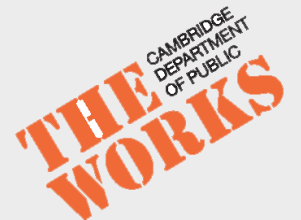


Alewife Sewer Separation Project

Information and Updates



Spring Construction Kick-Off Meeting | March 16, 2017

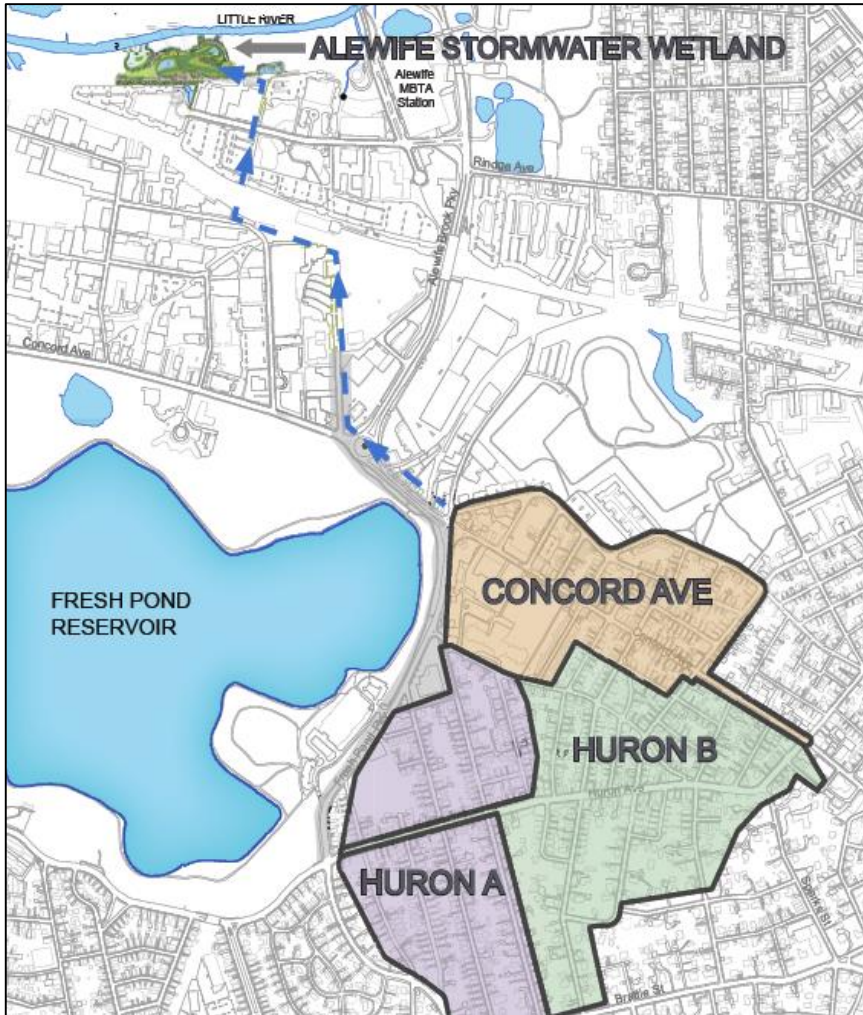


Agenda

Alewife Sewer Separation Project

- **Project Overview**
- **Project Progress**
- **Project Information**
- **Remaining Work**
- **Schedule Update**
- **Next Steps**





Background:

