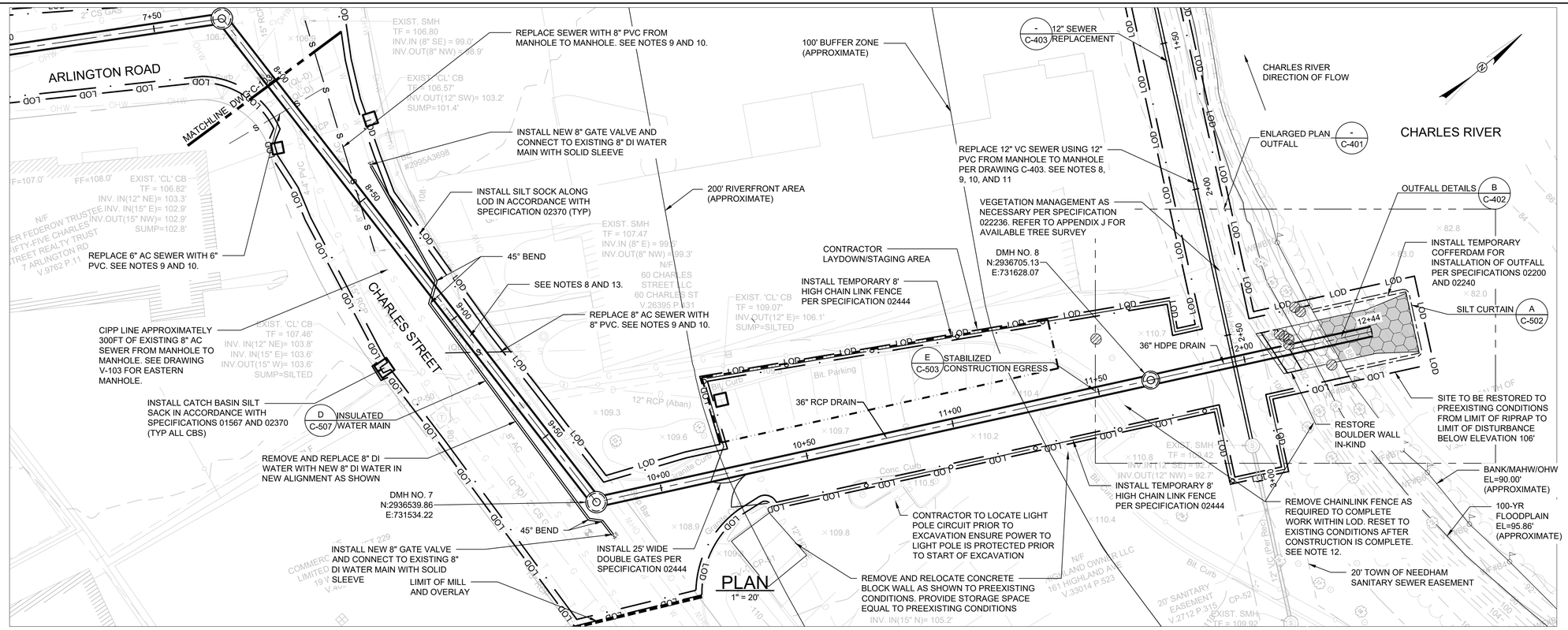

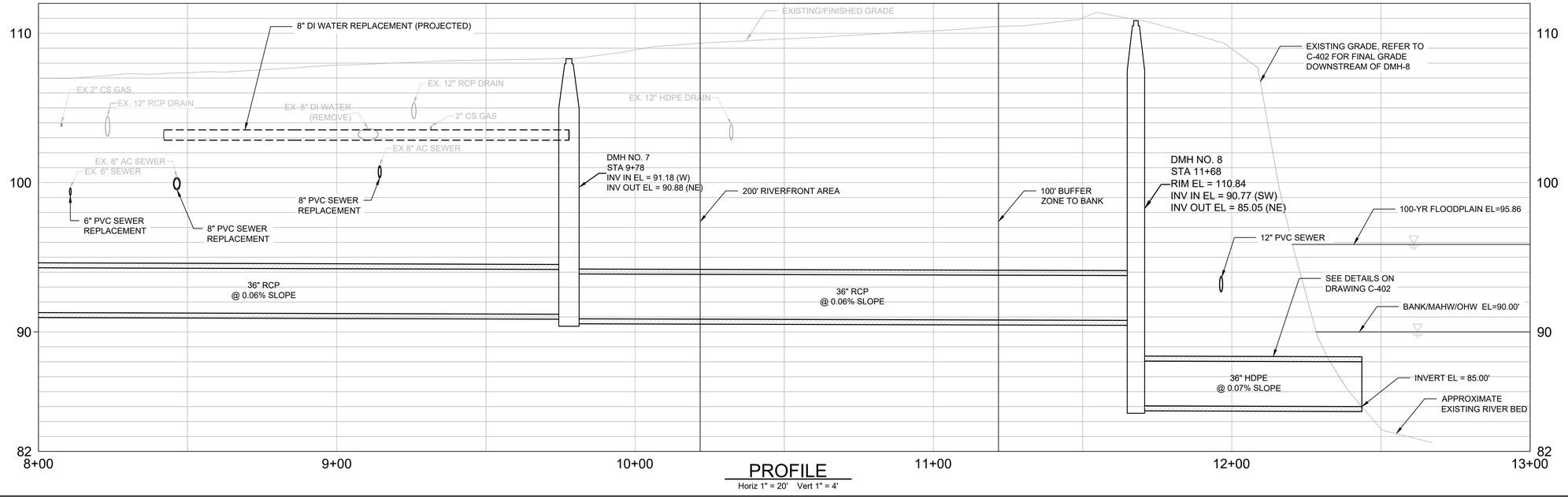

PROFILE
Horiz 1" = 20' Vert 1" = 4'

LEGEND

- IN-KIND-RESTORATION OF BOULDER WALL
- RIPRAP
- DREDGE FOOTPRINT
- TREE TO BE REMOVED

NOTES:

1. MINIMUM VERTICAL CLEARANCE BETWEEN NEW DRAIN AND SEWER LINES SHALL BE 18".
2. MINIMUM VERTICAL CLEARANCE BETWEEN NEW DRAIN AND OTHER UTILITIES SHALL BE AT LEAST 12".
3. PRIOR TO WORK ON SITE, STAKE OUT TREES OR SHRUBS REQUIRING REMOVAL FOR CONSTRUCTION PURPOSES (IF ANY) TO BE VERIFIED BY THE AUTHORITY AND LOCAL TREE WARDEN PER SPECIFICATION 02236. PROTECT ALL TREES WITHIN LIMITS OF DISTURBANCE AS PER DETAIL A ON C-504, UNLESS OTHERWISE INDICATED. CONTRACTOR SHOULD AVOID DAMAGING ANY TREES REGARDLESS OF WHETHER THE TREES ARE WITHIN THE LIMITS OF DISTURBANCE.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PLACE A "DIG SAFE" REQUEST AND HAVE ALL UTILITIES MARKED. CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES INCLUDING AND NOT LIMITED TO THE TOWN OF NEEDHAM UTILITIES, GAS LINES AND DUCT BANKS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO CONSTRUCTION. TEST PIT TO LOCATE AND CHARACTERIZE EXISTING UTILITIES. DEPTH, SIZE, CONDITION, COORDINATE POINTS, AND UTILITY MATERIAL SHALL BE RECORDED AND PROVIDED TO THE AUTHORITY. IF UTILITY CONFLICTS EXIST, CONTRACTOR SHALL NOTIFY THE AUTHORITY IMMEDIATELY.
5. DURING CONSTRUCTION, IF ANY OF THE UTILITIES OR EXISTING STRUCTURES ARE DAMAGED, THEY MUST BE REPLACED, IN KIND, FROM STRUCTURE TO STRUCTURE AT NO ADDITIONAL COST TO THE AUTHORITY.
6. COORDINATE WITH EVERSOURCE TO PROVIDE POWER POLE SUPPORT WHEN ANY PART OF OPEN TRENCH IS WITHIN 5 FEET OF POWER POLE, GUY WIRES, OR AS CONDITIONS WARRANT.
