



Beacon Hill Water Storage Tank Replacement Project



Presentation Outline

- Project Update and Meeting Purpose
- Recap
 - Previous Meetings and Communications
 - Existing Tank- Location and Need for Replacement
 - Proposed Tank- Design and Benefits
- Contractor (Caldwell Tanks Inc.) Experience
- Construction Schedule
- Impacts during Construction
- Mitigation Measures for Impacts
- Questions
- Contact Person for any future questions



Project Update

- Existing Beacon Hill Water Storage at the end of its useful life
- PWWD will be replacing this tank with a new state-of-the-art, pedisphere style tank
- Most cost-effective option for our community
- PWWD awarded the contract to Caldwell Tanks, Inc
- Currently reviewing shop drawing submittals



Meeting Purpose

- Review Caldwell Tank's detailed construction schedule
- Discuss significant activities in each phase of construction
- Review construction impacts and mitigation measures
- Discuss any questions about the project
- Provide PWWD contact information for any future questions or concerns



Previous Meetings and Correspondence

- Met with Elected Officials
- Hosted Public Meeting at Library
- Hosted meeting at PWWD for neighbors
- Learned: Community understands the need to replace the tank and has some specific requests:
 - Mitigate construction impacts including traffic, dust and noise
 - Ensure dialog is proactive and continuous throughout the whole process
 - Provide landscape beautification upon project completion

Beacon Hill Water Storage Tank Location



Recap- Existing Beacon Hill Tank





Recap - Existing Beacon Hill Tank

- Serves nearly half of the District's 30,000 residents and 9,350 households and businesses
- Built in the 1930's – 80+ years later it is at the end of its useful life
- Capacity of 250,000 gallons
- Riveted steel, multi-leg style tank with conical roof
- Current tank does not meet new hurricane wind and seismic load safety standards
- The most recent condition assessment of the tank revealed the start of coating system failure and corrosion could impact future water system operations

Recap - Proposed Beacon Hill Tank





Recap - Proposed Beacon Hill Tank

- Pedesphere Style- Design keeps pressure in system longer, which benefits firefighting operations during emergencies
- Capacity and overflow height would be the same; 250,000 gallons and 94 feet, respectively
- Requires less maintenance and is easier to repair due to reduced surface area and welded construction elements
- Designed to meet new hurricane wind and seismic load safety standards
- New tank will include a light on the roof in order to satisfy FAA regulations

