





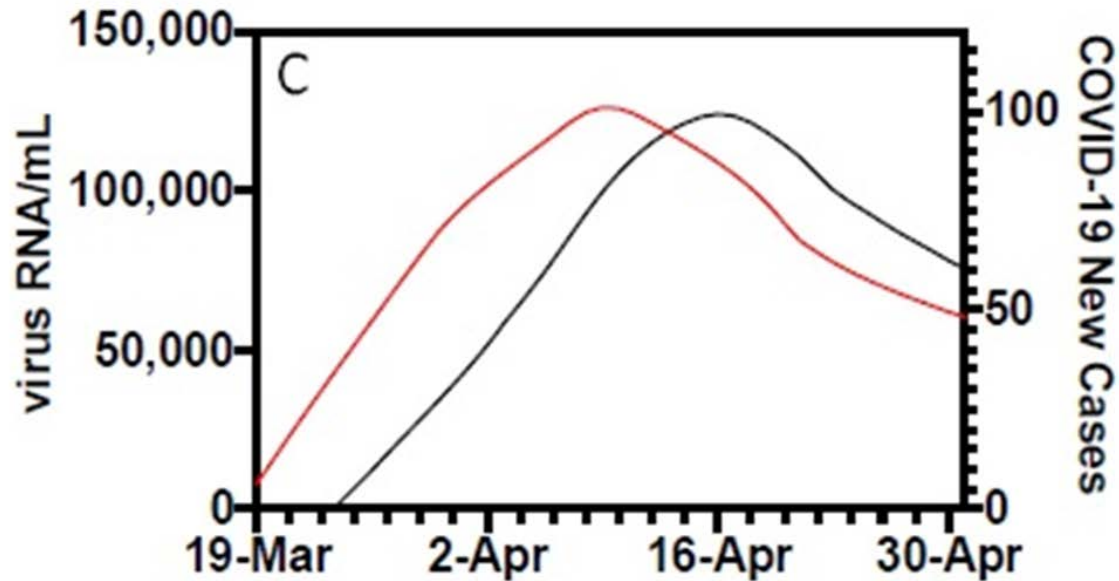
***Early Warning Pilot for the
Resurgence of COVID-19
Biobot***

June 24, 2020



Yale Study: COVID Signal Shows Up 7 Days Before Confirmed Cases

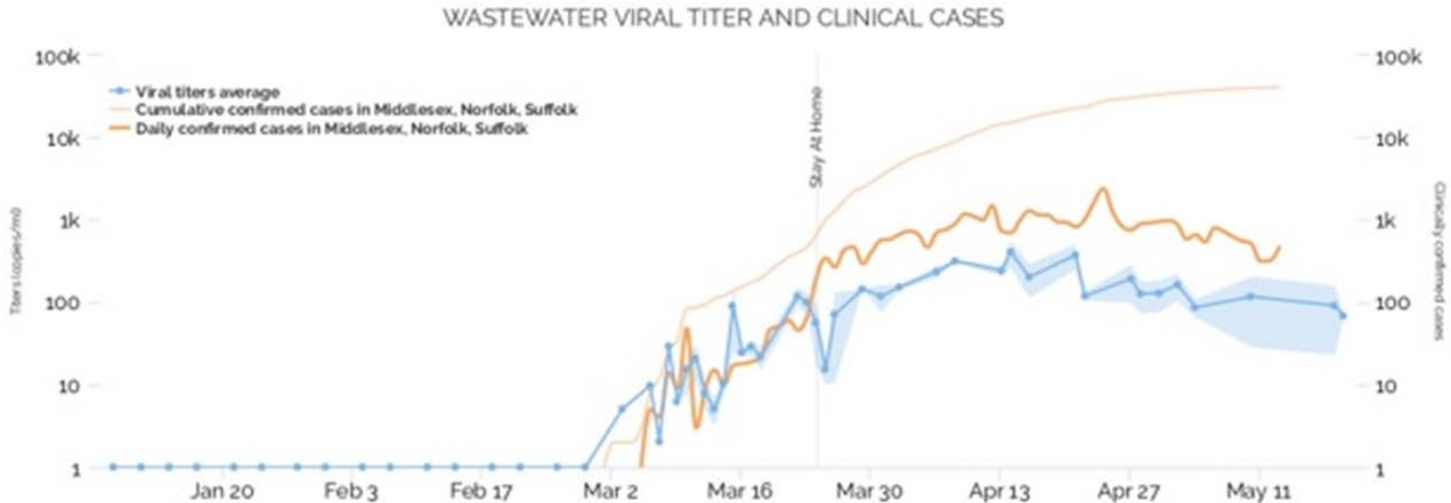
- COVID signal (red) in sludge parallels hospital admissions and precedes confirmed case (black) reports by ~7 days





