



# CAMBRIDGE WATER MAIN REPLACEMENT PROJECTS 2025

*Rich Holly*

*Director of Engineering & Distribution*

# Why replace water mains:

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- Aging Infrastructure
- Leakage History
- Improve Fire Flow Capacity
- Improve Water Quality
- Support both current and future developments





# DPW Projects

Chapter 90 Contract 25

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## **Maple Ave**

- ~1500' of new 8" Ductile Iron Pipe (DIP) replaced by CWD crews(2018)
- 3 new fire hydrants (*Hydrant flows went from 900GPM to 1900GPM*)
- Newport Construction(2025)
  - Relocated two hydrants for new crosswalks and replaced ten **lead services**

## **Montgomery St**

- Reconnected all services from old 6"(1870) Cast Iron(CI) main to 12"(1933) Cleaned and Lined Cast Iron(CICI) main(CWD crews 2017)
- Newport Construction(2025) – relocated 2 fire hydrants to accommodate raised crosswalks
- Replaced seven lead services
- Hydrant flow average went from 965 GPM to 1600 GPM

# Chapter 90

## Contract 25

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### **Dana St** (*Cambridge St to Mass Ave*)

- ~2200 feet of 10" CAST IRON(1896) pipe to be replaced with 8" Ductile Iron pipe.
- Hydraulic modeling shows that the "C" value(smoothness of pipe) is equal in flow rates.
- Saving in the overall cost of installation





# Chapter 90

## Contract 25

- **Sciarappa St**
  - 2000' of 8" DIP to replace the current 6" cast iron dating 1896.
  - Current fire flows are consistently below 750GPM. Estimated flows should be +/- 2000GPM when completed.
  - Replace 22 **lead services** in the system.

## Mass Ave Partial Construction Phase 1A Contract

- Various Intersections(Linnaean St, Wendell St, Shepard St & Jarvis St)
  - New water main work ranging in size from 8” – 20” to be installed outside the limits of the “floating” Bus Stop Areas
  - ~1900 total CI pipe to be replaced.
  - Fire flows greatly increased throughout the scope of work.
  - Supports both current and future retail stores and homes.
  - 6” - 1895 to 1898
  - 12” - 1895



# Future DPW Projects Out To Bid In 2025

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**Avon Hill St – CWD completed in 2021(~1300 feet)**

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**Hillside Ave – 400' of 6"(1871) CI replaced with 8" DIP**

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**Chetwynd Rd - 200' of 6"(1927) CI replaced with 8" DIP**

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**Gray St - 200' of 6"(1887) CI replaced with 8" DIP**

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**Kirkland Rd - 250' of 6"(1870) CI replaced with 8" DIP**

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**Norfolk St - 1500' of 6"(1899) CI replaced with 8" DIP(Cambridge St to Somerville line/ Hampshire St to Broadway)**

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**Haskell St - 700' of 6"(1891) CI replaced with 8" DIP(currently being done by CWD in-house contractor JNJ Sacca)**







## How does all this work compare.....?

- ~1.28 miles of new water main projected to be installed in 2025
- You would have to walk the John W. Weeks Bridge (Harvard) end to end 3.5 times to equal 1.28 miles



Any  
questions?