



The Metropolitan District
water supply · environmental services · geographic information

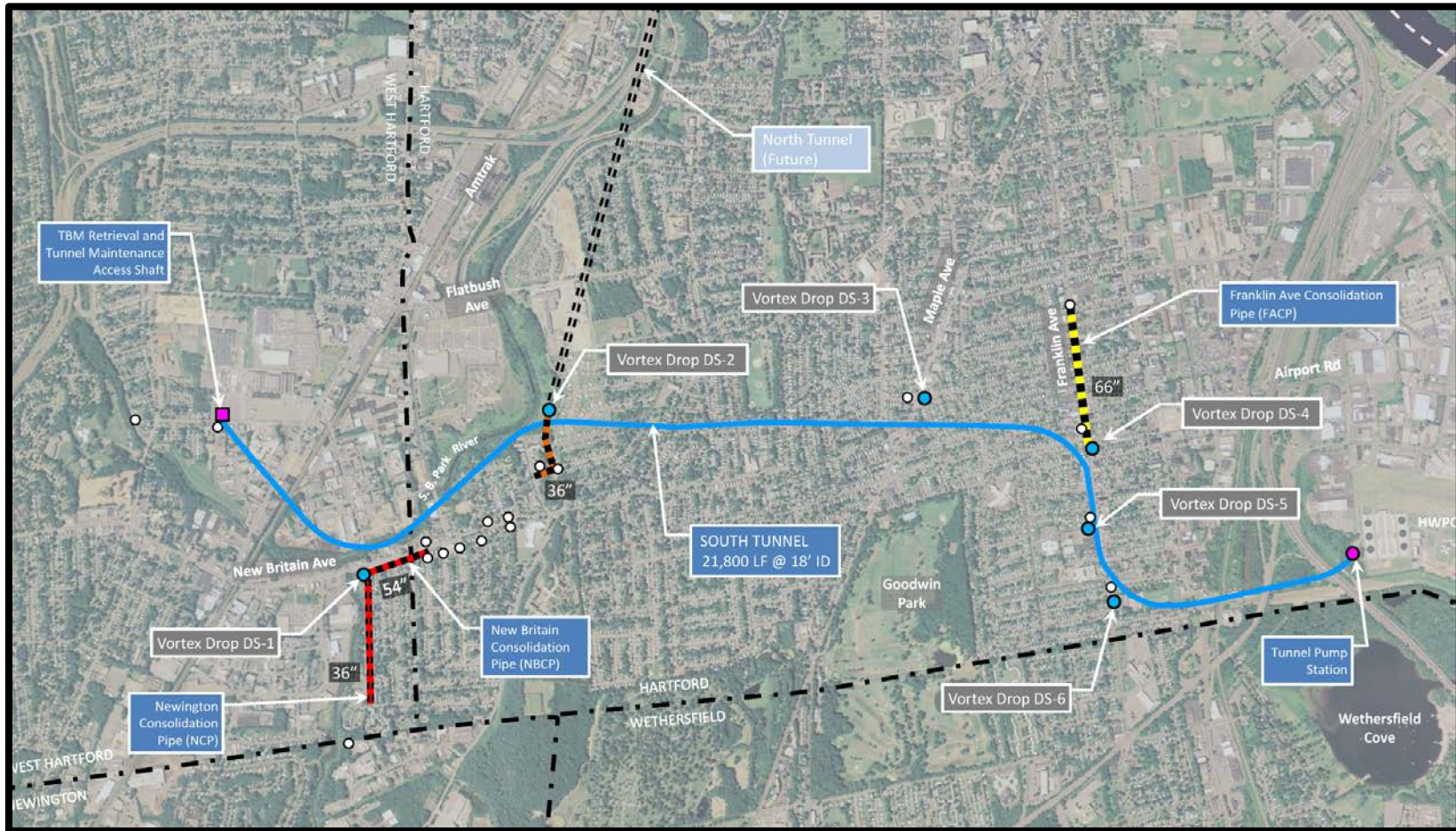
**BUREAU OF PUBLIC WORKS
REGULAR MEETING
WEDNESDAY, SEPTEMBER 30, 2020
5:00 PM**

<u>Location</u>	<u>Commissioners</u>	
Board Room	Adil	Magnan
District Headquarters	Avedisian	Marotta
555 Main Street, Hartford	Bush	Pane
	Currey	Patel
	DiBella (Ex-Officio)	Sweezy
	Healy	Taylor
	Hoffman (VC)	Torres
	Lester	Vicino (C)
		Woulfe
	Quorum: 9	

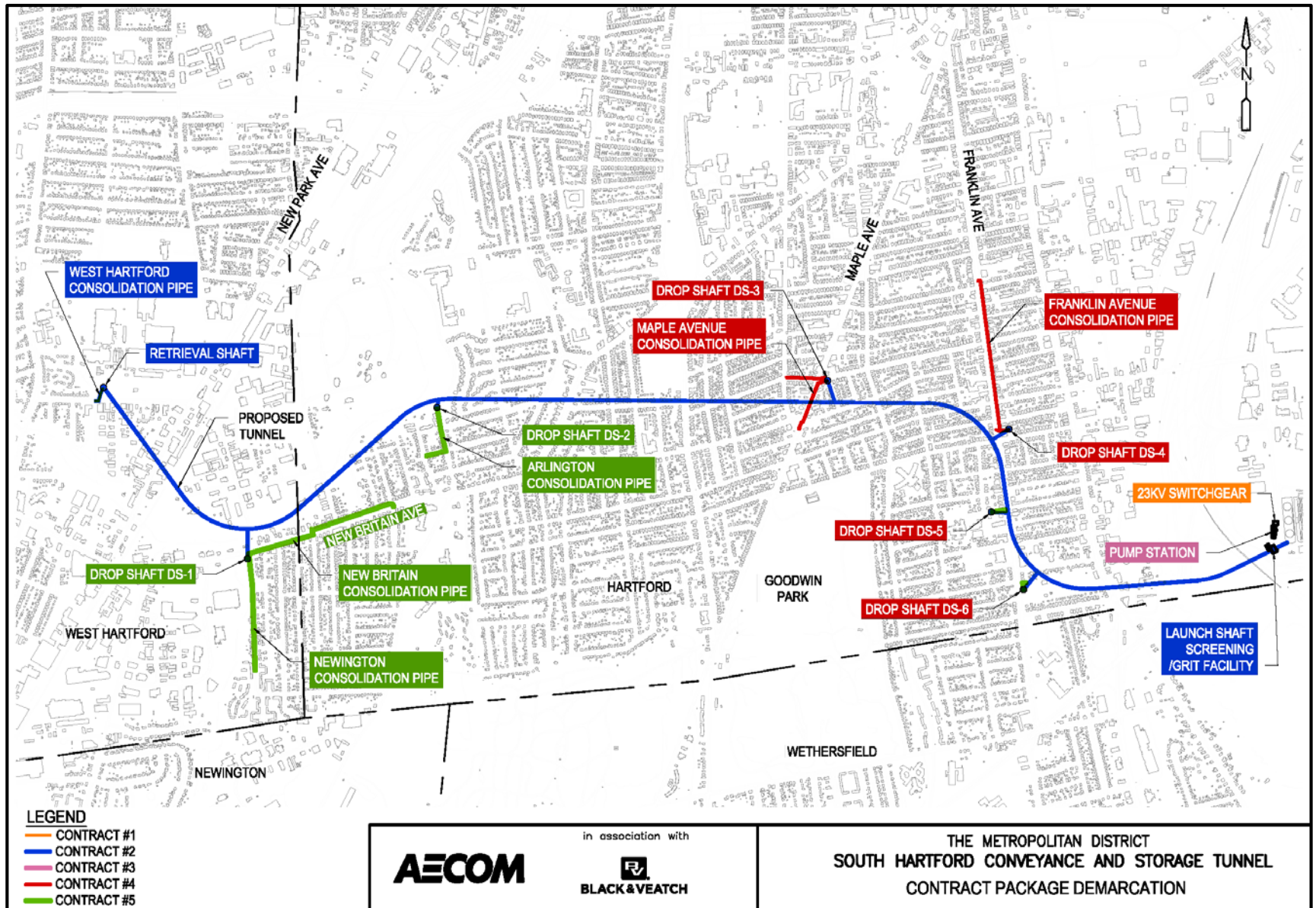
1. CALL TO ORDER
2. PUBLIC COMMENTS RELATIVE TO AGENDA ITEMS
3. APPROVAL OF MEETING MINUTES OF APRIL 28, 2020
4. REPORT RE: SOUTH HARTFORD CONVEYANCE & STORAGE TUNNEL
5. DISCUSSION RE: MISCELLANEOUS INDUSTRIAL USER GENERAL PERMIT
6. DISCUSSION RE: BERLIN WATER CONTROL DEPARTMENT
7. CONSIDERATION AND POTENTIAL ACTION RE: SEWAGE SLUDGE INCINERATORS NEW SOURCE PERFORMANCE STANDARDS (POSSIBLE EXECUTIVE SESSION)
8. OPPORTUNITY FOR GENERAL PUBLIC COMMENTS
9. COMMISSIONER COMMENTS & QUESTIONS
10. ADJOURNMENT



South Hartford Conveyance and Storage Tunnel – *Project Update: September 30, 2020*



