



# EXETER PUBLIC WORKS DEPARTMENT

13 NEWFIELDS ROAD • EXETER, NH • 03833-3792 • (603) 773-6157 • FAX 772-1355

[www.exeternh.gov](http://www.exeternh.gov)

DATE: June 26, 2020  
TO: Russell J. Dean, Town Manager  
FROM: Jennifer Mates, P.E., Assistant Town Engineer  
RE: Professional Engineering Services  
Westside Drive Neighborhood Utility Planning and Preliminary Design  
Consultant Award Recommendation

In March 2020, the town voted to approve \$100,000 for the planning and preliminary conceptual design of utility improvements to include water, sewer, and drainage in the Westside Drive neighborhood. The vote included approval of the NH Department of Environmental Services (NHDES) Clean Water State Revolving Loan Fund (CWSRF), which is providing a \$75,000 loan with 100% principal forgiveness to the Town for this project. The remainder of this phase of the project will be paid using sewer revenue funds.

The Westside Drive neighborhood was identified as a private I/I pilot area in the Town's Phase III I/I study and CSO LTCP. To help gain support of the stakeholders and develop effective concepts, the project approach includes a simplified Context Sensitive Solutions (CSS) process developed originally by AASHTO and NHDOT. As opposed to traditional approaches, the CSS focuses on defining the problem and framework prior to developing alternatives. This requires mechanisms that first collect information on issues and listening to the public/stakeholders to understand the current challenges prior to presenting concepts. This project will develop an Asset Management Program (AMP) document which will serve as a guideline for the Town to plan, fund, and implement necessary capital upgrades to the existing sewer system to reduce I/I town-wide. Additionally, preliminary design alternatives to reduce I/I in the Westside Drive neighborhood will be prepared to incorporate into a future CIP project.

In September 2019, the Department of Public Works (DPW) issued a request for proposals (RFP) for professional engineering services for utility design for the Salem St Area project which included a request for qualifications for engineering services to pre-qualify consultants for future projects. The qualifications-based selection (QBS) process was used and described in the attached memo regarding the selection of the Salem St project consultant.

Underwood Engineers, Inc. (UEI) was selected for this project based on their qualifications, existing knowledge of the Town's sewer system, initial research done during the LTCP, and the successful history of other I/I-related projects in town. The scope and fee were negotiated to ensure all of the CWSRF and preliminary design elements were included. The major elements of the scope of services to be provided by UEI include geotechnical investigation, evaluation of potential design alternatives, conceptual design of utility improvements, and preparing an opinion of probable construction costs. The contract was sent to Primex and Mitchell Municipal Group for review and their comments will be incorporated.

**The Department recommends approving the design contract for the Westside Drive Area Utility Planning and Preliminary Design project to Underwood Engineers, Inc. for \$97,600.00**

**ENGINEERING REPORT PHASE  
CONTRACT FOR PROFESSIONAL SERVICES  
FOR  
TREATMENT WORKS**

TOWN OF EXETER, NEW HAMPSHIRE

This AGREEMENT made and entered into at Rockingham County, New Hampshire, this \_\_\_ day of \_\_\_\_\_ 2020, by and between Town of Exeter, NH hereinafter called the OWNER, Underwood Engineers, Inc. hereinafter called the ENGINEER.

WITNESSETH:

WHEREAS, the OWNER intends to examine the need, alternatives and cost of constructing Treatment Works including develop a report phase preliminary design for the Westside Drive Neighborhood that could be used as a tool for future I/I mitigation and project development. A detailed description of the scope of services is provided as Attachment A and a Certificate of Insurance is provided as Attachment B.

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\_\_\_\_\_

hereinafter called the PROJECT, and

WHEREAS, professional sanitary engineering services are required to prepare an engineering report, and

WHEREAS, such services are of a distinct professional nature and hence not subject to the bidding process,

NOW THEREFORE, in consideration of these premises and of the mutual covenants herein set forth, the OWNER hereby retains the ENGINEER to furnish the following engineering services in connection with the proposed PROJECT; and it is agreed by and between the OWNER and the ENGINEER as follows:

**I. Services to be performed by the ENGINEER**

A. The ENGINEER agrees to produce a complete and definitive Engineering Report to meet current division requirements and to perform any and all engineering incidental thereto. The detailed scope of the work is as outlined in the attached Plan of Study.

B. Furnish to the OWNER two (2) copies of information needed for the acquisition of easements, site options for treatment plant and pump stations and route options for interceptor sewers within \_\_\_ calendar days after the Engineering Report has been approved by the New Hampshire Department of Environmental Services, Water Division, hereinafter called the DIVISION.

C. Furnish four (4) copies of the Engineering Report to the OWNER and two (2) copies to the DIVISION. Additional copies to be available at cost.

D. Prepare applications with supporting and associated documents for Federal, State and other grant or loan programs.

1. Assists the OWNER in securing grants or loans by State, Federal and other grant or loan agencies.

E. Provide the DIVISION with one copy of design calculations, work sheets, field notes, estimates and other data generated in preparing the Engineering Report in a form satisfactory to the DIVISION.

**II. The OWNER'S Responsibilities**

A. Assist the ENGINEER by placing at his disposal all available information pertinent to the PROJECT, including previous reports and other data relative to the reports.

B. Make provisions for the ENGINEER to enter upon public and private lands, municipal facilities and industrial establishments as required to perform work under this AGREEMENT.

**III. Time of Completion**

A. The ENGINEER agrees that he will submit to the DIVISION and the OWNER for approval after modification or revision as recommended by the DIVISION and agreed to by the ENGINEER the completed report within \_\_\_\_\_ consecutive calendar days following the

acceptance of the contract by the OWNER, and deliver same to the OWNER within 30 calendar days following the date of final approval by the DIVISION.

B. It is agreed by the parties to this contract that failure by the ENGINEER to complete the work within the time stipulated under III, A, above may be considered sufficient basis for the debarment of the ENGINEER from the DIVISION'S Roster of Prequalified Engineers as provided for under New Hampshire Code of Administrative Rules Env-Wq 603.08, or the Assessment of liquidated damages as provided for under RSA 485-A: 4, XII.

**IV. Compensation to be Paid the ENGINEER**

A. Method of Payment - Amount of Fee

1. Payment to the ENGINEER, for services rendered, shall be according to the following schedule:

Monthly billing based on hours and rates by labor category with mark-up and incidental expenses in accordance with the attached fee schedule.

2. The OWNER agrees to pay and the ENGINEER agrees to accept for all services under this AGREEMENT, a fee not to exceed

Ninety Seven Thousand and Six Hundred

Dollars (\$97,600),

and the ENGINEER agrees that the work proposed is sufficient to satisfactorily complete the study and that the monies to be paid are adequate. The attached fee schedule with labor category, hours, hourly rate, markup, incidental expenses, and fees for special services, shall be the basis for billing for engineering services.

a. The ENGINEER agrees that prior to submitting the report to the DIVISION for formal approval he shall make revisions in the report as recommended by the DIVISION and agreed to by the ENGINEER without additional compensation. After formal approval if it becomes necessary to update the report for reasons beyond the control of the ENGINEER, payment for such revision or revisions shall be made to

the ENGINEER on a basis to be negotiated with the DIVISION.

**V. Additional Covenants**

A. The ENGINEER agrees to assign in active charge of this PROJECT for the life of the contract a Project Engineer who is a permanent employee of the ENGINEER and who is a "qualified sanitary engineer" as defined under the DIVISION'S "Rules and Regulations for the Prequalification of Consulting Engineers." The Project Engineer shall be\*

Cole S. Melendy, P.E.

\* See appended resume describing the candidate's qualifications for the assignment.

Any proposed change in identity of the Project Engineer on the PROJECT shall first be approved by the DIVISION before transfer of responsibility is made. Failure of the ENGINEER to abide by the above covenant is agreed to be sufficient basis for debarment of the ENGINEER from the DIVISION'S Roster of Pre-qualified Consulting Engineers as provided for under New Hampshire Code of Administrative Rules Env-Wq 603.08.

B. The ENGINEER agrees to be solely responsible for all bills or claims for payment for services rendered by others and for all services and materials employed in his work, and to indemnify and save harmless the OWNER, and all of the OWNER'S officers, agents and employees against all suits, claims or liability of every name and nature arising out of or in consequence of the negligent acts or failures to act of the ENGINEER or others employed by him in the performance of the work covered by this AGREEMENT.

C. The ENGINEER further agrees to procure and maintain at his expense such workmen's compensation insurance as is required by the statutes and public liability insurance in amounts adequate to provide reasonable protection from claims for bodily injury, death or property damage which may result from his performance and the performance of his employees under this AGREEMENT.

D. All documents, including original drawings, design calculations, work sheets, field notes, estimates, and other data shall remain the property of the OWNER and shall be transmitted to the OWNER in clean and orderly condition on demand; however, these may be left in the possession of the ENGINEER at the OWNER'S discretion.

E. The ENGINEER shall not sublet, assign or transfer any part of the ENGINEER'S services or obligations under this AGREEMENT without the prior approval and written consent of the OWNER and the DIVISION, and the contract shall be binding upon and inure to the benefit of the parties, their successors and assigns.

IN WITNESS WHEREOF, the parties hereto have affixed their hand and seals at Rockingham County, New Hampshire, the day, month, and year first above written.

**ENGINEER:**

By: Keith A. Pratt, P.E., President  
(Authorized Representative\*)

Date: \_\_\_\_\_

By: W. Steven Clifton, Vice President  
(Authorized Representative\*)

Date: \_\_\_\_\_

**OWNER:**

By: Russell Dean, Town Manager, Exeter, New Hampshire  
(Authorized Representative\*)

Date: \_\_\_\_\_

**APPROVED: \*\***

DEPARTMENT OF ENVIRONMENTAL SERVICES  
Water Division

By: \_\_\_\_\_  
(Authorized Representative)

Date: \_\_\_\_\_

\* Signatures should be supported by appropriate document.

\*\* It is agreed that as an act in furtherance of its statutory authority to approve engineering agreements for treatment works, the DIVISION's approval does not impose any contractual obligation or liability on the State of New Hampshire, the Department of Environmental Services or the Division.

Approved as to form:

At a meeting of the Partners/Directors of Underwood Engineers, Inc., held on \_\_\_\_\_ ,  
at which all the Partners/Directors were present, except \_\_\_\_\_ ,  
it was

VOTES: That all contracts may be signed by any one of the following:

Keith A. Pratt, President and W. Steven Clifton, Vice President

A true copy

Attest: Colleen A. Morrow, Secretary/Treasurer

Place of Business: 25 Vaughan Mall, Portsmouth, NH 03801-4012

Date of this Contract: \_\_\_\_\_

I hereby certify that I am the Clerk of Underwood Engineers, Inc., that Keith A. Pratt is the duly elected President, and that W. Steven Clifton is the duly elected Vice President, and that the above vote has not been amended or rescinded and remains in full force and effect as of this date.

\_\_\_\_\_  
Clerk – Colleen A. Morrow, Secretary

COST OR PRICE SUMMARY FORMAT FOR SUBAGREEMENTS UNDER NH SAG & SRF				Form Approved DES 11/00
PART I - GENERAL				
1. GRANTEE / LOANEE			2. GRANT/LOAN NO.	
3. NAME OF CONTRACTOR OR SUBCONTRACTOR <b>Underwood Engineers, Inc.</b>			4. DATE OF PROPOSAL	
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP) <b>25 Vaughan Mall, Portsmouth, New Hampshire 03801-4012</b>			6. TYPE OF SERVICE TO BE FURNISHED	
PART II - COST SUMMARY				
7. DIRECT LABOR (Specify labor categories)	HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
Principal	24	\$64.50	\$1,548.00	
Sr. Project Manager	16	\$54.50	\$872.00	
Project Manager	76	\$47.00	\$3,572.00	
Sr. Project Engineer	74	\$43.00	\$3,182.00	
Project Engineer	253	\$33.00	\$8,349.00	
Project Engineer (II)	0	\$33.00	\$0.00	
Sr. Resident Engineer	0	\$35.00	\$0.00	
Resident Engineer	0	\$25.00	\$0.00	
Technician	132	\$33.00	\$4,356.00	
Clerical	22	\$24.50	\$539.00	
DIRECT LABOR TOTAL:				<b>\$22,418.00</b>
8. INDIRECT COSTS (Specify indirect cost pools)	RATE	x BASE =	ESTIMATED COST	
	1.76	\$22,418.00	\$39,455.68	
INDIRECT COST TOTAL:				
9. OTHER DIRECT COSTS				
a. TRAVEL			ESTIMATED COST	
(1) TRANSPORTATION (\$0.365 per mile)			\$0.00	
(2) PER DIEM			\$0.00	
TRAVEL COSTS TOTAL:			<b>\$0.00</b>	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)			ESTIMATED COST	
Mileage	200	\$0.54	\$108.00	
Copies (B/W)	1000	\$0.10	\$100.00	
Copies (Color)	400	\$0.30	\$120.00	
Prints	40	\$1.50	\$60.00	
Misc.	551	\$1.00	\$551.00	
EQUIPMENT SUBTOTAL:			<b>\$939.00</b>	
c. SUBCONTRACTS			ESTIMATED COST	
Doucet Survey, Inc.			\$9,820.00	
R.W. Gillespie & Associates, Inc.			\$8,500.00	
Flow Assessment			\$6,600.00	
SUBCONTRACTS SUBTOTAL:			<b>\$24,920.00</b>	
d. OTHER (Specify categories)			ESTIMATED COST	
			\$0.00	
			\$0.00	
OTHER SUBTOTAL:			<b>\$0.00</b>	
e. OTHER DIRECT COSTS TOTAL:			<b>\$25,859.00</b>	
10. TOTAL ESTIMATED COST				<b>\$87,732.68</b>
11. PROFIT				<b>\$9,867.32</b>
12. TOTAL PRICE				<b>\$97,600.00</b>



## Attachment A - Scope of Services

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Underwood Engineers, Inc. (UE) will use our existing knowledge of the Exeter's wastewater collection system to develop a planning document for the Westside Drive Neighborhood that is consistent with the Town's NHDES Clean Water SRF Planning Grant. Some of UE's previous wastewater work for the Town that was used to develop this scope of work includes:

- *Phase III Infiltration and Inflow Evaluation, January 14, 2013* (Phase III I/I Study) wherein UE built on previous investigations by others to evaluate Infiltration and Inflow (I/I) in the Town's wastewater collection system. This document served as the Town's Combined Sewer Overflow (CSO) Long-Term Control Plan (LTCP) and identified that a significant portion of I/I in the Town's system originated from private sources.
- *Public Outreach and Private I/I Mitigation Program (2015), January 12, 2016* wherein UE assisted the Town develop a Town-wide public information mailer and private I/I policy supported at all levels of the Town government.
- *Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) Update, (January 30, 2017)* which recommended private I/I mitigation including private I/I pilot areas.