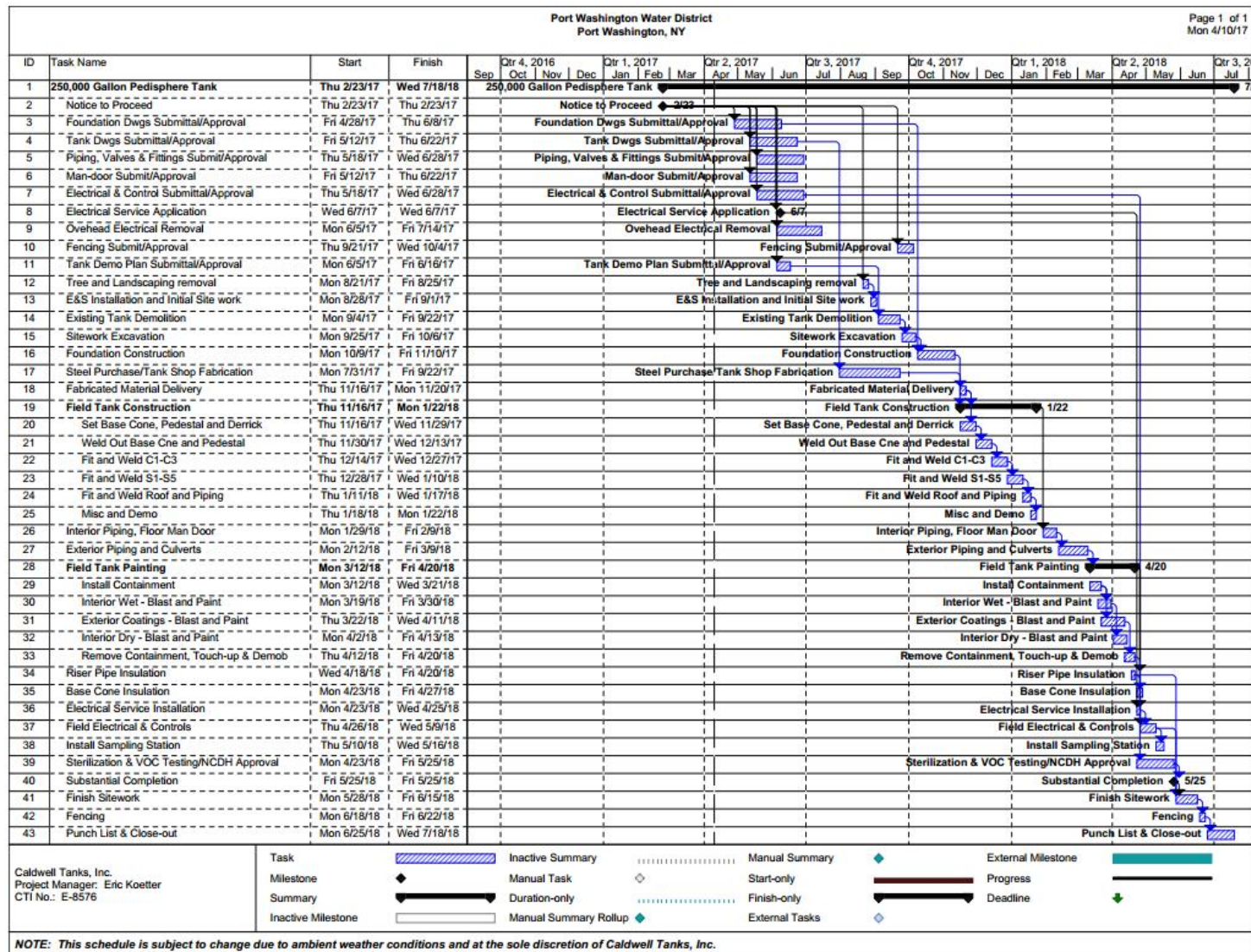


Contractor- Caldwell Tanks Inc.

- Has been constructing potable water storage tanks in the United States since 1887
- Most recent and successfully completed project on Long Island was for the Manhasset-Lakeville Water District (MLWD)
- The MLWD tank was placed into operation this past February



Anticipated Construction Schedule



Note – Subject to change due to unforeseen conditions



Construction Schedule

- Shop Drawing Reviews (April 2017 – June 2017)
- Tank Shop Fabrication (July 2017 – Sept. 2017)
- Initial Site Work (August 2017)
 - Includes tree removal and erosion and sediment control
- Existing Tank Demolition (Sept. 2017)
- Sitework Excavation (Late Sept. 2017 – Early Oct. 2017)
- Foundation Construction (Mid Oct. – Mid Nov. 2017)
- Field Tank Construction (Mid Nov. 2017 – Early Feb. 2018)
 - Includes steel deliveries, steel placement and welding



Construction Schedule

- Exterior Piping (Mid Feb. 2018– Mid March 2018)
- Field Tank Painting (Mid March 2018– Late April 2018)
- Tank Interior Insulation (Mid April 2018– Late April 2018)
- Electrical, Controls and Sample Station Work (Late April 2018 – Mid May 2018)
- Tank Sterilization and Testing (Late April 2018– Late May 2018)
- Substantial Completion (Late May 2018)
- Final Contract Site Work and Fencing (Late May 2018– Late June 2018)
- Site Landscaping (Fall 2018)



Significant Activities

- Duration of on-site work contract work is approximately 12 months, with landscape beautification to follow
- Initial Site Work
 - Cutting and removing trees and bushes
 - Grading and soil removal
 - Installing stabilized construction entrance to minimize the tracking of soil from off site and silt fence to prevent the transport of sediment laden water during storm events
- Demolition Phase
 - Tank will be cut into small sections for removal and disposal
 - Excavation and demolition of existing tank foundation
 - Tractor trailers and dump trucks will be used to remove sections of the tank and foundation from the site
 - Large crane on site for approximately one week

Significant Activities



- Foundation Construction
 - Prior to concrete placement, workers will install form work and reinforcing steel for approximately 2 weeks
 - Pumper truck and approximately 15 concrete trucks required
 - No more than 2 concrete trucks on site at one time
 - When one truck finishes, another takes its place



Significant Activities



- Field Tank Construction
 - Includes steel deliveries by tractor trailer
 - Large crane initially on site to set the access tube
 - Access tube used as a crane to hoist and place remaining steel sections along with small crane
 - Welding of steel sections