Timeline of MWRA/Biobot Data Through May 18, 2020

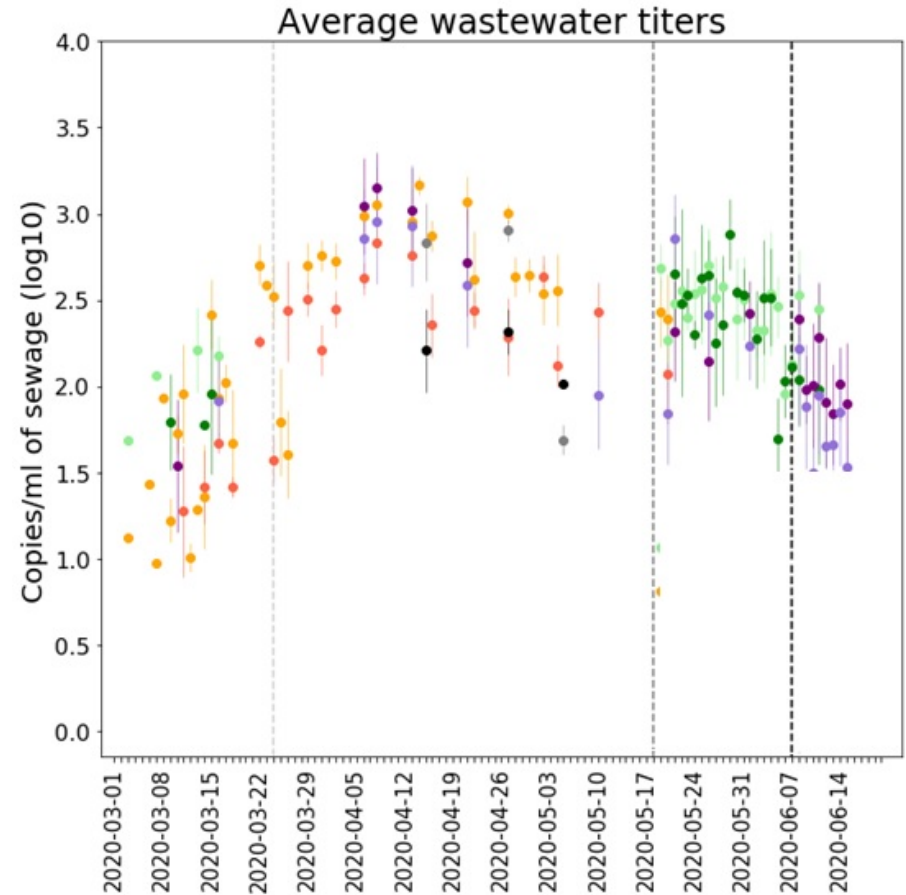
- Detected in early March
- Rapid increase paralleled rapid case growth
- Signal flattened with increased distancing





Latest Data

- Raw data from Deer Island
- Last weeks data shows continued downward trend
- This includes samples after phase one re-opening phase one, and after demonstrations





