

Northrop Grumman Bethpage Environmental Remedies Update

Virtual Meeting and Community Update

Ed Hannon
Project Director

February 3, 2022

Agenda

- Groundwater treatment system piping route progress
- Treatment system facility, construction timeline and progress
- Virtual walk-through of the treatment system building
- Soil treatment and sampling progress at Bethpage Park
- Questions via Zoom chat and telephone

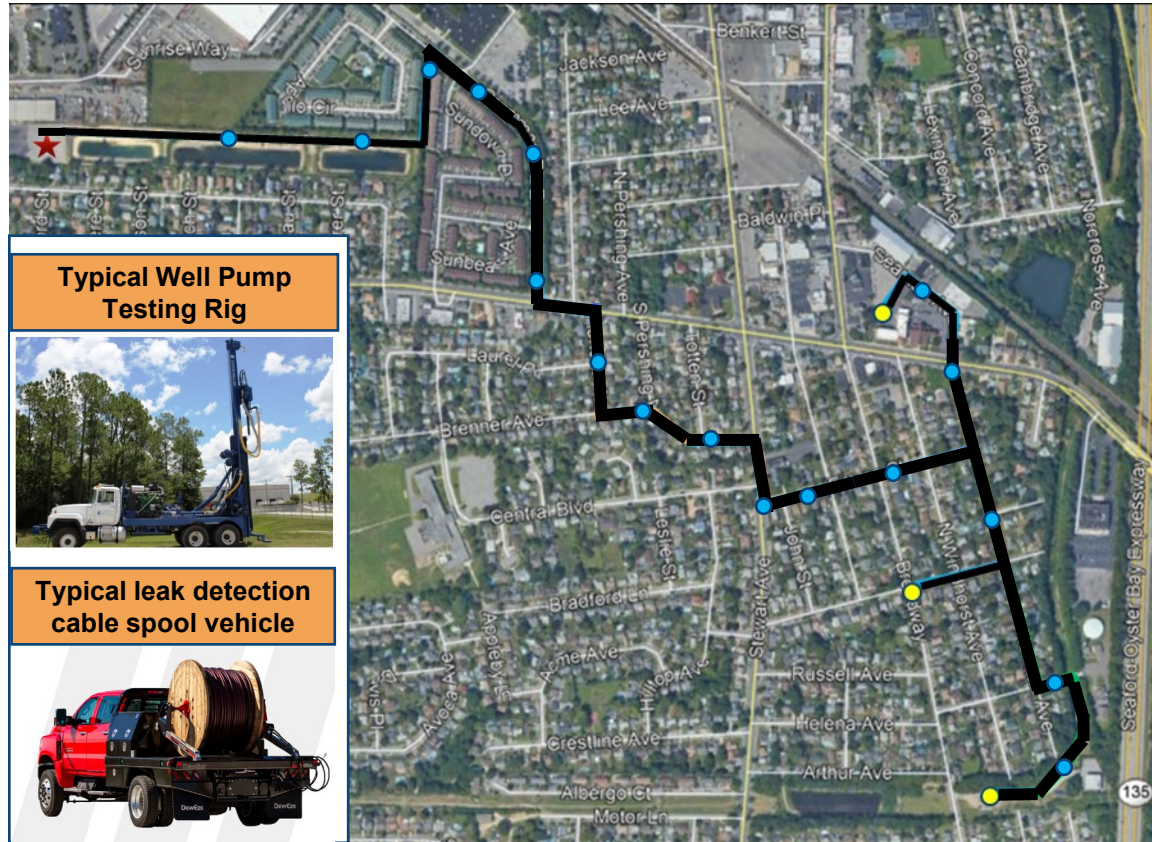
Work starting this month to prepare the system

Leak detection wiring and communication cables

- February to April/May
- Work from wells along pipeline route
- Wire spools may be stationed near well vaults and manholes. Wiring will be pulled to and from the well vaults

Extraction well testing and pumping

- We estimate 3-4 months to complete (schedule pending)
- Wells will be pumped and equipment installed in wells
- Mobile rig, tanks, and other equipment
- All work in coordination with Town



