



September 25, 2025

Kevin Tollisen, Town Supervisor
Town of Halfmoon
2 Halfmoon Town Hall Plaza
Halfmoon, NY 12065

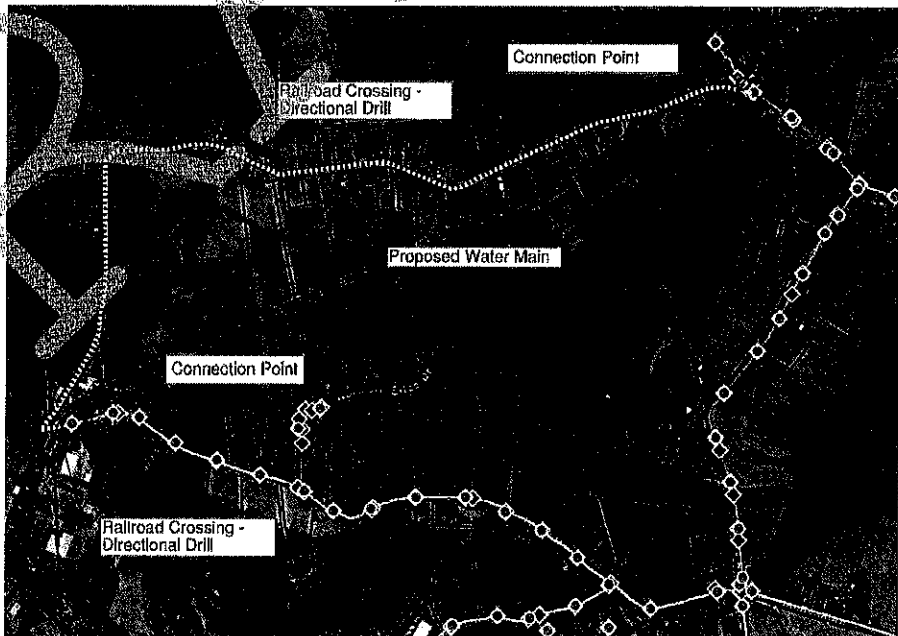
Re: Ushers Road Water Main Extension
MJ Proposal No. 2025393 for Engineering Services

Dear Supervisor Tollisen:

MJ Engineering, Architecture, Landscape Architecture, and Land Surveying, P.C. (MJ) is pleased to provide the Town of Halfmoon (Town) with this proposal for engineering services associated with the extension of water main on Ushers Road between the intersection with Tabor Road and Cary Road. Based on previous discussions with the Town and MJ's project understanding, the associated Scope of Services are included below.

PROJECT UNDERSTANDING

The existing water distribution in the northern section of Town currently terminates at the western end of Tabor Road, east of the Town of Halfmoon / Town of Clifton Park boundary. Another existing water main is located on Cary Road which conveys water from the Town's Goon Crossing Pump Station south into the Town's distribution system. With increased industrial development along Ushers Road, a water main extension is needed to connect these end points. The proposed water main connection will complete a loop which will also improve system hydraulics, increase redundancy, and provide alternate direction of flow.



The proposed project includes installation of approximately 11,000 linear feet of 12-inch DR11 high-density polyethylene (HDPE) water main, twenty-two (22) hydrants, and eleven (11) valves. A total of fifty-two (52) 1-inch water services will be installed from the new HDPE water main to serve the properties in this area. The proposed water main will be installed via horizontal directional drilling.



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Fishkill, NY
Levittown, NY
Picatinny, NJ
Melbourne, FL



The new water main will connect to an existing 12-inch ductile iron pipe (DIP) water main east of the Tabor Road/Ushers Road intersection. A tee and valve cluster will be installed at this intersection for a potential connection with the Clifton Park Water Authority if needed in the future. The new water main will connect to an existing 16-inch DIP water main in the Ushers Road/Cary Road intersection. The new water main will be installed under the existing Canadian Pacific railroad and the Dwaas Kill at multiple locations on Ushers Road. The project boundary is shown in the adjacent figure.

