



# Metropolitan Water Tunnel Program

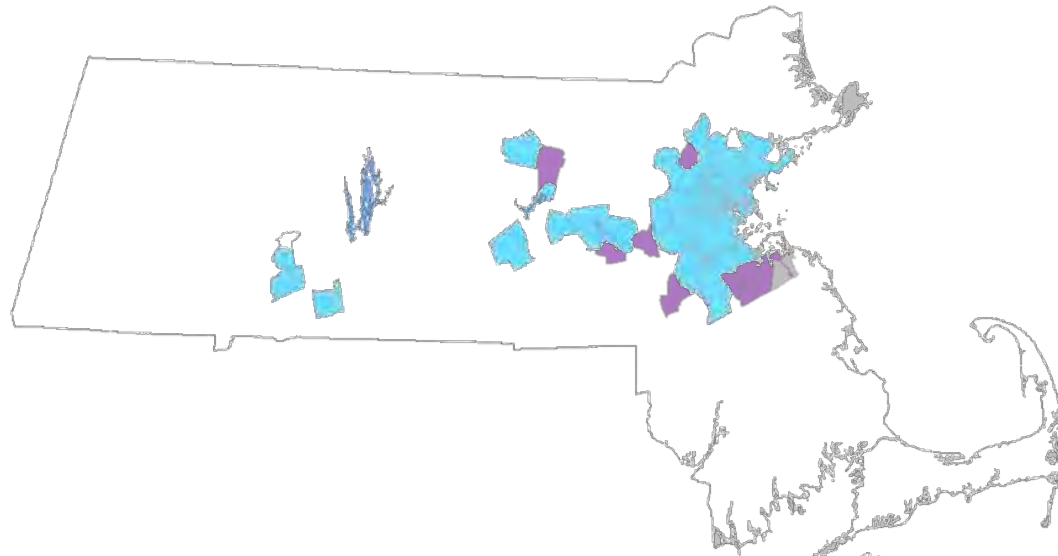
Waltham City Council

June 16, 2025



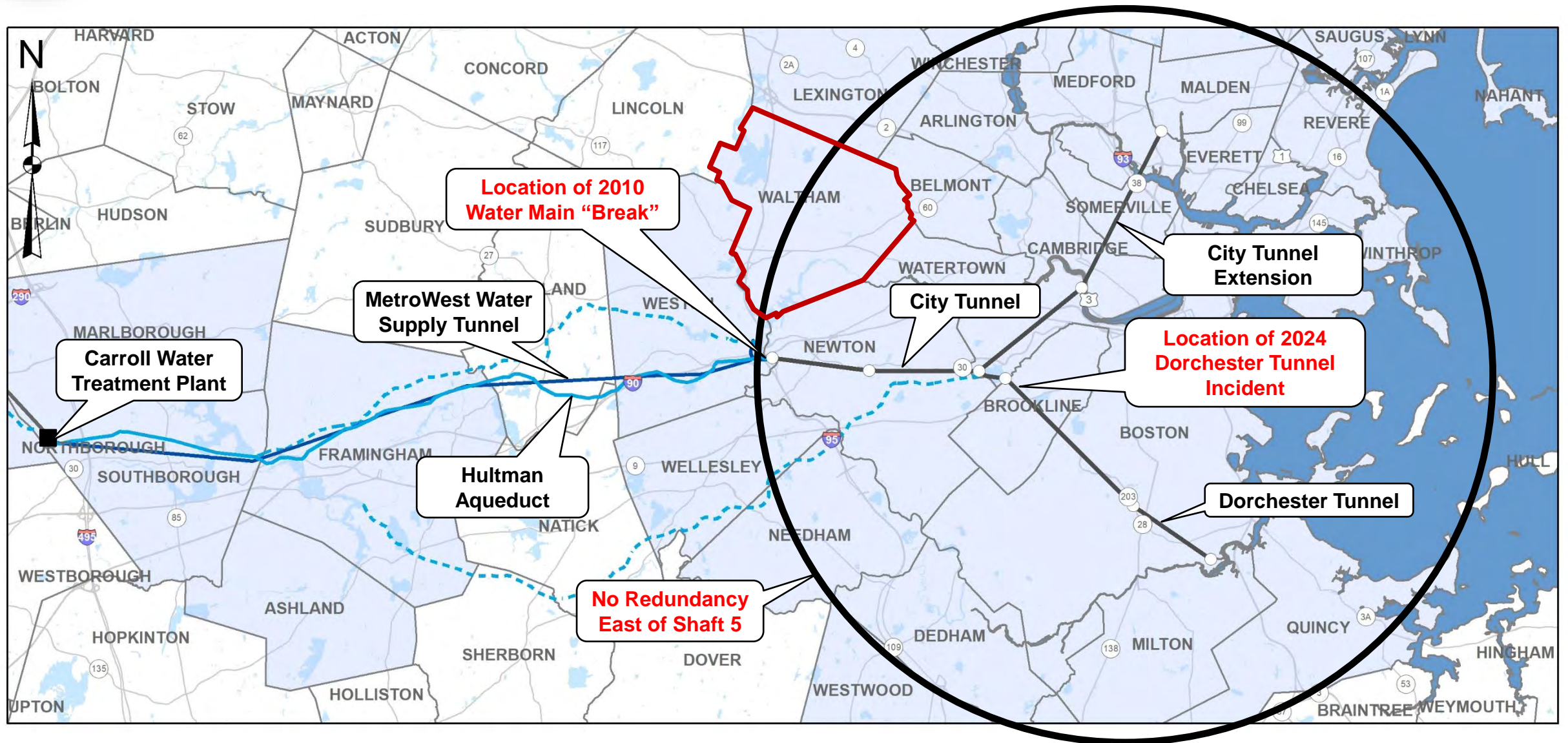
## MWRA ...