The Westside Drive neighborhood was identified as a private I/I pilot area in the Town's Phase III I/I study and CSO LTCP. To help gain support of the stakeholders and develop effective concepts UE's project approach includes a simplified Context Sensitive Solutions (CSS) process developed originally by AASHTO and NHDOT. As opposed to traditional approaches, the CSS focuses on defining the problem and framework prior to developing alternatives. This requires mechanisms that first collects information on issues and listening to the public/stakeholders to understand the current challenges prior to presenting concepts.

The primary objective is to develop a report phased preliminary design for the Westside Drive Neighborhood that could be used as a tool for future I/I mitigation and project development. It is intended that the CSS process will be used to include the following considerations for overall project planning and concepts:

- Evaluate alternatives to reduce roadway and sidewalk impervious area (possible non-point nutrient source mitigation considerations)
- Evaluate the adequacy of existing storm drain systems and the feasibility of additional drainage systems, drainage outfall limitations (Little River stage height), and private drainage tie-ins
- Evaluate alternatives to reduce groundwater impacts to the roadway
- Evaluate alternatives for private sump pump mitigation and separation from the sewer
- Feasibility of stormwater BMPs for water quality
- Water system condition considerations and planned improvements
- Roadway and sidewalk safety improvements
- Timing of utility improvements with roadway repairs
- Town participation for work on private property
- Private utility (gas, electric, cable, telephone) improvements





# Attachment A - Scope of Services

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Underwood Engineer's Scope of Services includes:

## **Task #1 – Public Participation and CSS Approach**

Prepare for and assist with facilitating the following for CSS and Public Information Process as described above:

- Kickoff Meeting with DPW
- Stakeholder/Public Input Meeting #1
  - Introduce project to public and abutters
  - Gain input on apparent problems within the work area
  - Gain input on wants for improvements from abutters
  - Allow attendees to identify problem areas on preliminary base plans (aerial photo/GIS)
- Develop Conceptual Alternatives
  - Work with Town staff to develop alternatives based on input from public input meetings and general understanding of costs for types of improvements
  - Attend work sessions (2) with DPW to refine concepts
- Stakeholder/Public Input Meeting #2
  - Present selected alternative concepts to public and abutters
  - Receive general feedback and comments

The information and feedback gathered through the CSS process will be incorporated into the conceptual planning documents and design plans described in later phases of the project.

## **Task #2 – Mapping and Base Plan Development**

Develop Base Maps for use in conceptual designs and public meeting support including the following:

- Town GIS data (property lines, buildings, and utility information)
- Supplemental topographic survey to locate the following:
  - Roadway centerline
  - Edge of Pavement
  - Roadside Drainage Swales
  - Drainage Structures and Inverts
  - Sewer Manholes
- Field investigations to establish 4 temporary benchmarks
- Aerial photography

Deliverable will be a base plan of the project area in 2019 Autocad Civil3D format using Horizontal Datum NHSPC, NAD83(2011) and Vertical Datum NAVD88.

## **Task #3 – Subsurface Investigation and Evaluation**

Perform one day of borings to evaluate subsurface conditions and install monitoring wells to evaluate groundwater conditions over time. This task will include 1 day of subsurface investigations that are anticipated to include up to:

- Eight (8) borings approximately 10' deep to evaluate subsurface soil conditions
- Four (4) groundwater monitoring wells to evaluate groundwater conditions over time
- Grainsize distribution tests to evaluate road base materials and estimate soil permeability



# Attachment A - Scope of Services

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- Geotechnical Summary Report

## **Task 4 –Basis of Design Planning Document and Conceptual Design Plans**

UE will perform the following evaluations and incorporate findings and information gathered during Tasks 1 through 3 into a basis of design planning technical memorandum for the Westside Drive Neighborhood.

### Sewer/Water Service Location and Private I/I Mitigation

Review the existing house inspection forms that were previously performed by UE (2009). UE will provide supplemental inspections (20 assumed – 3 days) for properties not previously inspected if access is granted by the property owner. Critical information from inspections includes:

- Water service location
- Sewer service location and depth where it exits the building
- Drainage systems
- Illicit sewer connections

Findings will be summarized in a technical memorandum. UE will incorporate this information into the design concepts and work with the Town to develop a strategy to address private I/I in the project area.

### Roadway Condition and Drainage System Evaluation

Evaluate roads and sidewalks for safety improvements and potential for reducing impervious cover. This does not include design of the pavement section at this time. Evaluate the condition of existing drainage systems to identify alternatives to mitigate identified deficiencies, expansion of drainage system to accommodate I/I, and potential for water quality BMPs. The findings of the geotechnical investigation (particularly groundwater levels) will be considered in evaluating the feasibility of drainage alternatives and roadway recommendations.

### Water System Evaluation

Evaluate the need for water system improvements based on the recommendations of the water system Asset Management Program. Improvements will not be designed during this phase but will be identified to incorporate into the future construction project.

### Private Utility Improvements

Coordinate with contacts for responsive available private utility providers (gas, electric, cable, telephone) to document their long-term private utility improvement plans within the neighborhood and consider the feasibility and cost of private utilities improvements (such as underground electric) into the basis of design for the neighborhood.

### Engineer's Opinions of Probable Cost and Conceptual Design Plans

UE will provide engineer's opinion of probable cost for up to three (3) design alternatives included in the Basis of Design Planning Document. UE will develop conceptual design plans for the project for the selected alternative by the Town.



# Attachment A - Scope of Services

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## **Task 5 – Town Sewer AMP Supplement**

The Town’s sewer system AMP will be used as a base and will be refined for the specific project elements developed for the Westside Drive Planning Document (Task 4). In addition, the findings and lessons learned through the Westside Drive planning project, particularly as they relate to Private I/I mitigation, will be used to supplement the Town’s system-wide AMP.

## **Information to be Provided by the Town:**

- Town GIS information
- Water System AMP
- Private utility contact information
- Westside Drive Pumping station O&M manual and pump curves
- Westside Drive Pumping station pump records for the past 3 years

## **Deliverables:**

Compile a planning document and conceptual design summarizing the findings of Tasks 1 through 5 including the following:

- CSS Public Input Stakeholder Meetings (2)
- Work sessions with the Town (2)
- Provide Basis of Design Planning Memo which includes considerations for:
  - Private I/I Mitigation
  - Pumping Station Evaluation
  - Roadway and Drainage Evaluation
  - Water System Evaluation
  - Private utility improvement considerations
  - Preliminary cost estimate for design alternatives (up to 3)
- Conceptual design base plan for the selected alternative
- Supplement for the Town’s overall wastewater collection system AMP

## **Work Not Included**

- Typical Roadway Section recommendation
- Cadastral and easements
- Jurisdictional wetland delineations
- Final Survey, Design and Specifications
- Application, permit application and fees
- Any other services not explicitly stated above

## **Schedule (Field Investigations and Meetings Pending COVID 19 Health Guidelines)**

- |   |                      |
|---|----------------------|
| • Contract Authorization                                  | June 2020            |
| • NHDES Application (by Town)                             | June 2020            |
| • Kickoff Meeting with DPW                                | July 2020            |
| • Field Investigations (Geotech, House Inspections, etc.) | July-September 2020* |
| • CSS meetings and Process                                | August – Dec. 2020*  |
| • Basis of Design Planning Memo                           | Jan 2021             |
| • Conceptual Design Plans                                 | May 2021             |





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DATE: June 26, 2020  
TO: Russell J. Dean, Town Manager  
FROM: Jennifer Mates, P.E., Assistant Town Engineer  
RE: Professional Engineering Services  
Squamscott River Sewer Siphons and Webster Avenue Pump Station Rehabilitation Design Project  
Consultant Award Recommendation

In March 2020, the town voted to approve \$1,600,000 for the Squamscott River Sewer Siphons and Webster Avenue Pump Station Rehabilitation Design Project. The vote included approval of the NH Department of Environmental Services (NHDES) Clean Water State Revolving Loan Fund (CWSRF), which is providing a loan with 10% principal forgiveness to the Town for this project.

Currently, there are two 8-inch inverted sewage siphon pipes under the Squamscott River that transport sewage from areas of the Portsmouth Avenue and all the Jady Hill Avenue areas to the Main (Sewer) Pumping Station located between Water Street and Swasey Parkway. Engineering analysis has indicated the siphons are at capacity at normal dry weather flows and undersized for any further additional new connections or during extreme wet weather events. Historically, sanitary sewer overflows (SSOs) have occurred immediately upstream of the two siphons at Duck Point at the bottom of Jady Hill Avenue. This project includes the design and construction of infrastructure improvements to increase the sewer capacity under the river. Additionally, improvements to the Webster Avenue sewage lift station will be designed as part of this project and built as part of a future CIP project.

In September 2019, the Department of Public Works (DPW) issued a request for proposals (RFP) for professional engineering services for utility design for the Salem St Area project which included a request for qualifications for engineering services to pre-qualify consultants for future projects. The qualifications-based selection (QBS) process was used and described in the attached memo regarding the selection of the Salem St project consultant.

Based on the QBS process, a request for proposals for this project was requested from the two pre-qualified consultants of Wright-Pierce Engineers and Weston & Sampson Engineers on April 20, 2020. Proposals were received with cost proposals in separate, sealed envelopes. Interviews were conducted with both consultants using an online meeting platform (Zoom) on May 8, 2020.

Wright-Pierce was selected for this project based on their qualifications, existing knowledge of the Town's sewer system, and the successful history of other I/I-related projects in town. The scope and fee were further negotiated to ensure all of the CWSRF and design elements were included. The major elements of the scope of services to be provided by Wright-Pierce include survey, geotechnical investigation, evaluation of potential design alternatives, the final design of siphon and pump station upgrades, preparing an opinion of probable construction costs, and bidding services for the siphon

Page 2  
Mr. Russell Dean  
June 26, 2020

construction. Construction of the siphon improvements is anticipated to occur in 2021. Construction of the Webster Ave pump station improvements is currently listed in the CIP for construction in 2021.

Primex and Mitchell Municipal Group reviewed the contract and their comments have been incorporated.

**The Department recommends approving the design contract for the Squamscott River Sewer Siphons and Webster Avenue Pump Station Rehabilitation Design Project to Wright-Pierce Engineers, Inc. for \$414,600.00**



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## REQUEST FOR PROPOSALS PROFESSIONAL ENGINEERING SERVICES

### SQUAMSCOTT RIVER SEWER SIPHONS and WEBSTER AVENUE PUMP STATION REHABILITATION DESIGN

RFP No. DPW 2020-01  
April 20, 2020



## **INTRODUCTION**

The Town of Exeter is requesting proposals for professional engineering services for the upgrades to the Squamscott River siphon and the design of upgrades to the Webster Avenue sewer pump station.

## **GENERAL REQUIREMENTS**

Engineering firms making proposals must respond in writing to all requirements of this Request for Proposals (RFP). Responses should reflect detailed considerations of the issues and opportunities presented by this specific project. Any additional information or tasks that are felt to be relevant by the responding firm should be included together with the submittal requirements.