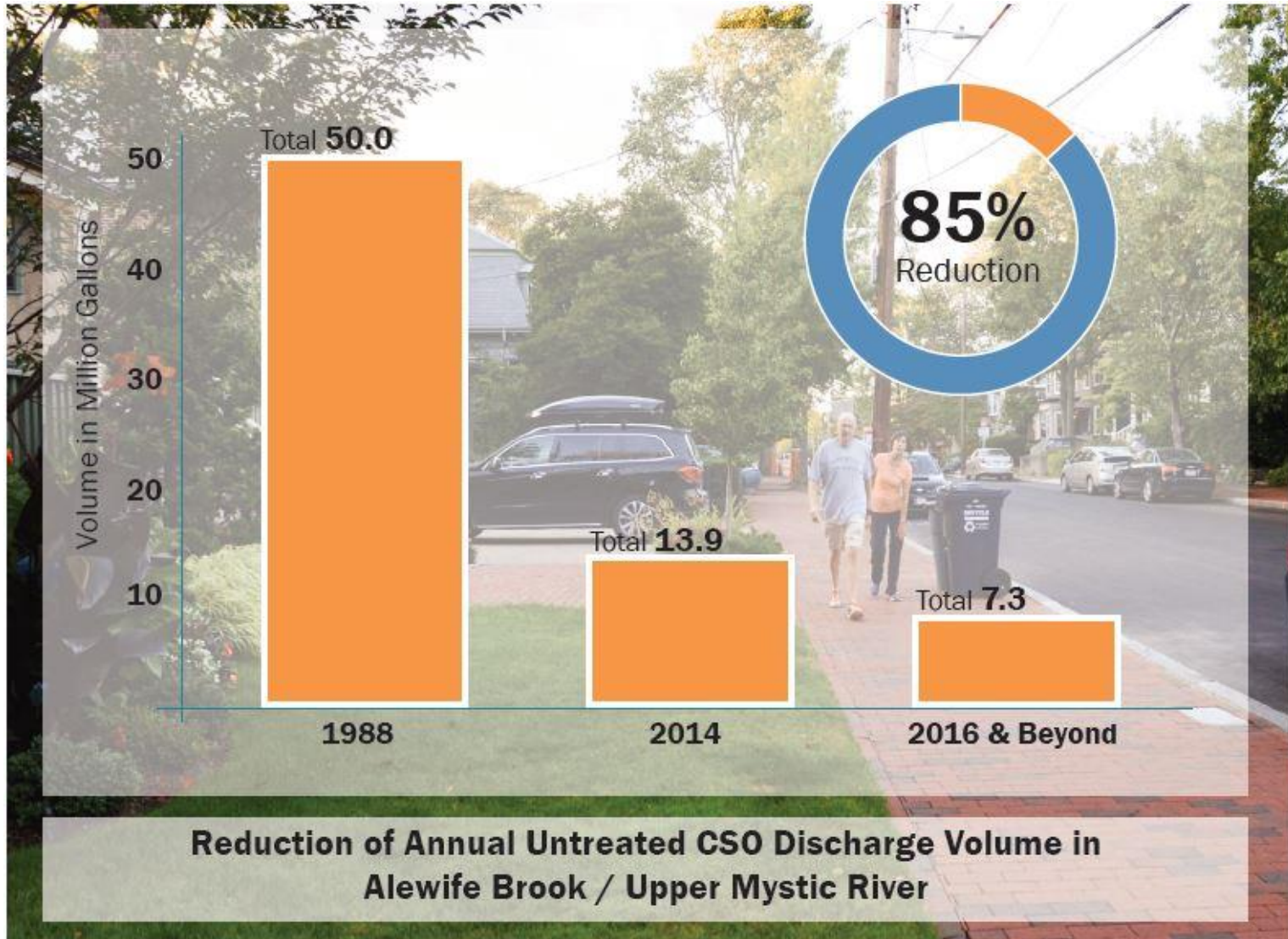
- Federal Court order related to Boston Harbor Cleanup to complete sewer separation by December 2015
 - Parkway and related work completed between 1998 and 2008
 - Construction in neighborhood began 2012
 - Stormwater Wetland completed in 2013

Goals

- Court order to finish sewer separation by December 2015
– **COMPLETE**
 - Significant accomplishment for the City
 - Remove **42.7 million gallons** of combined sewer overflows annually from Huron/Concord neighborhood to Alewife Brook, Mystic River, and Boston Harbor