- provides wholesale water and wastewater services to over 3.1 million customers in 61 communities
- delivers an average of 200 million gallons per day to its water customers
- collects and treats an average of 350 million gallons of wastewater per day, with a peak capacity of 1.2 billion gallons
- Waltham receives **100%** of its water and sewer services from MWRA





# Metropolitan Tunnel System Serves About 60 Percent of Water Demand in Metropolitan Area







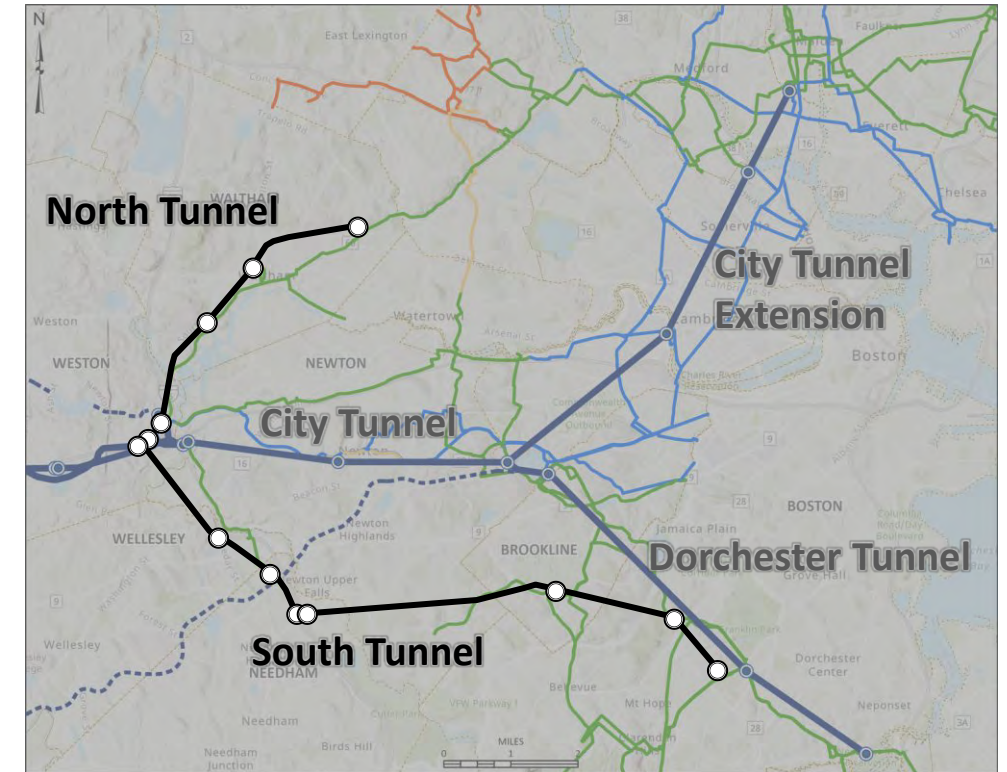
# Metropolitan Water Tunnel Program

Purpose: To provide redundancy to the Metropolitan Tunnel System

Today



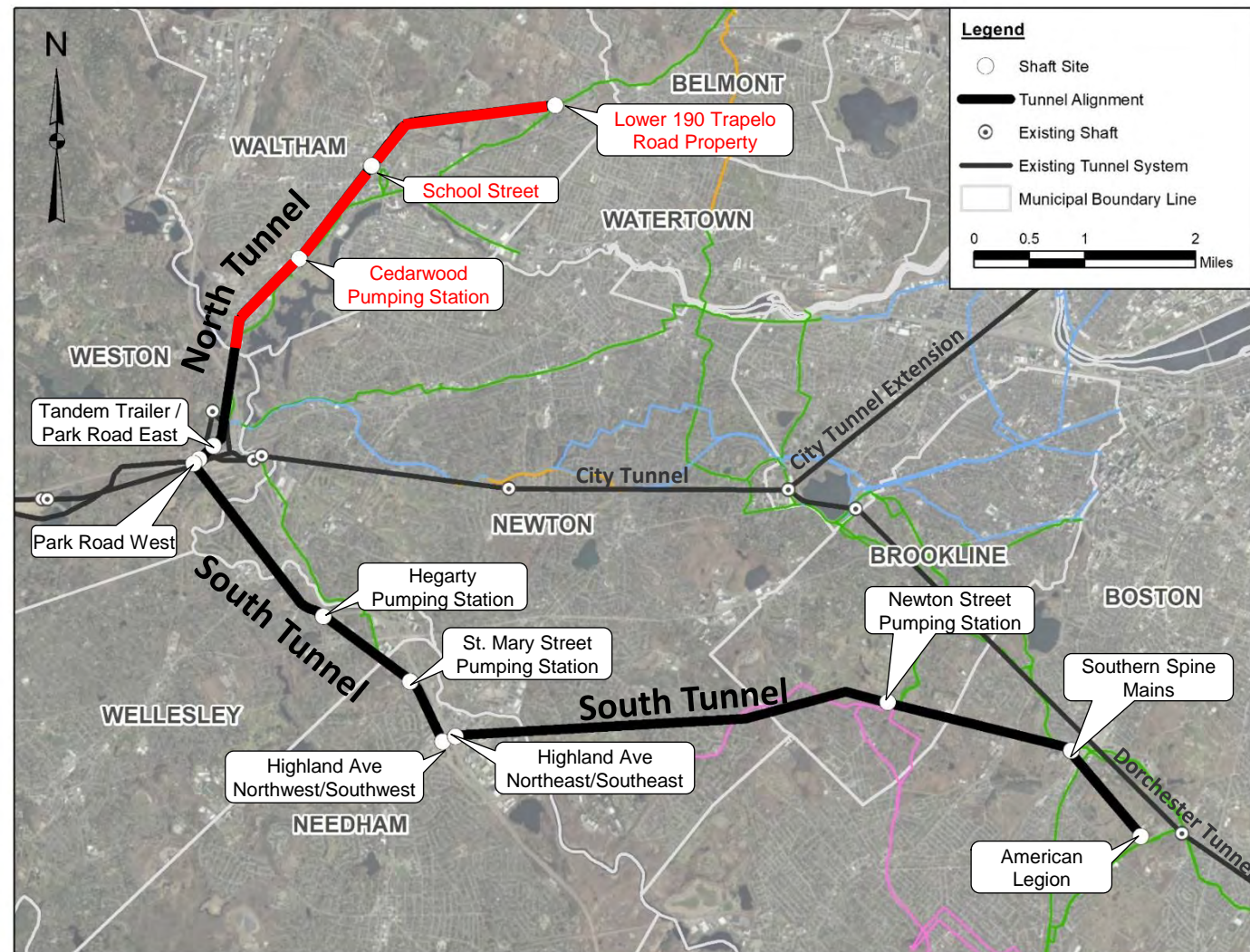
When Completed





