



June 24, 2025

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

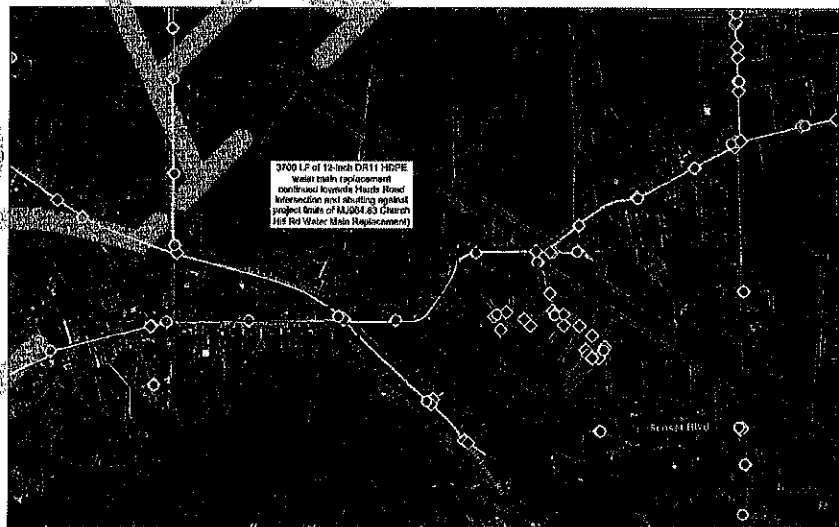
Re: Brookwood Road Water Main Replacement
MJ Proposal No. 2025220 for Engineering Services

Dear Supervisor Tollisen:

M.J. Engineering and Land Surveying, P.C. (MJ) is pleased to provide the Town of Halfmoon (Town) with this proposal for engineering services associated with the replacement of the existing water main on Halfmoon Drive/Brookwood Road (Saratoga County Route 94) between the intersection with Harris Road and New York Power Authority transmission easement. Based on previous discussions with the Town and MJ's project understanding, the associated Scope of Services are included below.

PROJECT UNDERSTANDING

The Town's water distribution currently serves multiple residential parcels in the project area. The Town's water distribution system on Halfmoon Drive/Brookwood Road was constructed over 40 years ago. The water main, hydrants, and valves are aging and the water main has experienced periodic breaks, resulting in disruption of water service to the area residences. To improve the reliability of water supply and increase longevity of the Town's infrastructure, the existing water main is to be replaced. The water system infrastructure in the project area



consists of 12-inch diameter ductile iron pipe located on the south side of Halfmoon Drive/Brookwood Road (Saratoga County Route 94). The western boundary of the project is the Church Hill Road 12-inch HDPE Watermain Replacement Project (MJ964.83). The eastern boundary of the project is 202 Brookwood Road in the area of the New York Power Authority transmission easement. The project boundary is shown in the adjacent figure.

The proposed project includes installation of approximately 3,700 linear feet of 12-inch DR11 high-density polyethylene (HDPE) water main, seven (7) hydrants, six (6) valves. A total of forty-four (44) water services will be disconnected from the existing water main and reconnected to the new



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HDPE water main. Existing hydrants and valve assemblies will be removed. The proposed water mains will be installed via horizontal directional drilling. The new water main will connect to an existing 12-inch HDPE water main at the intersection of Church Hill Road (Saratoga County Route 99) and an existing 12-inch ductile iron pipe (DIP) water main at 202 Brookwood Road. The proposed water main will extend across Middletown Road (Saratoga County Route 96) and tie into the existing 12-inch DIP in both directions at this location. The new water main will also be connected to an existing 8-inch PVC water main at Brookwood Estates Road. A tee connection in the existing 12-inch DIP will be installed at 202 Brookwood Road for service to the Brookwood Road Water Storage Tank.

SCOPE OF SERVICES

Task 1: Field Investigation

A. 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 throughout the project corridor. Horizontal datum will be NAD 83 and vertical datum will be NAVD 88.
- Place a utility one call to identify utility owners in the area and request existing record plans and mark outs. Review any existing utility records in possession of the Town.
- Road rights-of-way, property boundaries, existing easements, and zoning setbacks will be shown on the 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 all 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 nine (9) 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 300-foot to 500-foot intervals along the proposed water main alignment to a depth of eight (8) to fifteen (15) 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 flag person will be provided for up to two (2) days to assist with maintenance and protection of traffic in select areas. A highway work permit will also be obtained from the Saratoga County Department of Work 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.

Task 2: 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 specifications 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 3: 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.



