



**Consulting & Municipal  
ENGINEERS**

**DRAFT**

April 29, 2025

Ms. Justine Progebin  
Business Administrator  
Township of North Brunswick  
710 Hermann Road  
North Brunswick, NJ 08902

**Re: Proposal for Professional Services for the  
Water System Emergency Interconnection Meter Chambers  
Our File No.: PNO00467.01**

Dear Ms. Progebin:

Thank you for considering our Firm for the above referenced work and allowing us to submit this proposal for Professional Services associated with the proposed metering chambers located at the two (2) emergency interconnections between the Township's Water System and the South Brunswick Township Water System.

#### INTRODUCTION

We understand that the scope of the proposed improvements generally includes the construction of new water system interconnection chambers in North Brunswick for metering of water purchased from South Brunswick in the event of an emergency. The Township's Water System has existing interconnections with the South Brunswick Water System along Finnegan Lane near Tulip Drive and along Davidson's Mill Road near Oakeys Brook which provide a source of emergency water supply to North Brunswick Township. Due to higher water system pressures in South Brunswick, water is generally only supplied to the North Brunswick Water System through these interconnections. Both interconnections are currently un-metered and require manual operation of a valve to activate.

The NJDEP has required that the Township install meters at both the emergency interconnections to record the actual amount of water conveyed to the Township during an emergency. The Interconnection Chambers will be located within proposed easements along Finnegan Lane and Davidson's Mill Road to allow for access during operation and maintenance. Each Interconnection will consist of a precast concrete chamber, water meter, meter bypass, isolation valves and valves to regulate the amount of water being purchased. In addition, modifications to the water mains will be performed to allow for the installation of the Interconnection Chambers.

Our proposal has considered all the elements of the work outlined above, and our Firm has the capabilities of providing the necessary Land Surveying and Engineering Services associated with the project.

**CONSULTING AND MUNICIPAL ENGINEERS LLC**

NJ CERTIFICATE OF AUTHORIZATION NO. 24GA28359000

Barneгат • Berlin • Camden • Howell • Medford • Monmouth Junction • Parlin



Ms. Justine Progebin, Business Administrator  
Township of North Brunswick  
Water System Emergency Interconnection Meter Chambers

April 29, 2025  
Our File No. PNO00467.01  
Page 2

## SURVEY, BASE MAPPING, DESIGN, PERMITTING AND BID PHASE SERVICES

We anticipate the Professional Services will involve the preparation of the necessary Plans, Specifications and Bid Documents within the specified project limits and will include the following:

### PHASE 1- SURVEY, BASE MAPPING AND EASEMENT DOCUMENT PREPARATION

- Establish a balanced control survey (traverse) line with recoverable ties. Basis of the horizontal and vertical control will be the New Jersey State Plane Coordinate System, NAD 1983, U.S. Survey Foot, and North American Vertical Datum of 1988, respectively. Permanent points (Capped Rebar, PK Nails, etc.) will be set along the control line. A minimum of two horizontal and vertical control points will be established along the project limits. GPS methodology will be used to establish horizontal and vertical control.
- Preparation of a Topographic Plan showing natural and manmade features, including: existing above and, where possible, underground utilities, survey baseline (traverse line), spot elevations and contours at an interval of 1.00-foot within and adjacent to the Project limits. Topographic plan will be compiled from field locations and edits. Plan will be drafted at a scale of 1" = 30'.
- Limited survey to be prepared to determine the current public rights-of-ways, property lines and easements in the Project Area. Individual boundary and/or utility R.O.W. surveys are excluded under this proposal.
- Prepare easement descriptions and sketches for locating the proposed interconnection chambers along Finnegans Lane and Davidson's Mill Road.

### PHASE 2 – DESIGN

With regard to the Design Phase for the Project, we anticipate meeting with representatives of the Township prior to commencing this phase in order to review the project schedule and other preliminary issues.