Sealed proposals should be plainly marked "**RFP No. DPW 2020-01 – Squamscott River Sewer Siphon and Webster Ave Pump Station Rehabilitation - Engineering Services**" on the outside of the mailing envelope and addressed to:

Town of Exeter  
Public Works Department  
13 Newfields Rd  
Exeter, NH 03833

Proposals will be accepted until **2:00 p.m. on Tuesday, May 5, 2020**, at the Public Works office. Five (5) copies of the proposal and one copy of the cost estimate in a separate, sealed envelope shall be submitted.

Costs incurred for the preparation of a proposal in response to this RFP shall be the sole responsibility of the firm submitting the proposal. The Town of Exeter reserves the right to select or reject any engineering firm that it deems to be in the best interest to accomplish the project specified. The Town reserves the right to accept the proposal on one or more items of a proposal, on all items of a proposal or any combination of items. The Town reserves the right to discontinue the selection process at any time before the awarding of a contract. There will be no reimbursement to any candidate firm if the selection process is terminated. The Town reserves the right to waive defects and informalities of the proposals.

## **BACKGROUND**

The Jady Hill area in Exeter was the location of an Infiltration and Inflow elimination project from 2011 to 2013. During that time, additional limiting future capacity issues were uncovered. The siphon that carries the flow from Jady Hill is or occasionally overcapacity. The pump station within this area, Webster Ave requires upgrades.

As this project went through the Town CIP process, \$1,400,000 was allotted for siphon design and construction while \$200,000 was included for the design of the Webster Ave pump station and associated forcemain upgrade.

In March 2020, the town voted to approve \$1,600,000 for this project. The warrant article was worded as follows:

*Shall the Town vote to raise and appropriate the sum of one million six hundred thousand and zero dollars (\$1,600,000) for the purpose of design, construction, and installation of siphons from Jady Hill to the Main Pump Station and design of improvements to the Webster Ave pump station and force main design as part of the project, and to authorize the issuance of not more than \$1,600,000 of bonds or notes in accordance with the provisions of the Municipal Finance Act (RSA 33); and further to authorize the Select Board to issue and negotiate such bonds or notes and to determine the rate of interest thereon through the New Hampshire Department of Environmental Services Clean Water State Revolving Fund for this purpose. The loan will be repaid as follows: a 10% forgiven by agreement with NHDES, and \$1,440,000 in sewer fees over 10 years.*

Construction costs for the Webster Ave pump station upgrades are tentatively planned for a 2021 Town Warrant vote for \$2,200,000.

The Webster Avenue sewer pump station was built in 1964 and consists of a building, wet well, force main, and back-up generator. The pump station building is a cantilevered building construction with asbestos exterior wall panels. The building interior consists of electrical MCCs, a bathroom, and dry and wet wells. The wet well is too small and shallow, which can cause issues with pumping efficiencies and pumping capacities. There are three submersible pumps located in the dry pit side, and the pumps have to be operated @ ~45 Hz versus 60 (by VFD speed controller) or cavitation may occur. The forcemain is 8-inch asbestos cement (AC) pipe which discharges into a sewer manhole on Jady Hill Avenue.

## **SCHEDULE**

The Town expects that the siphon project will be designed and permitted then put out to bid for construction. The pump station project will be designed under these current funds and the anticipated construction costs put into the 2021 Town Warrant.

## **ENGINEER PRE-QUALIFICATION**

Only the prequalified engineering companies of Weston & Sampson and Wright-Pierce is invited to prepare a proposal.



## **CONTRACT DOCUMENT**

Upon selection, the successful Engineer will prepare Engineering Contracts for execution. Approval of the contract is required for both the Town and NHDES. Upon execution of the Contract, the Engineer will be instructed to commence providing the work outlined in the contract. All information, data, documents, photos, computer records and other materials of any kind acquired or developed by the Engineer pursuant to this proposal shall be the property of the Town of Exeter.

## **PROJECT REQUIREMENTS**

1. The engineer shall review the project scope and current cost estimates, and advise the department as to the adequacy for accomplishing the work. Provide updated construction cost estimates for a CIP request in August 2020.
2. The engineer will add direction to the project to have a viable construction project in the schedule previously described.
3. The engineer will perform a survey of the existing conditions showing all elevations, observable landmarks (e.g., edge of road, sidewalks, buildings, trees and manhole structures with inverts, etc.) and underground utility locations. The engineer will coordinate with the utility owners to have the underground utility marked out prior to the survey. The survey shall be done in the NH State Plane coordinate system, NAD83 to be compatible with the Town's GIS system. Please note that the as-built plans for the Jady Hill utility project do not encompass the full route of the forcemain.
4. The consultant shall investigate and determine the limits of the right-of-way (ROW) and utility easements and show them on the plan. The engineer shall delineate the existing ROW and easements in which any work will be performed. The apparent ROW and easement mapping may be completed for use in the preliminary design to expedite the design process. The actual ROW and easement locations should be used for final design.
5. Meet with Town staff who regularly maintain the pump station for insights into its operation.
6. Perform a preliminary "alternative analysis" for the pump station considering various upgrading scenarios for consideration.
7. Evaluate the SCADA system to identify upgrades needed to accommodate a dial-up fire alarm system and remote operations.
8. The consultant shall calculate additional future flows from yet undeveloped or potential redevelopment sites. Anticipate that a portion of the Exeter Hospital flows will be redirected to the Webster Ave pump station. A strategy meeting with the Town Planner is required.
9. The engineer shall delineate wetland areas and on behalf of the Town apply for all local, state, and federal wetland permits as required for the projects.

10. The engineer shall coordinate the design review by NH Department of Environmental Services (NHDES) Wastewater Engineering Bureau.
11. Coordinate with the private utility companies for any pole or utility relocations, and new utility construction. Consult with the private utilities so that any of their outstanding work items can be accomplished in a timely manner.
12. The engineer shall provide 2 complete copies of the 30% (preliminary) design plans and the 90% (final) design plans and bid specifications to the Town for review and approval. Meetings with the Town and engineer will be required to discuss each review.
13. The bid specifications shall include estimated quantities for the Bid Schedule. The engineer shall recommend the format of specifications for town consideration.
14. Additional opinions of costs shall be supplied with the preliminary and final plan submission.
15. A final plan and profile with a scale of 1" = 20'(H) and 1"=4'(V) will be required. The plan will show all observable features and underground utilities with depths. The proposed utility systems shall be shown. The profile shall show the existing road or surface profile, existing utilities, and the proposed utility systems.
16. The engineer shall develop a general construction site sedimentation mitigation plan to prevent siltation or construction debris from entering the stormwater system and wetland areas. This plan shall be included with the final plans. This requirement does not relieve the contractor from creating a detailed stormwater pollution prevention plan (SWPPP) for accomplishing the work.
17. Administer a neighborhood meeting with residents during the design phase of the project. This meeting shall be held to receive input from the residents.
18. Upon completion of the design and specifications, the engineer shall provide five (5) complete sets of plans and specifications to the Town. A final digital copy will also be provided to the Town in PDF format.
19. Bidding services shall include: issue plans and specifications to bidders, respond to bidders questions, prepare and distribute addenda, attend the pre-bid meeting and bid opening, review the bids, provide a recommendation of award, and prepare the contract documents. Only the siphon project is anticipated for bidding. Bidding for the pump station upgrades will be under a separate contract once funds for the upgrades are available.
20. Construction administration, shop drawing review and resident engineering services are not included at this time but may be added during subsequent construction phases.

### **INFORMATION AVAILABLE**

- Exeter MapsOnline – GIS information - <http://mapsonline.net/exeternh/>
- 2020 – 2025 Capital Improvement Program <https://www.exeternh.gov/planning/capital-improvement-program-cip>

The following items are available for download from Google Drive (link to be provided via email):

1. 2020 CIP Project Sheets for the Siphon and Pump Station
2. CIP Projects – Siphon and Webster PS – Wright-Pierce email dated July 23, 2015
3. Jady Hill Utility Replacement Project – Post-Construction Flow Monitoring Analysis – Wright-Pierce memorandum dated September 23, 2014
4. Jady Hill Utility Project As-builts, Wright-Pierce, Phase 1 and 2, dated October 2014
5. Jady Hill Utility Project Geotechnical Engineering report, S.W. Cole, Inc., dated March 30, 2011
6. Inverted Siphon Sewer Contract No. 5 record drawings, Whitman & Howard Engineers, April 1964
7. Interceptor Sewers and Forcemains Contract No. 3 record drawings, Whitman & Howard Engineers, April 1964
8. Webster Ave Pump Station – Capacity Evaluation – Wright-Pierce draft memorandum dated October 31, 2013.
9. Webster Ave Pump Station Plans
  - a. Whitman & Howard Engineers, April 1964
  - b. Jones & Beach Engineers, January 1985
  - c. Camp, Dresser & McKee, November 2000
10. Webster Ave Pump Station, table of pump run hours

### **PRE-PROPOSAL MEETING**

There will be a **mandatory** pre-proposal meeting at **10:00 a.m. on Monday, April 27, 2019**, at the Exeter Public Works Department to discuss this project and answer questions. Because of the COVID-19 social distancing guidelines, this may be an online meeting. Any further details will be forthcoming.

### **TIMELINES**

The Engineer Selection Schedule is as follows:

Request for Proposal	Monday, April 20, 2020
Pre-Proposal Meeting	Monday, April 27, 2020
Proposals Due	Tuesday, May 5, 2020
Interviews	Completed by Wednesday, May 13, 2020
Selection	Friday, May 15, 2020
Contract Negotiations	Friday, May 29, 2020
NHDES Approval of Scope	Friday, June 12, 2020
SRF Loan Application Due	Tuesday, June 30, 2020

## **PROPOSAL SUBMITTAL REQUIREMENTS**

Five (5) copies of the proposal shall be submitted. **All submissions shall be limited to a maximum of 16 pages, including the cover letter, resumes, and schedule.** The pages shall be numbered.

1. Cover letter
2. Project understanding
3. Project approach to accomplish the Work
4. Scope of Services – Highlight major tasks that were not specifically called out in the Project Tasks.
5. List of similar work experience, construction administration, and resident engineering specifically for the project manager and project engineer that will be working on these projects.
6. Project Team Chart identifying the team
  - a. Principal-in-Charge
  - b. Project Manager
  - c. Project Engineer(s)
  - d. Sub Consultants
7. Project Schedules in Gantt format for each project
8. Cost proposal with estimated man-hour projections. Must be sealed in a separate envelope

## **EVALUATION CRITERIA & INTERVIEWS**

From the proposals submitted by the pre-qualified engineering firms, the Town may select finalists for an interview. The process to date has been qualifications-based selection (QBS) process to become a pre-qualified firm. The final selection will be based upon:

- Firm's qualifications for siphon design and large sewer pump station upgrades
- Experience of the individuals on similar projects
- Understanding of the Project Scope
- Approach for completing the Work
- Commitment to Project timelines
- Quality of Proposal
- Any other criteria determined appropriate by the Town

An attempt will be made to negotiate a fee schedule with the top-ranked firm. If the Town is unable to reach an agreement with the selected firm, the Town reserves the right to negotiate with the next highest-ranked firm until an agreement is reached.

### **TOWN ROLE**

Town staff will be responsible for administering the project and overseeing the engineer's work on this project. Representatives of the Town's Public Works Department will review plans and other documents prepared by the engineer.

### **RESERVATION OF RIGHTS**

The Town reserves the right to make such inquiries regarding the firm's qualifications and reputation as it deems necessary to evaluate the firm.

The Town reserves the right to negotiate directly with the firm selected for additional project work including design, construction administration services, and/or additional project engineering and design services.

### **CONTACT INFORMATION**

If you have any questions regarding this RFP or wish to visit the pump station, please contact Matt Berube, Water/Sewer Manager at [mberube@exeternh.gov](mailto:mberube@exeternh.gov) or (603) 773-6167.

**ENGINEERING DESIGN PHASE  
CONTRACT FOR PROFESSIONAL SERVICES  
FOR  
TREATMENT WORKS**

TOWN OF EXETER, NEW HAMPSHIRE

This AGREEMENT made and entered into at Rockingham County, New Hampshire, this \_\_\_\_\_ day of \_\_\_\_\_ 2020, by and between the Town of EXETER, hereinafter called the OWNER, and WRIGHT-PIERCE, hereinafter called the ENGINEER.