Sole Source Contract

- Proposed pilot program:
 - Samples 3 times per week from Deer Island
 - Through December 2020
 - Up to 40 upstream samples if necessary
 - Only pay for the samples we submit
- Six month contract not to exceed \$200,000
- Provides continuity during the ongoing emergency
- Competitive procurement in fall to allow overlap/comparison of data



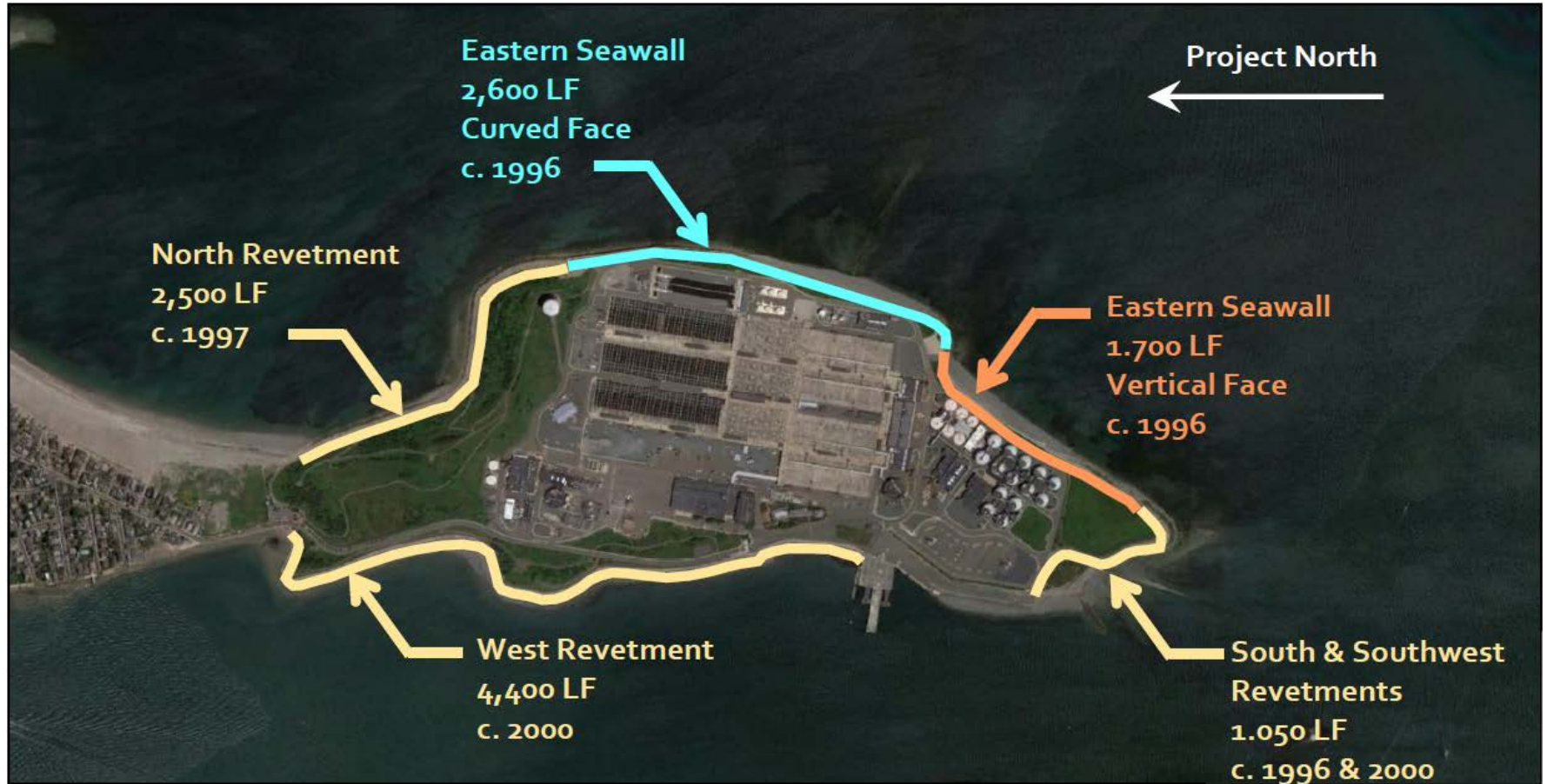


***Deer Island Eastern Seawall and Shoreline Protection
Design, ESDC and RE Services
Contract 6723, Green International Affiliates***