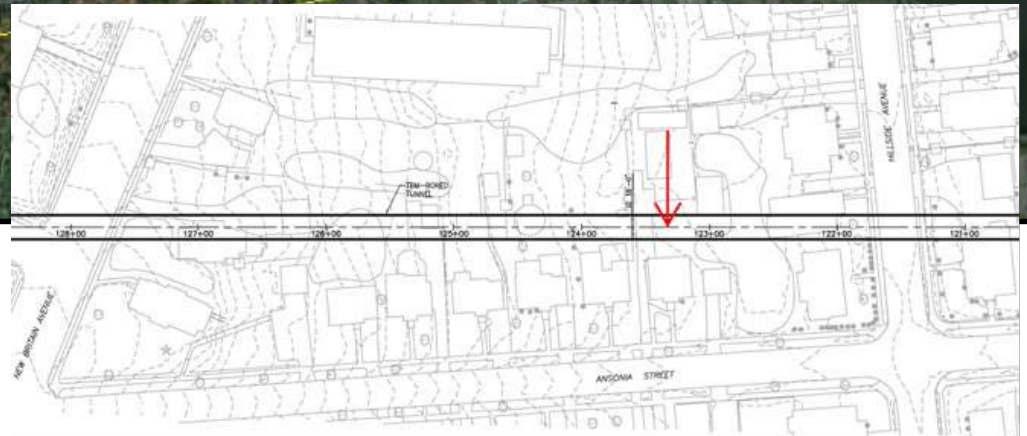
Contract Packaging



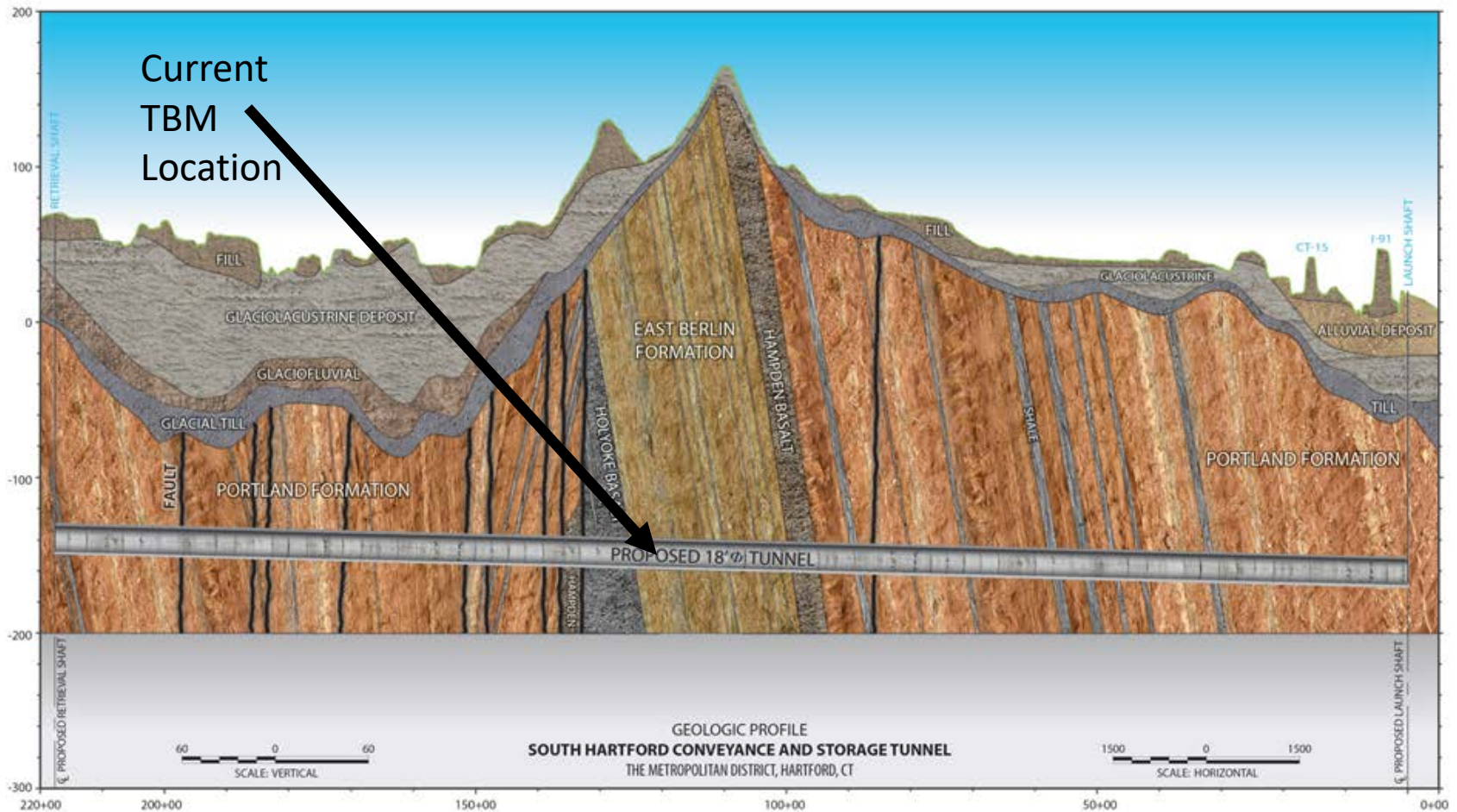
Project Overview



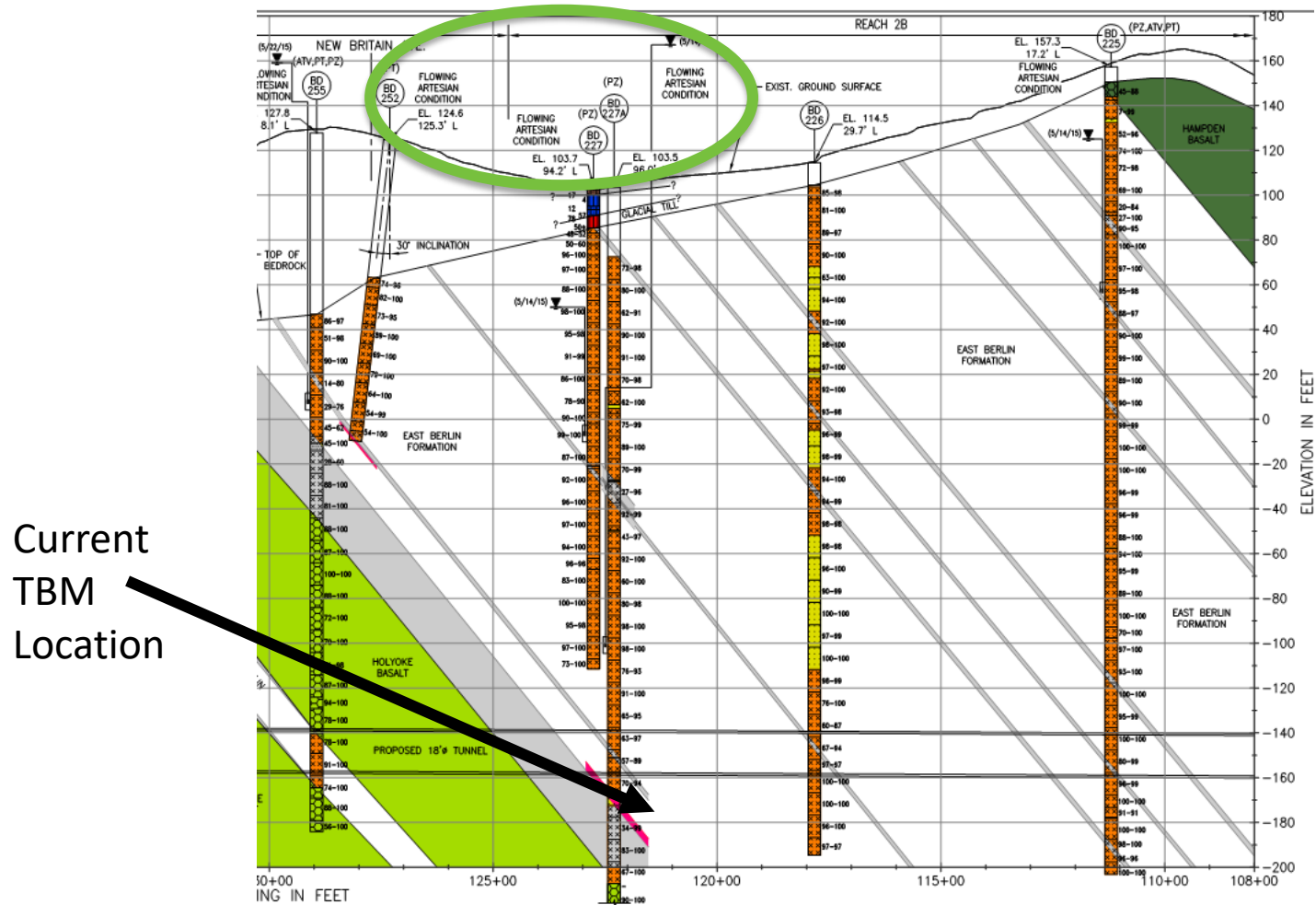
- 4 miles long, 18 ft diameter
- 7,300 feet of consolidation conduits
- Deep circular shaft pump station
- ★ Current Location of Iris



General Geologic Profile

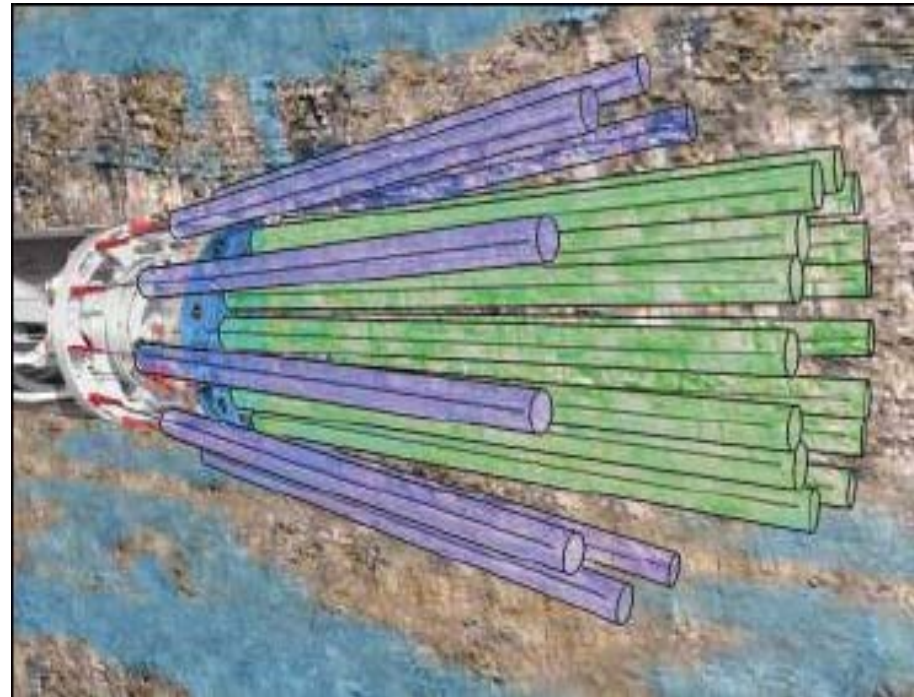
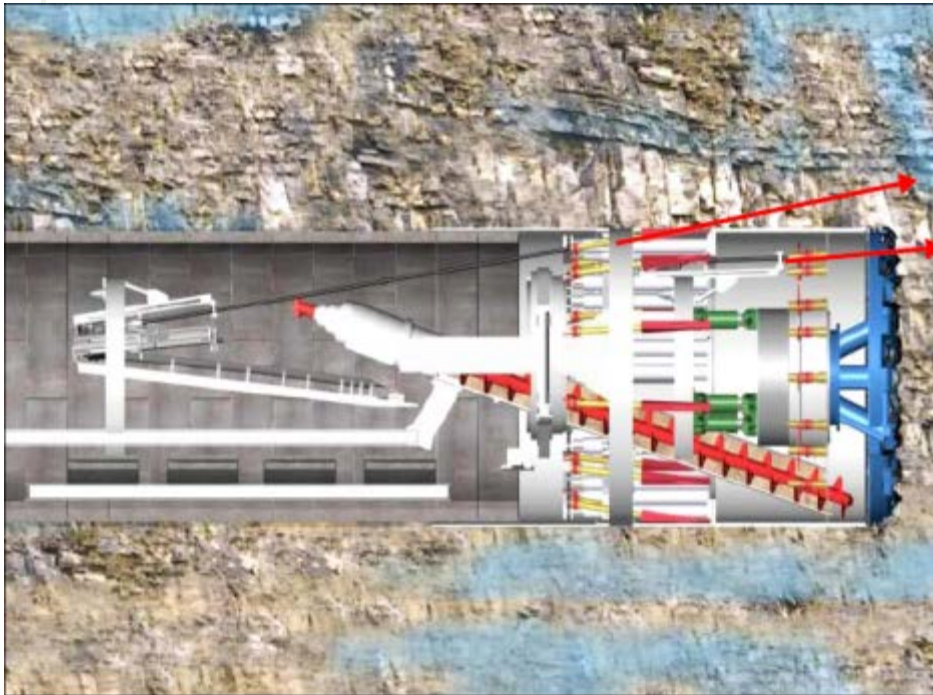


Profile in current area



Risk Management Approach

- Geotechnical investigation program identified this area to have potential for high water pressures and inflows
- Requirement for probing and grouting (if required) ahead of machine prior to mining



Contract 2 Status

- Tunnel
 - TBM went underground late summer 2018.
 - Tunnel length excavated through September 11, 2020: 11,840 feet.
 - 9,418 feet remaining.
 - Scheduled completion of mining: August 21, 2021
- Pump Station Shaft
 - Excavation completed fall 2018
 - Concrete liner pours completed; remedial grouting & patching ongoing
 - Estimated Completion: October 2020
 - Pump Station Completion Milestone Date July 27, 2019
- Retrieval Shaft
 - Shaft completed in June 2020.
 - 32' in diameter and 218' deep.
 - Odor Control Building and shallow utilities currently under construction.
 - Completion and final restoration scheduled for May 2022.
- Drop Shafts
 - All work complete

Contract 2 – Contractual Milestone Status

09/22/2020

Milestone	Description	Contractual	KOJV Update #47	CM Analysis
3	Tunnel Pump Station Shaft Complete	7/27/19	9/3/20	4/30/21
4	Launch Shaft Complete	8/9/20	9/24/21	2/9/22
5	Odor Control Facility Work Complete	3/13/22	5/25/22	12/13/22

Contract 2 Status

CONTRACT COMPLETION DATE:
MAY 2022

Contract Value: \$279,400,000

- Change Order total to date: \$6.6 M due to tunnel crew hour and grout exceedances
- Proposed Differing Site Condition in Reach 1 – will be referred to DRB

Cost

A horizontal progress bar for Cost. The bar is divided into two segments: a green segment on the left representing 77% completion, and a blue segment on the right representing the remaining 23%. The text "77% Complete" is centered within the green segment.