WITNESSETH:

WHEREAS, the OWNER intends to construct Treatment Works WEBSTER AVENUE PUMP STATION AND FORCEMAIN UPGRADES, SQUAMSCOTT RIVER SEWER SIPHON UPGRADES, hereinafter called the PROJECT, and

WHEREAS, professional sanitary engineering services will be required for the preparation of plans and specifications and contract documents, and

WHEREAS, such services are of a distinct professional nature and hence not subject to the bidding process,

NOW THEREFORE, in consideration of these premises and of the mutual covenants herein set forth, the OWNER hereby employs the ENGINEER to furnish the following engineering services in connection with the proposed PROJECT; and it is agreed by and between the OWNER and the ENGINEER as follows:

**I. Services to be Performed by the ENGINEER**

A. Upon execution of this AGREEMENT, the ENGINEER agrees to proceed with all engineering, surveying, drafting, calculations, borings, and other work as required and necessary to develop and produce final plans, specifications, and associated contract documents involved in the construction of treatment works for

WEBSTER AVENUE PUMP STATION AND FORCEMAIN UPGRADES, SQUAMSCOTT RIVER SEWER SIPHON UPGRADES as identified in Exhibit A.

as recommended in an Engineering Report dated \_\_\_\_\_ and/or modified by a Report dated \_\_\_\_\_. The ENGINEER further agrees that said services shall include, but shall not necessarily be limited to:

1. Plans, Specifications, and Contract Documents

a. The preparation of detailed plans, specifications, and contract documents in accordance with the rules and regulations of the New Hampshire Department of Environmental Services, Water Division, hereinafter called the DIVISION, ready for the receipt of bids and the award of construction contracts for said construction; the work shall also include the preparation of estimates of the cost of construction based on the contract documents. Prepare applications with supporting and associated documents for Federal, State and other grant or loan programs. Assists the OWNER in securing grants or loans by State, Federal and other agency.

b. The furnishing of all the necessary subsurface investigations and field surveys required for the preparation and completion of approved plans, specifications, and contract documents.

c. The furnishing of three (3) ~~ten (10)~~ copies of the final plans, specifications, and contract documents to the OWNER; one (1) ~~three (3)~~ copies of which are to be submitted to the DIVISION. Additional copies to be available at cost to the OWNER.

2. ~~Site Acquisitions~~

~~a. Assistance to the OWNER including preparation of documents for the acquisition of lands, easements, and rights-of-way essential to the construction of the PROJECT.~~

**II. The OWNER'S Responsibilities**

A. Assist the ENGINEER by placing at his disposal all available information pertinent to the PROJECT, including previous reports and other data relative to the reports.

B. Make provisions for the ENGINEER to enter upon public and private lands, municipal facilities and industrial establishments as required to perform work under this AGREEMENT.

C. The OWNER also agrees to comply with DIVISION and Federal requirements (where applicable) and further agrees to acquire with the assistance of the ENGINEER all the necessary easements, options or outright purchases of land for the locations of said treatment works as shown on the contract plans. The provisions of this section shall be satisfied prior to submission of documents referred to in III (A) below. It is also understood that no approvals of reports or plans and specifications or other associated documents will be made by the DIVISION without fulfillment of this requirement.

**III. Time Of Completion**

A. The ENGINEER agrees that he will submit to the DIVISION for approval after modification or revision as recommended by the DIVISION and agreed to by the ENGINEER, the completed final plans, specifications, contract, and associated documents in compliance with the current issue of the DIVISION's standards of design as identified in Exhibit A ~~within \_\_\_\_\_ consecutive calendar days following the execution of this AGREEMENT, and deliver same to the OWNER within \_\_\_\_\_ calendar days following the date of final approval by the DIVISION.~~

B. It is agreed by the parties to this contract that failure by the ENGINEER to complete the work within the time stipulated under III, A, above may be considered sufficient basis for the debarment of the ENGINEER from the DIVISION'S Roster of Prequalified Engineers as provided for under New Hampshire Code of Administrative Rules Env-Wq 603.08, or the Assessment of liquidated damages as provided for under RSA 485-A: 4, XII.

**IV. Compensation to be Paid the ENGINEER**

**A. Method of Payments - Amounts of Fees**

1. Payment to the ENGINEER, for services rendered, shall be according to the following schedule:

Monthly billing based on hours and rates by labor category with mark-up and incidental expenses in accordance with the attached fee schedule.

2. The OWNER agrees to pay and the ENGINEER agrees to accept for all services under this AGREEMENT, a fee not to exceed

Four Hundred Fourteen Thousand Six Hundred  
\_\_\_\_\_ Dollars  
(\$414,600.00).

3. If separate documents are required for additional construction contracts on this PROJECT, an additional fee as approved by the DIVISION shall be paid to the ENGINEER.

4. Prior to formal approval of contract documents by the DIVISION, the ENGINEER shall make such revisions in them as recommended by the DIVISION and agreed to by the ENGINEER without additional compensation. After formal approval, if it becomes necessary to revise the contract documents for reasons beyond the control of the ENGINEER, payment for such revision or revisions shall be made to the ENGINEER subject to approval by the DIVISION.

**B. Limits of All Payments**

1. The ENGINEER hereby assures the OWNER and agrees that the following fee for his services (exclusive of surveys, borings, and certain special services which follow) in connection with the preparation of final plans, specifications, and contract documents and other work as generally described under I(A) is adequate to complete the assignment and shall not exceed

Three Hundred Fifty-Five Thousand Seven  
Hundred Eighty \_\_\_\_\_ Dollars  
(\$355,780.00).

2. It is also agreed that payment to the ENGINEER for services in relation to engineering surveys, including layout and logging of borings,

probings or seismic surveys, together with plats and project related special services shall be at actual cost. Actual cost shall include compensation to the ENGINEER for his work performed on these services. The ENGINEER further agrees that the work proposed under this item is enough to satisfactorily complete the contract documents and that the moneys to be paid under this item are adequate for the work proposed and shall not exceed

Thirty-Five Thousand Six Hundred Twenty  
\_\_\_\_\_ Dollars  
(\$35,620.00).

3. It is again agreed that payment to the ENGINEER for services in relation to subsurface exploration, including borings, probings or seismic surveys, shall be at actual cost as defined in IV (B) 2. The ENGINEER further agrees that the work proposed under this item is enough to satisfactorily complete the contract documents and that the moneys to be paid under this item are adequate for the work proposed and shall not exceed

Twenty-Three Thousand Two Hundred  
\_\_\_\_\_ Dollars  
(\$23,200.00).

~~4. It is also agreed that payment to the ENGINEER for services in relation to cadastral surveys and other work associated with the acquisition of lands, easements, and rights of way essential to the construction of the PROJECT shall be at actual cost as defined in IV (B) 2. The ENGINEER further agrees that the work proposed under this item is enough to provide adequate sites, easements, and rights of way to permit the unencumbered construction, operation, and maintenance of the completed project without interference in any way. The ENGINEER also assures the OWNER that the moneys to be paid under this item are adequate for the work proposed and shall not exceed~~

\_\_\_\_\_  
\_\_\_\_\_ Dollars  
(\$\_\_\_\_\_).



**V. Additional Covenants**

A. The ENGINEER agrees to provide in active charge of this PROJECT for the life of the contract a Project Engineer who is a permanent employee of the ENGINEER and who is a “qualified sanitary engineer” as defined under the DIVISION’S “Rules and Regulations for the Prequalification of Consulting Engineers.” The Project Engineer shall be\*

Michael R. Theriault, PE

250 Commercial St Suite 4014, Manchester, NH 03101

\* *Resume clearly describing the candidate's qualifications for the assignment is appended for convenience of reference.*

Any proposed change in identity of the Project Engineer on the PROJECT shall first be approved by the DIVISION before transfer of responsibility is made. Failure of the ENGINEER to abide by the above covenant may be considered basis for debarment of the ENGINEER from the DIVISION’S Roster of Prequalified Consulting Engineers as provided for under New Hampshire Code of Administrative Rules Env-Wq 603.08.

B. The ENGINEER agrees to be solely responsible for all bills or claims for payment for services rendered by others and for all services and materials employed in his work, and to indemnify and save harmless the OWNER, and all of the OWNER’S officers, agents and employees against all suits, claims or liability of every name and nature arising out of or in consequence of the negligent acts or failures to act of the ENGINEER or others employed by him in the performance of the work covered by this AGREEMENT.

~~C. The ENGINEER further agrees to procure and maintain at his expense such workmen's compensation insurance as is required by the statutes and public liability insurance in amounts adequate to provide reasonable protection from claims for bodily injury, death or property damage which may result from his performance and the performance of his employees under this AGREEMENT. During the term of the AGREEMENT and any extension, ENGINEER must carry and maintain the following insurance:~~

*(1) Commercial general liability coverage with limits of at least \$1,000,000 per occurrence and \$2,000,000 aggregate applicable to the work and services performed under this AGREEMENT. The commercial general liability policy must also contain contractual liability applicable to the contractual indemnification obligation set forth in this AGREEMENT;*

*(2) Automobile liability coverage of at least \$1,000,000 combined single limit (each accident);*

*(3) Umbrella liability coverage of at least \$10,000,000;*

*(4) Professional liability coverage with minimum limits of \$1,000,000 per claim and \$3,000,000 aggregate;*

*(5) Workers’ compensation coverage meeting State of New Hampshire required limits and providing employer’s liability coverage.*

*Prior to execution of this AGREEMENT, ENGINEER must furnish to OWNER a certificate of insurance proving it carries the insurance described above. The certificate must indicate that the OWNER and its officials, agents, employees and volunteers are named as an additional insured on ENGINEER’s commercial general liability, automobile liability, and umbrella liability policies on a primary and noncontributory basis. If ENGINEER’s liability policies require certain policy provisions or endorsements to effectuate OWNER’s additional insured status, then ENGINEER must provide such policy provisions or endorsements prior to execution of this AGREEMENT.*

D. All documents, including original drawings, design calculations, work sheets, field notes, estimates, and other data shall remain the property of the OWNER, and shall be transmitted to the OWNER in clean and orderly condition on demand; however, these may be left in the possession of the ENGINEER at the OWNER’S discretion.

E. The ENGINEER shall not sublet, assign or transfer any part of the ENGINEER’S services or obligations (except surveys and borings and other special services) under this AGREEMENT without the prior approval and written consent of the OWNER.

F. It is further agreed that the ENGINEER will assist the OWNER or his authorized agent in providing the DIVISION with clear documentation certifying that the necessary easements, options or outright purchases of land have been secured to provide for location of treatment works and other associated structures and equipment as shown on the contract plans or described in the specifications. Similar documentation will be submitted on approvals from the State Department of Transportation and/or other state agencies regarding location of treatment works within rights-of-way and other lands under their jurisdiction.

G. Indemnification

ENGINEER shall indemnify OWNER and its officials, agents, volunteers and employees (“Indemnified Parties”) from and against any and all liabilities, obligations, claims, damages, penalties, interest and expenses, including but not limited to reasonable attorney and paralegal fees, imposed upon, incurred or asserted against Indemnified Parties by reason of any accident, bodily injury, personal injury, death of person, economic injury or loss of or damage to property, arising directly or indirectly, in whole or in part, out of the negligence or willful act or omission of ENGINEER or its officers, directors, partners, members, agents, employees, representatives, contractors or subcontractors fulfilling ENGINEER’s obligations under this AGREEMENT. In addition, and regardless of respective fault, ENGINEER shall indemnify Indemnified Parties for any cost, expenses and liabilities arising out of a claim, charge or determination that ENGINEER’s officers, directors, partners, members, agents, employees, representatives, contractors and subcontractors are employees of Indemnified Parties, including but not limited to claims or charges for benefits, wages, fees, penalties, withholdings, damages or taxes brought in connection with laws governing workers’ compensation, unemployment compensation, social security, Medicare, state or federal taxation, and/or any similar obligation associated with an employment relationship. ENGINEER’s obligations to indemnify the Indemnified Parties shall survive the term of this AGREEMENT.

fault on the part of the ENGINEER, the ENGINEER shall be entitled to compensation for all work performed to the satisfaction of the DIVISION and the OWNER, and pursuant to this AGREEMENT. In order that the ENGINEER shall receive payment under termination notice of any part of the work, all plans, drawings, tracings, field notes, estimates, specifications, proposals, sketches, diagrams, and calculations, together with all other materials and data collected or prepared in connection with the PROJECT shall be transmitted to the OWNER in a form acceptable to the OWNER and DIVISION.

H. Attachments: OWNER and the ENGINEER agree that this Agreement shall be incorporate the following attachments which together with the previous provisions hereof represent the entire Agreement between the OWNER and the ENGINEER which may only be altered, amended or repealed by duly executed written instrument:

1. Exhibit A – Scope of Services
2. Exhibit B – Summary of Estimated Staff Effort (Hours) and Costs and Fee Schedule
3. Exhibit C – ENGINEER’S Resume
4. Exhibit D – ENGINEER’S Insurance
5. Exhibit E – ENGINEER’S Certificate of Vote

**VI. Termination**

A. The OWNER shall have the right at any time for any reason whatsoever to interrupt or terminate any part of or all of the work required of the ENGINEER under this AGREEMENT, with a seven (7) day written notice of such interruption or termination transmitted to the ENGINEER by the OWNER. In the event of termination of any part of or all of this AGREEMENT, without

IN WITNESS WHEREOF, the parties hereto have affixed their hand and seals at Rockingham County, New Hampshire, the day, month, and year first above written.