SCOPE OF SERVICES

Task 01: Field Investigation

A. Topographic Survey and Mapping

MJ will obtain topographical survey data in support of the project which will include the following:

- Collect topographic survey data through conventional survey over the entirety of the project site. Sufficient data will be collected to prepare mapping with 1-foot contours.
- Establish control points and benchmarks throughout the project corridor to serve as project control. The horizontal datum will be referenced to the New York State Plane Coordinate System, East Zone, on the North American Datum of 1983 (NAD83). The vertical datum will be referenced to the North American Vertical Datum of 1988 (NAVD88).
- Coordinate, prepare, and submit a design-ticket request for the project to document project site utilities. Project site utilities will be investigated on-site and documented based on visual identification and in conjunction with any information received from the design-ticket request (utility as built information) that will be incorporated into the project base mapping deliverable with the label Record Plan Only (RPO).
- Road rights-of-way, property boundaries, existing easements, and zoning setbacks will be shown on the base mapping, as defined by tax maps and/or record maps provided by the Town and correlated to any property monumentation recovered during a field survey, and/or surveyed features that correspond to record mapping. MJ will not be completing a formal boundary survey of the project work areas.
- Locate physical features within the project corridor including, but not limited to curbing, sidewalks, utility poles, culverts, manholes, streetlights, curb cuts, driveways and catch basins. Sanitary and storm structures will depict the elevations of the rims along with inverts and the size and directions of pipes. Underground utilities will be determined from observed surface evidence, record drawings obtained from the Town, and any mark out provided by contacting Dig Safe (Quality Level C).
- Existing electric, gas, and telephone conduits and structures will be shown on the mapping based on record information.
- Compile a base plan in AutoCAD Civil 3D 2024 format with 1' contours at a scale of 1" = 30' utilizing the data collected in the field and correlating utility records.



B. Geotechnical Investigation and Subsurface Condition Report

MJ, through our subconsultant, Atlantic Testing Laboratories, will complete a subsurface exploration and geotechnical investigation to obtain data for use in preparing construction documents associated with the proposed water main installation. The subsurface exploration and geotechnical investigation will include the following:

- Conduct a total of twenty-two (22) soil test borings along the proposed water main alignment to assess the soil properties, groundwater conditions, and presence of rock. The borings will be advanced in approximately 500-foot intervals along the proposed water main alignment to a depth of eight (8) to twenty (20) feet each, or to practical refusal, whichever is less. If practical refusal is encountered, the material may be cored at selected locations, a minimum of 5 feet using an NX-size core barrel (2-inch core diameter).
- Maintenance and protection of traffic consisting of signs and cones, will be provided during all boring activities along the proposed water main alignment. A highway work permit will also be obtained from the Town as needed for work conducted in the road right-of-way.
- Split spoon samples and Standard Penetration Testing will be performed continuously in the borings to the termination depth. Sampling will be conducted in accordance with ASTM D 1586 – *Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils*.
- Recovery of soil samples from the test borings and visual classification of soils will be performed.
- Bore holes will be backfilled upon completion of drilling. Borings in pavement will be patched at the surface with cold-patch asphalt.
- Prepare a data report including the boring location plan, subsurface investigation and sampling methodology, description of subsurface soil and rock conditions and groundwater conditions, soil boring logs, and laboratory test results.

C. Wetland Delineation

- Conduct a full wetland delineation (data collection, boundary flagging, GPS mapping) along the approximately 2-mile project area on Ushers Road, including approximately 50-feet on either side of Ushers Road. Services include the collection of data regarding vegetation, soils, and hydrogeology at each wetland identified along the interceptor routing in accordance with criteria set forth in the 1987 Corps of Engineers Wetland Delineation Manual and the 2012 Interim Regional Supplement to the Corps of Engineers Manual: Northcentral and Northeastern Region.
- Prepare a Wetland and Stream Delineation Report which outlines the delineation procedures and the number, size, and characteristics of any wetlands identified along the preferred water main route. The report will also include a preliminary assessment of the potential jurisdictional status of all delineated wetlands.



Task 02: Design Phase Services

A. Preliminary Design

- Conduct a site walkthrough with the Town to review the project area and identify site features, conditions, and/or constraints that will affect the performance of the work to be completed, and as needed to develop design plans for bidding proposes.
- Collect and review available existing information for the water system, including available record mapping and Town GIS mapping.
- Review the results of the topographical survey, mobile mapping, and geotechnical investigation to identify critical features and/or constraints that may affect the design of the project.
- Prepare preliminary design drawings and technical specification outline for review and approval by the Town. The drawing set will include preliminary plan sheets for the proposed water main improvements and miscellaneous water and civil details, as applicable.
- Prepare a preliminary engineering report and submit to the Town and involved regulatory agencies for review and comment. The preliminary engineering report is expected to include the following:
 - Project overview and background information
 - Review of water system hydraulics in the vicinity of the proposed water main improvements
 - Discussion of temporary staging areas
 - Identification of applicable regulatory permits and approvals
 - Outline of drawings and specifications
 - Preliminary water main layout plans (no profiles)
 - Estimated construction schedule
 - Opinion of probable cost

B. Final Design

Following Town approval of the preliminary design drawings, MJ will prepare final bid and contract documents, including construction drawings, contract front-end documents, Division 1 specifications, and technical specifications. The bid and contract documents will include information required for contractors to bid, procure, install, and properly test equipment and components of the project. Design documents will conform to applicable State, County, and Local laws and codes for construction and bidding. It is assumed the work will be bid under one (1) General Construction Contract for the water main improvements. The anticipated plan set will include.