77%
Complete

Time

A horizontal progress bar for Time. The bar is divided into two segments: a green segment on the left representing 72% completion, and a blue segment on the right representing the remaining 28%. The text "72% Complete" is centered within the green segment.

72% Complete

Status as of September 14, 2020

Dispute Resolution Board (DRB)

- Standard process in large underground construction projects
- Independent panel of experts chosen jointly by MDC and contractor
- DRB has been meeting regularly with project team throughout project to stay informed of progress and issues
- Parties can bring unresolved disputes to DRB through a hearing process
- DRB offers recommendation for resolution of dispute

Retrieval Shaft and Air Treatment Building – Sept. 2020



KENNY/OBAYASHI IV, A JOINT VENTURE
SOUTH HARTFORD CONVEYANCE AND STORAGE TUNNEL
CONTRACT 2015-B27
VIEW: RETRIEVAL SHAFT AREA > W
PHOTO: 12545.049.001 DATE: 8/19/2020

PROGRESS PHOTOGRAPH

BERNSTEIN ASSOCIATES PHOTOGRAPHERS

Retrieval Shaft Site (Air Treatment Building) – Sept. 2020



KENNY/OBAYASHI JV, A JOINT VENTURE
SOUTH HARTFORD CONVEYANCE AND STORAGE TUNNEL
CONTRACT 2015-827
VIEW: RETRIEVAL SHAFT AREA > SE
PHOTO:12545.049.010 DATE: 8/19/2020

PROGRESS PHOTOGRAPH

BERNSTEIN ASSOCIATES PHOTOGRAPHERS

Retrieval Shaft Site (Air Treatment Building) – Sept. 2020



KENNY/OBAYASHI JV, A JOINT VENTURE
SOUTH HARTFORD CONVEYANCE AND STORAGE TUNNEL
CONTRACT 2015-B27
VIEW: RETRIEVAL SHAFT AREA > SE
PHOTO:12545.049.018 DATE: 8/19/2020

PROGRESS PHOTOGRAPH

BERNSTEIN ASSOCIATES PHOTOGRAPHERS

Pump Station Shaft – September 2020



KENNY/OBAYASHI IV, A JOINT VENTURE
SOUTH HARTFORD CONVEYANCE AND STORAGE TUNNEL
CONTRACT 2015-B27
VIEW: LAUNCH SHAFT > S
PHOTO:12545.049.020 DATE: 8/19/2020

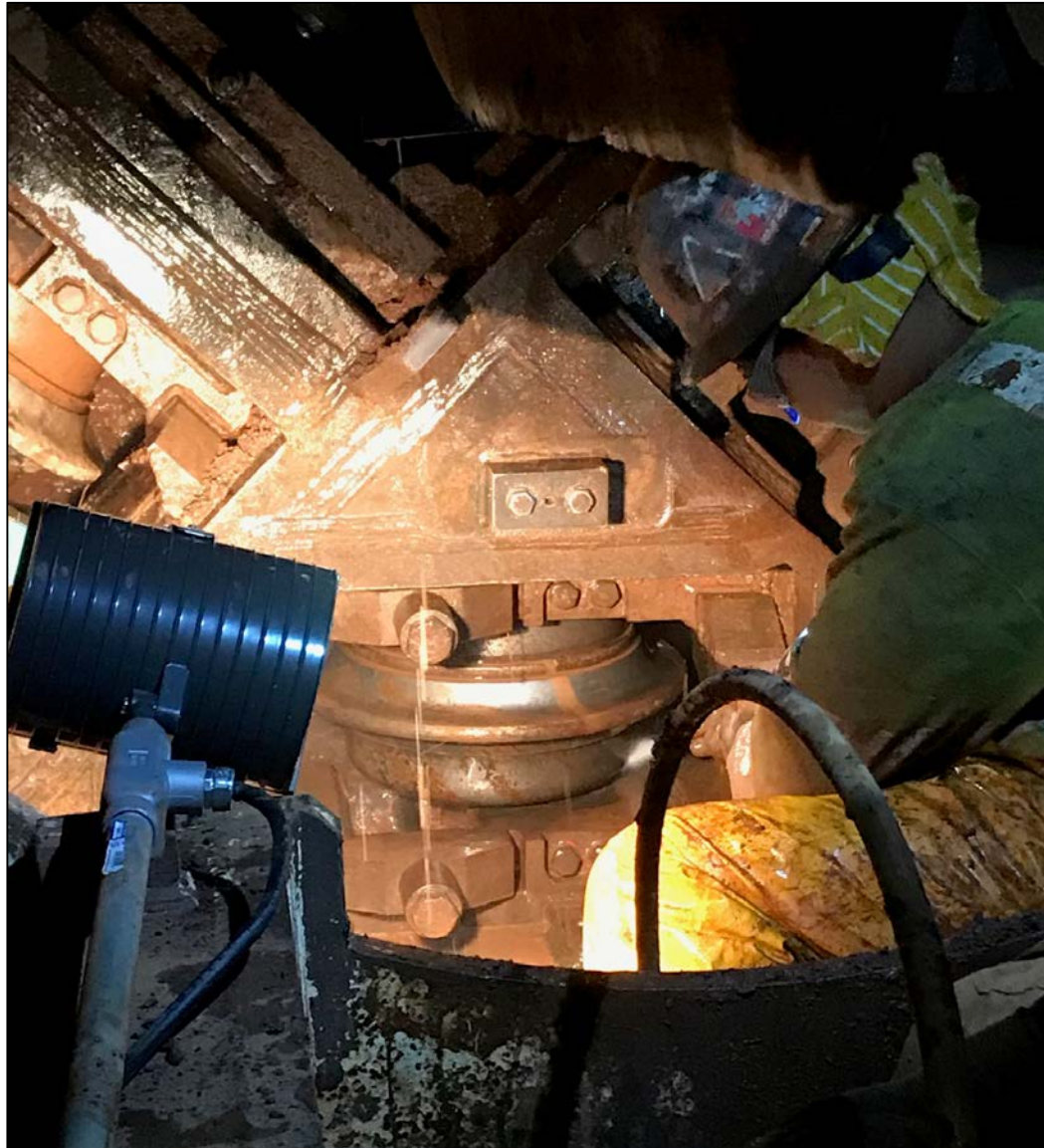
PROGRESS PHOTOGRAPH

BERNSTEIN ASSOCIATES PHOTOGRAPHERS

Tunnel Curve



Cutter replacement



Contract 5 – Arlington, Newington & New Britain Conduits

- Awarded to Empire Paving Inc. in January 2020 for \$37,600,842
- 42% grant (mix of CSO and SSO)/58% loan
- NTP April 1, 2020
- New diversion structures
- Consolidation conduits by microtunneling
 - Hillcrest Ave ~ 1,800 feet, 36"
 - New Britain Ave ~ 1,100 feet, 54"; 1,200 feet 30"
 - Arlington St ~ 1,000 feet, 42"
- 2 Drop Shaft Facilities
 - **DS-1:** Hillcrest & New Britain Aves, WH; **DS-2:** Brookfield Street, HTFD.
 - Approach channels and gate chambers
 - Odor control equipment
 - Site landscaping and enclosures

Contract 5 – Arlington, Newington & New Britain Conduits

Contract 5 eliminates:

SSO

- **Newington Trunk Sewer** - Hillcrest Avenue
 - Regulator is located on private lands in West Hartford.
 - Outfall is to a small intermittent stream, which flows to Piper Brook

Contract 5 controls:

CSOs up to a 1-year storm

- S-19
 - Arlington St and Stone St
- S-21
 - Natick St and Arlington St
- S-23, S-24, S-25, S-26, S-27, S-28, S-29, S-30
 - S-23 through S-30 are located along New Britain Avenue.
 - S-19 to S-21 and S-23 through S-30 all discharge to the South Branch of the Park River via the storm system.