Typical Well Pump Testing Rig



Typical leak detection cable spool vehicle



● Leak Detection Manhole ● Extraction wells ★ Groundwater Treatment Facility

Treatment System Construction Timeline

Activity	Start Date	End Date	2021																			
			Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023														
			Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
Construction of RW-21 Treatment Facility (ongoing)	05/10/21	08/17/22	Construction of RW-21 Treatment Facility (ongoing)																			
Erect RW-21 Treatment system building structure	12/07/21	03/24/22	Erect RW-21 Treatment system building structure																			
RW-21 Treatment system installation and interior work	12/21/21	06/14/22	RW-21 Treatment system installation and interior work																			
RW-21 Treatment System install pavement, fencing and landscaping	05/04/22	05/23/22	RW-21 Treatment System install pavement, fencing and landscaping																			
RW-21 System Integration, Start-up and Testing	06/07/22	08/16/22	RW-21 System Integration, Start-up and Testing																			
RW-21 Treatment System Goes Fully Online	08/17/22	08/17/22	RW-21 Treatment System Goes Fully Online																			

Revised schedule as of 1/25/22

****Timeline is weather permitting and labor and material availability/market conditions***

Treatment System Construction Progress (as of 1/19/22)



Groundwater Treatment Facility

- The building will be 126 x 119 feet and 35 feet high at the peak of the roof. The state-of-the-art design approved by the NYSDEC
- Once the building shell is constructed, interior construction will begin, including installing the treatment system equipment and connecting water, electric, gas, communications, and sanitary sewer
- Work in progress and is expected to take approximately six more months (weather permitting)

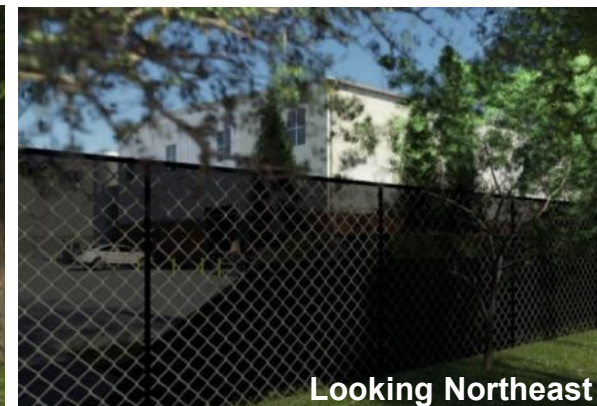
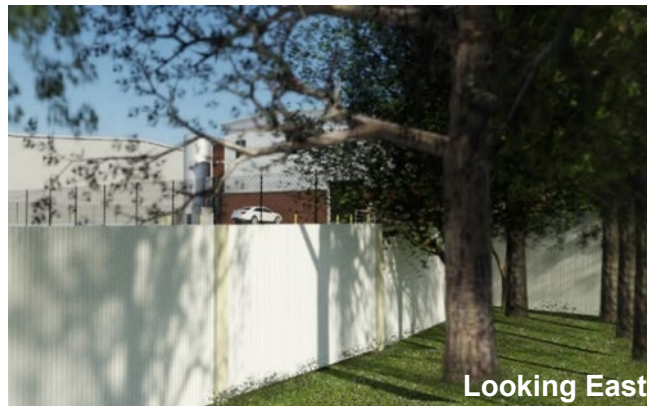


Architectural rendering of RW-21 Groundwater Treatment Facility (looking northeast)