- Title Sheet
- General Notes, Legend, and Index



- Existing Conditions and Removals Plan
- Water Main Plan and Profiles
- Work Zone Traffic Control Plans
- Miscellaneous Water and Construction Details

MJ will also prepare a revised opinion of probable construction cost for the water main improvements based on the final documents prior to project bidding to ensure conformance with the project budget.

Task 03: Regulatory Agency Coordination

A. Agency Coordination

- Collect data relative to mapped wetlands and streams, ecological resources, listed threatened and endangered species and cultural resources. Data sources will include, but not be limited to, digital orthoimagery, New York Natural Heritage Program (NYNHP) correspondence for rare species, U.S. Fish and Wildlife Services (USFWS) data and correspondence, New York State Freshwater Wetland and Stream mapping, National Wetland Inventory (NWI) maps, USDA Soil Surveys, and NYS Office of Parks, Recreation and Historic Preservation (NYS OPRHP) data.
- Based on the results of the preliminary screening, prepare and submit coordination letters as needed to the NYNHP, USFWS, NYS OPRHP, NYSDEC, and USACOE.
- Identify required permits and approvals required for the project based on the responses generated from the agencies contacted and assist the Town in securing the required permits and/or approvals.

B. Permits and Approvals

Based on the results of Task 3.A - Agency Coordination, MJ will prepare the required documentation, including NYS PE-stamped and signed plans, specifications, and required permit application forms to submit to the involved agencies. MJ will incorporate comments provided by the agencies into the contract documents. Based on a preliminary review of the project area and proposed scope of work, it is anticipated that the following permits and approvals will be required.

- **New York State Department of Health (NYSDOH)** - MJ will assist the Town in obtaining NYSDOH approval of the project. The final contract documents and DOH 348 - Application for Approval of Plans for Public Water Supply Improvement will be submitted to the NYSDOH for review and approval. Comments provided by the NYSDOH will then be incorporated into the final contract documents. Upon completion of the project, MJ will complete, stamp/sign, and submit the Engineer's Certification of Public Water Improvement Project Completion (DOH-5025) to the NYSDOH.
- **Town of Halfmoon Highway Work Permit** - MJ will coordinate with the Town of Halfmoon Highway Department during the preliminary and final design phases for work within the Town right-of-way along the project corridor. Plans and details of the work to be completed along Town roads will be submitted for review and approval. Comments provided by the Town will be incorporated into the final design and contract documents.



- **New York State Department of Environmental Conservation (NYSDEC)**

- **Freshwater Wetlands:** The NYSDEC Environmental Resource Mapper (ERM) indicates there are previously mapped surface waters in the vicinity of the project area, including the Dwaas Kill, Cooley Kill, Anthony Kill and associated wetlands. Horizontal directional drilling will be utilized to avoid any disturbance to these surface waters and their buffer areas. Bore pits will be strategically placed outside of surface waters and their buffer areas. In the event a bore pit must be placed within a wetland buffer area, an application will be submitted to NYSDEC for coverage under the Freshwater Wetlands General Permit GP-25-003, which authorizes the use of directional drilling in wetland adjacent areas for utility line replacement. NYSDEC has ten (10) days to review and respond to that application, and upon their approval, a Notice of Intent (NOI) is filed, and the project can begin.
- **Canadian Pacific Kansas City (CPKC) Railroad Crossing Permit/Approval** - MJ will assist the Town in obtaining a CPKC Utility Permit application for directional drilling at two (2) Delaware & Hudson railway crossings. The final contract documents and required permit fee of \$3,000 will be submitted to CPKC (via Jones Lang LaSalle, Inc. (JLL)) for review and approval. Comments provided by the JLL/CPKC will then be incorporated into the final contract documents.
- **State Environmental Quality Review Act (SEQRA)** - This project appears to be a Type II Action under 6 NYCRR Part 617.5(c)(10) - "extension of utility distributions facilities including gas, electric, telephone, cable, water and sewer connections to render service in approved subdivisions or in connection with any action on this list;". Accordingly, MJ will prepare a Short Environmental Assessment Form (SEAF) for the project file, and no further coordination under SEQRA will be necessary.