In addition, we anticipate the design work in this phase will include, but not be limited to, the following:



Ms. Justine Progebin, Business Administrator  
Township of North Brunswick  
Water System Emergency Interconnection Meter Chambers

April 29, 2025  
Our File No. PNO00467.01  
Page 3

- Perform field evaluations to obtain operating data, verify locations of existing water mains, valves, hydrants and utilities in order to develop base drawings and review proposed improvements with the Township;
- Review existing pressures in both water systems in the area of the interconnection chambers. This information will be utilized for sizing of piping and meter equipment;
- Prepare plan and profile drawings for the water main relocations associated with the two (2) new interconnections;
- Prepare construction details for the two (2) new interconnection chambers including precast concrete vaults, water meters, isolation valves, flow control valve, bypass pipe and associated equipment;
- Prepare Bid Documents, including Plans, Details, Specifications and Engineer's Estimate of construction costs.

### PHASE 3 – PERMITTING

Concerning the Permit Acquisition Phase of the Project, we anticipate submitting a complete application for each of the permits outlined below, and our Scope of Services will include one (1) plan revision to comply with review agency comments.

#### TASK 1 - SOIL EROSION AND SEDIMENT CONTROL PLAN CERTIFICATION

We anticipate submitting the required applications for Soil Erosion and Sediment Control Plan Certification to the Freehold Soil Conservation District as necessary, in accordance with the above Scope of Services.

#### TASK 2 - NJDEP PERMITS

We anticipate obtaining approval from the Bureau of Water System Engineering (BWSE) of the New Jersey Department of Environmental Protection for the replacement of the existing water mains and new interconnection chambers, if required, in accordance with the above Scope of Services.



Ms. Justine Progebin, Business Administrator  
Township of North Brunswick  
Water System Emergency Interconnection Meter Chambers

April 29, 2025  
Our File No. PNO00467.01  
Page 4

#### PHASE 4 – BID PHASE

We anticipate that bid phase services will generally include the furnishing of an electronic set of plans and specifications prior to advertisement for bids, coordination with prospective bidders during the bid period, issuance of any addenda required, attendance at the bid opening, and the preparation of a report recommending award of the Project.

#### COST PROPOSAL

Accordingly, based upon the above outlined Scope of Services, we find that the necessary Surveying, Base Map preparation, Design, Permitting and Bid Phase can be provided for the estimated cost not to exceed fee indicated below based upon the following breakdown:

Phase 1 – Surveying and Base Mapping	\$ 23,972.00
Phase 2 – Design	\$ 38,767.00
Phase 3 – Permitting	\$ 3,968.00
Phase 4 – Bid Phase	\$ 5,664.00
<b>Total</b>	<b>\$ 72,371.00</b>

#### SCHEDULE

Based upon the above Scope of Services and an authorization for providing Professional Services for the Water System Emergency Interconnection Meter Chambers by May 5, 2025, we estimate the schedule for the Project to be as follows:

Complete Survey and Base Mapping	June 15, 2025
Submit Preliminary Plans & Specifications to Township	August 15, 2025
Prepare Easement Sketch and Description	August 31, 2025
Permit Application Submissions	September 30, 2025
Submit Final Plans & Specifications to Township	December 1, 2025
Receive Permit Approvals and Easements	January 30, 2026
Advertise for Bids	March 1, 2026

#### SUMMARY

Our hourly rates shall be firm until January 1, 2026 after which they may be subject to re-negotiation. Invoices shall be paid within 30 days of presentation of same. In accordance



**Consulting & Municipal  
ENGINEERS**

Ms. Justine Progebin, Business Administrator  
Township of North Brunswick  
Water System Emergency Interconnection Meter Chambers

April 29, 2025  
Our File No. PNO00467.01  
Page 5

with State requirements the Township has our Affirmative Action Statement and Business Registration Certificate on file.

Our contract documents will include wording that requires the Contractor to be responsible for all applicable OSHA and other regulatory agency requirements, as well as safety, construction means and methods, and the usual other requirements that are normally included in our Standard Specifications.

Our Proposal does not include subsurface investigations or the preparation of permits other than those listed that may be required for the proposed Project. Only limited Right of Way / Easement acquisitions are included in this Proposal for minor improvements outside of the public Right-of-Way. Costs for procurement of any easements are not included in this proposal. In addition, our Proposal does not include costs associated with permit fees or the preparation of permits other than those listed that may be required for the proposed project.

The estimated construction cost for the Project as described herein is approximately \$325,000.00 per meter chamber.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

Very truly yours,  
**CME ASSOCIATES**

James Watson, P.E.  
Township Engineer's Office

KC/md

cc: Michael Hritz, Director of Community Development