractors shall be construed to imply that the Consultant has any responsibility for any activities on site performed by personnel other than the Consultant's employees or subcontractors.
12. Original survey data, field notes, maps, computations, studies, reports, drawings, specifications and other documents generated by the Consultant are instruments of service and shall remain the property of the Consultant. The Consultant shall provide copies to the Client of all documents specified in the Description of Services.

Any documents generated by the Consultant are for the exclusive use of the Client and any use by third parties or use beyond the intended purpose of the document shall be at the sole risk of the Client. To the fullest extent permitted by law, the Client shall indemnify, defend and hold harmless the Consultant for any loss or damage arising out of the unauthorized use of such documents.

13. No claim may be asserted by either party against the other party unless an action on the claim is commenced within two (2) years after the date of the Consultant's final invoice to the Client.
14. If a Client's Purchase Order form or acknowledgment or similar form is issued to identify the agreement, authorize work, open accounts for invoicing, provide notices, or document change orders, the preprinted terms and condition of said Purchase Order shall be superseded by the terms hereof.
15. Standard of Care - Services performed by Consultant under this agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other representation expressed or implied, and no warranty or guarantee is included or intended in any report, opinion or document under this agreement.
16. Liability Insurance - Consultant will maintain such liability insurance as is appropriate for the professional services rendered as described in this Agreement. Consultant shall provide Certificates of Insurance to Client, upon Client's request, in writing.
17. Indemnification and Limitation of Liability - Client and Consultant each agree to indemnify and hold the other harmless, including their respective officers, employees, agents, members, and representatives, from and against liability for all claims, costs, losses, damages and expense, including reasonable attorney's fees, to the extent such claims, losses, damages or expenses are caused by the indemnifying party's acts, errors or omissions.

The Client understands that for the compensation herein provided Consultant cannot expose itself to liabilities disproportionate to the nature and scope hereunder. Therefore, the Client agrees to limit Consultant's liability to the Client arising from Consultant's professional acts, errors or omissions, such that the total aggregate liability of Consultant shall not exceed \$50,000 or Consultant's total fee for services rendered on this Project, whichever is less.

18. Allocation of Risk - Consultant and Client acknowledge that, prior to the start of this Agreement, Consultant has not generated, handled, stored, treated, transported, disposed of, or in any way whatsoever taken responsibility for any toxic substance or other material found, identified, or as yet unknown at the Project premises. Consultant and Client further acknowledge and understand that the evaluation, management, and other actions involving toxic or hazardous substances that may be undertaken as part of the Services to be performed by Consultant, including subsurface excavation or sampling, entails uncertainty and risk of injury or damage. Consultant and Client further acknowledge and understand that Consultant has not been retained to serve as an insurer of the safety of the Project to the Client, third parties, or the public.

Client acknowledges that the discovery of certain conditions and/or taking of preventative measures relative to these conditions may result in a reduction of the property's value. Accordingly, Client waives any claim against Consultant and agrees to indemnify, defend, and hold harmless Consultant and its subcontractors, consultants, agents, officers, directors, and employees from any claim or liability for injury or loss allegedly arising from procedures associated with environmental site assessment (ESA) activities or the discovery of actual or suspected hazardous materials or conditions. Client releases Consultant from any claim for damages resulting from or arising out of any pre-existing environmental conditions at the site where the work is being performed which was not directly or indirectly caused by and did not result from, in whole or in part, any act or omission of Consultant or subcontractor, their representatives, agents, employees, and invitees.

If, while performing the Services set forth in any Scope of Services, pollutants are discovered that pose unanticipated or extraordinary risks, it is hereby agreed that the Scope of Services, schedule, and costs will be reconsidered and that this Agreement shall immediately become subject to renegotiation or termination. Client further agrees that such discovery of unanticipated hazardous risks may require Consultant to take immediate measures to protect health and safety or report such discovery as may be required by law or regulation. Consultant shall promptly notify Client upon discovery of such risks. Client, however, hereby authorizes Consultant to take all measures Consultant believes necessary to protect Consultant and Client personnel and the public. Furthermore, Client agrees to compensate Consultant for any additional costs associated with such measures.

19. In the event of legal action to construe or enforce the provisions of this agreement, the prevailing party shall be entitled to collect reasonable attorney fees, court costs and related expenses from the losing party and the court having jurisdiction of the dispute shall be authorized to determine the amount of such fees, costs and expenses and enter judgment thereof.
20. Termination - The obligation to provide further services under this Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. In the event of any termination, Consultant will be paid for all services rendered to the date of receipt of written notice of termination, at Consultant's established chargeout rates, plus for all Reimbursable Expenses including a 15% markup.
21. Provision Severable - The unenforceability or invalidity of any provisions hereof shall not render any other provisions herein contained unenforceable or invalid.
22. Governing Law and Choice of Venue - Client and Consultant agree that this Agreement will be governed by, construed, and enforced in accordance with the laws of the State of Illinois. If there is a lawsuit, Client and Consultant agree that the dispute shall be submitted to the jurisdiction of the Illinois District Court in and for Stephenson County, Illinois.