Wachusett Aqueduct Pumping Station
Water Supply Citizen’s Advisory Committee

October 10, 2017
MWRA Transmission System

Proposed Pumping Station

Carroll WTP

Wachusett Aqueduct
Major Design Elements

- 240 mgd pumping station located near the end of the Wachusett Aqueduct
- Security Gate Improvements
WAPS and CWTP Site

Carroll WTP

Forebay Channel

Wachusett Aqueduct
Pumping Station Site

Wachusett Aqueduct
Terminal Chamber
- 122’ x 68’ and 51’ high masonry building
- Surge tank
- Storage yard
• Establish flow in the Wachusett Aqueduct to Inlet Channel
• Overflow channel until ready to start pumps
• Seven 40 mgd pumps with 700 hp motors (six for 240 mgd and one stand-by)
Yard Piping

- Connection to existing Wachusett Aqueduct extension pipe, suction pipe, discharge pipe and by-pass
- Surge tank
• Constant speed vertical turbine pumps
• Intake Channel
• Overflow Channel

To Carroll WTP
Entrance Improvements

- K-12 Security Gates
- Guard House
- Canopy

To Interim Corrosion Control Facility

To Marlborough PS

To CWTP
Entrance Improvements
Other Design Elements

- Photovoltaic panels on roof and ground for Zero Net Energy
- WAPS building optimized for energy efficiency
- Geothermal heating and cooling system
Construction Notice to Proceed: March 1, 2016

Construction Substantial Completion: February 14, 2019
Excavation for Inlet Channel 6/7/2016
Base Slab Reinforcing Steel
Front Gate Security Improvements
Questions?