Task 04: Bid Phase Services

- Provide construction documents to the Town in digital (PDF) format.
- Assist the Town in obtaining pricing from the designated contractor based on a previously awarded contract in accordance with General Municipal Law Section 103 (16).
- Notify potential bidders of advertisement publication and provide electronic contract documents (plans and specifications) to prospective bidders and contractor clearinghouses.
- Respond to prospective bidder's questions and prepare addenda to the contract documents, as required, to clarify bidder questions.
- Tabulate and evaluate the bids, review professional and financial references of low bidders, and prepare a recommendation letter to the Town for the contract award.

Task 05: Contract Administration Services

- Prepare and issue Notice of Award to the selected Contractor. Compile and review the contractual submittals, including bonds, insurance, and agreement and forward to the Town for execution.



- Coordinate, schedule, and attend a pre-construction conference, and prepare and distribute meeting minutes to attending parties.
- Review and process construction shop drawings and specifications submitted by Contractor for compliance with the design concept.
- Respond to construction-related questions raised by the Contractor.
- Process minor design revisions, as required, to adjust the proposed construction to site-specific conditions. Major design changes, due to unforeseen conditions, are not included.
- Review and certify the Contractor's monthly and final payment applications. Payment applications will be prepared and submitted to the Town as needed.
- Conduct up to fourteen (14) bi-weekly progress meetings at the site to assure schedule conformance. Prepare and distribute meeting minutes as needed.
- Receive, review, and prepare change orders as required. Provide the Town with recommendations on the validity of the change orders.
- Conduct a final on-site project review, issue punch list, Notice of Substantial Completion, and Notice of Final Completion for the contract.
- Compile equipment operation and maintenance manuals, start-up reports, warranty information, shop drawings, and record plans as provided and developed by the Contractor, into a single final document package for delivery to the Town.

Task 06: Construction Observation Services

MJ will provide up to 1,120 hours of construction observation during critical phases of construction by a NICET Level III Inspector in the Town road right-of-way. Critical phases will include, but may not be limited to water main, valve, hydrant, and water service installation, connections to the existing water distribution system and system testing and disinfection. It is noted that the level of construction observation may vary and will be dependent upon the contractor's specific work schedule. MJ will provide construction observation on an hourly rate basis such that only the hours spent will be billed, which may result in cost savings to the Town depending on the contractor's schedule.

As part of our construction observation services, MJ will perform the following tasks:

- Full-time inspection with the road right-of-way.
- Verify that the construction work observed is in conformance with the Contract documents.
- Perform a detailed inspection of materials and items of work required by the Contract documents to support the Contractor's payment request.
- Coordinate the Contractor's construction activities with the Town.
- Inform the Town, in writing, of operations and procedures that may lead to a delay in the construction.



- Maintain a construction observation log describing progress, problems encountered and other pertinent information related to the project. Any meetings conducted will also be documented.
- Inspect manufactured and shop-fabricated materials to ensure conformance with approved shop drawings.
- Supervise any on-site testing and maintain a log and file of tests and related reports.
- Maintain a set of record documents based upon redline mark-ups provided by the Contractor.

SCHEDULE

MJ is prepared to initiate the work identified in this proposal within 2 weeks of Notice to Proceed. MJ will perform the outlined tasks as follows:

Task 01: Field Investigation (Survey/Geotechnical/Wetlands)	October 2025 – March 2026
Task 02: Design Phase Services	January 2026 – August 2026
Task 03: Regulatory Agency Coordination	September – December 2026*
Task 04: Bid Phase Services	January 2027
Task 05: Contract Administration Services	TBD
Task 06: Construction Observation Services	TBD

**Review periods by agencies may vary.*

Projected start and end dates are subject to change and are based on date from authorization to proceed. As certain aspects of the project are outside of MJ's control (e.g., review agency schedules, actions, and approvals), MJ cannot guarantee completion of the project within these proposed schedules.

FEE

MJ proposes to complete the above-listed services for the following lump sum fees.