June 24, 2020



Deer Island Eastern Seawall and Shoreline Protection Remediation



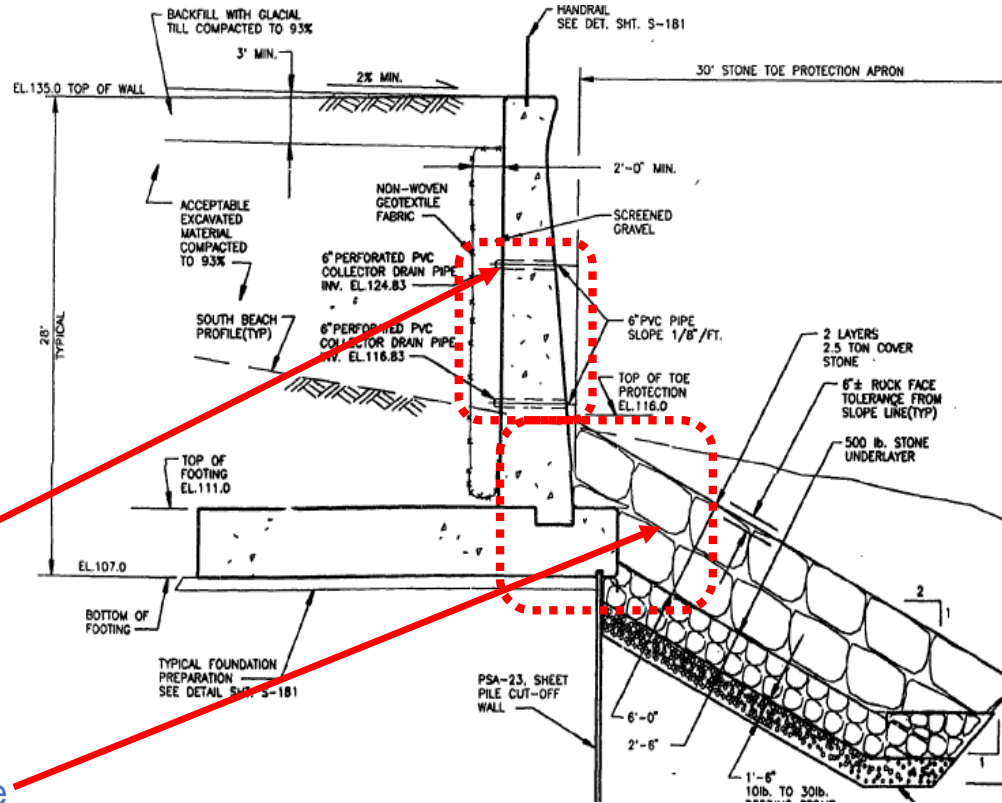


Deer Island Eastern Seawall and Shoreline Protection Remediation

Typical Seawall Section
(Vertical Face)

