MASSACHUSETTS WATER RESOURCES AUTHORITY



Chelsea Facility 2 Griffin Way Chelsea, Massachusetts 02150

> Telephone: (617) 242-6000 Facsimile: (617) 305-5990

Frederick A. Laskey Executive Director

November 13, 2019

Arlington Conservation Commission

Attention: Emily Sullivan 730 Mass Ave. Annex Arlington, MA 02476

Re: MWRA Contract No. 6544 – Cleaning and Lining of Weston Aqueduct Supply Main 3 – Mystic River Reservation

Dear Ms. Sullivan and Commission Members:

The Massachusetts Water Resources Authority (MWRA) is undertaking a construction project to rehabilitate its 85 to 90-year old, 60-inch steel water main near the Mystic River and Alewife Brook in Arlington. The riveted steel pipe, originally installed in the 1920s, will be cleaned and cement mortar lined to protect water quality and inhibit internal corrosion of the pipe. The work will require access to the pipe to insert cleaning and lining equipment approximately every 1,000 feet along the existing pipeline. Within the Town of Arlington, there are two (2) proposed work areas within the 200-ft. Riverfront Area of the Mystic River, but outside of the 100-foot buffer zone. The excavation location is identified in the attached Locus Map. One of the locations, Coral Street, is outside of the FEMA 100-year floodplain (i.e.-Zone AE 1% Annual Chance of flooding). The second site, for access to the pipe near Alewife Brook, is within the FEMA 100-year floodplain.

To access the pipes, MWRA will dig access pits. Typical access pits are approximately 20 feet long by 10 feet wide excavated to a depth of approximately 9 feet in order to remove a section of pipe and allow insertion of the cleaning and lining equipment. Access pits will require a limited footprint and similar size area for equipment to operate, details are provided below. Any work within or adjacent to the buffer zone will require straw bales and silt fence surrounding the work area and no soil stockpiling at the site. In addition, any dewatering will be treated through a filter bag with straw bales and silt fence for filtration through the grass surface so there will be no point source discharge to waterways or wetlands. The attached drawings provide details of the work areas and erosion controls to be included in the contract.



The Excavation of Access Pits consists of the following:

- The excavation pit will be approximately 20 feet x 10 feet x 9 feet deep, and will be constructed with an excavator, 2 tri-axle dump trucks, and support vehicles. Straw bales and silt fence will be placed between the site location and the Mystic River.
- Access pits will be shored to support excavation during work.
- Dewatering may be required. The contractor is required to keep water out of the excavation during the work. The water will be discharged nearby through a 3-inch hose and filter bag. The filter bag will be surrounded by straw bales and a silt fence to create a sheet flow condition through the grass discharging to the upland area. See attached erosion control details.
- Excavated soil will not be stockpiled in the 100-foot buffer zone area. The stockpile will be maintained on filter fabric and surrounded by straw wattle and silt fence outside of the 100-foot buffer zone. See attached detail.
- The cleaning and lining activities involve truck mounted mixers and winch systems to pull equipment through the pipe or to support motorized equipment entering the pipe. Truck access will be maintained outside the buffer zone to support the work.
- Following the cleaning and lining activities, the trench will be backfilled compacted and disturbed areas will be loamed and seeded. The activity is anticipated to take six to eight weeks per location to complete.

This work is considered to be minor in nature and meets the exemptions listed in the Wetland Protection Act regulations at 310 CMR 10.00 as follows:

10.02(2)(a)(1): minor activities within the riverfront area and 10.02(2)(a)(2): activities conducted to maintain, repair or replace, but not substantially change or enlarge an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, sewer, telephone, telegraph and other communication services, provided said work utilizes the best practicable measures to avoid or minimize impacts to wetland resource areas outside the footprint of said structure or facility.

MWRA anticipates beginning its procurement process for this work in January 2020, but due to water system demand conditions, we will not be starting the work until September 2020 in order



to minimize effects of the water main shut down on the MWRA distribution system. Surface restoration activities could continue through June 2021. If requested, the MWRA is happy to arrange an onsite meeting with representatives of the Commission, the contractor, and the project engineer to ensure that the proposed work is clear to all parties. As always, the MWRA remains committed to working in a manner that is protective of wetland resources areas. Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

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Michael Rivard, P.E. Program Manager, Engineering & Construction Massachusetts Water Resources Authority Phone: (617) 570-5427 Mike.Rivard@mwra.com

Enclosures: Excavation Locus Map Excavation Site Plans Erosion Control Details

cc. John Colbert, Beth Card, Mary White, and Ester Lwebuga, MWRA Erica Lotz, Stantec Consulting Services, Inc.