Contract 5 Status

CONTRACT COMPLETION DATE:
OCTOBER 2023

Cost



9% Complete

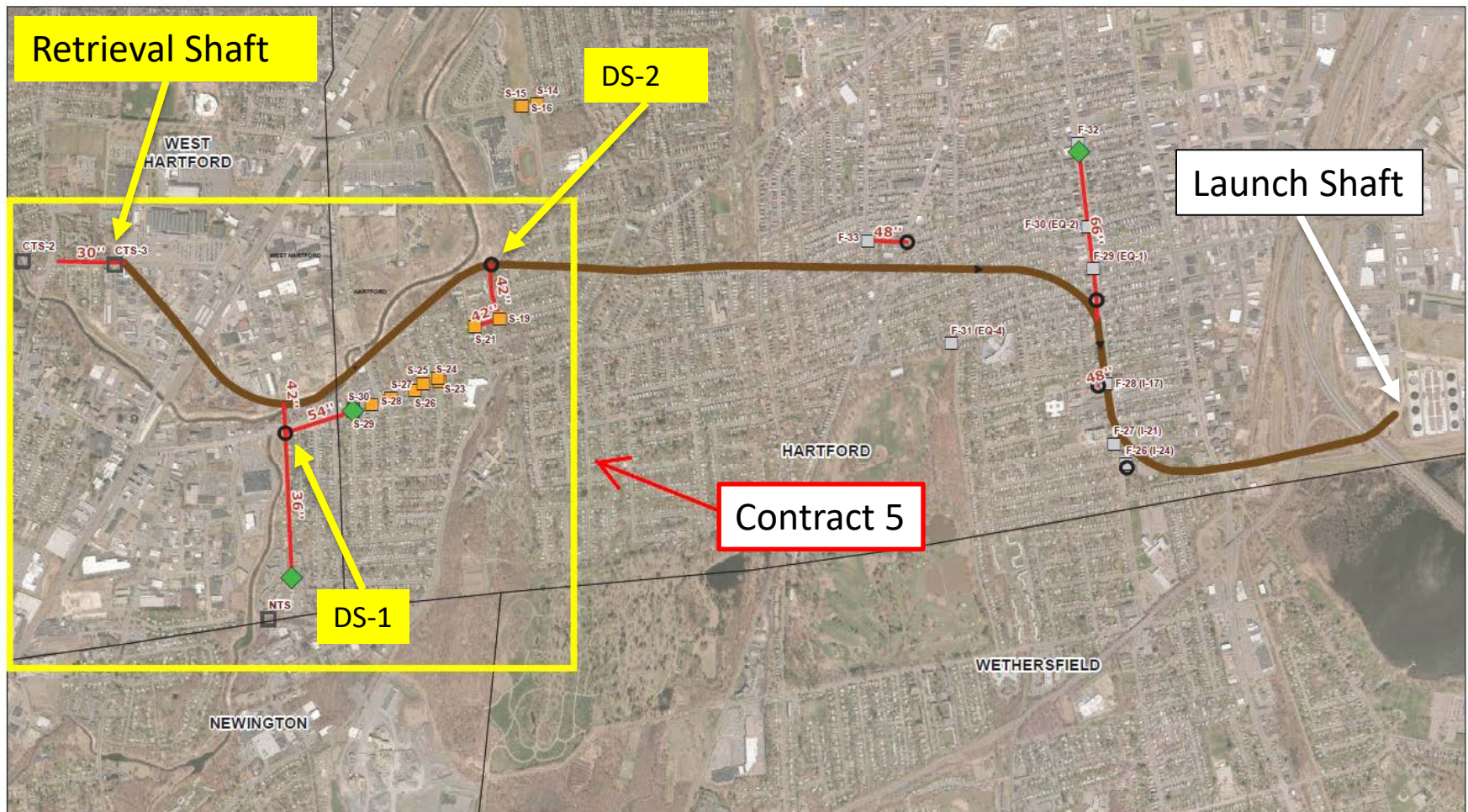
Time



17% Complete

Status as of September 9, 2020

Contract 5



South Tunnel
Consolidation Pipe

Legend
Drop Shaft
Tunnel Regulator

CSO
SSO

Franklin CSO
Eliminated by SHCST

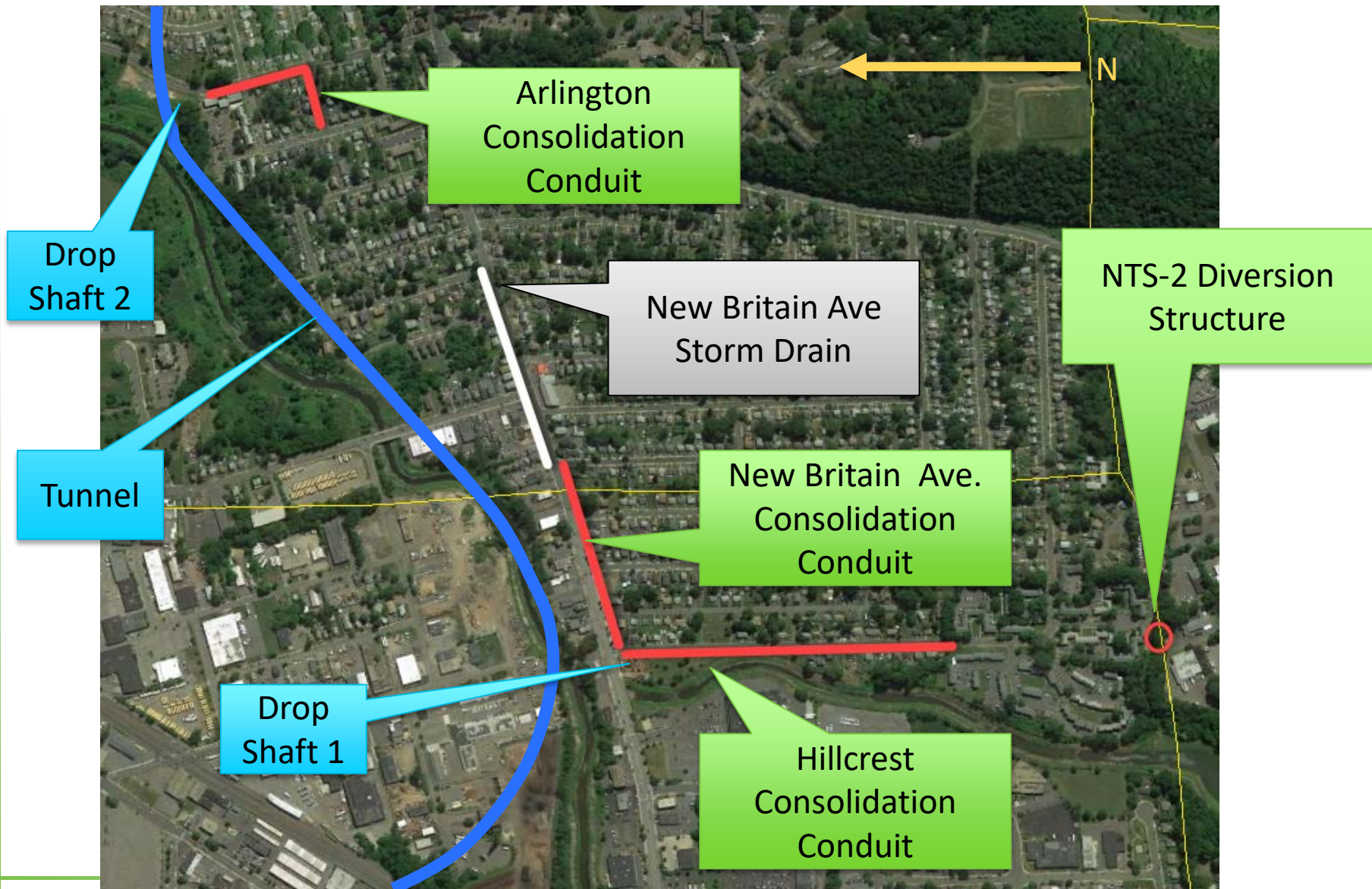


0 650 1,300
Feet

The Metropolitan District
Hartford, CT
2018 LTCP Update

Figure 9-1
SHCST Alignment

Contract 5



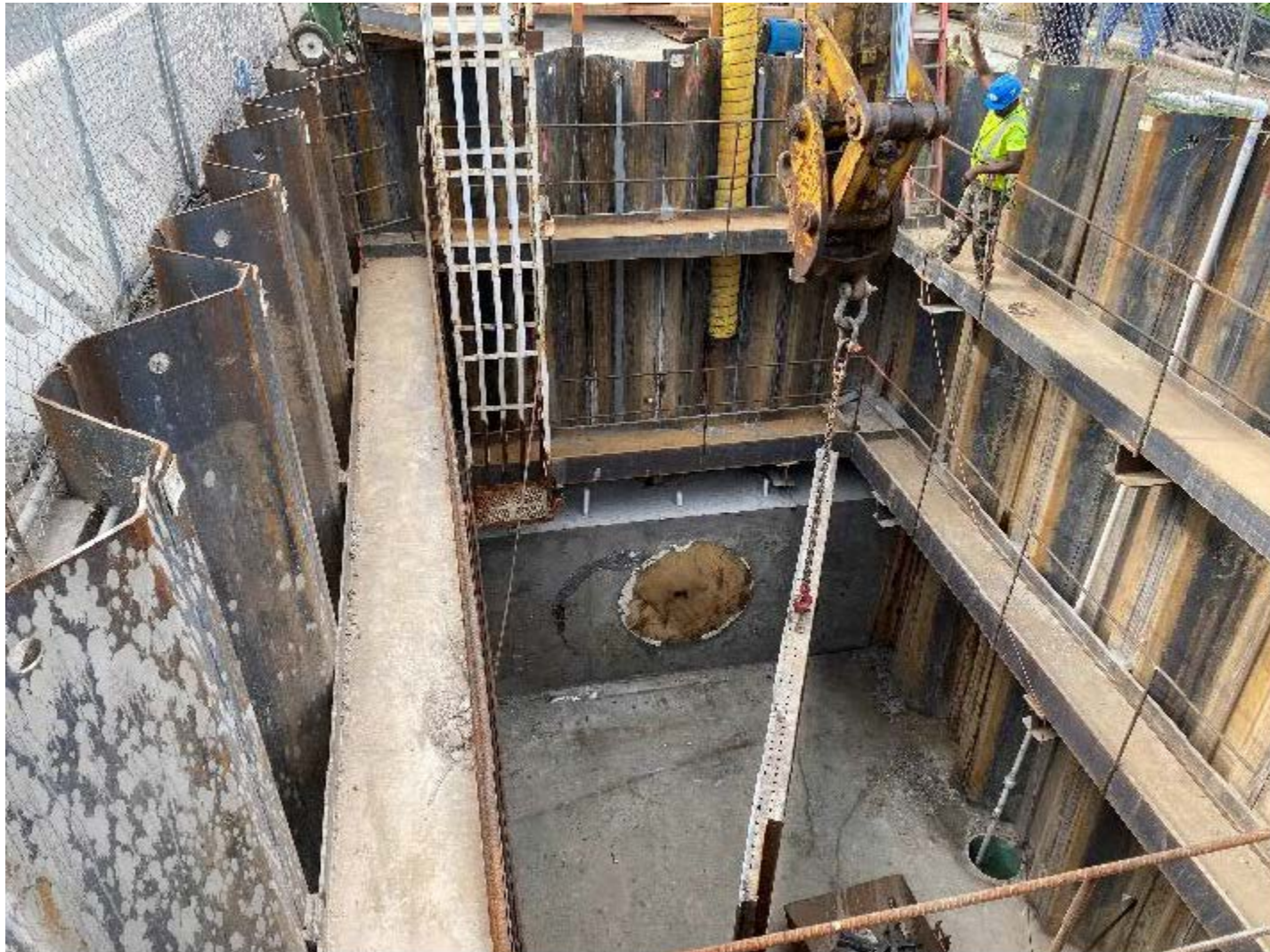
Contract 5 – Arlington, Newington & New Britain Conduits

- Progress
 - Working on Hillcrest Avenue and Arlington Street areas.
 - **Hillcrest** Avenue: Preparation for MTBM
 - **Arlington** Area: Utility relocations and support of excavation ongoing.
 - **New Britain** Avenue: Utility work.
- Schedule
 - Substantial Completion – August 23, 2023
 - Field Completion – October 27, 2023
 - On schedule
 - **Hillcrest** Avenue: Micro TBM tunnel late Sept/early Oct.
 - **Arlington** Area: Tunnel drive scheduled for April 2021
 - **New Britain** Avenue: Tunnel drives scheduled for June 2021.

Contract 5 – Installation of sheet piles at DS-2 for Arlington Consolidation Conduit



Contract 5 – Hillcrest Ave: Microtunneling entry portal, man hole #2 (August 2020)



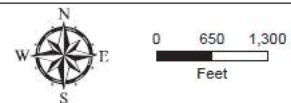
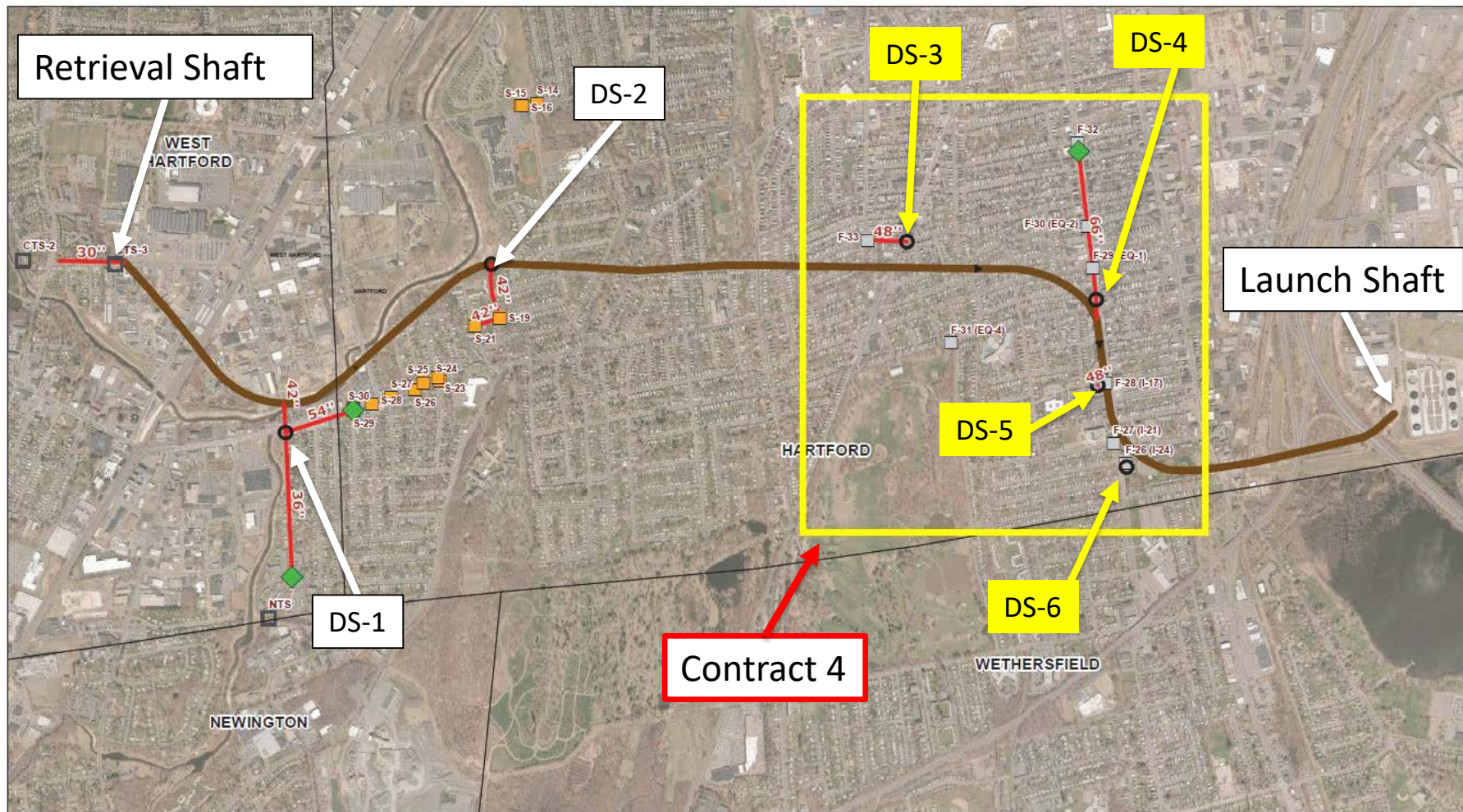
Contract 5 – Microtunneling TBM