**ENGINEER:**

\_\_\_\_\_  
By: \_\_\_\_\_  
(Authorized Representative\*)  
Date: \_\_\_\_\_

**OWNER:**

\_\_\_\_\_  
By: \_\_\_\_\_  
(Authorized Representative\*)  
Date: \_\_\_\_\_

**APPROVED: \*\***

DEPARTMENT OF ENVIRONMENTAL SERVICES  
Water Division

By: \_\_\_\_\_  
(Authorized Representative)  
Date: \_\_\_\_\_

\* Signatures should be supported by appropriate document.  
\*\* It is agreed that as an act in furtherance of its statutory authority to approve engineering agreements for treatment works, the DIVISION's approval does not impose any contractual obligation or liability on the State of New Hampshire, the Department of Environmental Services or the Division

## **EXHIBIT A**

### **WEBSTER AVENUE PUMP STATION AND FORCEMAIN UPGRADES AND SQUAMSCOTT RIVER SEWER SIPHON UPGRADES**

#### **SCOPE OF WORK**

This scope of work has been prepared for design phase engineering services for upgrades to the Webster Avenue Pump Station and Forcemain and the Squamscott River Sewer Siphons.

The proposed siphon upgrades generally include a new (additional) wastewater siphon barrel that will provide additional capacity to convey flows from residential properties in the Jady Hill area and commercial properties upstream of the Webster Avenue Pump Station. The proposed Webster Avenue Pump Station and Forcemain upgrades will generally include an increase in capacity for the pump station and forcemain which serves properties in the Jady Hill area and portions of the Portsmouth Avenue area and to allow for additional development and flow contributions upstream.

#### **SCOPE OF WORK**

##### **TASK A - Preliminary Design**

- Attend a project kick-off meeting with the OWNER to understand operations of the existing infrastructure and potential future development.
- Develop and submit a NHDES State Revolving Fund (SRF) loan application and prepare the Environmental Review document.
- Perform data collection of relevant existing studies, reports, record drawings, and data from the OWNER and utility companies. Pertinent existing information will be utilized to the extent possible to avoid duplication of previous efforts.
- Provide updates and recommendations on project schedules.
- Review and update total project cost estimates for the OWNER's Capital Improvement Plan budgetary updates in August 2020 and with design submissions.
- Perform a topographic and existing conditions survey. The survey will be performed in the NH State Plane coordinate system, NAD83 to be compatible with the OWNER's GIS system. The topographic survey will include reusing historical survey base mapping where possible with new detailed survey for existing critical infrastructure and for areas where there is no historical survey. A new bathymetry survey of the Squamscott River siphon crossing area would be performed. The limits of the survey will not include a potential alternative Squamscott River crossing alignment through the Hayes Trailer Park or river crossing between Hayes Trailer Park and Newfields Road.
- The limits of utility easements along the existing siphon alignment and along a cross country easement between Douglass Way and the Webster Avenue Pump Station will be researched and included in the existing conditions mapping. The adequacy of existing easements will be evaluated and recommendations for additional or supplemental easements will be provided. Easement preparation, boundary surveys, and cadastral services are not included in the scope of

work at this time and may be added by Amendment in the future once the easement research and recommendations are identified.

- A certified wetlands scientist will perform a field review and identification of wetlands present within the project corridor. Wetlands found will be delineated and the wetland limits will be included in the survey.
- Three to four geotechnical borings will be performed at the Webster Avenue Pump Station and one geotechnical boring will be performed on each side of the Squamscott River Crossing. A Geotechnical Memorandum will be prepared for each site and a single Geotechnical Report will be prepared for both sites to document subsurface conditions within the project area including presence of ledge, groundwater, and soil types. Coordination will be provided for the environmental engineer of record to be present during the geotechnical boring in the area of Swazey Parkway (historical contaminated soil and groundwater) to perform Photoionization Detector (PID) readings and sampling as required with costs of sampling and analysis being paid by others.
- Geotechnical borings within the navigable waters of the Squamscott River are not included in the scope of work at this time. The OWNER may choose to add this work by Amendment in the future for an anticipated budget of approximately \$30,000 to \$35,000.
- A Phase 1A Archeological Review will be performed along the project alignment since Native American habitats are anticipated along the Squamscott River.
- Allowance for cleaning and CCTV inspection of the existing dual 8-inch sewer siphon barrels will be performed to evaluate the internal condition of the existing siphon barrels. The OWNER will provide the cleaning subconsultant with water via a fire hydrant and waive the fees for water usage and a backflow preventer. The OWNER will accept disposal of the cleaning spoils from the siphon at the WWTF and waive the fees for disposal. The cleaning and CCTV work will be paid on a time and materials basis and is anticipated to take five, 10-hour days. ENGINEER will provide on-site coordination at the initiation of the cleaning and CCTV work but not continuous observation for the entire anticipated duration. ENGINEER to produce a condition assessment and recommendations technical memo.
- Cleaning and Inspection of the dual 36-inch CSO siphon barrel is not included in the scope of work at this time. Given that this pipeline is submerged, Sonar inspection technology is assumed and the OWNER may choose to add this work by Amendment in the future for an anticipated budget of approximately \$55,000.
- Evaluate existing and future flows from undeveloped or potential redevelopment sites within the Webster Avenue Pump Station collection system, including a portion of the flows from the Exeter Hospital and upstream of the Squamscott River Siphon. This task will include a workshop meeting with the OWNER's Planning Department.
- Update the hydraulic model for the existing dual sewer siphon barrels to confirm existing and available capacity. Update the hydraulic model for the existing CSO piping network surrounding the Main Pump Station (in light of recent upgrades) and the dual CSO siphon barrels to confirm existing and available capacity.

- Coordinate an on-site meeting with a contractor to evaluate feasibility, layout, challenges, and other pertinent details for the addition of a new siphon river crossing via directional drilling.
- Perform a site visit with process engineers and members of the architectural, structural, electrical, and instrumentation design team to provide a physical assessment of the Webster Avenue Pump Station. Meet with the OWNER's staff responsible for the operation and maintenance of the station to document historical repairs, operations, and maintenance challenges. Develop a list of "OWNER issues" desired to be addressed as part of the upgrades. Confirm associated structural, mechanical, architectural, electrical, and instrumentation upgrades to ensure code compliance in areas affected by the upgrade.
- Develop a memorandum to summarize project alternatives analysis and recommendations. This task will include a meeting with the OWNER for review and discussion.
  - Webster Avenue Pump Station wetwell – Standalone new wetwell, wetwell expansion utilizing the existing pump room, wetwell expansion provided by new supplementary tankage.
  - Webster Avenue Pump Station pump station style – Wet-pit dry-pit, submersible-type, suction-lift.
  - Siphon upgrades – Directional drilling a new siphon under the Squamscott River, sliplining a new siphon barrel within one of the existing 36-inch CSO siphons, extending the Webster Avenue Pump Station forcemain through Hayes Trailer Park with a new directionally drilled River crossing to Newfields Road. Evaluate locating a new siphon inlet chamber at the end of Jady Hill Road rather than at the existing location on Duck Point.
- Identify preliminary SCADA systems upgrades to accommodate a new fire alarm system and remote operations at the Webster Avenue Pump Station.
- Coordinate with private utility companies to identify potential pole relocations or new utility construction, including a new electrical service for the Webster Avenue Pump Station.
- Develop preliminary (30% progress) design drawings, a preliminary design report, and opinion of total project cost for the recommended project alternatives, for review by the OWNER and NHDES. Meet with the OWNER to discuss the preliminary design and review comments.
- Confirm NHDES wetlands and shoreland protection permitting requirements and prepare permitting applications for each project site for final submission by the OWNER. Application fees to be paid for by the OWNER.
- Facilitate a public meeting with project stakeholders to present a summary of the preliminary utility design and receive stakeholder input.
- Facilitate a meeting with the Swazey Parkway Trustees to present a summary of the preliminary utility design and receive input.

## **Task 2. Final Design**

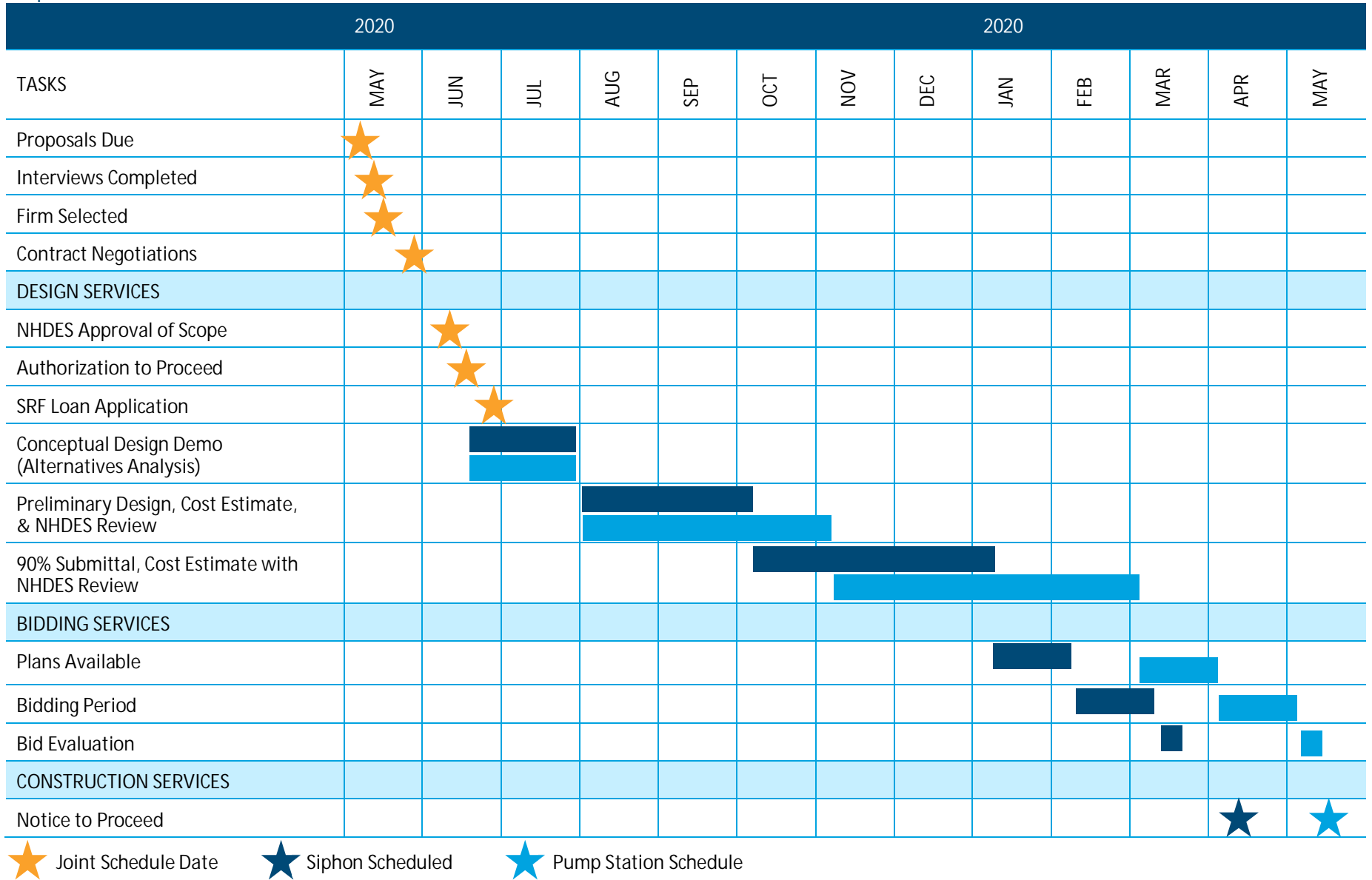
On the basis of the accepted preliminary design submission and upon comments and decisions being satisfactorily addressed, final design will be initiated to include:

- Perform utility coordination review with public and private utilities and the OWNER. Information from this review and comments will be incorporated into the design, where necessary.
- Develop a 60% design submission including drawings with associated schedule and cost estimate updates for review by the OWNER.
- Develop a 90% design submission including drawings, front-end and technical specifications, and associated schedule and cost estimate updates. Meet with the OWNER to review comments.
- Develop a 95% regulatory review design submission to NHDES to including drawings, front-end and technical specifications, and associated schedule and cost estimate updates. Address comments and issue final 100% stamped design documents for bidding.
- Facilitate a public meeting with project stakeholders to present a summary of the final utility design and receive stakeholder input.
- Coordinate a meeting with OWNER and select property owners to present a summary of the potential new or expanded easements needed. Easement preparation, boundary surveys, and cadastral services are not included in the scope of work at this time and may be added by Amendment in the future once the easement research and recommendations are identified.
- Facilitate a meeting with the Swazey Parkway Trustees to present a summary of the final utility design and receive input.

## **Task 3. Bidding (Siphon Only)**

- Issue plans and specifications to bidders through the ENGINEER bidding website, respond to bidder questions, and prepare and distribute addenda.
- Coordinate and administer the Pre-Bid Meeting including agenda preparation, compiling meeting minutes, and distribution of minutes to attendees.
- Attend the Bid Opening, collect and evaluate the bids received, and provide a recommendation of award.
- Assist the OWNER in preparation of the request for Authorization to Award submittal to NHDES and Contract Documents to be executed.

