



**Request for Proposals**  
**Design and Services Supply and Treatment System Upgrades**  
**Rye Water District**  
**60 Sagamore Road, Rye, NH 03870**

**Addendum #1**  
**January 10, 2025**

**Question #1 (from Underwood Engineers):**

Is there a scope and/or Basis of Design for utilized for the SRF submittal to NHDES for the treatment facility?

**Answer to Question #1:**

**Summary of WTF Design Basis submitted to the NHDES for SRF Funding by Wright-Pierce:**

Treatment Design

- Garland Well: 500 gpm, 0.720 MGD @ 24 hr/day operation
- Bedrock Wells: 680 gpm, 0.979 MGD @ 24 hr/day operation
- Finish Water Pumping Design: 1200 gpm

Water Flow Measurement

- Raw – Garland & Bedrock: Electromagnetic flow meter with totalizer
- Backwash & Finish Water: same as above
- Sample and Domestic Service: same as above

Backwash Water Pump

- 2 Pumps Alternating (Vertical Turbine)
- 5 HP Premium Efficiency Motors
- > 80 % efficiency, VFD
- 400 gpm @ 20' TDH

Finish Water Pumps

- 3 Pumps (2 duty and 1 backup) (Vertical Turbine)
- 40 HP Premium Efficiency Motors

- > 80 % efficiency VFDs
- 600 gpm @ 150' TDH
- Surge Anticipation Valve

Process

- NaOCl chemical feed pumps: 2 pumps (1 duty & 1 standby)
- KOH chemical feed pumps: 2 pumps (1 duty & 1 standby)
- Sequestrant chemical feed pumps: 2 pumps (1 duty & 1 standby)

Garland Wells

Aeration Units: 1 Unit

500 gpm, 30 HP Blower Required

GAC Filtration Units 2 Units, one duty, 1 stand by (2 vessels per unit)

500 gpm per unit

Bedrock Well

Biological Filtration Units 3 Units, 2 duty, 1 stand by (2 vessels per unit)

350 gpm per unit

Continuous Compressor use for Dissolved Oxygen Adjustment, Blower for Air Scour during backwash.

Central Treatment Plant

1/15/2024

**Conceptual Budget Estimate of Probable Cost**

<b>Item/Description</b>	<b>Probable Cost</b>
General Conditions	\$700,000
Site Work	\$1,400,000
Building Construction	\$5,800,000
Process Equipment	\$3,300,000
Transmission and Distribution WM	\$800,000
<b>Construction Total:</b>	<b>\$12,000,000</b>
Construction Contingency	\$2,000,000
Engineering Services	\$2,000,000
<b>Project Budget:</b>	<b>\$16,000,000</b>

**Project Funding Breakdown**

DWSRF	\$ 10,000,000	20 Yr Loan @ 2.8% w/10% PF
DWSRF- EC	\$ 1,000,000	100% PF
DWGTF	\$ 4,950,000	20 yr Loan @ 3.5% NO PF
Strat Plan Grant	\$ 50,000	100% Grant
<b>Funding Total</b>	<b>\$ 16,000,000</b>	

**Question #2 (from Underwood Engineers):**

There was mention of some type of piloting already planned by the District. Can you elaborate?

**Answer to Question #2:**

Yes. We are acquiring the equipment that the City of Portsmouth had used for their ongoing operational pilot work at the Pease Water Treatment Facility. District staff are in the process of setting the equipment up at our Garland Road wellsite. Piloting will include 4 trains of filter media to treat the Garland Well PFAS and determine what other parameters might affect the filters (organics, pH, etc.). The District has also contacted Calgon regarding piloting Filtrasorb 400 GAC and another train piloting their CalRes 2301 resin. We are still in contact with other vendors (Pureflow, Fluoro-sorb, etc.) about obtaining two other medias to pilot. The intent of setting up this equipment is to have it up and running by the time that an engineer is selected for this design work. The engineer would then continue to work with the District on the pilot throughout the rest of 2025 during preliminary design.

We are not envisioning any piloting for iron and manganese at this time, however, will wait for our selected consultant to make any final recommendations for that. If recommended, we will work with them to implement iron-manganese piloting.