

## MEETING MEMORANDUM



**PROJECT:** Stearns Meadow Water Treatment Plant, Scituate, MA (0233681.02)

**MEETING DATE:** August 2, 2023

**ISSUED DATE:** August 7, 2023

**LOCATION:** Virtual (Teams)

**ATTENDEES:** Fire Chief Mark Donovan (Town of Scituate), Deputy Fire Chief Pat Reilly (Town of Scituate), Renee Lanza (Project Manager, Woodard & Curran), Steve Robbins (Technical Manager, Woodard & Curran), Kevin McCaffery (Technical Manager, Woodard & Curran), Will Gatchell (Lead Architect, Harriman), Jen Robinson (Architect, Harriman)

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This meeting served as an introduction for the Scituate Fire Department (SFD) to the Stearns Meadow Water Treatment Plant to identify concerns and design considerations for site planning and site circulation for emergency response. A subsequent meeting will be held to dive into details internal to the building.

### Facility Overview

The Stearns Meadow Water Treatment Plant will replace the existing Old Oaken Bucket Water Treatment Plant. The existing raw water pump station at Old Oaken Bucket Pond will remain, and water will be pumped up to this new facility. The facility will house the water treatment plant and water treatment staff, distribution operations, and billing/administrative functions. All water department staff currently located at the Old Oaken Bucket site will be relocated to the new site. As such, there are multiple spaces/functions of the facility:

- Public-Facing Administrative Functions: Water department administrative staff will be located at the facility with a public access vestibule. This is where the public would go for information, contractors would go for permits, etc. It is estimated that this may be about two visitors per day.
- Distribution Functions/Equipment Storage: Water distribution staff will be located at the facility. The facility includes a garage for secure and weather-safe equipment storage.
- Water Treatment Functions: The facility is the location of surface water treatment. All water treatment operations and staff would be located at this building. Water treatment functions include a treatment/process areas, chemical areas, control room, and laboratory space.



**Onsite Chemicals**

The water treatment process includes chemical storage and addition. The chemicals that will be part of the Stearns Meadow Water Treatment Facility include:

Chemical Name	Use Description	Estimated Onsite Storage Volume (Liquid or Dry)
Polyaluminum Chloride (PACl)	Coagulant	10,200 gal (L)
Sodium Fluoride (NaF)	Fluoridation/Dental Health	2,550 lbs (D)
Sodium Hydroxide (NaOH)	pH Adjustment	8,800 gal (L)
Sodium Hypochlorite (NaOCl)	Disinfection	1,500 gal (L)
Sodium Chlorite (NaClO <sub>2</sub> )	Used to create disinfectant	220 gal (L)
Hydrochloric Acid (HCl)	Used to create disinfectant	110 gal (L)

**Site Plan**

Woodard & Curran (W&C) reviewed the site plan with the Scituate Fire Department. The following site plan elements were discussed:

- Site Access: There are two curb cuts to Route 3A. The Northern curb cut is the primary access and only entrance. This is the only curb cut public visitors will utilize. The Southern curb cut is exit only for Town employees and chemical delivery trucks.
- Security Fencing: Building is surrounding by a fence with secure gate access for security and public health purposes. SFD noted Town-standardization on gate fobs. W&C will follow up with DPW on Town standards.
- Building Access: Public access and the main entrance to the building is via the parking area accessed by the Northern curb cut. Town staff will park on the lower parking area and access through the garage area. There is controlled access within the building. SFD noted that the Knox Box is best to be located at the main entrance or closest to where the Fire Alarm panel may be.
- Hydrant Placement: W&C is seeking guidance or preference from the Fire Department on hydrant placement. SFD indicated that hydrants closer to the street provide more flexible uses for them. Discussions identified including at least one hydrant within the secured fence line and one hydrant outside the fence line. W&C will send SFD the site plan to review and provide recommendations.
- Emergency Management Considerations: SFD inquired as to where emergency management functions may be executed such as bottled water distribution, or whether WTP finished water could be used to fill bottles in the event of a boil water order in other areas of Town. Bottled water distribution, if needed, is expected to occur out of the public access vestibule. In the event of a large scale event, it was discussed that the secure access gates could be opened and the site access road could be used as a drive-up pick-up and go area.



- Metered Water: SFD noted that there's usually a metered hydrant for water needs for different uses. W&C will discuss with DPW on the best location for this at the new site, or other locations within the Town.
- Electric Vehicle Chargers: This will be provided for EV charging of Town vehicles within the secured access area. EV chargers and charging parking spots will be located away from the building on the lower parking area.

### **General Discussion**

The following items were also discussed as general discussion:

- Fire Department Training: SFD currently uses the OOB WTP site for fire department training, to minimize water disturbance to residents. With the relocation of operations to the new site, what might that look like in the future?
- Confined Space Access/Training: Due to the nature of the facility and significant water tankage, there will be multiple confined spaces, though there is every effort to minimize. W&C will review confined spaces with SFD during interior building review meeting, and SFD will be involved in building startup and commissioning.
- Bi-Directional Amplifier (BDA) Survey: SFD indicated this will need to occur once the building is weather tight. This location may need to be a receiver site. More to discuss on this as the building is in construction.

### **Summary**

The design team, including representatives from Woodard & Curran (Design Engineer) and Harriman (Architect), met with Scituate Fire Department. The two entities are working on minor details, but there are no concerns with the site plan and site circulation at this time. The Scituate Fire Department is currently reviewing provided information and will provide input on the ongoing basis as the design develops.

### **Action Items**

- W&C to send Site Plan and Meeting Summary to Scituate Fire Department.
- W&C to schedule follow-up meeting with Fire Department to review building interior
- W&C to follow up with DPW on Town electronic access gate and fob specifications.
- W&C to follow up with DPW on future Fire Department training considerations.
- Scituate FD to send specifications for Town ladder truck, including additional space needs for outriggers to confirm that we have sufficient area
- Scituate FD to send specifications for sprinkler connections (standpipe, threads, etc).
- Scituate FD to provide preferences on hydrant locations after reviewing site plans.

### **ATTACHMENTS: F-100 – FIRE TRUCK LAYOUT PLAN**