Contract 4 – Franklin Avenue Area Consolidation Conduits

- Bids received in March 2020.
- NorthEast Remsco was the only bidder with a submitted total of \$83,977,000. The Engineer's Opinion of Probable Construction Cost was \$50,700,000, which was prepared and submitted in the Fall of 2019.
- 50% grant/50% loan
- Project not awarded.
- CDM-Smith performed independent review and developed alternatives.
- Project Scope
 - New diversion structures
 - Consolidation conduits
 - Franklin Avenue Rock Tunnel ~ 2,300 feet, 66" finished diameter
 - Shorter conduits from other diversion structures
 - 4 Drop Shaft Facilities
 - Approach channels and gate chambers
 - Odor control equipment
 - Site landscaping and enclosures

Contract 4



The Metropolitan District
Hartford, CT
2018 LTCP Update

Figure 9-1
SHCST Alignment

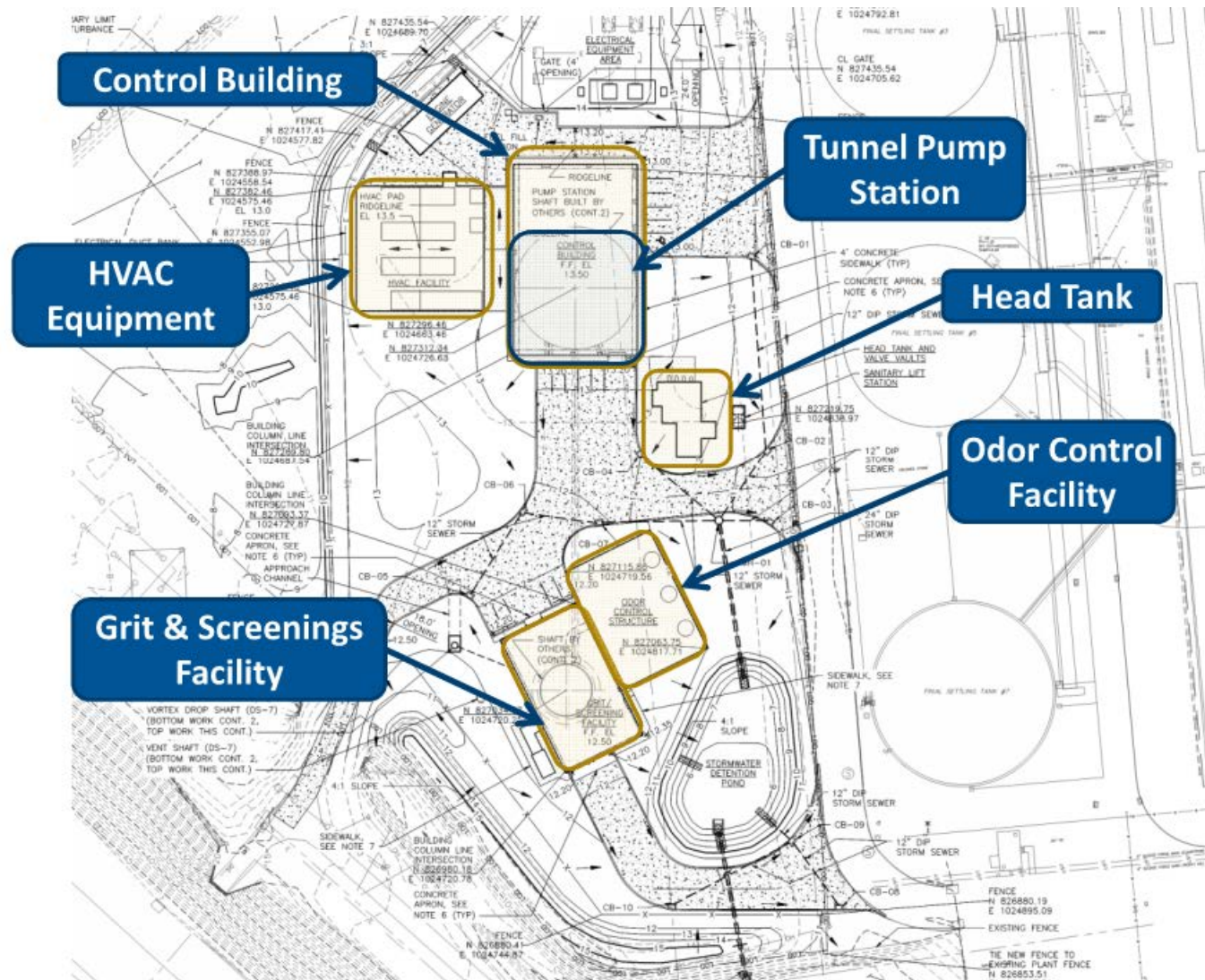
Contract 4



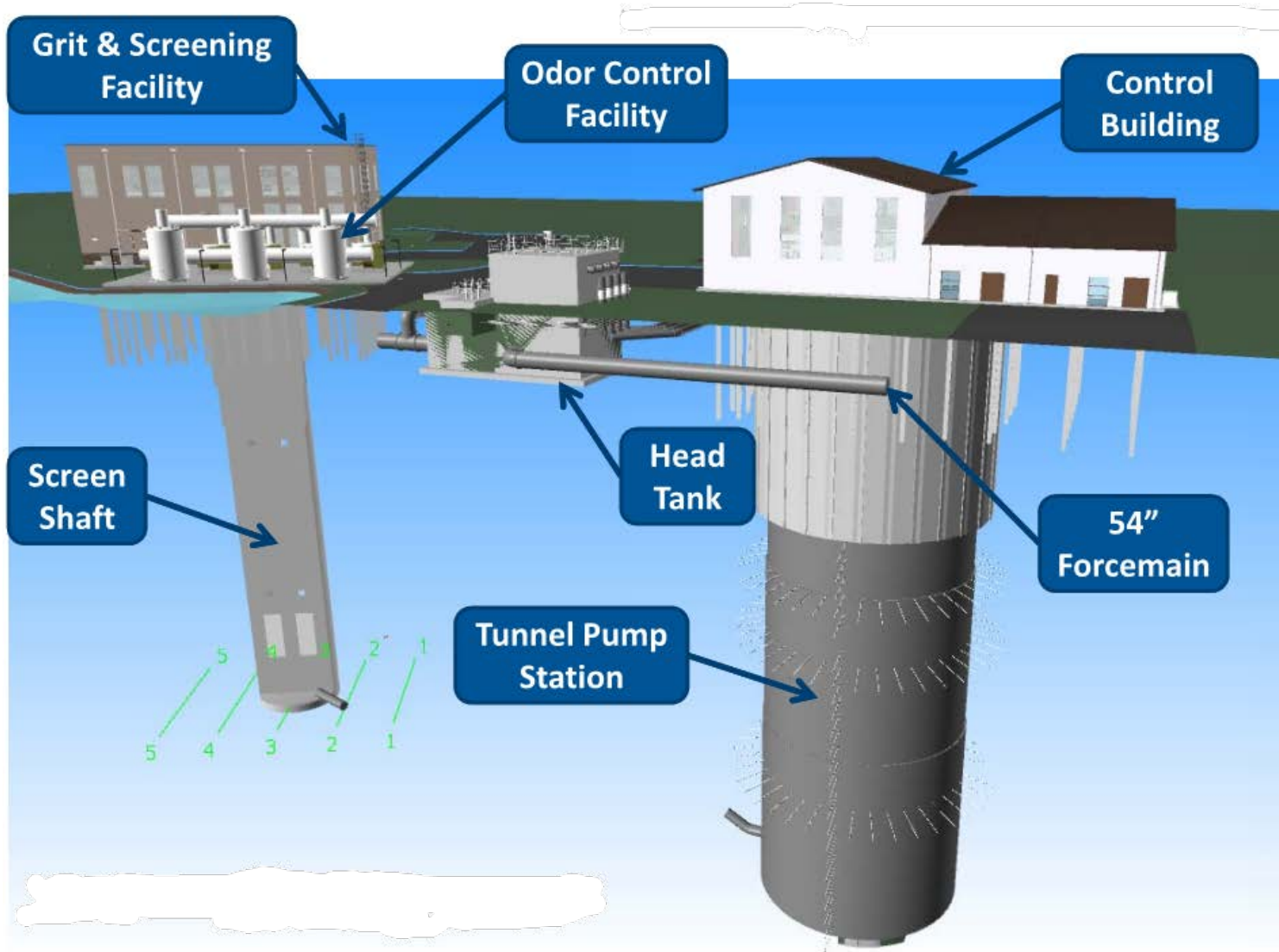
Contract 3 – Tunnel Pump Station

- Advertising Fall of 2020
- Contingent on availability of Launch and Pump Station Shaft (Contract 2)
- 48% grant (mix of CSO and SSO)/52% loan
- Funding anticipated from DEEP
- Contract 2 is building shafts
 - Tunnel launch shaft becomes grit & screening facility
 - Tunnel pump station shaft
 - Suction header connects the two shafts
- Major Equipment
 - Grit & Screening – Bar Rack, Rake, Clamshell
 - Pumps (4), valves, etc.
 - Odor Control
 - Backup Generators
- Buildings – Pump Station, Grit & Screenings
- Head Tank
- Force main to HWPCF headworks
- Systems Integration
- Site restoration/wetlands mitigation

Contract 3 – Tunnel Pump Station



Contract 3 – Tunnel Pump Station



Thank you!



CT DEEP Miscellaneous Industrial User (MIU) General Permit

- CT DEEP has developed a new General Permit for Non-Significant Industrial Users for discharges to Sanitary Sewers.
 - Permit goes into effect on October 31, 2020.
 - Permit is applicable for discharges less than 25,000 gallons per day
- Previous permitting and enforcement was conducted by CT DEEP; in 2019 DEEP informed CT Publicly Owned Treatment Works (POTW) operators that these environmental permitting functions would be passed on to the local municipalities and POTWs.
- The new permit requires the POTWs that receive the discharge will receive the notification from the discharger and review for compliance.
- All Significant Industrial Users are still permitted by CT DEEP through either a Wastewater Discharge General Permit or Individual Permit
- In anticipation of this new requirement, MDC has modified its rate sheet for 2020 with the creation of an annual Wastewater Discharge Compliance Fee (\$150/yr (Billed Monthly)) and has modified the existing FOG violation fee schedule to incorporate potential MIU GP violations. Administrative Review fee is also applicable for all new permits and renewals. Customers will not be subject to current CT DEEP permit fees under this new permit.