# Proposed Schedule





**EXETER, NH**  
**WEBSTER AVENUE PUMP STATION AND FORCE MAIN UPGRADES**  
**SQUAMSCOTT RIVER SEWER SIPHON UPGRADES**  
**ESTIMATE FOR PROFESSIONAL ENGINEERING SERVICES**

TASK DESCRIPTION	SUBS EFFORT	TOTAL
<b>Webster PS and FM Prelim Design Phase</b>		
1 Review Existing Data		\$ 6,770
2 Kickoff, Site Visit with Building Services Engineers		\$ 9,280
3 Survey and Wetlands Delineation	\$ 19,000.00	\$ 24,060
4 Subsurface Investigation and Geotechnical Report		inc w/ Siphons
5 Archaeological		inc w/ Siphons
6 Wetlands and Shoreland Permitting		\$ 7,920
7 SRF Application		inc w/ Siphons
8 PDR, 30% Drawings		\$ 30,570
9 Meet with Town, Finalize PDR for NHDES		\$ 6,900
Subtotal	\$ 19,000	\$ 85,500
<b>Webster PS and FM Final Design Phase</b>		
1 Kick-off, Design Meeting Coordination		\$ 6,520
2 60% Submission		\$ 32,160
3 90% Submission		\$ 38,440
4 100% Submission		\$ 20,000
5 Client and Public Meetings		\$ 6,480
Subtotal	\$ -	\$ 103,600
<b>Siphons Prelim Design</b>		
1 Review Existing Data		\$ 2,990
2 Kickoff, Site Visit with Civil Engineers		\$ 4,810
3 Survey and Wetlands Delineation	\$ 8,500.00	\$ 11,560
4 Subsurface Investigation and Geotechnical Report	\$ 17,200.00	\$ 23,200
5 Archaeological	\$ 1,300.00	\$ 3,560
6 Wetlands and Shoreland Permitting		\$ 7,920
7 SRF Application		\$ 5,190
8 PDR, 30% Drawings		\$ 14,410
9 Meet with Town, Finalize PDR for NHDES		\$ 5,930
10 Public Meetings (2)		\$ 7,100
11 HDD Layout and Meeting		\$ 3,200
12 Sewer and CSO Siphon Modeling		\$ 7,950
13 Siphon Cleaning	\$ 50,000.00	\$ 58,380
Subtotal	\$ 77,000	\$ 156,200
<b>Siphons Final Design</b>		
1 Kick-off, Design Meeting Coordination		\$ 3,640
2 60% Submission		\$ 15,330
3 90% Submission		\$ 15,990
4 100% Submission		\$ 13,290
5 Client and Public Meetings		\$ 8,550
Subtotal	\$ -	\$ 56,800
<b>Siphons Bidding</b>		
1 Prepare Bid Package		\$ 2,150
2 Respond to Bid Questions		\$ 5,180
3 Pre-Bid Meeting		\$ 2,710
4 Bid Tab/Evaluation/Recommendation		\$ 2,460
Subtotal	\$ -	\$ 12,500
Total Design Phases	\$ 96,000	\$ 414,600

COST OR PRICE SUMMARY FORMAT FOR SUBAGREEMENTS UNDER NH SAG & SRF			Form Approved	
PART I - GENERAL				
1. GRANTEE / LOANEE - Town of Exeter, NH			2. GRANT/LOAN NO.	
3. NAME OF CONTRACTOR OR SUBCONTRACTOR - Wright-Pierce			4. DATE OF PROPOSAL 5/27/2020	
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR ( Include ZIP )  250 Commercial St Suite 4014 Manchester, NH 03101		6. TYPE OF SERVICE TO BE FURNISHED  Webster Ave PS and FM and Squamscott Siphon Upgrades		
PART II - COST SUMMARY				
7. DIRECT LABOR (Specify labor categories)	HOURS	HOURLY RATE	ESTIMATED COST	TOTAL
Principal in Ct Kickoff, Site Visit with Building Services Engineers	34	\$63.00	\$2,142	
Project Manager	220	\$45.00	\$9,900	
Technical Advisor	122	\$50.00	\$6,100	
Lead Project Engineer	306	\$45.00	\$13,770	
Project Engineer	494	\$30.00	\$14,820	
Project Engineer - Civil	228	\$54.00	\$12,312	
Sr. Project Architect	10	\$50.00	\$500	
Project Architect	42	\$26.00	\$1,092	
Sr. Project Engineer - Structural	94	\$47.00	\$4,418	
Project Engineer - Mechanical	46	\$43.00	\$1,978	
Sr. Project Engineer - Electrical	84	\$60.00	\$5,040	
Sr. Project Engineer - Instrument.	12	\$61.00	\$732	
Project Engineer - Electrical	84	\$52.00	\$4,368	
Engineering Technician	510	\$32.00	\$16,320	
Administration	156	\$21.00	\$3,276	
DIRECT LABOR TOTAL:				\$96,768
8. INDIRECT COSTS (Specify indirect cost pools)	RATE	x BASE =	ESTIMATED COST	
	1.7518	96,768.00	\$169,518	
INDIRECT COSTS TOTAL:				\$169,518
9. OTHER DIRECT COSTS				
a. TRAVEL			ESTIMATED COST	
Meetings, Documentation, Site Visits, etc.			\$3,785.45	
TRAVEL COSTS TOTAL:			\$3,785.45	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)			ESTIMATED COST	
Printing, Drawings, Specifications, Etc..			\$ 3,785.45	
			0	
			0	
EQUIPMENT SUBTOTAL :			\$3,785.45	
c. SUBCONTRACTS			ESTIMATED COST	
Survey, Wetlands, Geotechnical, Archaeological, Siphon Cleaning and CCTV			\$ 100,800.00	
SUBCONTRACTS SUBTOTAL :			\$ 100,800.00	
d. OTHER (Specify categories)			ESTIMATED COST	
OTHER SUBTOTAL :			\$0.00	
e. OTHER DIRECT COSTS TOTAL :			\$0.00	\$108,371
10. TOTAL ESTIMATED COST				\$374,657
11. PROFIT				\$39,943
12. TOTAL PRICE				\$414,600





# Michael R. Theriault, PE

## PROJECT MANAGER

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Project Assignment: Project Manager

### Education

B.S., Environmental  
Engineering, Rensselaer  
Polytechnic Institute

### Professional Registration

New Hampshire  
Massachusetts  
Vermont

### Experience

16 Years

### Joined Firm

2013

### Professional Affiliations

Water Environment  
Federation  
New England Water  
Environment Association  
NH Water Pollution Control  
Association, Activities  
Committee Chairman

### Project Awards

2018 Engineering Excellence  
Awards, Newmarket, NH  
WWTF Upgrades,  
ACEC, 2018

Excellence in Asset  
Management, Claremont, NH  
Asset Management Program,  
NHDES, 2019

### Presentations

"Taking a Global Look –  
Citywide Pump Station  
Assessment for Portsmouth,  
NH", NEWEA Annual  
Conference, 2020

## Experience Summary

Mr. Theriault has over 16 years of experience in project engineering evaluations and design support for wastewater treatment facilities, pump stations, and utilities. He has worked with facility improvements, infrastructure improvements, new and replacement utilities, discharge permit compliance, construction administration, and asset management programs. He has significant experience in state SRF USDA-Rural Development project funding. The following is a representative listing and his project experience.

## Relevant Project Experience

### Wastewater Treatment

- Wastewater Treatment Facility Improvements, Newmarket, NH
- Disinfection Upgrades, Burlington, VT
- Wastewater Infrastructure Improvements, Burlington, VT
- Sludge Stabilization Evaluation, Concord, NH
- Sludge Dewatering, Stabilization, and Disposal Evaluation, Claremont, NH
- Primary and Secondary Clarifier Upgrades, Concord, NH
- Septage Receiving Upgrades, Plymouth Village, NH
- Dewatering and Septage Receiving Improvements, North Conway, NH
- Blower Replacement, Claremont, NH
- Blower Evaluation and Upgrade, Hanover, NH
- Anaerobic Digester Heating System Evaluation, Winnepesaukee River Basin Program, Franklin, NH
- Equipment Replacement, Penacook WWTF, Concord, NH
- HVAC Upgrades, Hall St WWTF, Concord, NH
- Permit Compliance, Jiminy Peak Resort, Hancock, MA
- Water Reclamation Facility Improvements, Hanover, NH\*
- Aeration System and Blower Replacement, Hanover, NH\*
- Wastewater Treatment Facility Replacement Alternatives, Conway Village, NH\*
- Regional Septage Evaluation, Winnepesaukee River Basin, Franklin, NH\*
- Grit Removal System Evaluation, New London, NH\*
- Wastewater Treatment Facility Evaluation, Conway Village, NH\*
- Outfall Extension, Hanover, NH\*
- Chlorination/Dechlorination Facilities, Hanover, NH\*
- Wastewater Treatment Facility Interim Improvements, Hanover, NH\*
- Wastewater Treatment Facility Improvements, Henniker, NH\*
- RBC Nitrification Pilot, Jiminy Peak Mountain Resort, Hancock, MA\*

“Setting on Example for Energy Efficiency and Proactive Facility Maintenance, Hall Street Wastewater Treatment Facility Upgrades-Concord, NH, NHWPCA Fall Meeting, 2018

“The Future of Wastewater Treatment in the Great Bay Estuary, Newmarket WWTF Upgrades”, NEWEA Annual Conference, 2018, and NHWPCA Winter Meeting, 2017

“Navigating the World of Funding”, GSRWA, 2017

“Septage Receiving Upgrades: One System’s Tale”, GSRWA Operator Field Day, 2017

“Fitchburg’s Largest Sewer Separation Project Provides Relief to the Nashua River: Conquers Urban City Challenges”, NEWEA Annual Conference, 2017

“Septage Receiving Upgrades: Regionally Serving Northern, NH”, NEWEA Annual Conference, 2017

## Wastewater Pump Stations

- Pump Stations Master Plan, Portsmouth, NH
- Pump Station No. 1 Improvement, Plymouth Village, NH
- Hanna-Dustin Pump Station Upgrades, Concord, NH
- Heritage Avenue Pump Station Replacement, Portsmouth, NH
- Pump Station No. 2, Hanover, NH
- Force Main and Pump Station Evaluation, Canobie Lake Park, Salem, NH
- Washington Street and Elm Street Pump Stations Upgrades, Claremont, NH\*
- Pump Station No. 5, Hanover, NH\*
- Pump Station No. 3, Hanover, NH\*
- Guild Pump Station Replacement, Newport, NH\*
- Georges Mills Pump Station Improvements, New London, NH\*
- Deer Street Pumping Station Improvements, Portsmouth, NH\*

## Wastewater Collection System

- Phase I, II, and III Main Street Water and Sewer Improvements, Plymouth Village, NH
- CSS 4D Sewer Separation, Fitchburg, MA
- Rockingham Road Water and Sewer Improvements, Derry, NH\*
- Phase I Water and Sewer Improvements, Conway Village, NH\*
- Asset Management Assistance, Claremont, NH
- Collection System O&M Plan, Claremont, NH
- Infiltration and Inflow Evaluations, Claremont, NH
- Sagamore Avenue Sewer Extension, Portsmouth, NH
- Phase I and II Pump Station No. 4 Force Main Replacement, Fairgrounds Road Sewer, Plymouth, NH
- Force Main and Gabion Wall Repair, Winnepesaukee River Basin Program, Laconia, NH
- Pump Station 5 Collection System Infiltration and Inflow Study, Hanover, NH
- Bog Sewer Improvements, Claremont, NH\*
- Phase IA Water and Sewer Improvements, Conway Village, NH\*
- Maple Ave Sewer Improvements, Claremont, NH\*
- 2010 Infrastructure Improvements, Keene, NH\*
- Infiltration and Inflow Evaluations, Marlborough, NH\*
- Wastewater Improvements, Sterling Camp Meeting Association, Sterling, MA\*
- South Range School Sewer Extension, Derry, NH\*
- Scenic Drive Sewer Extension, Derry, NH\*
- North Swanzey Sewer Improvements, Swanzey, NH\*
- Gage Street Improvements, Boscawen, NH\*

## Municipal Water Distribution and Supply

- Lake Avenue Water Main Replacement, Sunapee, NH\*
- Peninsula Water System Improvements, Pillsbury Lake Water District, Webster, NH\*

- Ledgewood Drive and Old Church Road Water Main Improvements, Claremont, NH\*
- Claremont Master Water Specifications, Claremont, NH\*
- Bridge Street Water Main Replacement, Hillsborough, NH\*
- Dunning Street Water Main Replacement, Claremont, NH\*
- Slab City Road and Broad Street Water Main Improvements, Claremont, NH\*
- Elm Street Area Water Main Improvements, Claremont, NH\*
- Sidewalk Improvements Project #1, Antrim, NH\*

#### Other Relevant Projects

- Landfill Closure, Acworth, NH\*
- Ruhle Road Residential Subdivision, Ballston Spa, NY\*
- Southwick Meadows Residential Subdivision, Clifton Park, NY\*

\*Experience from previous employer



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/23/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement.

Table with 2 main columns: PRODUCER (License # 1780862, HUB International New England) and CONTACT INFORMATION (PHONE: (207) 829-3450, FAX: (207) 829-6350). Includes INSURER(S) AFFORDING COVERAGE: INSURER A: Hanover Insurance Company (NAIC # 22292), INSURER B: Hanover American Insurance (NAIC # 36064).