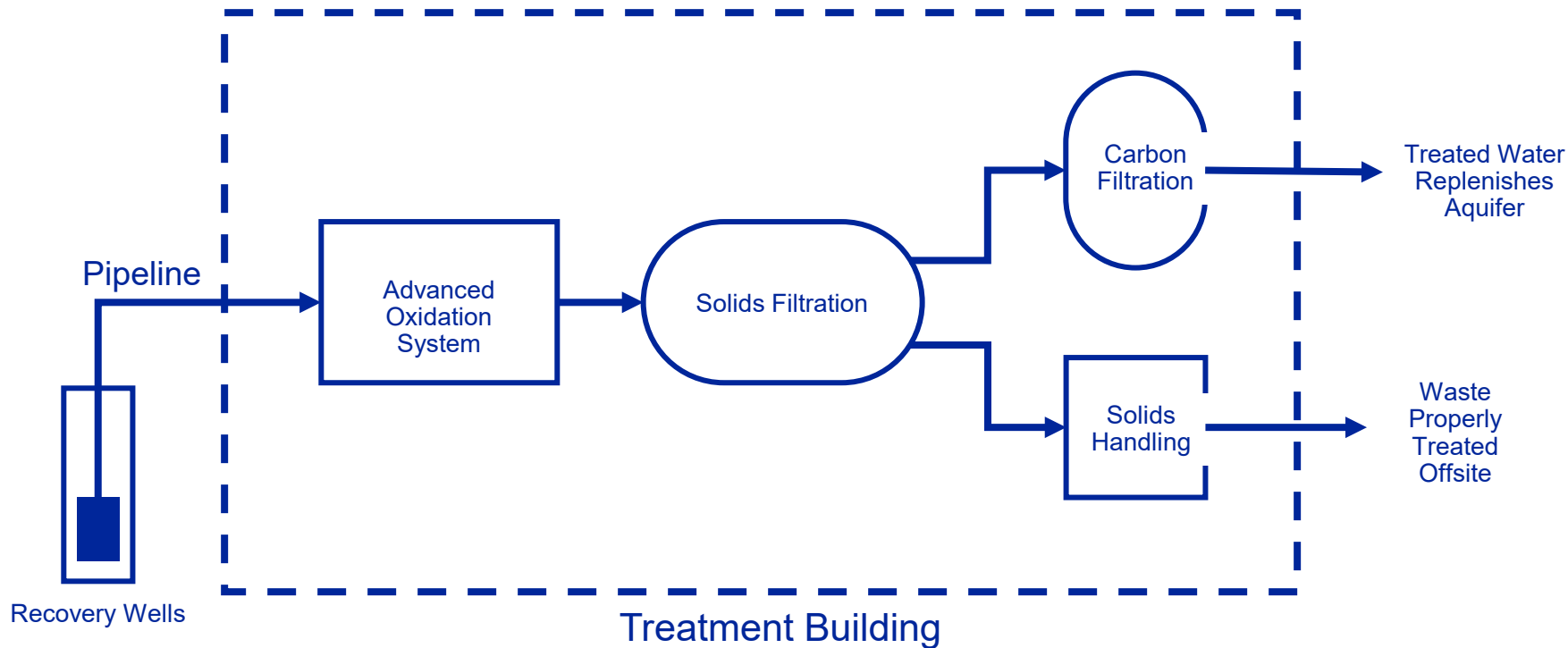
**The Town of Hempstead Planning Department and
The Nassau County Fire Marshal have approved the project plan**