Customers to be Impacted by the MIU GP

Group I – Process Water Dischargers

- Commercial laundry wastewater
- Contact cooling and heating wastewater
- Cutting and grinding wastewater
- Food processing wastewater (including breweries and distilleries)
- Non-destruct testing rinsewater
- Printing and photographic processing wastewater
- Reverse osmosis reject water
- Tumbling or cleaning of parts wastewater
- Water treatment wastewater

Group II – Non-Process Water Dischargers

- Air compressor condensate & blowdown
- Boiler blowdown wastewater
- Building maintenance wastewater
- Fire suppression system testing wastewater
- Hydrostatic pressure testing wastewater
- Non-contact cooling water
- Potable water system maintenance or sampling wastewaters
- Swimming pool wastewater
- Vehicle maintenance wastewater



TOWN OF BERLIN
Water Control Commission
240 Kensington Road • Berlin, CT 06037
Office (860) 828-7065 • Fax (860) 828-7180

CERTIFIED MAIL 7017 3380 0000 1148 2331

July 1, 2019

Metropolitan District Commission
Mr. Scott W. Jellison, Chief Executive Officer
MDC Headquarters
555 Main Street
Hartford, CT 06103



Subject: Re-payment of water/sewer services provided by the Berlin Water Control Commission

Dear Mr. Jellison;

I am writing to address a long-outstanding issue that has not been fully addressed by our respective organizations. As a matter of brief history, both of our organizations have depended on each other to provide water and sewer service in Berlin, Newington, and Rocky Hill. There have been many Agreements set in place that have attempted to identify responsibilities, and compensation for those services.

While upgrading our MDC water booster station in Berlin (corner of Rowley St. and Berlin Turnpike), I discovered several instances where the MDC has not reimbursed the Berlin Water Control Commission (BWCC) in accordance with previous contracts. Following my discovery, I met with a couple of MDC employees (Ms. Susan Negrelli and Mr. Jason Waterbury), and they were helpful in addressing some issues, however, the issue of payments to BWCC remains outstanding.

Specifically, although the BWCC was partially paid for past oversight, there must be compensation for on-going services the BWCC provides to the MDC and its customers. We are obligated to recover our associated costs incurred in providing services to the MDC/MDC's customers. Therefore, attached are spreadsheets summarizing the outstanding sums due to the BWCC from MDC, calculated in accordance with the historical Agreements between our organizations. The sums due are summarized as follows:

- 1) Sewer Service to MDC customers on Rowley Street (Newington side)..... \$ 11,005.34
- 2) Water Service to MDC customers on Rowley St. (Newington side) and Willow Lane..... \$ 63,908.79
- 3) Deming Road Sewer Pump Station*.....\$ 659,455.88

* The BWCC's cost estimates are conservative. Pump replacements and labor (i.e. overtime, interest on past due sums, double-time expenses, subcontractor costs) are not yet included.

TOWN OF BERLIN
Water Control Commission
240 Kensington Road • Berlin, CT 06037
Office (860) 828-7065 • **Fax** (860) 828-7180

Historically, (according to our records) when annual payments were made to BWCC, our invoices were generated, and submitted, to MDC (after MDC provided us with the flow data from Rowley Street and Little Brook metering stations). The BWCC wants to maintain our relationship with water/sewer service, but feel we have been taken advantage of (likely inadvertent) and full compensation is warranted under the circumstances.

In addition, the Deming Road Sewer Pump Station is in dire need of an upgrade and since the MDC is the 'major user' of this station, the BWCC requires MDC's participation in funding the cost of the upgrade of this Sewer Pump Station (per our historical agreements). 'Flushables' at this station are costing BWCC a great deal of staff time in order to keep this system operational.

The BWCC would like to schedule a meeting in the near future to address the issues summarized above, as this is perceived by the Commission as an 'unjust enrichment' of the MDC and BWCC is required to pursue recovery of the outstanding sums, as well as reach agreement as to our on-going services. Thank you for your immediate attention to this matter.

Respectfully,



Ray Jarema, P.E.
Berlin Water Control Manager

Attachment

cc: Michael S. Ahern, Public Works Director/Town Engineer
James P. Horbal, Deputy Director of Public Works

MDC Reimbursement Summary												
	Denning Road Pump Station 1817-1818											
Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
Estimated Labor (3% increase)	\$2,781.00	\$2,864.43	\$2,950.36	\$3,038.87	\$3,130.04	\$3,223.94	\$3,320.66	\$3,420.28	\$3,522.89	\$3,628.57	\$3,737.43	
Estimated Supplies/Maintenance	\$1,288.90	\$1,661.25	\$5,663.59	\$2,905.93	\$2,778.27	\$3,150.62	\$3,522.96	\$3,895.30	\$4,267.65	\$4,639.99	\$5,012.33	
Estimated Power	\$5,592.09	\$3,903.76	\$4,215.43	\$4,527.09	\$4,838.76	\$5,150.43	\$5,462.10	\$5,773.77	\$6,085.44	\$6,397.10	\$6,708.77	
Estimated MDC Flows (1976-86) Average	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	
Estimated Total Sewage Costs	\$5,984.09	\$6,583.47	\$10,019.87	\$8,178.66	\$8,393.57	\$9,001.13	\$9,610.89	\$10,222.91	\$10,837.27	\$11,454.03	\$12,073.27	
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Estimated Labor	\$3,849.55	\$3,965.04	\$4,083.99	\$4,206.51	\$4,332.71	\$4,462.69	\$4,596.57	\$4,734.47	\$4,876.50	\$5,022.80	\$5,176.19	
Estimated Supplies/Maintenance	\$5,384.67	\$5,757.02	\$6,129.36	\$6,501.70	\$6,874.05	\$7,246.39	\$7,618.73	\$7,991.08	\$8,363.42	\$8,735.76	\$9,108.10	
Estimated Power	\$7,020.44	\$7,332.11	\$7,643.78	\$7,955.45	\$8,267.11	\$8,578.78	\$8,890.45	\$9,202.12	\$9,513.79	\$9,825.46	\$10,137.12	
Estimated MDC Flows	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	
Estimated Total Sewage Costs	\$12,695.06	\$13,319.48	\$13,946.60	\$14,576.51	\$15,209.29	\$15,845.02	\$16,483.80	\$17,125.72	\$17,770.87	\$18,419.35	\$20,760.35	
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Labor	\$7,852.18	\$12,337.92	\$10,376.92	\$8,961.47	\$18,870.91	\$22,699.20	\$21,599.63	\$68,361.14	\$56,660.89	\$56,660.89		
Supplies/Maintenance	\$1,317.55	\$15,102.61	\$3,945.05	\$2,148.41	\$2,432.66	\$4,500.37	\$1,191.86	\$10,719.19	\$38,561.08	\$38,933.42		
Power	\$2,778.09	\$10,700.87	\$8,511.21	\$9,216.96	\$9,035.65	\$8,222.61	\$7,603.00	\$10,079.22	\$9,038.00	\$9,349.67		
Estimated MDC Flows	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78		
Estimated Total Sewage Costs	\$9,331.37	\$29,788.81	\$17,832.94	\$15,875.47	\$23,687.43	\$27,665.08	\$23,738.40	\$69,634.50	\$81,428.08	\$81,962.30		
											Total:	\$659,435.58

Drinking Water 1980-2017														
CCE Average Per Year	Address	Cum Based on Historic Rates										Corrected Cost		Total
		1980-1991	1991-1999	1999-2001	2001-2005	2005-2007	2007-2008	2008-2011	2011-2013a	2013b-2017				
20.53	98 Rowley St.	N/A	\$98.53	\$39.41	\$86.21	\$54.19	\$64.97	\$152.41	\$256.17	\$157.81			\$973.74	
121.56	130 Rowley St.	N/A	\$583.50	\$233.40	\$510.57	\$320.93	\$384.75	\$902.61	\$1,517.11	\$866.39			\$5,698.54	
70.57	152 Rowley St.	N/A	\$338.74	\$135.49	\$296.39	\$186.30	\$223.35	\$523.98	\$880.71	\$523.26			\$3,328.41	
69.97	24 Willow Ln.	N/A	\$279.87	\$134.34	\$293.86	\$184.71	\$221.44	\$519.50	\$873.18	\$505.13			\$3,230.33	
71.34	27 Willow Ln.	\$29.96	\$485.13	\$379.64	\$299.64	\$188.35	\$225.80	\$529.72	\$890.36	\$530.49			\$3,599.04	
193.61	28 Willow Ln.	N/A	\$774.43	\$371.72	\$813.15	\$511.12	\$612.77	\$1,437.53	\$2,416.21	\$1,359.76			\$9,900.74	
148.51	31 Willow Ln.	N/A	\$475.23	\$285.14	\$623.74	\$392.07	\$470.03	\$1,102.69	\$1,853.40	\$1,115.49			\$6,781.15	
118.24	32 Willow Ln.	N/A	\$472.95	\$227.01	\$496.59	\$312.14	\$374.22	\$877.91	\$1,475.59	\$907.02			\$5,512.33	
100.46	35 Willow Ln.	\$42.19	\$683.11	\$192.88	\$421.92	\$265.21	\$317.95	\$745.89	\$1,253.70	\$749.95			\$4,986.21	
292.85	39 Willow Ln.	\$123.00	\$1,991.40	\$562.28	\$1,229.98	\$773.13	\$926.88	\$2,174.44	\$3,654.81	\$2,082.79			\$14,432.41	
140.25	43 Willow Ln.	N/A	\$561.00	\$269.28	\$589.05	\$370.26	\$443.89	\$1,041.36	\$1,750.32	\$1,063.14			\$6,525.88	
									Total:				\$63,908.79	

Sewage Usage						
Cost Based on BWCC Historic Water Rates						
Address	1994	1995	1996	1997	1998	1999
98 Rowley Street	\$51.24	\$51.24	\$51.24	\$51.24	\$51.24	\$51.24
130 Rowley Street	\$153.12	\$153.12	\$153.12	\$153.12	\$153.12	\$153.12
152 Rowley Street	-	\$78.54	\$78.54	\$78.54	\$78.54	\$78.54
84 Rowley Street	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
1114 Rowley Street	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
142 Rowley Street	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Total Amount Due						
\$11,005.34						

Cost Based on BWCC Historic Water Rates						
Address	2003	2004	2005	2006	2007	2008
98 Rowley Street	\$61.76	\$61.76	\$61.76	\$61.76	\$74.12	\$118.49
130 Rowley Street	\$184.56	\$184.56	\$184.56	\$184.56	\$221.48	\$354.09
152 Rowley Street	\$94.67	\$94.67	\$94.67	\$113.60	\$181.62	\$181.62
84 Rowley Street	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00
1114 Rowley Street	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00
142 Rowley Street	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00
Total:						
\$11,005.34						

Water Consumption Costs			
Address	1994-2009	2009	Total
98 Rowley Street	\$1,040.36	\$1,040.36	\$1,040.36
130 Rowley Street	\$3,108.88	\$3,108.88	\$3,108.88
152 Rowley Street	\$1,516.10	\$1,516.10	\$1,516.10
84 Rowley Street	\$1,780.00	\$1,780.00	\$1,780.00
1114 Rowley Street	\$1,780.00	\$1,780.00	\$1,780.00
142 Rowley Street	\$1,780.00	\$1,780.00	\$1,780.00
Total Amount Due:			
\$11,005.34			

Remaining Road Pump Station Costs			
Address	1994-2009	2009	Total
98 Rowley Street	\$61.76	\$61.76	\$61.76
130 Rowley Street	\$184.56	\$184.56	\$184.56
152 Rowley Street	\$94.67	\$94.67	\$94.67
84 Rowley Street	\$120.00	\$120.00	\$120.00
1114 Rowley Street	\$120.00	\$120.00	\$120.00
142 Rowley Street	\$120.00	\$120.00	\$120.00
Total Amount Due:			
\$659,455.58			