7. BORING LOCATIONS ARE SHOWN ON DRAWING B-101.
8. REFER TO APPENDIX B OF THE SPECIFICATIONS FOR AVAILABLE UTILITY RECORD DRAWINGS.
9. REPLACE ALL EXISTING SEWER PIPELINES CROSSING THE 36-INCH DRAIN PIPE AND ALL SEWER SERVICE LINES CONNECTING TO A REPLACED SEWER MAIN. REPLACEMENT LENGTHS TO EXTEND TO THE NEAREST EXISTING PIPE JOINT AND IN NO CASE LESS THAN 5 FEET FROM THE CENTERLINE OF THE 36-INCH DRAIN PIPE TO EACH SIDE OF THE PIPELINE CROSSING. USE RUBBER COUPLINGS TO CONNECT PVC TO EXISITING. REPLACEMENT IN ACCORDANCE WITH SPECIFICATION 01100 AND 02625.
10. PERFORM CCTV INSPECTION OF ALL UTILITIES WITHIN THE LOD, INCLUDING TOWN OF NEEDHAM SEWER AND DRAIN PIPES. CCTV INSPECTION MUST BE PERFORMED PRIOR TO CONSTRUCTION AND UPON COMPLETION OF REPLACEMENT OR REHABILITATION. CCTV IN ACCORDANCE WITH SPECIFICATION 02513 AND 02625.
11. APPROXIMATELY 11.3 FEET OF THIS SEWER WAS REPLACED WITH 12-INCH PVC PIPE AND CONNECTED TO THE EXISTING SEWER USING RUBBER COUPLINGS. SEE SKETCH INCLUDED IN APPENDIX B OF THE SPECIFICATIONS.
12. STORE FENCE AFTER REMOVAL. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE FENCE.
13. INSTALL TEMPORARY BYPASS FOR 8" DI WATER MAIN VIA HOSE CONNECTION FOR LIMITS OF WATER MAIN TO BE SHUT OFF. CONNECT SERVICES AND HYDRANTS TO TEMPORARY BYPASS WITHIN THESE LIMITS. CONFIRM IF FIRE PROTECTION IS SERVICING ANY ADJACENT BUILDINGS. FIRE SERVICE CONNECTIONS ARE TO BE ACTIVE AT ALL TIMES DURING CONSTRUCTION. SERVICE CONNECTION CAN BE ALONG ROADWAY BUT MUST CONNECT BACK UNDERGROUND AT EXISTING BUILDINGS. TEMPORARY BYPASS WORK SHALL BE SUBJECT TO THE APPROVAL OF THE TOWN OF NEEDHAM IN ACCORDANCE WITH THE TOWN STANDARDS