# Metropolitan Water Tunnel Program - Overview

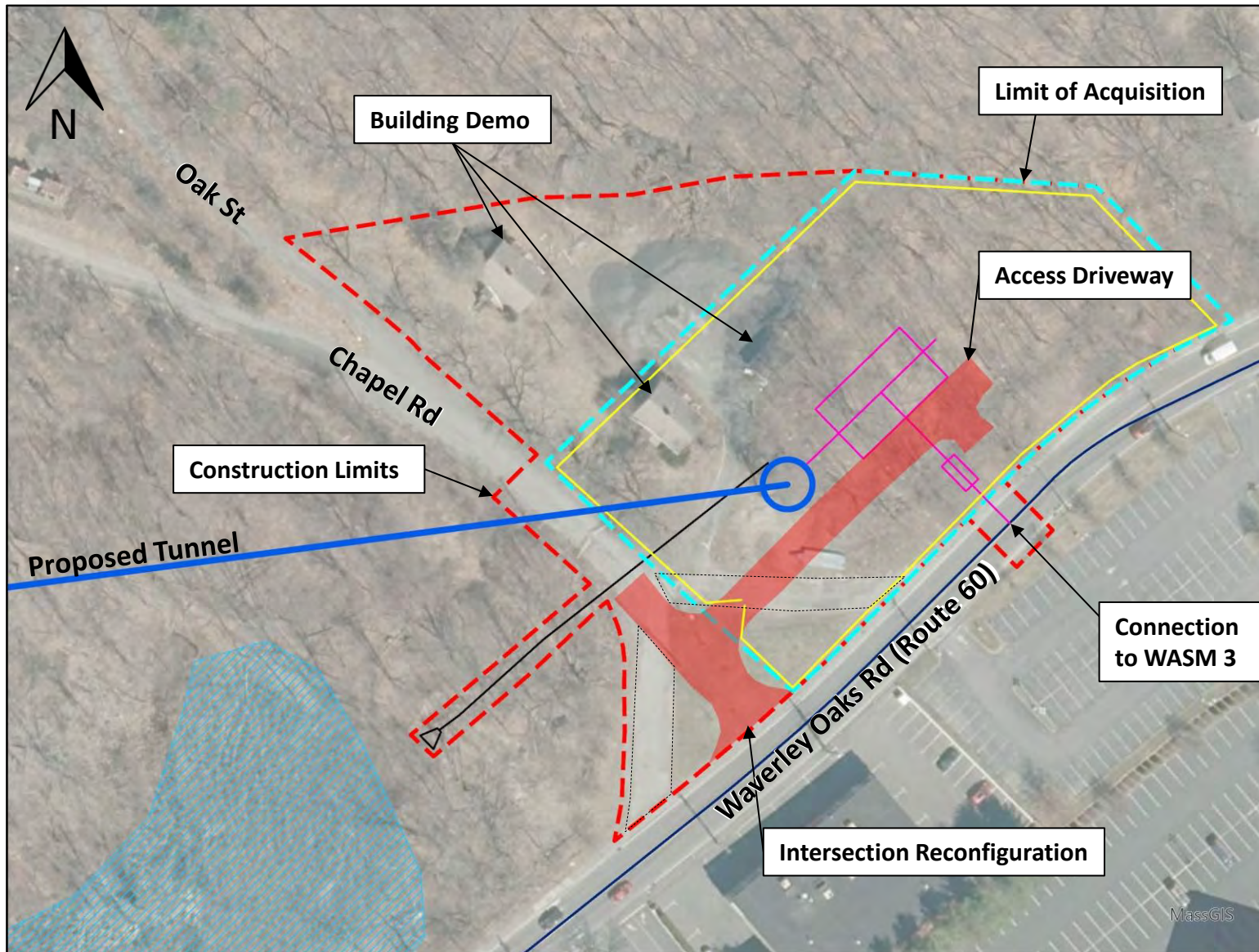
- ~15 miles of deep, hard rock, pressure water tunnels
- 13 Shaft Sites:
  - Three launching shaft sites
  - Three receiving shaft sites
  - Seven connection shaft sites
- Tunnels will begin in Weston (I-90/I-95)
- North Tunnel - ~4.8 miles, ends in Waltham
- South Tunnel - ~10.2 miles, ends in Mattapan
- Tunnel Construction anticipated between 2028 and 2040







# Lower 190 Trapelo Road Property – Receiving Shaft Site



## Proposed Work

- Mobilization and site security
- Building demolition
- Site entrance reconfiguration
- Construction phase TBM receiving shaft work site
- Permanent water supply shaft & valve chamber
- Accommodate future use