Significant Activities

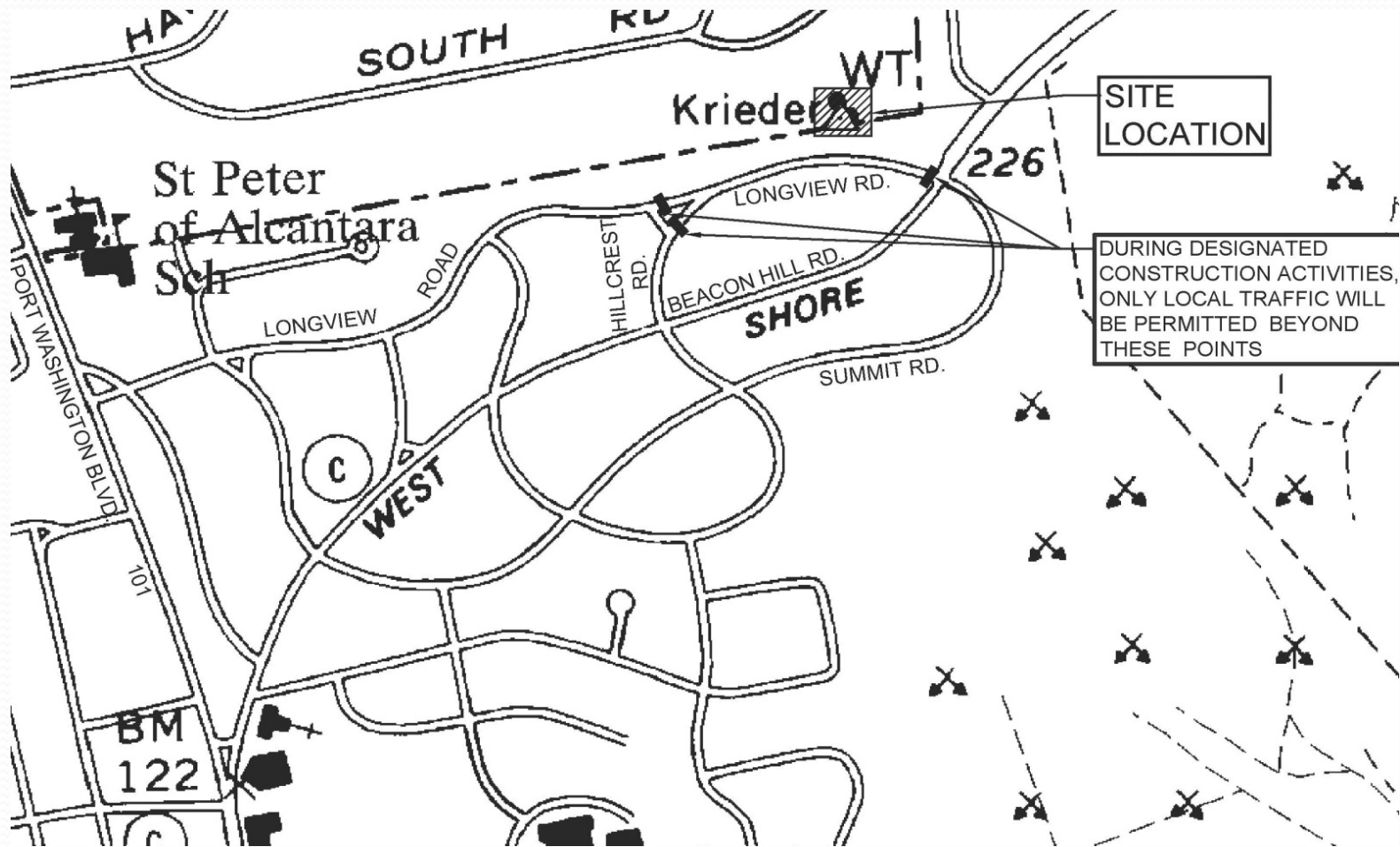
- Field Tank Painting
 - Erection of containment structure around tank for sandblast material and paint overspray
 - Manlifts and scaffolding for worker access
 - Initial sandblasting to prepare surface for paint
 - Deliveries of sandblasting media and paint products
- On-site Storage
 - Contractor required to use off-site location for stockpiling and storing excess equipment (no material to be stored on Longview Road)
 - Tool trailer, generator trailer and small crane will be on site throughout construction

Maintenance and Protection of Traffic

- Contractor to provide Maintenance and Protection of Traffic Plan
 - Flaggers, Signage, Barricade Placement
- Community Precautions
 - Stay Alert & Drive Slowly



Potential Road Closures



Site Security

- Work site will be monitored by a security firm with live video surveillance
- If an unauthorized person or suspicious activity is detected, the security firm will contact Caldwell
- Caldwell will call the police to respond as required





Construction and Community Impact Mitigation

- Committed to minimizing the impact/inconvenience on the community and surrounding residents
- Work hours limited to only Monday through Friday, 8:00 am through 4:00 pm. Weekend and holiday work will **not** be permitted
- Coordinated an off-site staging area for excess materials and equipment
- Coordinated with the neighboring Sands Point water department to use their tank to supply water while construction occurs at the Beacon Hill site



Our Pledge to the Community

- We will always be available to discuss any portion of this project with you.
- You will have access to a point person before, during and after construction.
- Any resident with special needs affected by construction or road closures is encouraged to reach out to us so we can appropriately address your needs/concerns.
- Continued beautification and landscaping projects at the Beacon Hill tank site to improve its aesthetic presence within the community will be completed.
- We will work to do whatever we can to make this project as convenient and seamless as possible.



Questions?

- We are happy to answer any questions you may have at this time.
- If additional questions come up after you leave today, please contact us at:
 - Telephone – (516) 767-0171
 - Email - info@pwwd.org