MDC Reimbursement Sewage Usage Calculations													
				Consumption in CCF									
	Address	Installation No.	Permit Year	2010	2011	2012	2013	2014	2015	2016	2017	Average	
Water	98 Rowley Street	83644	1994	83	74	85	50	18	18	18	20	45.75	
	130 Rowley Street	83669	1994	204	156	136	127	122	138	74	-	136.71	
	130 Rowley Street	-	1994	-	-	-	-	-	-	36	73	54.50	
	152 Rowley Street	83672	1995	82	91	81	63	60	66	57	61	70.13	
Non-Water	84 Rowley Street	-	1994	-	-	-	-	-	-	-	-	-	
	114 Rowley Street	-	1994	-	-	-	-	-	-	-	-	-	
	142 Rowley Street	-	1994	-	-	-	-	-	-	-	-	-	
Cost Based on BWCC Historic Water Rates													
	Address	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Water	98 Rowley Street	\$51.24	\$51.24	\$51.24	\$51.24	\$51.24	\$51.24	\$51.24	\$61.76	\$61.76	\$61.76	\$61.76	
	130 Rowley Street	\$153.12	\$153.12	\$153.12	\$153.12	\$153.12	\$153.12	\$153.12	\$184.56	\$184.56	\$184.56	\$184.56	
	152 Rowley Street	-	\$78.54	\$78.54	\$78.54	\$78.54	\$78.54	\$78.54	\$94.67	\$94.67	\$94.67	\$94.67	
Non-Water	84 Rowley Street	100	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$120.00	\$120.00	\$120.00	\$120.00	
	114 Rowley Street	100	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$120.00	\$120.00	\$120.00	\$120.00	
	142 Rowley Street	100	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$120.00	\$120.00	\$120.00	\$120.00	
Cost Based on BWCC Historic Water Rates													
	Address	2005	2006	2007	2008	2009	Total		BWCC Historic Rates				
Water	98 Rowley Street	\$61.76	\$61.76	\$74.12	\$118.49	\$118.49	\$1,040.36		Date	Sewage (\$/CCF)	Flat Rate (\$/year)		
	130 Rowley Street	\$184.56	\$184.56	\$221.48	\$354.09	\$354.09	\$3,108.88		1991	\$1.12	100		
	152 Rowley Street	\$94.67	\$94.67	\$113.60	\$181.62	\$181.62	\$1,516.10		1999	\$1.12	100		
	84 Rowley Street	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00	\$1,780.00		2001	\$1.35	120		
Non-Water	114 Rowley Street	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00	\$1,780.00		2007	\$1.62	120		
	142 Rowley Street	\$120.00	\$120.00	\$120.00	\$120.00	\$120.00	\$1,780.00		2008	\$2.59	120		
							\$11,005.34						

Credit Calculated 2010-2015:	\$11,526.59
Credit Calculated 2016-2017:	\$4,388.94
Total Amount due for 1990-2017:	\$11,005.34

MDC Reimbursement: Drinking Water Consumption Calculations						
Address	Account No.	Permit Year	Consumption in CCF			
			Second Half of 2015	2016	2017	Average Per Year
98 Rowley St.	7045166	1993	11	19	20.58	20.53
130 Rowley St.	7019285	1993	87	117	73.69	121.56
152 Rowley St.	7049264	1993	44	63	60.71	70.57
24 Willow Ln.	7047573	1994	48	54	59.9	69.97
27 Willow Ln.	7072463	1990	44	65	61.03	71.34
28 Willow Ln.	7029285	1994	145	145	145.82	193.61
31 Willow Ln.	7079327	1995	88	136	133.53	148.51
32 Willow Ln.	7039268	1994	64	116	110.71	118.24
35 Willow Ln.	7082387	1990	61	92	87.37	100.46
39 Willow Ln.	7034624	1990	211	237	219.56	292.85
43 Willow Ln.	7069379	1994	80	137	123.75	140.25
Cost Based on BWCC Historic Water Rates						
Address	1990	1991-1999	1999-2001	2001-2005	2005-2007	2007-2008
98 Rowley St.	N/A	\$98.53	\$39.41	\$86.21	\$54.19	\$64.97
130 Rowley St.	N/A	\$583.50	\$233.40	\$510.57	\$320.93	\$384.75
152 Rowley St.	N/A	\$338.74	\$135.49	\$296.39	\$186.30	\$223.35
24 Willow Ln.	N/A	\$279.87	\$134.34	\$293.86	\$184.71	\$221.44
27 Willow Ln.	\$29.96	\$485.13	\$136.98	\$299.64	\$188.35	\$225.80
28 Willow Ln.	N/A	\$774.43	\$371.72	\$813.15	\$511.12	\$612.77
31 Willow Ln.	N/A	\$475.23	\$285.14	\$623.74	\$392.07	\$470.03
32 Willow Ln.	N/A	\$472.95	\$227.01	\$496.59	\$312.14	\$374.22
35 Willow Ln.	\$42.19	\$683.11	\$192.88	\$421.92	\$265.21	\$317.95
39 Willow Ln.	\$123.00	\$1,991.40	\$562.28	\$1,229.98	\$773.13	\$926.88
43 Willow Ln.	N/A	\$561.00	\$269.28	\$589.05	\$370.26	\$443.89
Cost Based on BWCC Historic Water Rates				Correct Amount	Total at Each Property	
Address	2008-2011	2011-2015a	2018	2015b-2017	1990-2018	
98 Rowley St.	\$152.41	\$256.17	\$64.04	\$157.81	\$973.74	
130 Rowley St.	\$902.61	\$1,517.11	\$379.28	\$866.39	\$5,698.54	
152 Rowley St.	\$523.98	\$880.71	\$220.18	\$523.26	\$3,328.41	
24 Willow Ln.	\$519.50	\$873.18	\$218.30	\$505.13	\$3,230.33	
27 Willow Ln.	\$529.72	\$890.36	\$222.59	\$530.49	\$3,539.04	
28 Willow Ln.	\$1,437.53	\$2,416.21	\$604.05	\$1,359.76	\$8,900.74	
31 Willow Ln.	\$1,102.69	\$1,853.40	\$463.35	\$1,115.49	\$6,781.15	
32 Willow Ln.	\$877.91	\$1,475.59	\$368.90	\$907.02	\$5,512.33	
35 Willow Ln.	\$745.89	\$1,253.70	\$313.42	\$749.95	\$4,986.21	
39 Willow Ln.	\$2,174.44	\$3,654.81	\$913.70	\$2,082.79	\$14,432.41	
43 Willow Ln.	\$1,041.36	\$1,750.32	\$437.58	\$1,063.14	\$6,525.88	
				Total Cost:	\$63,908.79	

Total Amount due for 1990-2011	\$63,908.79
Credit Calculated 2009-2015a:	\$8,413.17
Credit Calculated 2015b-2017:	\$20,109.64
Remaining Amount Due:	\$35,385.98

BWCC Historic Rates	
Date	Water \$(/CCF)
3/1/83	\$0.42
4/1/91	\$0.80
10/1/99	\$0.96
10/1/01	\$1.20
4/1/05	\$1.32
4/1/07	\$2.11
10/1/08	\$2.97
4/1/11	\$3.12

MDC Reimbursement: Deming Road Pump Station Calculations											
Year	FY 1977-78	FY 1978-79	FY 1979-80	FY 1980-81	FY 1981-82	FY 1982-83	FY 1983-84	FY 1984-85	FY 1985-86	FY 1986	
Labor	\$2,353.38	\$1,576.80	\$1,432.99	\$1,896.11	\$1,366.19	\$1,479.69	\$1,751.12	\$1,792.40	N/A	\$2,700.00	
Supplies	\$540.60	\$1,153.18	\$1,670.30	\$1,239.04	\$1,339.21	\$791.34	\$890.31	\$1,235.95	N/A	\$916.56	
Power	\$779.90	\$1,092.92	\$1,153.45	\$1,381.02	\$1,624.66	\$889.07	\$2,045.86	\$2,561.33	N/A	\$3,280.58	
MDC Flows Percentage (MDC/Total)	0.649	0.578	0.637	0.612	0.806	0.901	0.896	0.901	N/A	0.920	
Total Sewage Disposal Costs	\$2,384.35	\$2,209.64	\$2,711.54	\$2,763.90	\$3,487.86	\$2,848.20	\$4,201.22	\$5,036.30	N/A	\$6,255.65	
										* End of Payments*	
Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Estimated Labor (3% increase)	\$2,781.00	\$2,864.43	\$2,950.36	\$3,038.87	\$3,130.04	\$3,223.94	\$3,320.66	\$3,420.28	\$3,522.89	\$3,628.57	\$3,737.43
Estimated Supplies/Maintenance	\$1,288.90	\$1,661.25	\$5,663.59	\$2,905.93	\$2,778.27	\$3,150.62	\$3,522.96	\$3,895.30	\$4,267.65	\$4,639.99	\$5,012.33
Estimated Power	\$3,592.09	\$3,903.76	\$4,215.43	\$4,527.09	\$4,838.76	\$5,150.43	\$5,462.10	\$5,773.77	\$6,085.44	\$6,397.10	\$6,708.77
Estimated MDC Flows (1976-86) Average	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Estimated Total Sewage Costs	\$5,984.09	\$6,583.47	\$10,019.87	\$8,178.66	\$8,393.57	\$9,001.13	\$9,610.89	\$10,222.91	\$10,837.27	\$11,454.03	\$12,073.27
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Estimated Labor	\$3,849.55	\$3,965.04	\$4,083.99	\$4,206.51	\$4,332.71	\$4,462.69	\$4,596.57	\$4,734.47	\$4,876.50	\$5,022.80	\$7,336.19
Estimated Supplies/Maintenance	\$5,384.67	\$5,757.02	\$6,129.36	\$6,501.70	\$6,874.05	\$7,246.39	\$7,618.73	\$7,991.08	\$8,363.42	\$8,735.76	\$9,108.10
Estimated Power	\$7,020.44	\$7,332.11	\$7,643.78	\$7,955.45	\$8,267.11	\$8,578.78	\$8,890.45	\$9,202.12	\$9,513.79	\$9,825.46	\$10,137.12
Estimated MDC Flows	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Estimated Total Sewage Costs	\$12,695.06	\$13,319.48	\$13,946.60	\$14,576.51	\$15,209.29	\$15,845.02	\$16,483.80	\$17,125.72	\$17,770.87	\$18,419.35	\$20,760.35
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Labor	\$7,852.18	\$12,337.92	\$10,376.92	\$8,961.47	\$18,870.91	\$22,699.20	\$21,599.63	\$68,361.14	\$56,660.89	\$56,660.89	
Supplies/Maintenance	\$1,317.55	\$15,102.61	\$3,945.05	\$2,148.41	\$2,422.66	\$4,500.37	\$1,191.86	\$10,719.19	\$38,561.08	\$38,933.42	
Power	\$2,778.09	\$10,700.87	\$8,511.21	\$9,216.96	\$9,035.65	\$8,222.61	\$7,603.00	\$10,079.22	\$9,038.00	\$9,349.67	
Estimated MDC Flows	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	
Estimated Total Sewage Costs	\$9,331.37	\$29,788.81	\$17,832.94	\$15,875.47	\$23,687.43	\$27,665.08	\$23,738.40	\$69,634.50	\$81,428.08	\$81,962.30	
								Total			\$659,455.58

Average from 2009-2017	
Supplies/Maintenance	\$8,878.75
Power	\$8,353.96
Estimated Total Sewage Costs	\$33,220.23
Calculated Yearly Increase	
Supplies/Maintenance	\$372.34
Power	\$311.67

Average from 1976-86	
Labor	\$1,904.87
Supplies	\$1,059.55
Power	\$1,808.92
MDC Flows	0.78
Total Sewage Disposal Costs	\$3,817.49