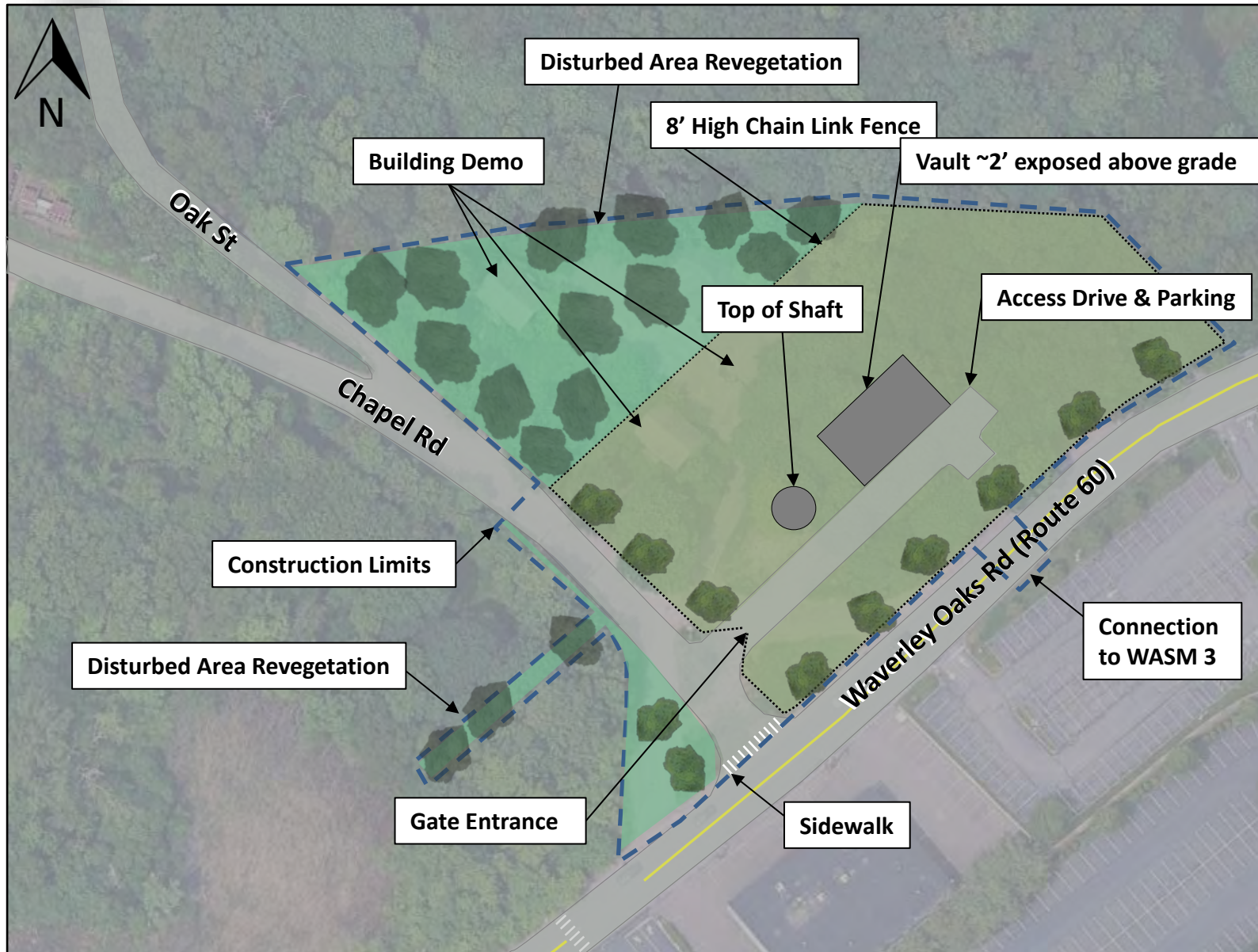
## Land Requests

- Temporary construction staging area = ~2.3 acres
- Permanent fee interest = ~1.4 acres