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES.

Main table with columns: INSR LTR, TYPE OF INSURANCE, ADDL INSD, SUBR WVD, POLICY NUMBER, POLICY EFF (MM/DD/YYYY), POLICY EXP (MM/DD/YYYY), LIMITS. Includes Commercial General Liability (ZZPH13751400), Automobile Liability (AWPH13753900), Umbrella Liability (UHPH13751500), and Workers Compensation (WHPH13757400).

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Workers Compensation Includes the following States: ME, FL, MA, NH, NY, CT, RI

The Town of Exeter, NH its officials, agents, employees and volunteers are named as additional insured on Commercial General Liability, Auto Liability, and Umbrella Liability on a primary and non-contributory basis as required by written contract with respect to work and services performed for the Webster Avenue Pump Station and Forcemain Upgrades and Squamscott Sewer Siphon Upgrades.

CERTIFICATE HOLDER: Town of Exeter, 13 Newfields Road, Exeter, NH 03833. CANCELLATION: SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE: [Signature]





## Wright-Pierce Certificate of Vote

I, Ryan T. Wingard, hereby certify that I am the duly elected Clerk of Wright-Pierce.

I certify that the following is a true copy of a vote taken at a meeting of the board of directors of the corporation, duly called and held on April 8, 2020, at which a quorum of the board was present and voting.

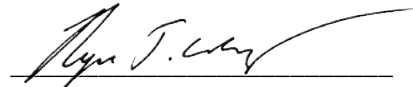
VOTED:

That any one or all of the following officers of Wright-Pierce, on behalf of the corporation, are authorized to execute all Wright-Pierce contracts, both service agreements and general contractual obligations:

- Paul F. Birkel, Vice President
- John W. Braccio, President/CEO
- Richard N. Davee, Vice President
- Michael D. Giggey, Vice President
- Steven C. Hallowell, Vice President
- Edward J. Leonard, Vice President
- John R. Nelson, Vice President
- Christopher N. Pierce, Vice President
- Richard G. Protasowicki, Vice President
- Laura J. Riley, Vice President/Treasurer/CFO
- Timothy R. Vadney, Vice President
- Ryan T. Wingard, Vice President/Clerk

I hereby certify that said vote has not been amended or repealed and remains in full force and effect.

Attest:



Ryan T. Wingard, Clerk

April 9, 2020





# EXETER PUBLIC WORKS DEPARTMENT

13 NEWFIELDS ROAD EXETER, NH 03833-3792 (603) 773-6157 FAX 772-1355

[www.exeternh.gov](http://www.exeternh.gov)

DATE: November 22, 2019  
TO: Russell J. Dean, Town Manager  
FROM: Jennifer Mates, P.E., Assistant Town Engineer  
RE: Professional Engineering Services  
Salem Street Area Utility Design  
Consultant Award Recommendation

In March 2019, the town voted to approve \$325,000 for the design and engineering of utility improvements to include water, sewer, and drainage in the Salem Street area. On September 24, 2019, the Department of Public Works (DPW) issued a request for proposals (RFP) for professional engineering services for utility design for the project area, which includes Forest Street, Hale St, Locust Street, Oak Street, Park Street (portion), Salem Street, Wadleigh Street, Walnut Street, and Warren Street.

The RFP was posted to the Town's website and in the Exeter News-Letter newspaper on September 27, 2019. This proposal was also intended to be used to update the Town's list of prequalified consultants for use on similar projects in the future. An addendum was issued on October 8, 2019, to include transportation engineering services in the proposal for qualification on future projects.

The qualifications-based selection (QBS) process was used and cost proposals were not provided. Using the QBS process is required if state or federal funds are to be used on future projects. A non-mandatory, pre-proposal meeting was held on October 3, 2019, at the DPW complex, which was attended by the nine consulting firms.

Eight consultants submitted written proposals on or before the due date of October 15, 2019.

- CMA Engineers, Inc. (CMA)
- Dubois & King (D&K)
- Fuss & O'Neill (F&O)
- Hoyle, Tanner & Associates (HTA)
- Underwood Engineers, Inc (UEI)
- VHB
- Weston & Sampson (W&S)
- Wright-Pierce, Inc. (W-P)

The proposals were reviewed by Jennifer Perry, PE (DPW Director) Paul Vlasich, PE (Town Engineer), Jay Perkins (Highway Superintendent), Matt Berube (Water and Sewer Manager), Dan Lewis (Engineering Technician, and myself (Assistant Town Engineer). After review of the proposals, all eight firms were found to be sufficiently capable of performing the required work and all were selected for interviews.

Interviews took place on November 5, 6, and 12, 2019, at the DPW complex. Interviewers included the six DPW staff members that reviewed the proposals. Based on the proposals and interviews, HTA was

Page 2  
Mr. Russell Dean  
November 22, 2019

deemed the most advantageous to the town and the department recommends that they are awarded the contract.

The fee of \$315,000 was negotiated which represents approximately 7% of the anticipated construction cost. Construction phase inspection is not included in this contract. The scope and fee were negotiated to ensure all of the design elements were included. The major elements of the scope of services to be provided by HTA include survey, design of utility improvements, permitting, and bidding services.

**The Department recommends approving the design contract for the Salem Street Area Utility design project to Hoyle, Tanner & Associates for \$315,000.00**

The RFP also notified consulting firms that this qualification-based selection process for the Salem Street area project may be sufficient for similar future projects. The public works department recommends that the eight firms be approved and pre-qualified for potential consulting services in the future without needing additional qualification review. All future contracts must meet the required approvals as outlined in the Town's purchasing policy and procedures.



# **EXETER PUBLIC WORKS DEPARTMENT**

13 NEWFIELDS ROAD • EXETER, NH • 03833-3792 • (603) 773-6157 • FAX 772-1355

[www.exeternh.gov](http://www.exeternh.gov)

## **REQUEST FOR PROPOSALS**

### **PROFESSIONAL ENGINEERING SERVICES SALEM STREET AREA UTILITY DESIGN**

**RFP No. DPW 2019-01**

**September 24, 2019**

## **INTRODUCTION**

The Town of Exeter is requesting proposals for professional engineering services for utility design in the Salem Street neighborhood, including Forest Street, Hale St, Locust Street, Oak Street, Park Street (portion), Salem Street, Wadleigh Street, Walnut Street, and Warren Street.

This proposal will also be used to update the Town's list of prequalified consultants for use on similar projects in the future.

## **GENERAL REQUIREMENTS**

Engineering firms making proposals must respond in writing to all requirements of this Request for Proposals (RFP). Responses should reflect detailed considerations of the issues and opportunities presented by this specific project. Any additional information or tasks that are felt to be relevant by the responding firm should be included together with the submittal requirements.

Sealed proposals should be plainly marked "**RFP No. DPW 2019-01 – Salem Street Area Utility Design - Engineering Services**" on the outside of the mailing envelope and addressed to:

Town of Exeter  
Public Works Department  
13 Newfields Rd  
Exeter, NH 03833

Proposals will be accepted until **2:00 p.m. on Tuesday, October 15, 2019**, at the Public Works office. Seven copies of the proposal shall be submitted.

Costs incurred for the preparation of a proposal in response to this RFP shall be the sole responsibility of the firm submitting the proposal. The Town of Exeter reserves the right to select or reject any engineering firm that it deems to be in the best interest to accomplish the project specified. The Town reserves the right to accept the proposal on one or more items of a proposal, on all items of a proposal or any combination of items. The Town reserves the right to discontinue the selection process at any time prior to the awarding of a contract. There will be no reimbursement to any candidate firm if the selection process is terminated. The Town reserves the right to waive defects and informalities of the proposals.

## **BACKGROUND**

In March 2019, the town voted to approve \$325,000 for the design and engineering of utility improvements to include water, sewer, and drainage in the Summer/Salem Street, Park Street, and Warren Ave areas. The FY21 Capital Improvement Program (CIP) has \$4.44M programmed for these improvements. The funds for construction will need approval at a future

town vote and may include NH Department of Environmental Services (NHDES) State Revolving Loan Fund (SRF) loans.

### Water

Approximately 5,600 feet of water mains require replacement because of undersized and/or poor condition pipes. Water mains in this area are mostly 4-inch and 6-inch CI and AC pipes. A hydraulic analysis was used to determine the proposed main sizes of 6 to 8-inch pipes.

A water main connection between Locust Street and Walnut Street is desired by the town. There is currently no easement for this water main. The consultant shall facilitate creating and obtaining this easement.

These mains were identified by various studies including the “Public Water System Asset Management Plan,” dated May 2015, “Water System Evaluation Study”, dated January 2002, or by public works personnel.

The Rose Farm subdivision was recently approved near the intersection of Wadleigh Street and Forest Street. As part of the subdivision approval, the water main on Wadleigh Street and Summer Street require upgrading by the developer. However, this subdivision approval is currently under challenge in the court system. The consultant will need to advise the town on how to work with and around this subdivision’s offsite improvements during the course of the town project.

### Sewer

There are approximately 4,300 feet of vitrified clay pipe (VCP) sewer mains in these areas that need to be addressed. The sewer mains on Forest Street, Oak Street (north of Salem Street), Walnut Street, Wadleigh Street, Hale Street, Warren Ave, and Locust Street are 8-inch VCP that are in poor condition with joint separation and root intrusion. The cross-country main from Locust Street to Walnut Street is a 10-inch VCP that is also in poor condition and is also close to several houses. CCTV video inspections by the Sewer Department will be provided to understand if slip lining type improvements could be utilized.

The sewer on Salem Street and Oak Street (south of Salem Street) are 12-inch and 18-inch PVC in good condition. The “Phase I & II, I/I Study, Sewer System Evaluation Survey, and CSO Study,” dated 1997 and 1998, suggests that capacity may be an issue in the future. A sewer capacity analysis is currently being developed and will be available in December 2019.

Several houses abutting this project have voluntarily provided sump pump information through various town initiated surveys. Town regulations prohibit sump pumps from discharging into the sewer. The consultant will guide and assist the Town in removing this private I&I from the sewer system.

### Drainage and Roads

The drainage system was televised in 2014 and found to be in good condition; however, there are many catch basins in poor condition that will need to be replaced. Smoke testing performed in 2016 found that one catchbasin on Walnut Street was connected to the sewer. This was corrected at that time.

The consultant will investigate if any stormwater BMPs improvements would be appropriate to enhance runoff water quality within the project area.

Dry weather flows have been observed in the subcatchment outfall. The consultant will perform dry weather testing for contaminants as associated with the MS4 dry weather flow screening protocols.

The roads in the project area are approximately 24 feet wide and do not have curbs or sidewalks. They are in good to decent condition and last resurfaced in 2009. The consultant will recommend appropriate final pavement repairs and improvements.

### SCHEDULE

The Town's expectation is that the project will be put out to bid with bids received in early March 2021. Construction will be accomplished during the 2021 construction season. The selected engineer will complete the design, obtain approval, and provide bidding for construction to meet this schedule.

### ENGINEER PRE-QUALIFICATION

The Engineer must be on the NHDES pre-qualified list for water and sewer to submit a proposal for this project.

The Town will prequalify several consultants that may be called upon in future similar type projects. This prequalification will allow the town to more expeditiously procure engineering services from a condensed consultant pool.

### CONTRACT DOCUMENT

Upon selection, the successful Engineer will prepare Engineering Contracts for execution. Upon execution of the Contract, the Engineer will be instructed to commence providing the work outlined in the contract. All information, data, documents, photos, computer records and other materials of any kind acquired or developed by the Engineer pursuant to this proposal shall be the property of the Town of Exeter.

**PROJECT REQUIREMENTS**

1. The engineer shall review the project scope and current cost estimates, and advise the department as to the adequacy for accomplishing the work. Provide updated construction cost estimates for a CIP request in June 2020.
2. The engineer will add direction to the project to have a viable construction project in the schedule previously described. The engineer may need to recommend adjustments to the phasing of the projects.
3. The engineer will perform a survey of the existing conditions showing all elevations, observable landmarks (e.g., edge of road, sidewalks, buildings, trees and manhole structures with inverts, etc.) and underground utility locations. The engineer will coordinate with the utility owners to have the underground utility marked out prior to the survey. The survey shall be done in the NH State Plane coordinate system, NAD83 to be compatible with the Town's GIS system.
4. The engineer shall investigate and determine the limits of the right-of-way (ROW) and utility easements and show them on the plan. The engineer shall delineate the existing ROW and easements in which any work will be performed. The apparent ROW and easement mapping may be completed for use in the preliminary design to expedite the design process. The actual ROW and easement locations shall be used for final design.
5. Recommend water valve and hydrant locations within the project areas.
6. During preliminary design, the engineer shall determine the need for temporary water service during construction and incorporate that into the design.
7. No information about the presence of ledge in any of the project areas is currently available. The engineer shall make recommendations for subsurface investigations as needed.
8. The engineer shall delineate wetland areas and on behalf of the Town apply for wetland applications as required for the projects.
9. The engineer shall coordinate the design review by NHDES of the water and sewer improvements.
10. Determine if the dry weather flow at the subcatchment outfall is a concern. Advise the town on removing the contaminant if it is a concern.
11. Advise if stormwater quality BMPs should be included in the project.
12. Coordinate with the private utility companies for any pole or utility relocations, and new utility construction. Consult with the private utilities so that any of their outstanding work items can be accomplished in a timely manner.
13. The engineer shall provide 2 complete copies of the 30% (preliminary) design plans and the 90% (final) design plans and bid specifications to the Town for review and approval. Meetings with the Town and engineer will be required to discuss each review.
14. The bid specifications shall include estimated quantities for the Bid Schedule. The engineer shall recommend the format of specifications for town consideration.