Drainage systems

Stone base





Concrete Deterioration



- Concrete deterioration and exposed reinforcing steel



Concrete Deterioration



- Concrete deterioration and exposed reinforcing steel



Other Damage



- Damage at top of seawall





***Interceptor Renewal No. 7
Malden-Melrose, Sections 41/42/49/54/65
Contract 7216, Kleinfelder, Inc.***

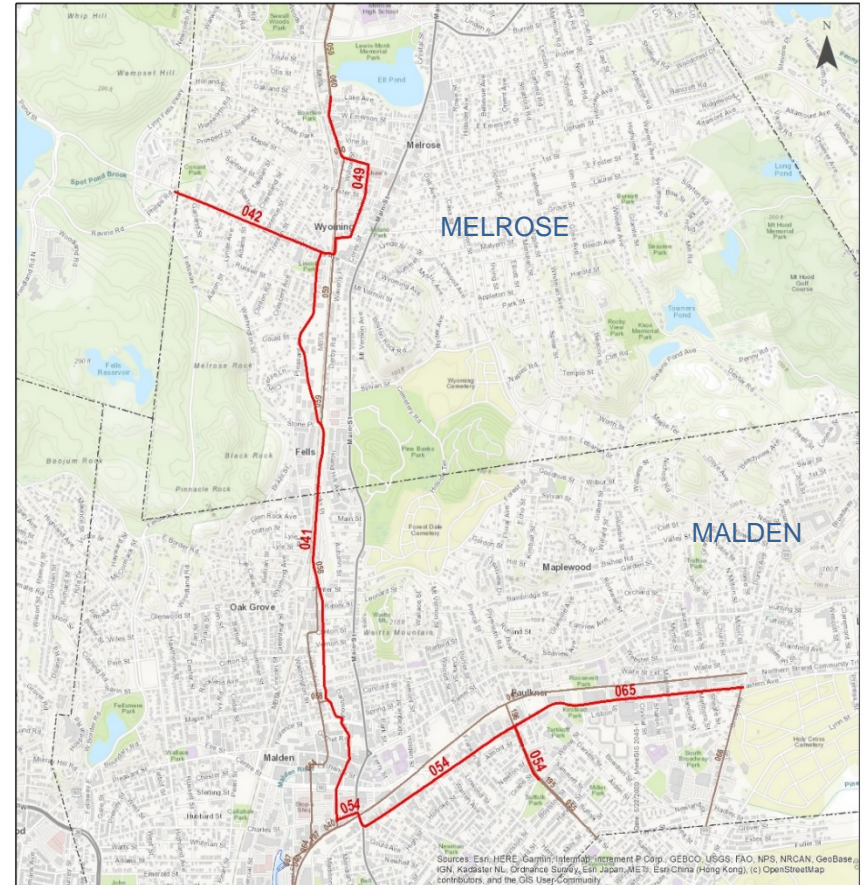
June 24, 2020



Site Map

Section	Length	Size/Material *
Section 41	10,805 LF	20"x30" Oval Brick
Section 42	3,049 LF	12" Round VC
Section 49	3,888 LF	18" Round Brick
Section 54	4,131 LF	36" Round Brick
Section 65	4,499 LF	30" Round Brick
TOTAL	26,372 LF	

* Average Diameter of Sewer Section





Procurement Process and Project Cost

Proposer	Rank	Cost	Hours
Kleinfelder Northeast, Inc.	1	\$2,559,330	16,748 hours
Hazen and Sawyer, P.C.	2	\$2,413,621	15,036 hours
Arcadis U.S., Inc.	3	\$2,326,952	12,743 hours
Jacobs Engineering	4	\$2,801,213	20,391 hours
Weston & Sampson	5	\$1,807,514	11,743 hours
Engineer's Estimate		\$2,735,000	15,330 hours

- One step RFQ/P
- Selection Committee recommends Kleinfelder Northeast Inc.



Project Schedule

Item	Start Date	Duration	End Date
Design	July 2020	30 Months	December 2022
Construction (ESDC)	January 2023	30 Months	July 2025
Warranty	July 2025	12 Months	July 2026
Total Contract Period 72 Months			