# Lower 190 Trapelo Road Property Conceptual Permanent Site Condition

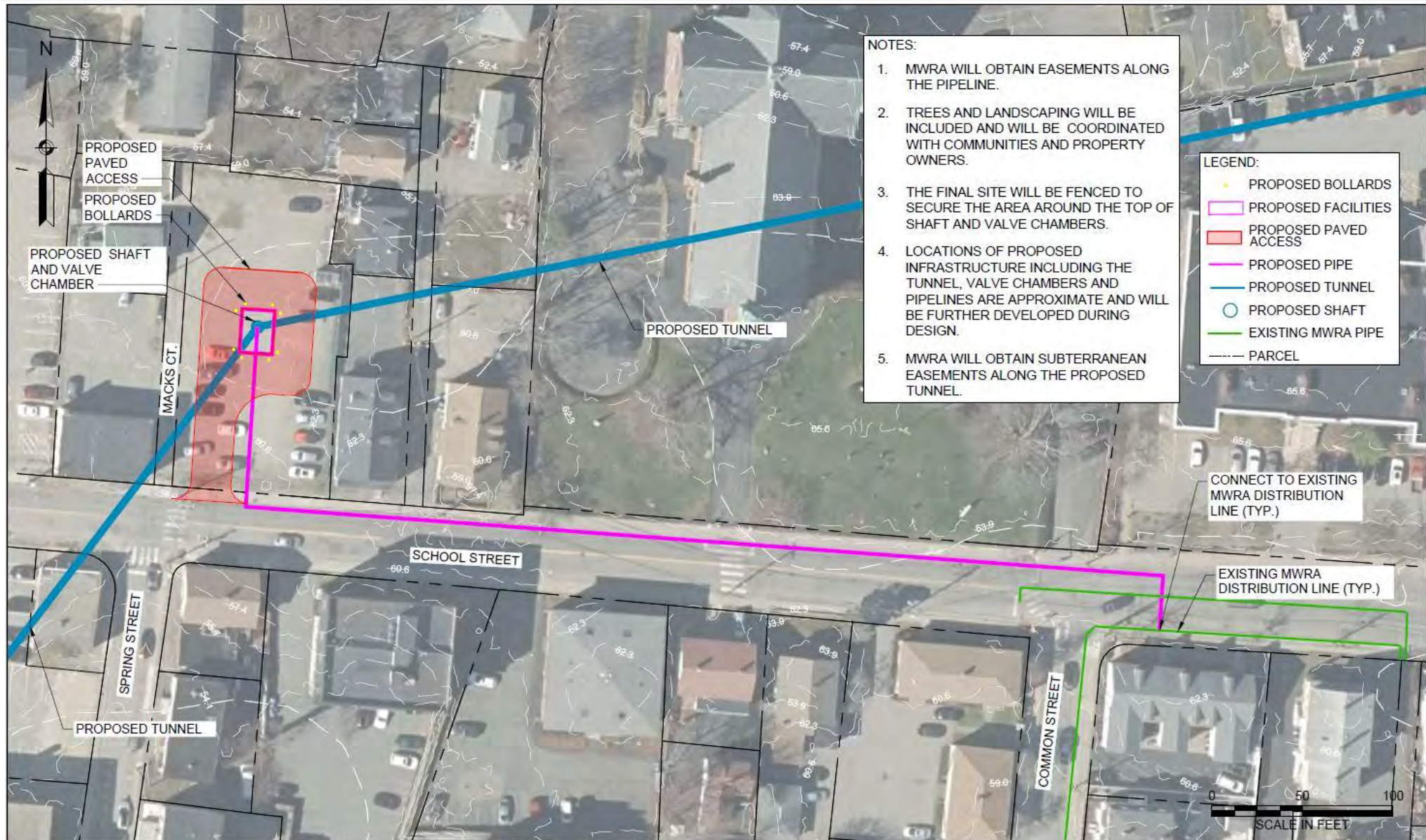


- Landscaped, Fenced & Secured
- Operations
  - Regular inspections / security checks
  - Occasional water quality sampling
- Maintenance/repairs
  - Facility maintenance
  - Snow removal
  - Lawn care
- No increase to traffic or noise





# School Street – Connection Shaft Site







# Cedarwood Pump Station – Connection Shaft Site







# Permanent Infrastructure

Early  
Concepts

Prelim. Design  
& EIR

Geotechnical  
Investigations

Final  
Design

Construction

Operations



Permanent infrastructure is mostly below grade:

- Top of shaft structure and valve chamber (~2 ft above grade)
- Connection piping (all buried)