Goals

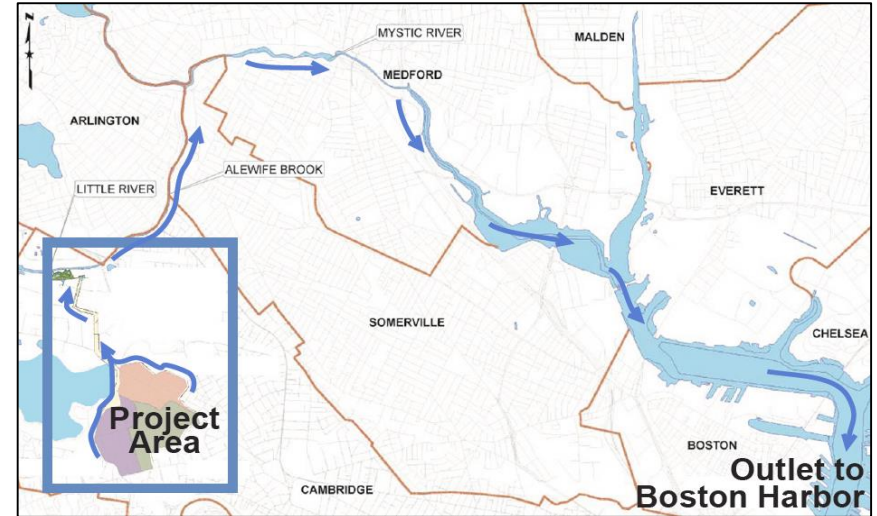


PROJECT OVERVIEW

Goals

“The work of the MWRA and the CSO communities has often been difficult and under a tight schedule, but **every project has now been completed – and on time,**” said Judge Stearns.

“Every man and woman who has worked on any of these projects can take great pride in a job well done, with **results that directly benefit the people, the environment and the economy of the region.**”