- Prepare and submit letters to the NYNHP, USFWS, NYS OPRHP, NYSDEC, and USACOE, as needed, to determine any potential environmental impacts.
- 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.

- **State Environmental Quality Review Act (SEQRA)** – This project appears to be Type II for the purposes of SEQRA pursuant to 617.5(c)(1) – maintenance or repair with no substantial changes to existing structure or 617.5(c)(2) replacement, rehab, or reconstruction in kind on same site. As such, no further action relative to SEQRA is required.
- **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 Town right-of-way. Plans and details of the work to be completed along Town streets will be submitted for review and approval. Comments provided by the Town will be incorporated into the final design and contract documents.
- **Saratoga County Department of Public Works** - MJ will coordinate with the Saratoga County Department of Public Works (DPW) during the preliminary and final design phases for work within the County Road right-of-way. Plans and details of the work to be completed along County roads will be submitted for review and approval. Comments provided by the County DPW will be incorporated into the final design and contract documents.
- **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.
- **New York State Department of Environmental Conservation (NYSDEC)** – It is anticipated that the project will disturb more than 1-acre. As a result, the project will be subject to the NYSDEC Phase 2 Stormwater Regulations and will require coverage under the NYSDEC SPDES General Permit GP-0-25-001. As part of the design effort, MJ will prepare a Stormwater Pollution Prevention Plan (SWPPP) as required by GP-0-25-001. Given the nature of the proposed work which includes replacement/installation of underground linear utilities, the SWPPP will only be required to address erosion and sediment control pursuant to GP-0-25-001 Appendix B Table 1. MJ will prepare an electronic Notice of Intent (eNOI) supporting permit coverage under the General Permit



and will furnish the completed eNOI for signature by the appropriate Client representative. Prior to construction, MJ will submit the eNOI to the NYSDEC requesting permit coverage. MJ assumes that no deviations from the NYSDEC Stormwater Management Design Manual are required.

- **New York Power Authority (NYPA)** - MJ will assist the Town in obtaining approvals for work activities within the NYPA Power Transmission right-of-way. The final contract documents and PA-39 – NYPA Real Estate Permit Application will be submitted to the NYPA for review and approval. Comments provided by the NYPA will be incorporated into the final design and contract documents.

Task 4: 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 5: 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 five (5) 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 6: Construction Observation Services

MJ will provide up to 480 hours of construction observation during critical phases of construction by a NICET Level III Inspector in the Saratoga County right-of-way. Critical phases will include, but may not be limited to water main and valve 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 Saratoga County right-of-way to fulfill the County's highway work permit requirements.
- 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 relative 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 1:** Field Investigation (Survey/Mapping/Geotechnical) ...July – September 2025
Task 2: Design Phase ServicesOctober – December 2025
Task 3: Regulatory Agency CoordinationJanuary 2026*



Task 4: Bid Phase ServicesMarch-April 2026
Task 5: Contract Administration ServicesTBD
Task 6: Construction Observation ServicesTBD

**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.....	\$17,200
• Geotechnical Investigation and Subsurface Condition Report.....	\$17,200
Task 02: Design Phase Services	
• Preliminary Design	\$12,600
• Final Design	\$30,900
Task 03: Regulatory Agency Coordination.....	\$4,800
Task 04: Bid Phase Services	\$1,900
Task 05: Contract Administration Services.....	\$27,800
Task 06: Construction Observation Services*	\$64,800
Total Estimated Fee: \$177,200	

**The fee for construction observation services assumes 480 hours (based on a 12-week construction duration) at \$135/hour (County Road ROW). To be billed as hourly not-to-exceed.*

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 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. 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.
7. Wetlands delineation and permitting through NYSDEC and the USACE and mitigation design are assumed not required. If through correspondence with the NYSDEC and USACE that this work is required, MJ can provide these services for an additional fee, under separate authorization.
8. Preparation of a Storm Water Pollution Prevention Plan (SWPPP) is not included. It is assumed that the total disturbance will be less than 1 acre for each valve replacement or installation area.
9. 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.
10. 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. Habitat assessments, wetlands delineation and permitting.
4. Threatened / endangered species investigations.

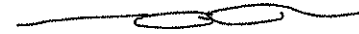


5. Preparation of temporary and/or permanent construction easements.
6. Materials testing and special inspections.
7. Construction survey stakeout and field survey verification.

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 M.J. Engineering and Land Surveying, P.C. to proceed with the scope of services as described in this proposal.

Printed Name

Title

Signature

Date