MWWST Wellesley St  
Connection Shaft, Weston



MWWST Shaft L, Framingham



MWWST Shaft 5/5A, Weston



MWWST Shaft E, Southborough





# TBM Power Supply (by Eversource) – North Tunnel

Early  
Concepts

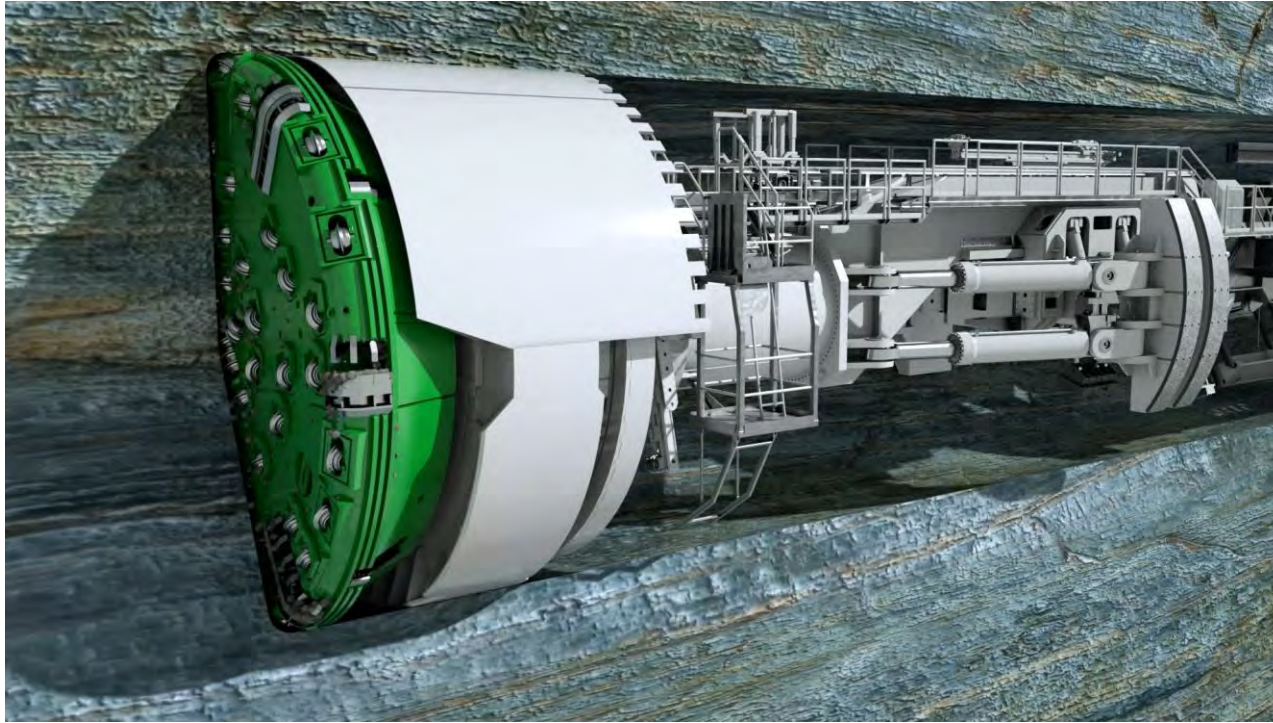
Prelim. Design  
& EIR

Geotechnical  
Investigations

Final  
Design

Construction

Operations



*Used with permission from Herrenknecht*

*Source: <https://www.herrenknecht.com/en/products/productdetail/gripper-tbm/>*

## Power to Tandem Trailer Launching Shaft Site (Weston)

- ~3.2 miles of new duct bank
- Through Waltham, Newton & Weston
  - ~1 mile in Waltham
- Coordinating with ongoing MassDOT project along Route 30

## Anticipated Eversource Construction

- Construct duct banks and manholes
- Install and splice new electric cable
- Schedule – TBD, design ongoing



# Emergency Response Coordination



- Shafts are located in six (6) communities, tunnel alignment is beneath seven (7) communities
- Advance coordination is needed to ensure coordinated emergency response during construction
  - Uniqueness of the underground construction environment and its hazards
  - Anticipated role and responsibilities of the MWRA tunnel contractors and local Emergency Responders
  - Provide training and equipment needed by the local Emergency Responders throughout tunnel construction
- Emergency response coordination needs to be tailored to each communities' capabilities and size
- MWRA resources will be provided to ready the local Emergency Responders
- **MWRA is working with local Emergency Responders to determine what resources will be needed** Ongoing
  - Meetings have included Waltham Fire Chief Mullin