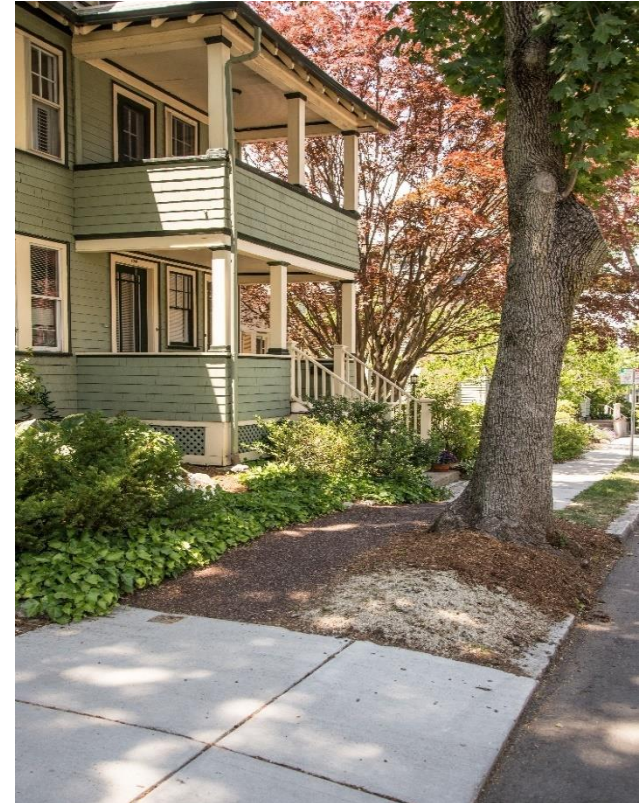
Stormwater Wetland Plan

Utility relocation and replacement



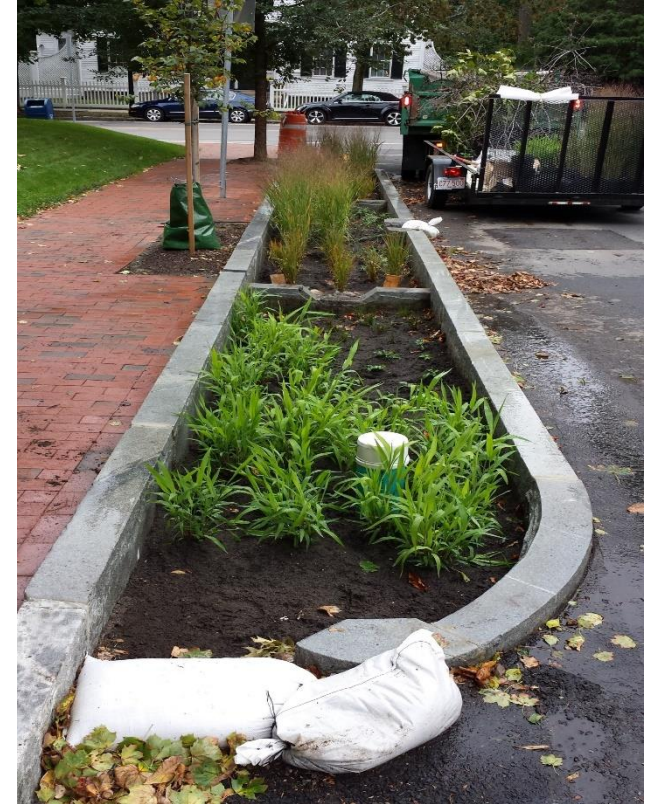
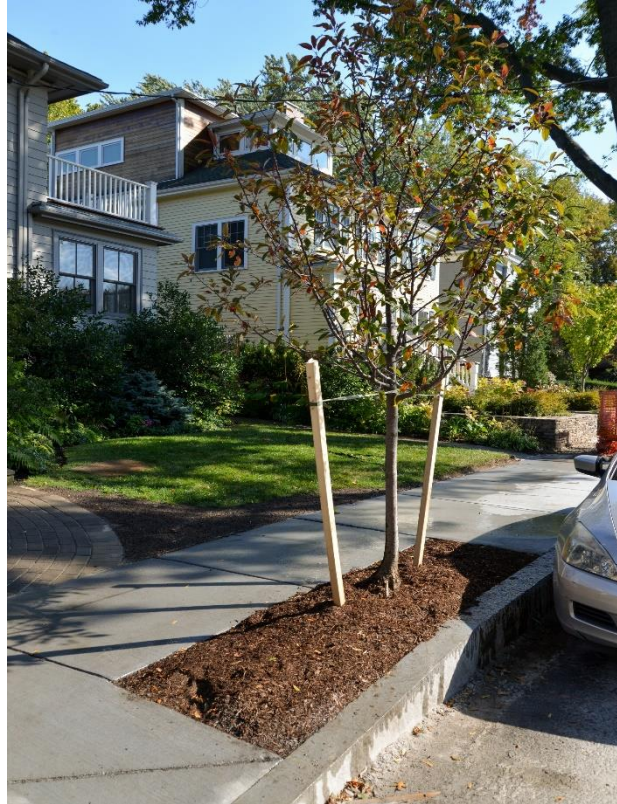
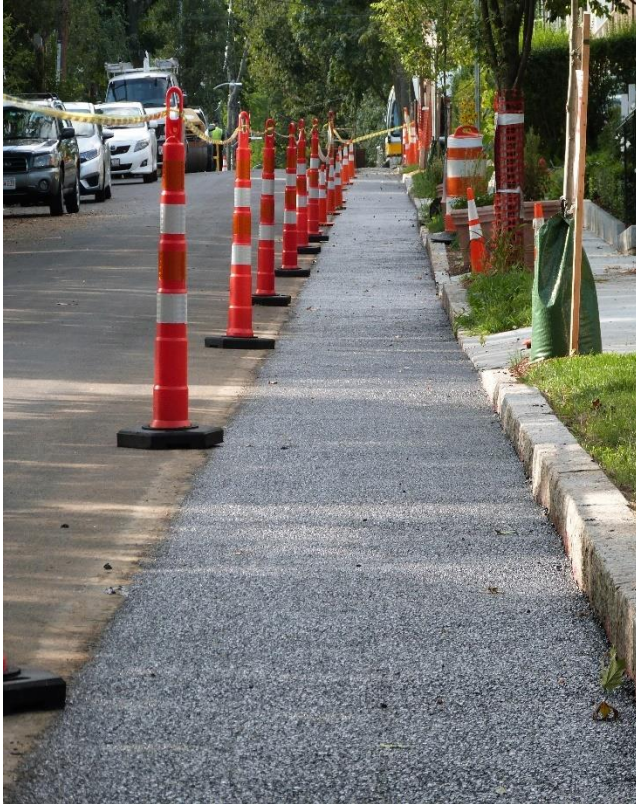
6 miles of both water and gas mains installed