Building after Completion

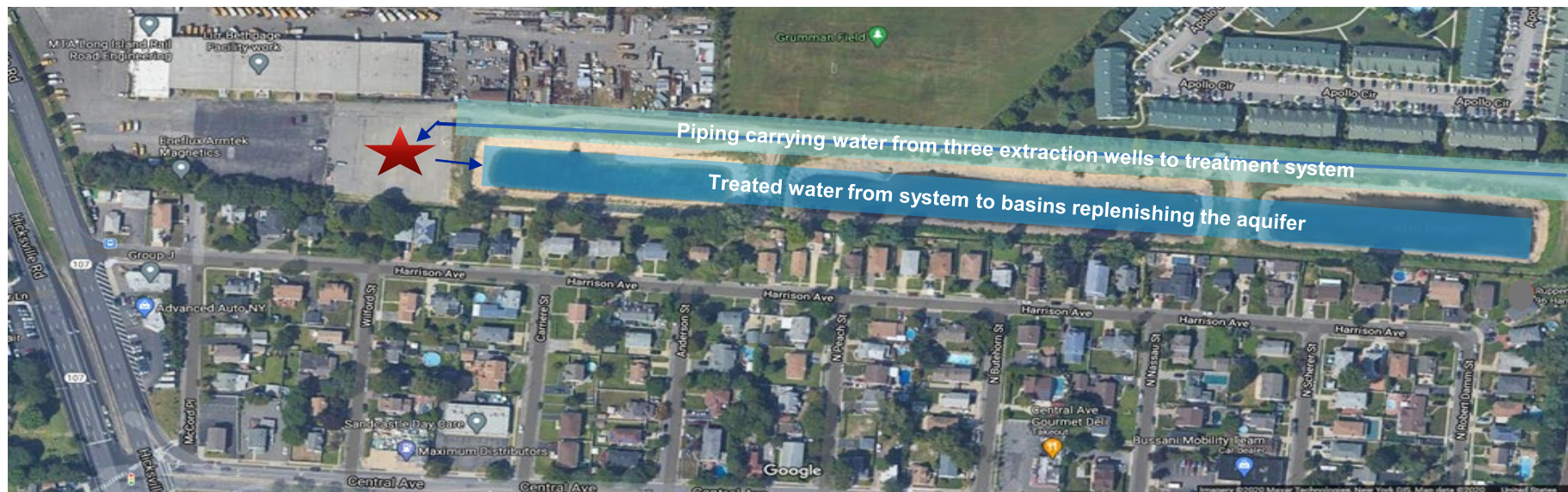
- Facility will operate 24/7
- Routine system maintenance and monitoring will be conducted in accordance with a NYSDEC-approved Plan
- Treating up to 2.7 million gallons a day



RW-21 Treatment Process



Treatment System Process



- The pipeline carries extracted water from our three recovery wells to the treatment system
- The system treats the water to NY State drinking water standards
- The aquifer is replenished via our basins

Communication Activities

- Produced 140 progress reports to inform residents and local officials in the past seven months
- Provided hard copies of daily progress reports to residents in work zones
- Held 13 community meetings
- Continuously available to address questions/concerns

Park Soil Thermal Remedy System

- The system has performed exceptionally well
- Received approval from NYSDEC to power down the heating elements in the ballfield
- The system will remain in place for now



Park Soil Sampling Progress

- Completed sampling (in yellow starred areas)
- Scheduled sampling at four additional locations (green star)
- Work will be conducted over next several weeks
- Results are shared with NYSDEC, NYSDOH and Town of Oyster Bay
- Data and science will determine next steps
- No impact to walking path access



Our Continued Commitment

Northrop Grumman continues to work closely with the NYSDEC, the U.S. Navy and other federal, state, and local government regulatory authorities, to address environmental conditions in the area.

We remain committed to pursuing scientifically sound, targeted and effective remedial approaches that protect the health and well-being of the community and avoid unnecessary disruption.

For ongoing updates, visit our project web site
www.northropgrumman.com/bethpage

Opt-in email to Dianne.baumert-Moyik@ngc.com

Agreement with New York State on Bethpage Amended Groundwater Remedy

In late December, the State announced it had reached an agreement in principle with each of Northrop Grumman and the Navy on additional measures the parties will take, in partnership with the State, to implement the Bethpage amended groundwater remedy.

- The agreements and the underlying Amended Record of Decision (AROD) were widely praised as significant steps forward in protecting public health and the environment.

Northrop Grumman is pleased to have finalized the terms of its agreement with the State of New York.

Under the agreement, in partnership with the State, the company will take additional measures to implement the Bethpage amended groundwater remedy, make payments to benefit water districts and other public water supply and restoration projects, and resolve claims for natural resource damages.

The additional measures will complement the work that we understand the Navy has agreed to undertake, and further benefit the citizens of Bethpage and surrounding communities and the local water districts.

The agreement builds on the company's long-standing partnership with the State and exhaustive work over the past 25 years to understand and remediate contamination.

We look forward to obtaining final court approval of the agreement and proceeding with the work.

NORTHROP
GRUMMAN

The logo symbol consists of a thick horizontal line on the right side of the word "NORTHROP", which extends to the right and then turns 90 degrees downward to form a vertical line.