Task 01: Field Investigation Services	
• Topographic Survey and Mapping	\$54,700
• Geotechnical Investigation and Subsurface Condition Report	\$23,500
• Wetland Delineation and Report	\$5,900
Task 02: Design Phase Services	
• Preliminary Design	\$23,000
• Final Design	\$79,600
Task 03: Regulatory Agency Coordination	\$15,300
Task 04: Bid Phase Services	\$3,400
Task 05: Contract Administration Services	\$49,100
Task 06: Construction Observation Services*	\$163,500

Total Estimated Fee: \$418,000



**The fee for construction observation services assumes 1,120 hours (based on a 28-week construction duration) at the 2027 Project Rate of \$146/hour. Effort will be billed based on hours required to be worked based on contractor schedule on a hourly not-to-exceed basis.*

MJ will invoice the Town in accordance with the contract requirements. The fee assumes there are no significant changes resulting from decisions, conditions, and/or events beyond MJ's control.

ASSUMPTIONS

The following assumptions were made in the development of this proposal:

1. The Town will provide:
 - a. Existing utility and record mapping if available.
 - b. Assistance to obtain access to project site.
 - c. Property lines to be established via tax maps.
 - d. Information regarding private buried and overhead site utilities not managed by public utility sources.
 - e. Payment for any fees, including applications, permits and other reviewing authority.
2. Project requires current NYS Prevailing Wage Rates for survey and geotechnical field personnel.
3. Right-of-way survey is not required. Property lines to be established via tax maps. Property boundaries shown on the survey will be approximate, and for orientation purposes only based on tax maps and evidence of possession located in the field. The survey will indicate tax map section, block and lot numbers and will note current owners and street addresses.
4. Contact will be made with UFPO prior to performing the ground survey. Utility identification by UFPO is limited to publicly owned lands only.
5. Geotechnical investigation excludes rock drilling. If refusal is encountered as soil borings are advanced, rock drilling and NX coring can be provided for an additional fee, under separate authorization.
6. Traffic control during the geotechnical investigation will include only temporary cones and signage. Flaggers, handheld signs, and manual interventions are not included.
7. Disturbance will be less than 1 acre with the use of directional drilling of the proposed water main. As such, preparation of a Stormwater Pollution Prevention Plan (SWPPP) is not required.
8. Habitat assessments and archeological investigations (i.e., Phase 1A/1B/2) are assumed not required. If through correspondence with the NYSDEC and NYS OPRHP that this work is required, MJ can provide these services for an additional fee, under separate authorization.
9. Individual permitting, beyond the scope of general permitting in Task 3.B, with NYSDEC and USACE is assumed not required. If through correspondence with the NYSDEC and USACE it is determined further permitting is required, MJ can provide these services for an additional fee, under separate authorization.
10. A site visit with representatives from the USACE and the NYSDEC to obtain agency



concurrence with the surveyed wetland/stream boundaries and a determination of the extent of their jurisdiction over the delineated wetlands will not be required.

11. Proposal fee includes a Canadian Pacific Kansas City (CPKC) Railway right-of-way processing fee of \$3,000. Additional fees imposed by CPKC Railway/Delaware & Hudson Railway, or other subsidiaries, for review of design documents are not included.
12. CPKC services for construction observation or flagging will not be required to obtain a CPKC Utility Permit.
13. Construction phases field test for settlement monitoring of ground surface and subsurface (settlement plates) in area of Delaware & Hudson Railway will not be required to obtain a CPKC Utility Permit.
14. The Contractor will be required, as part of the construction contract, to prepare record drawings for submission to the Town. Preparation of additional record drawings is not included.
15. No warranty, or guarantee, is expressed, or implied concerning the granting of permits or approvals required, or timelines for review and action, by regulatory agencies.

TASKS NOT INCLUDED IN THIS PROPOSAL

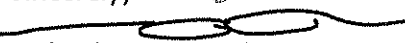
The following efforts are excluded from this scope of services:

1. Underground utility locating.
2. Cultural / archeological investigations.
3. Threatened / endangered species investigations.
4. Preparation of temporary and/or permanent construction easements.
5. Materials testing and special inspections.
6. Construction survey stakeout and field survey verification.
7. CPKC construction phase services (i.e., flagging, construction phase testing)

SUMMARY

Thank you for the opportunity to provide a proposal for this project. We look forward to the opportunity to work with the Town on this project. Please do not hesitate to contact Carrie Dooley at 518-371-0799 or via email at carriedooley@mjteam.com. If you have questions or require additional information.

Sincerely,


Michael D. Panichelli, P.E.
President

Cc: Ca. Dooley
File



AUTHORIZATION TO PROCEED

I hereby authorize MJ Engineering, Architecture, Landscape Architecture, and Land Surveying, P.C. to proceed with the scope of services as described above.

Printed Name

Title

Signature

Date

DRAFT