15. Additional opinions of costs shall be supplied with the preliminary and final plan submission.
16. A final plan and profile with a scale of 1" = 20'(H) and 1"=4'(V) will be required. The plan will show all observable features and underground utilities with depths. The proposed utility systems shall be shown. The profile shall show the existing road or surface profile, existing utilities, and the proposed utility systems.
17. The engineer shall develop a general construction site sediment and erosion control plan to prevent siltation or construction debris from entering the stormwater system and wetland areas. This plan shall be included with the final plans. This requirement does not relieve the contractor from creating a detailed stormwater pollution prevention plan (SWPPP) for accomplishing the work.
18. Administer a neighborhood meeting with residents during the design phase of the project. This meeting shall be held to receive input from the residents.
19. Upon completion of the design and specifications, the engineer shall provide two (2) complete sets of plans and specifications to the Town. A final digital copy will also be provided to the Town in PDF format.
20. Bidding services shall include: issue plans and specifications to bidders, respond to bidders questions, prepare and distribute addenda, attend the pre-bid meeting and bid opening, review the bids, provide a recommendation of award, and prepare the contract documents.
21. Construction administration, shop drawing review and resident engineering services are not included at this time but may be added during subsequent construction phases.

### **INFORMATION AVAILABLE**

- Exeter MapsOnline – GIS information - <http://mapsonline.net/exeternh/>
- Town website <https://www.exeternh.gov/publicworks/reports-and-studies>
  - Public Water System Asset Management Plan, by Tata & Howard, dated May 2015
  - Water System Evaluation Study by CDM, dated January 2002
- 2020 – 2025 Capital Improvement Program <https://www.exeternh.gov/planning/capital-improvement-program-cip>
- Fire flow results based on the hydraulic water model available at DPW.
- Storm Drain Evaluation in Locust / Forest Neighborhood available at DPW.
- Various CCTV inspection of the area sewer mains. (provided only to the selected engineering company)

### **PRE-PROPOSAL MEETING**

There will be a **non-mandatory** pre-proposal meeting at **1:00 p.m. on Thursday, October 3, 2019**, at the Exeter Public Works Department to discuss this project and answer questions.

## **TIMELINES**

The Engineer Selection Schedule is as follows:

Request for Proposal	Monday, September 23, 2019
Pre-Proposal Meeting	Thursday, October 3, 2019
Proposals Due	Tuesday, October 15, 2019
Interview Notification	Within two weeks of proposal due date
Interviews	Shortly after notification
Selection	TBD
Contract Negotiations	TBD
Contract Approval	TBD

## **PROPOSAL SUBMITTAL REQUIREMENTS**

Seven (7) copies of the proposal shall be submitted. **All submissions shall be limited to a maximum of 16 pages, including the cover letter, resumes, and schedule.** The pages shall be numbered.

1. Cover letter
2. Project understanding
3. Project approach to accomplish the Work
4. Scope of Services – Highlight major tasks that were not specifically called out in the Project Tasks.
5. List of similar work experience, construction administration, and resident engineering specifically for the project manager and project engineer that will be working on this project.
6. Project Team Chart identifying the team
  - a. Principal-in-Charge
  - b. Project Manager
  - c. Project Engineer(s)
  - d. Sub Consultants
7. Project Schedules in Gantt format

## **EVALUATION CRITERIA & INTERVIEWS**

From the proposals submitted by qualified engineering firms, the Town may select finalists for an interview. This will be a qualifications-based selection (QBS) process. The final selection will be based upon:

- Firm's qualifications
- Experience of the individuals on similar projects
- Understanding of the Project Scope
- Approach for completing the Work
- Commitment to Project timelines
- Quality of Proposal
- Any other criteria determined appropriate by the Town

An attempt will be made to negotiate a fee schedule with the top-ranked firm. If the Town is unable to reach an agreement with the selected firm, the Town reserves the right to negotiate with the next highest-ranked firm until an agreement is reached.

### **TOWN ROLE**

Town staff will be responsible for administering the project and overseeing the engineer's work on this project. Representatives of the Town's Public Works Department will review plans and other documents prepared by the engineer.

### **RESERVATION OF RIGHTS**

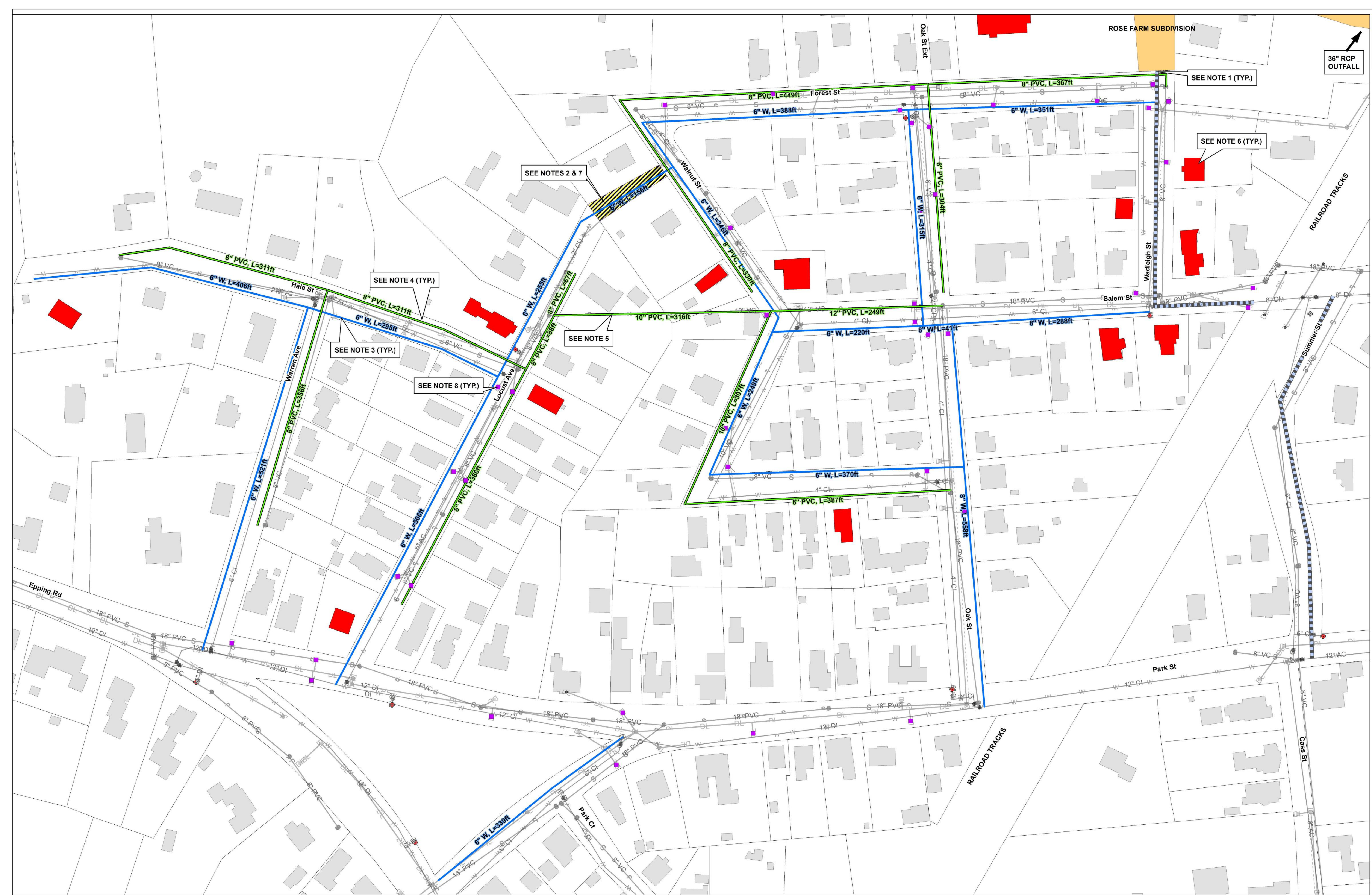
The Town reserves the right to make such inquiries regarding the firm's qualifications and reputation as it deems necessary to evaluate the firm.

The Town reserves the right to negotiate directly with the firm selected for additional project work including design, construction administration services, and/or additional project engineering and design services.

### **CONTACT INFORMATION**

If you have any questions regarding this RFP, please contact Jennifer Mates, P.E., Assistant Town Engineer at [jmates@exeternh.gov](mailto:jmates@exeternh.gov) or (603) 418-6431.

- NOTES:
- 1.) POTENTIAL 8" DI WATER MAIN TO BE INSTALLED BY OTHERS (ROSE FARM SUBDIVISION).
  - 2.) PROPOSED WATER MAIN EXTENSION FROM LOCUST AVE TO WALNUT ST.
  - 3.) WATER MAINS FOUND TO BE UNDERSIZED OR IN POOR CONDITION. WATER MAINS FROM 4 INCH CI OR 6 INCH AC WILL BE UPGRADED TO 6 OR 8 INCH DI WATER MAINS.
  - 4.) SEWERS MAINS FOUND TO BE IN POOR CONDITION DUE TO JOINT SEPARATION AND ROOT INTRUSION. MAINS WILL BE REPLACED OR LINED BASED ON CONDITIONAL ASSESSMENT. A SEWER CAPACITY ANALYSIS IS BEING PREPARED AND SHALL BE INCORPORATED INTO THIS DESIGN.
  - 5.) 10 INCH VC SEWER MAIN FROM LOCUST AVE TO WALNUT ST (CROSS COUNTRY) IS IN POOR CONDITION AND MAY REQUIRE LINING DUE TO ITS PROXIMITY TO NEARBY HOUSES. EASEMENT INFORMATION IS UNKNOWN.
  - 6.) BUILDINGS SHOWN IN RED ARE BELIEVED TO HAVE ILLICIT CONNECTIONS TO SEWER BASED ON PREVIOUS INVESTIGATIONS. ADDITIONAL BUILDINGS MAY HAVE ILLICIT CONNECTIONS. ILLICIT CONNECTIONS WILL BE EVALUATED AND REMOVED FROM THE SEWER MAINS AND CONNECTED TO THE EXISTING DRAINAGE, WHERE APPLICABLE.
  - 7.) 115 FT DRAINAGE EASEMENT, PER 1983 JONES & BEACH PLAN EASEMENT FOR DRAINAGE FACILITIES.
  - 8.) THE OVERALL DRAINAGE SYSTEM IS IN GOOD CONDITION. POTENTIAL CATCHBASIN REPLACEMENTS, IDENTIFIED IN THE LEGEND BELOW, INCLUDE OUTDATED 2-FT DIAMETER CATCH BASINS WITH LITTLE TO NO SUMP AND CATCHBASINS IN POOR CONDITION. THE USE OF STRUCTURAL BEST MANAGEMENT PRACTICES SHALL BE EVALUATED FOR POTENTIAL CATCHBASIN REPLACEMENTS TO ADDRESS WATER QUALITY.
  - 9.) THE LOCATION OF PROPOSED UTILITIES SHOWN IS SCHEMATIC ONLY.



**Legend**

Rose Farm Development: 8" Water Main	<b>Water</b>	Meter Pit	Other	<b>Wastewater</b>	DRAIN_LINES	Catch Basins in poor condition, no sump, or 2 ft diameter
Easement	Proposed Water	Hydrant Valve	Junction	Proposed Sewer	Drain Manhole	Catchbasin
Potential Illicit Sewer Connection (Public Outreach & Private I/I Mitigation Program 2015) (I&I Homeowner Questionnaires 2010)	Water_Pipes	Blow Off	Cap	Wastewater_Pipes	Foundation Drain	Pipe End Inlet
	Water Shutoff	Pump Station	Cistern	Cap	Other	Pipe End Outlet
	Gate Valve	WO	Deflection	Clean Out	Septic Tank	
	Hydrant	PV	Dry Hydrant	Deflection		
				<b>Stormwater</b>		
				DRAIN_LINES		
				Drain Manhole		
				Foundation Drain		
				Outfall		

**Salem St. Area  
Utility Replacement**

N  
1 in = 60 ft

**Addendum #1 – October 8, 2019**

**PROFESSIONAL ENGINEERING SERVICES  
SALEM STREET AREA UTILITY DESIGN  
RFP No. DPW 2019-01**

**Purpose:**

To add transportation type experience of the firm to the list of submittal requirements. Which may include traffic engineering, roadway, bridge, culvert, signal, crosswalk and sidewalk design.

The proposal due date and the maximum pages for submittals remain unchanged.