Street and sidewalk restoration and accessibility



15 miles of sidewalk and 150 pedestrian ramps installed

Green infrastructure and plantings



Over 300 additional street trees, 30 new planting areas, 6 biobasins, and approximately 2 miles of porous pavement installed

Completed Construction

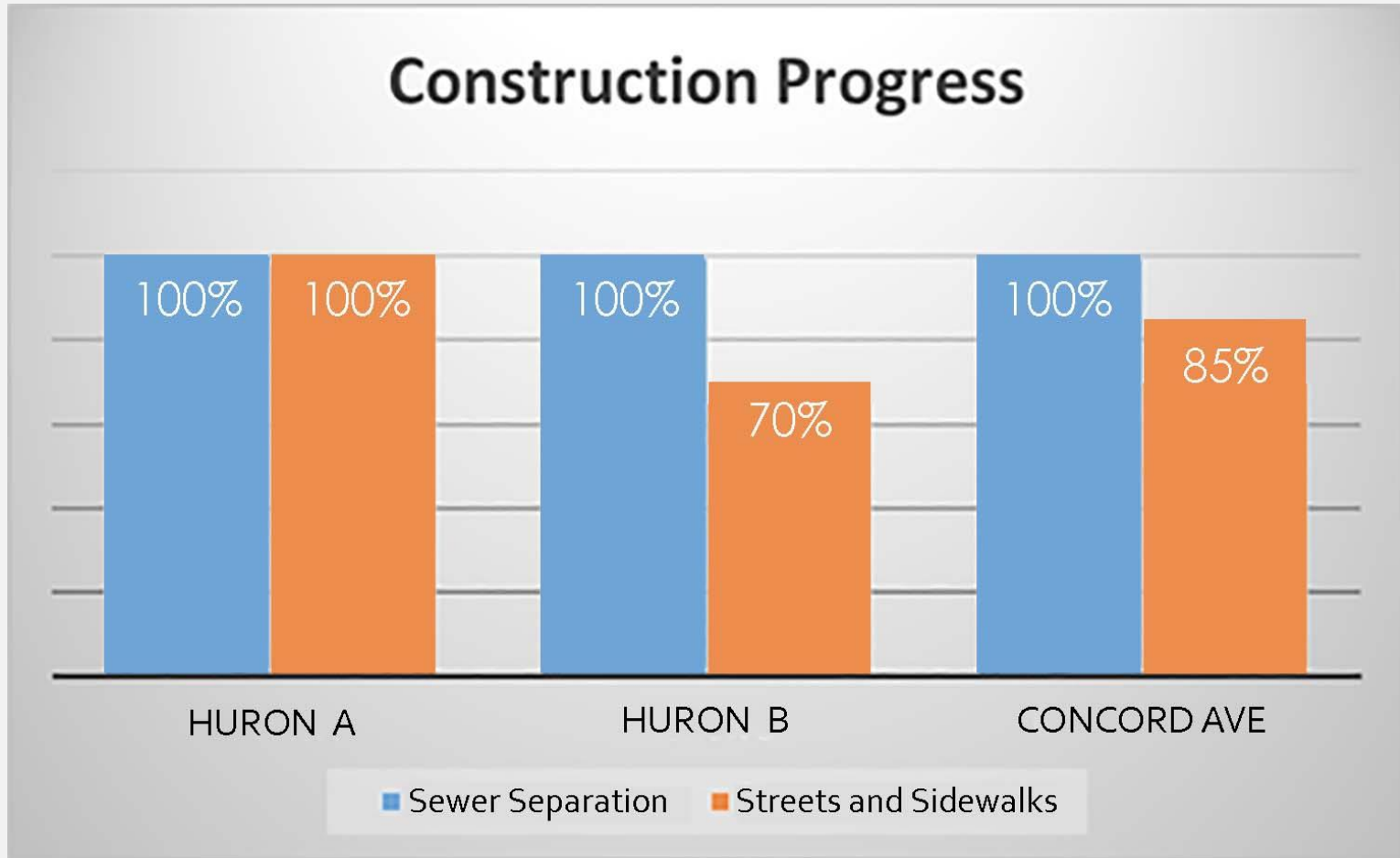


Significant progress on surface improvements, will continue through the end of 2017

Tree plantings and weather sensitive/seasonally-dependent punchlist work will continue into 2018