***Chelsea Creek Headworks Upgrade
BHD/BEC JV 2015
Contract 7161, Change Order 38***

June 24, 2020



Channel 3 Functional Testing Underway





Grit Collector Chain Replacement





Odor Control Room Topping Slab





Odor Control Room Topping Slab



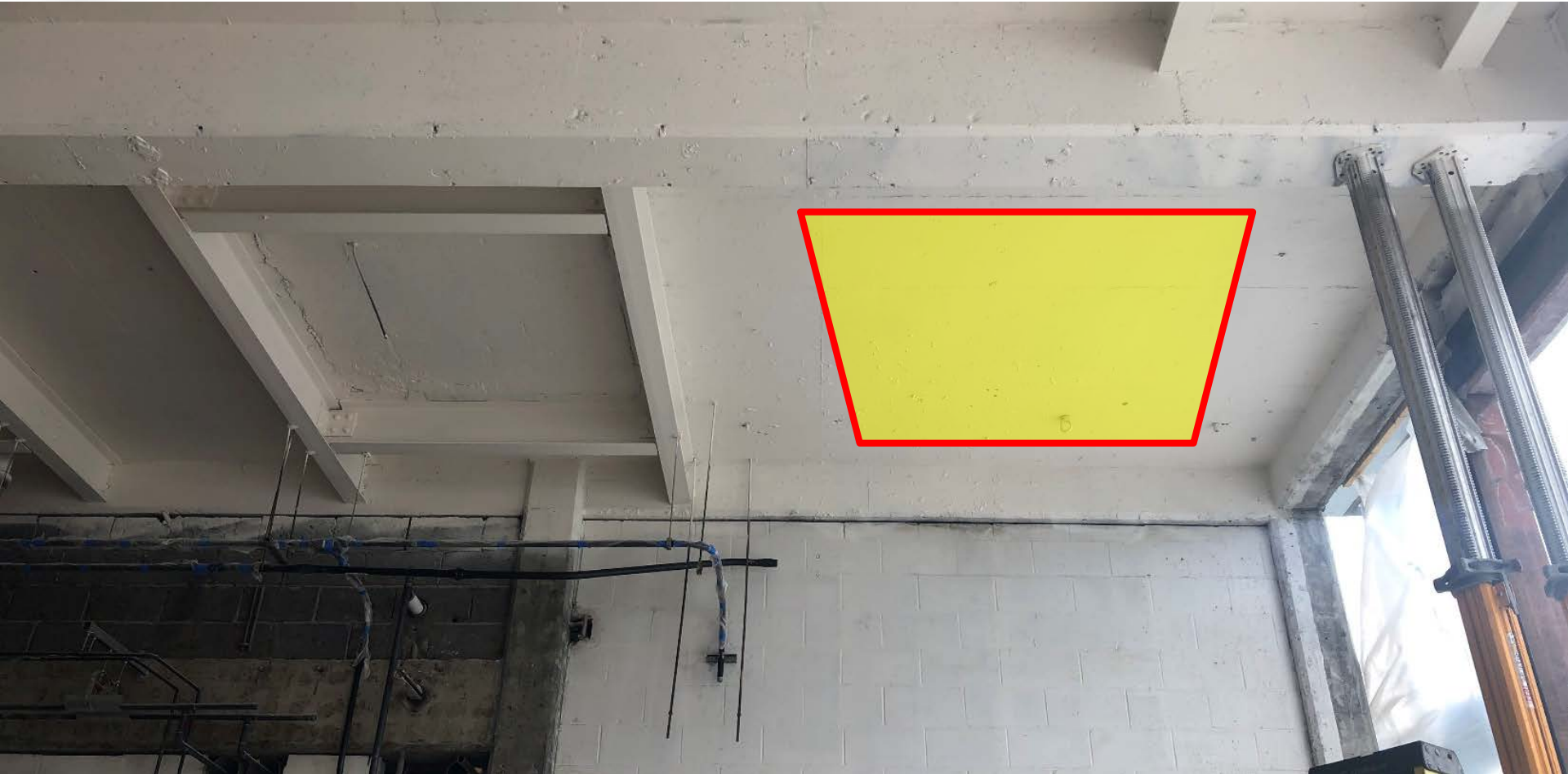


Odor Control Room Floor Penetrations





Odor Control Room Roof Penetration





Stop Log Covers





Freight Elevator Ventilation







***Rivers School
Admission to the MWRA Wastewater System***

June 24, 2020



Rivers School – Weston and Natick