MDC Reimbursement: Sewage - Labor Calculations 2018 to 2008				
2018	Rate	Number of Hours	Pumps/Occurance	Total for 2018
Wayne:	\$58.21	10	197	\$12,049.47
Charlie:	\$50.39	37	197	\$11,791.26
Mike:	\$50.46	179	197	\$18,972.96
Bill:	\$45.55	107	197	\$13,847.20
				\$56,660.89
2017	Rate	Number of Hours	Pumps/Occurance	Total for 2017
Wayne:	\$58.21	10	197	\$12,049.47
Charlie:	\$50.39	37	197	\$11,791.26
Mike:	\$50.46	179	197	\$18,972.96
Bill:	\$45.55	107	197	\$13,847.20
				\$56,660.89
2016	Rate	Number of Hours	Pumps/Occurance	Total for 2016
Wayne:	\$55.95	27	270	\$16,617.15
Charlie:	\$48.77	52	270	\$15,703.94
Mike:	\$48.85	99	270	\$18,025.65
Bill:	\$43.20	147	270	\$18,014.40
				\$68,361.14
2015	Rate	Number of Hours	Pumps/Occurance	Total for 2015
Wayne:	\$54.81	36	61	\$5,316.57
Charlie:	\$47.45	98	61	\$7,544.55
Mike:	\$46.73	126	61	\$8,738.51
				\$21,599.63
2014	Rate	Number of Hours	Pumps/Occurance	Total for 2014
Wayne:	\$53.72	34	77	\$5,962.92
Charlie:	\$46.52	77	77	\$7,164.08
Mike:	\$45.80	132	77	\$9,572.20
				\$22,699.20
2013	Rate	Number of Hours	Pumps/Occurance	Total for 2013
Wayne:	\$52.78	51	60	\$5,858.58
Charlie:	\$45.73	69	60	\$5,899.17
Mike:	\$45.02	98	60	\$7,113.16
				\$18,870.91
2012	Rate	Number of Hours	Pumps/Occurance	Total for 2012
Wayne:	\$51.94	0	2	\$103.88
Charlie:	\$44.97	70	2	\$3,237.84
Mike:	\$44.25	125	2	\$5,619.75
				\$8,961.47
2011	Rate	Number of Hours	Pumps/Occurance	Total for 2011
Wayne:	\$51.45	4	12	\$823.20
Charlie:	\$44.30	62	12	\$3,278.20
Mike:	\$43.58	132	12	\$6,275.52
				\$10,376.92
2010	Rate	Number of Hours	Pumps/Occurance	Total for 2010
Wayne:	\$49.90	3	26	\$1,447.10
Charlie:	\$44.05	55	26	\$3,568.05
Mike:	\$43.33	143	26	\$7,322.77
				\$12,337.92
2009	Rate	Number of Hours	Pumps/Occurance	Total for 2009
Wayne:	\$46.51	0	1	\$46.51
Charlie:	\$43.13	61	1	\$2,674.06
Mike:	\$42.41	120	1	\$5,131.61
				\$7,852.18
2008	Rate	Number of Hours	Pumps/Occurance	Total for 2008
Wayne:	\$43.61	3	1	\$174.44
Charlie:	\$41.39	65	1	\$2,731.74
Mike:	\$39.91	110	1	\$4,430.01
				\$7,336.19
			Total	\$244,852.66

MDC Reimbursement: Sewage - Supplies/Maintenance and Power Calculations 2009 to 2017				
	PO No.	Amount	Pump's Share	Description
2009	09-0000313-1	\$30,559.00	\$2,778.09	Power
	09-0001527-0	\$1,000.00	\$1,000.00	Raise Sewer Manhole
	09-00018100-0	\$317.55	\$317.55	Traffic Control
				Supplies Total: \$1,317.55 Power Total: \$2,778.09
	PO No.	Amount	Pump's Share	Description
2010	100687	\$16,948.70	\$1,540.79	Alarms
	102160	\$750.00	\$750.00	Blocked Sewer Line
	102392	\$2,500.00	\$2,500.00	Emergency Repairs
	101055	\$3,000.00	\$272.73	On Call Electrical Repairs with Bigelow Electric
	100671	\$61.82	\$61.82	Power
	100663	\$10,639.05	\$10,639.05	Power
	101710	\$430.00	\$39.09	Revised Phone Numbers
	100748	\$10,000.00	\$10,000.00	Water Main Repairs
				Supplies Total: \$15,102.61 Power Total: \$10,700.87
	PO No.	Amount	Pump's Share	Description
2011	110557	\$18,379.18	\$1,670.83	Alarm Repairs
	110283	\$18,379.18	\$1,670.83	Alarms
	110284	\$2,000.00	\$181.82	Electrical Services with Bigelow Electric
	112043	\$39.26	\$3.57	Pens for Monitor Equipment
	110272	\$8,443.77	\$8,443.77	Power
	110280	\$67.44	\$67.44	Power
	110343	\$243.56	\$22.14	Pump Station Maintenance
	110564	\$1,369.83	\$124.53	Repairs to Pump Stations
	112124	\$70.00	\$70.00	Replace Capacitor
	111218	\$2,214.50	\$201.32	Updates to Sewer Systems
				Supplies Total: \$3,945.05 Power Total: \$8,511.21
	PO No.	Amount	Pump's Share	Description
2012	120324	\$19,687.71	\$1,789.79	Alarms
	120325	\$3,944.81	\$358.62	Electrical Services with Bigelow Electric
	120389	\$9,211.85	\$9,211.85	Power
	120321	\$56.20	\$5.11	Power
				Supplies Total: \$2,148.41 Power Total: \$9,216.96
	PO No.	Amount	Pump's Share	Description
2013	130402	\$14,279.49	\$1,298.14	Alarms
	130403	\$6,762.24	\$614.75	Electrical Services with Bigelow Electric
	131590	\$509.78	\$509.78	Oxygen Analyzer Calibration
	130398	\$40.84	\$40.84	Power
	130391	\$6,233.97	\$6,233.97	Power
	131515	\$2,760.84	\$2,760.84	Power
				Supplies Total: \$2,422.66 Power Total: \$9,035.65
	PO No.	Amount	Pump's Share	Description
2014	140304	\$14,463.67	\$1,314.88	Alarms
	140306	\$5,769.74	\$524.52	Electrical Services with Bigelow Electric
	141176	\$660.97	\$660.97	Oxygen Sensors
	140321	\$67.44	\$67.44	Power
	140314	\$4,330.59	\$4,330.59	Power
	140277	\$3,824.58	\$3,824.58	Power
	140898	\$2,000.00	\$2,000.00	Rebuild Mechanical Seal
				Supplies Total: \$4,500.37 Power Total: \$8,222.61
	PO No.	Amount	Pump's Share	Description
2015	150254	\$10,631.75	\$966.52	Alarms
	150872	\$752.76	\$68.43	Calibration and Testing of Meters
	150256	\$1,726.00	\$156.91	Electrical Services with Bigelow Electric
	150273	\$72.48	\$72.48	Power
	150266	\$3,952.01	\$3,952.01	Power
	150283	\$3,578.51	\$3,578.51	Power
				Supplies Total: \$1,191.86 Power Total: \$7,603.00
	PO No.	Amount	Pump's Share	Description
2016	160442	\$20,000.00	\$1,818.18	Alarms
	160443	\$2,170.00	\$197.27	Electrical Services with Bigelow Electric
	162027	\$6,906.00	\$6,906.00	Evaluate Sewer Pump Station Flow with DPC
	160427	\$6,472.18	\$6,472.18	Power
	160439	\$3,600.00	\$3,600.00	Power
	160434	\$77.40	\$7.04	Power
	161950	\$1,797.74	\$1,797.74	Update Sewer Station with A W Chesterton Co
				Supplies Total: \$10,719.19 Power Total: \$10,079.22
	PO No.	Amount	Pump's Share	Description
2017	170417	\$372.50	\$372.50	Electrical Services on Pump with Bigelow Electric
	170639	\$314.74	\$314.74	Materials
	170405	\$8,960.00	\$8,960.00	Power
	170412	\$78.00	\$78.00	Power
	171724	\$2,000.00	\$2,000.00	Sewage Pump Seal
	170719	\$35,610.20	\$35,610.20	Sewer Station Updates
	171835	\$2,900.00	\$263.64	Washer at Pump Stations
				Supplies Total: \$38,561.08 Power Total: \$9,038.00

Sewage - Additional Costs from 1980 to 1990				
Year	PO No.	Amount	Description	Pump's Share
1989	28090	\$3,630.00	Plasti-Fab fume and flow recorder	\$3,630.00
1990	32519	\$500.00	Start-up service for flowmeter and flume	\$500.00



The Metropolitan District

water supply · environmental services · geographic information

July 25, 2019

Mr. Ray Jarema
Berlin Water Control Manager
240 Kensington Road
Berlin, CT 06037

Re: Payment to Berlin Water Control Commission

Dear Mr. Jarema:

I am in receipt of your July 1, 2019 letter to Scott Jellison, Chief Executive Officer of The Metropolitan District ("District") seeking payment for water/sewer service to District customers and operations and maintenance costs for the Deming Road Pump Station. Mr. Jellison asked that I respond to your letter on his behalf. Your letter seeks payment dating back to 1987. Unfortunately, the District is unable to make payment for any costs dating back more than six (6) years.

First, the Berlin Water Control Commission (BWCC) is seeking \$11,005.34 for sewer service to District Customers on Rowley Street in Newington for the time period 1994 to 2009. In 2016, District staff and BWCC investigated unpaid costs for sewer service for these customers and the District paid \$11,526.59 for 2010 to 2015 costs. Payments have since been made for 2016 and 2017 and the District is awaiting an invoice for 2018. No payments will be made for any costs prior to 2010.

Second, BWCC is seeking \$63,907.79 for water consumption for District customers on Rowley Street and Willow Lane in Newington for 1990 to 2017. The District has previously applied credits to the Town of Berlin's account for water consumption for 2009 to 2017. In 2015, the District applied a \$20,109.64 credit for water consumption for 2009 to July 2015. In 2018, the District applied an \$8,413.17 credit for the rest of 2015 through 2017. No credits or payments will be made for consumption prior to 2009.

Last, BWCC is seeking \$659,455.88 for costs related to the Deming Road Pump Station. Please provide supporting documentation including work orders, invoices, labor charges, electricity bills, etc. to support the claimed dollar amounts for the time period July 1, 2013 to present. The District will review the documentation and contact you regarding payment.

If you have any questions or concerns, I can be reached at (860) 278-7850 ext. 3113.

Very truly yours,
THE METROPOLITAN DISTRICT

Christopher Levesque, P.E.
Chief Operating Officer

cc: John Mirtle
Susan Negrelli

TO: MDC Board Members

My name is Ray Jarema, current Manager of the Berlin Water Control Department

Berlin has consistently and routinely paid the MDC since the mid 1960's for various services including the privilege of being able to purchase 0.5 million gallons per day of potable water, if needed. Without fail we have paid MDC on time. MDC enjoys our services as well, but has not reciprocated in payments for those services, and has enjoyed "unjust enrichment" at our expense.

According to the Mattabassett District, for 2019, 175.42 million gallons of sewage was pumped through our Deming Road Pump Station. Our data indicates that 80% of this flow is attributed to the MDC (from Newington and Rocky Hill). There are, of course, significant expenses associated with operating the pump station.

I have detailed the issues in correspondence to Mr. Scott Jellison in July 2019 and to Mr. Christopher Levesque in October 2019. A follow-up letter this year (in May 2020) has gone unaddressed to date. The Town requires fair compensation for the services provided. We should recognize that if Berlin was to abruptly curtail our services to the MDC, your cost could possibly be twenty times greater than the compensation we are seeking so while the outstanding balance is a significant sum, the services provided were likewise significant.

I welcome an opportunity to discuss details of the services Berlin provides and the amicable resolution of the issues.

Respectfully,

Ray Jarema

A handwritten signature in blue ink that reads "Ray Jarema". The signature is stylized with a large, looping "R" and a cursive "Jarema".