Extensive construction scheduled to be complete by the end of 2017





Remaining Work



Remaining Work



Project Status – March 2017:

-  Work substantially completed
-  Final paving to be completed
-  Substantial roadway and sidewalks to be completed
-  CAM004 Project Area

Schedule and Cost Changes

Each of the three contracts extended approximately one year from the original schedule.

Huron A:

Contract Start September 2012
 Original Completion December 2014
 Actual Completion November 2015

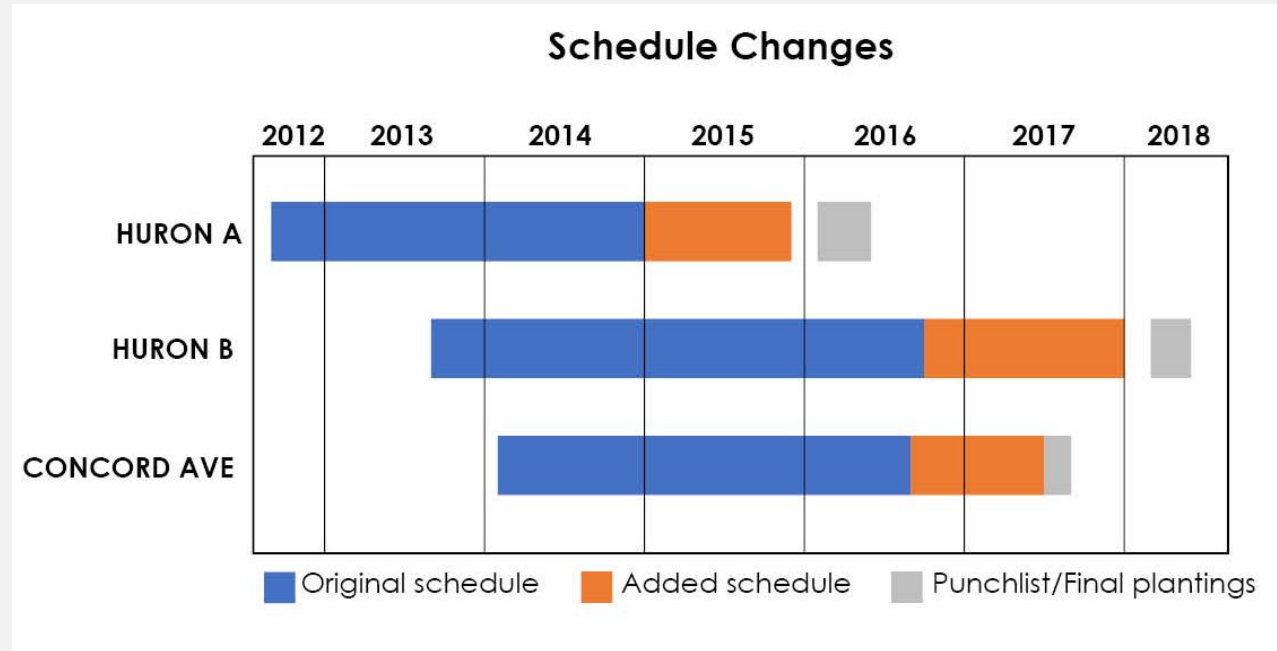
Huron B:

Contract Start September 2013
 Original Completion September 2016
 Actual Completion December 2017*

**Tree plantings and weather dependent punchlist items in 2018.*

Concord Ave:

Contract Start February 2014
 Original Completion August 2016
 Actual Completion August 2017

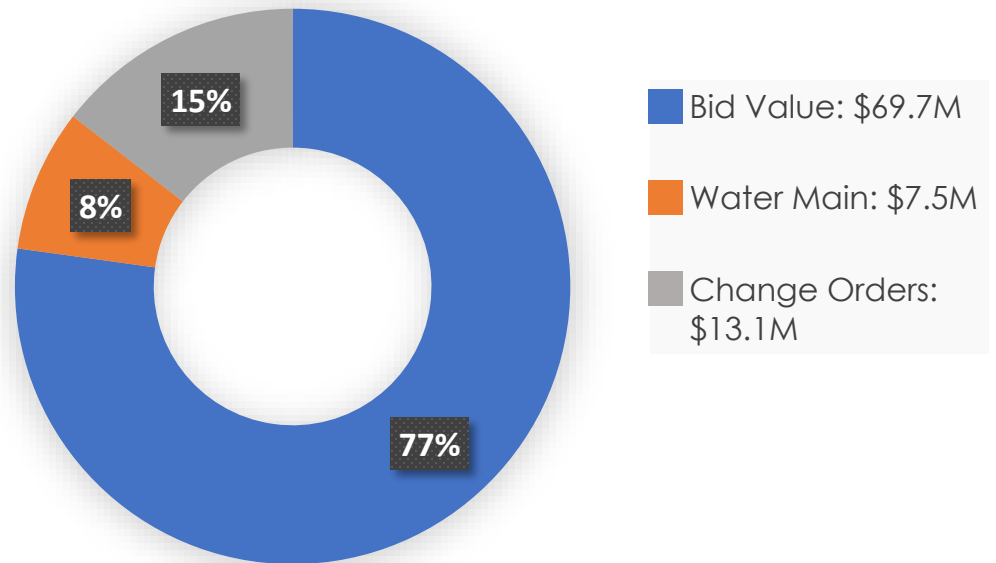


Schedule and Cost Changes

Contract changes

- Overall contract value:
 - Original: \$69.7 million
 - Current: \$90.3 million
- Cost increases:
 - \$7.5 million added to replace 100-year-old 40-inch water transmission main on Huron (FPP to Gurney)

Huron A, Huron B & Concord Ave



Schedule and Cost Changes

Cost and schedule changes are consistent with heavy utility construction in dense urban environments.

Primary sources of cost increases:

- Replacement of 40" water transmission main on Huron Avenue (FPP to Gurney)
- Extensive contract coordination with utilities (3 contracts, private utilities, etc.)
- Season dependent trees and plantings
- Extensive resequencing required for December 2015 sewer separation deadline
- Schedule modifications to reduce impacts on residents and businesses (e.g. limiting Huron Village significant construction during holiday months)



Schedule and Cost Changes

Approximately 50% of the project costs are funded by the MWRA and 50% by the City.