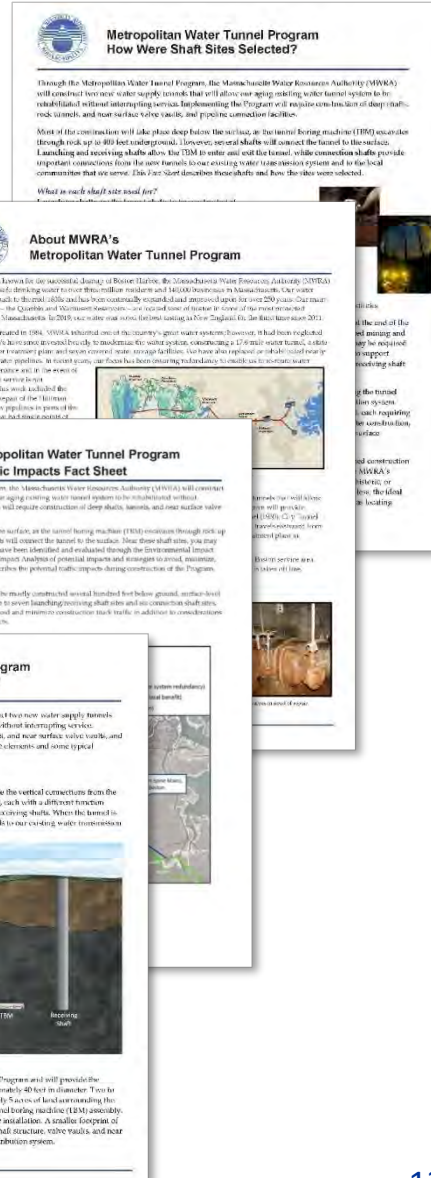


# Outreach



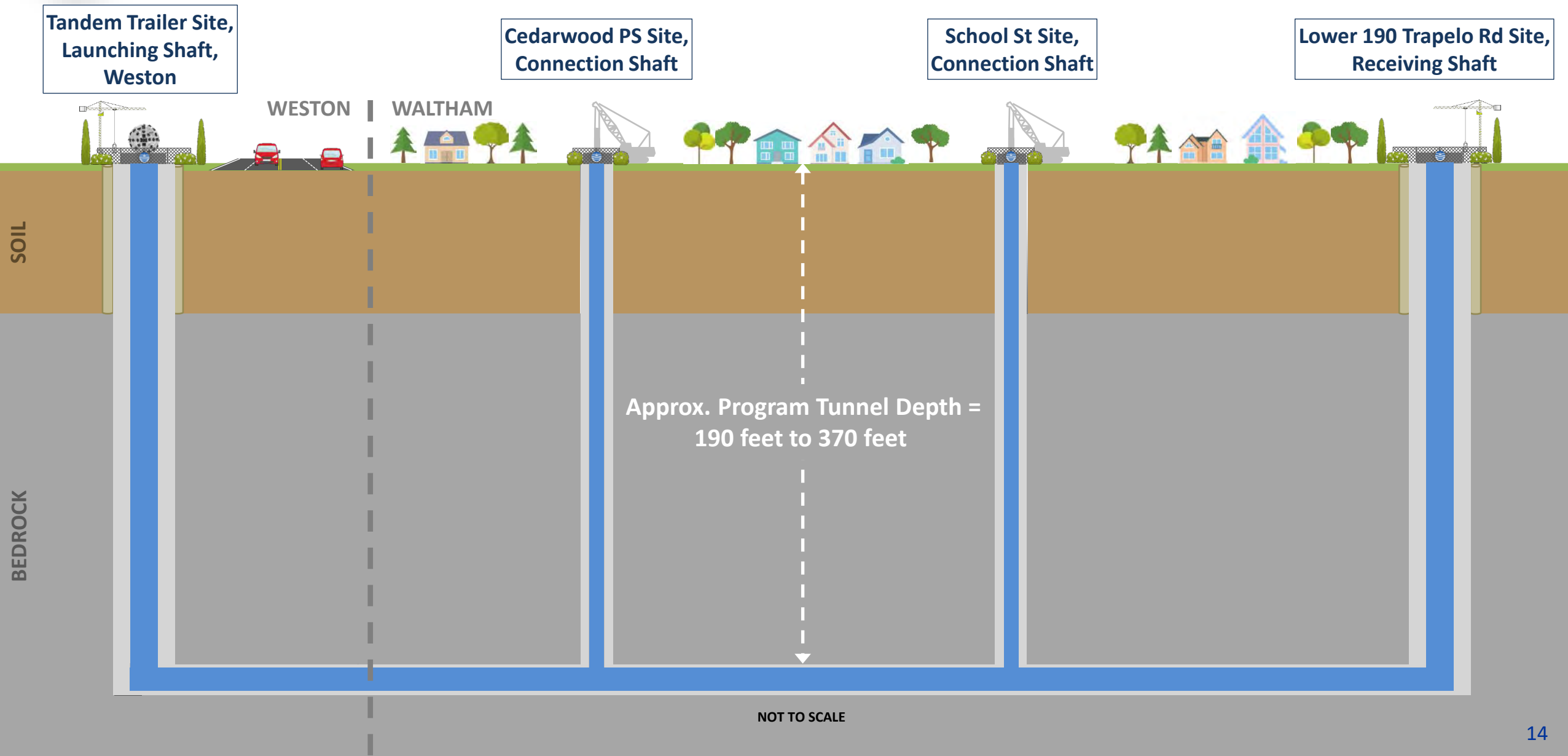
- Met with communities in the study area; established Working Groups with representatives from each community
- Numerous meetings with the 7 communities in which the tunnel will be constructed:
  - City/Town Management, Public Works, Public Safety/Fire, Conservation Commission, etc.
- Multiple meetings with key stakeholders and permit agencies
- Met with numerous organizations, businesses & private property owners to coordinate field work
- Met with several community interest groups
- Established a Website <https://www.mwra.com/mwtp.html> and email address (for questions) [Tunnels.info@mwra.com](mailto:Tunnels.info@mwra.com)
- Created multiple Fact Sheets – available in 4 languages
- Public Information Session held in Feb 2025. Recording is available on the Tunnel Program web site.

**Outreach will continue throughout final design and construction**





# Conceptual Construction Sequence – North Tunnel







# Current Schedule



- Preliminary Design & EIR: 2020 – 2024 **Complete ✓**
- Final Design: 2024 – 2029 **Ongoing**
- TBM Power Supply Construction: 2025 – 2028 **Ongoing**
- Early Enabling Projects Construction: 2026 – 2028
- Land Acquisition: 2021 – 2028 **Ongoing**
  - Shaft sites, pipeline easements, subterranean tunnel easements
- South Tunnel Construction: Start in 2028
- North Tunnel Construction: Start in 2029
- New Tunnel System in Operation: by 2040



# Where to Find Information / How to Contact Us

- Tunnel Program Website: <https://www.mwra.com/mwtp.html>
  - Program Information
  - Reports and other Documents
  - Meeting Agendas, Presentations and Minutes
- Waltham - Notices and Info:  
<https://www.mwra.com/mwtp/resources.html#resources>
- Program email address: [Tunnels.info@mwra.com](mailto:Tunnels.info@mwra.com)
  - Public inquiries and information requests
- Contact Us!
  - Carmine DeMaria, Community Relations Coordinator
  - 617-305-5725
  - [Carmine.DeMaria@mwra.com](mailto:Carmine.DeMaria@mwra.com)







# Metropolitan Water Tunnel Program

**Thank You!**