HORIZONTAL
0 20 40 60
SCALE: 1" = 20' SCALE IN FEET

VERTICAL
0 4 8 12
SCALE: 1" = 4 SCALE IN FEET

BID DOCUMENTS

REFERENCE:

NO.	DATE	BY	CHK'D	REVISION

CONTRACT NO. : 8086	CAD FILE NO. : 3-3-C-104
ACCESSION NO. : NOTUSED	SECTION NO. :
DATE: SEPTEMBER, 2026	DESIGNED BY: ANW DRAWN BY: CJG CHECKED BY: KRR APPROVED BY: WSW
SCALE: AS NOTED	

COMMONWEALTH OF MASSACHUSETTS
WILLIAM SMITH WALKUP
CIVIL
No.56210
REGISTERED PROFESSIONAL ENGINEER
9-16-2026

MASSACHUSETTS WATER RESOURCES AUTHORITY

PREPARED BY :
WSP
100 SUMMER STREET
BOSTON, MA 02110
617-426-7330

BLACK & VEATCH
200 SUMMIT DRIVE, SUITE 340
BURLINGTON, MA 01803
781-656-5800

METROPOLITAN WATER TUNNEL PROGRAM
CONTRACT PACKAGE 3.3
NEEDHAM DEWATERING DRAINAGE LINE

CIVIL
PLAN AND PROFILE
STA 8+00 TO STA 12+44

DRAWING NO.
C-104
11 of 41

PLOT DATE: 2026/09/16 3:15 PM BY: BRE110557
File = C:\DCACCDOCS\WSP USA PROJECTS (AMER)\BOS500-MWRA_MWTP-FGES\PROJECT FILES\PACKAGES\CP3\CP3 3-3\C\VPLOTSHEETS\3-3-C-104 Saved by:BRE110557 Save date= 2026/09/15 3:26 PM