Contract	Bid Value	Huron Ave Water Main	Change Orders	Total Value at Complete
Huron A	\$15,500,000		\$3,900,000	\$19,400,000
Huron B	\$30,000,000	\$7,500,000	\$5,400,000	\$42,900,000
Concord Ave	\$24,200,000		\$3,800,000	\$28,000,000
Totals	\$69,700,000	\$7,500,000	\$13,100,000	\$90,300,000

Upcoming Activity – Huron B

Huron Avenue

- Full depth roadway reconstruction (Lakeview to Reservoir)
- Curbing and sidewalk reconstruction work
- Traffic signals and lighting
- Roadway pavers and raised crosswalks
- Tree plantings and landscaping
- Final paving

Huron Avenue at Appleton Street looking west toward Vassal Plaza



Upcoming Activity – Huron B

Project Wide

- Minor sewer and drain repairs and final paving on Appleton, Fay., and Reservoir.
- Raised crosswalks and raised intersections
- Tree and landscape plantings
- Miscellaneous work items throughout project area



SCHEDULE UPDATE

➡ Upcoming Activity – Concord Ave

Fern Street Artscape



Colored lithocrete for sidewalks

Upcoming Activity – Concord Ave

Project Wide

- Final paving of streets including Concord Avenue and north of Concord
- Miscellaneous curbing/sidewalk
- Bio-basin and plantings
- Added trench drain within sidewalk at Library on Concord Avenue
- Porous paving
- Miscellaneous signage, traffic signals, back of sidewalk restoration, sectional lining/repairs of drains and laterals, cleaning catch basins



Upcoming Activity

Note:

- Punchlist items will follow substantial completion
- Some work is seasonally dependent
- Fall Hazard trees must be planted in the spring, to ensure survival



Red Oak
Quercus rubra

QR
Street Tree - Type I

NEXT STEPS

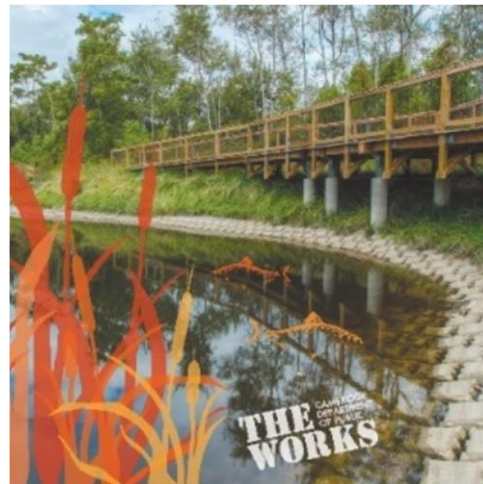
Community Schedule



**Alewife Stormwater
Wetland Tour!**
Saturday, June 10th 10am
(200 Cambridge Park Drive)



Come to Coffee Talk!
Every 1st Thursday, 7-11am
April-August
Sarah's Market (200 Concord)



**End of Concord Ave
Construction Celebration!**
Wednesday, September 13th, 5-7pm
(Fern Street)

NEXT STEPS

Build Cambridge, Buy Local

Support your local businesses during construction!



NEXT STEPS

Contact Information

Huron B

Bruno Cardarelli, Resident Engineer
(617)799-4374

Concord Ave

Mike Smith, Resident Engineer
(857)201-1005 / michael.d.smith@mwhglobal.com

General Project Assistance:

KyAnn Anderson, Community Relations Manager
(617)498-4708 / kanderson@kleinfelder.com



COMMENTS & QUESTIONS?

Huron Avenue Design

Huron Avenue at Appleton looking west toward Vassal Plaza



Huron Avenue Design

Huron Avenue looking east at Gurney Street



Before



After



Huron Avenue Design

Huron Avenue looking west toward Lexington Ave



Before



After

