

Addendum No. 1 to IFB #25-55



CITY OF SOMERVILLE, MASSACHUSETTS
Department of Procurement and Contracting Services
KATJANA BALLANTYNE
MAYOR

To: All Parties on Record with the City of Somerville as Holding IFB #25-55
2025 Sewer Rehabilitation

From: Jordan T. Remy

Date: 4/10/2025

Re: Questions and Answers

Addendum No. 1 to IFB #25-55

Please acknowledge receipt of this Addendum by signing below and including this form in your proposal package. Failure to do so may subject the proposer to disqualification.

NAME OF COMPANY / INDIVIDUAL: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

TELEPHONE/FAX/EMAIL: _____

SIGNATURE OF AUTHORIZED INDIVIDUAL: _____

ACKNOWLEDGEMENT OF ADDENDA:

Addendum #1 _____ **#2** _____ **#3** _____ **#4** _____

**City of Somerville, MA
2025 Sewer Rehabilitations
Addendum No. 1**

To be considered as part of the contract drawings and specifications for the Somerville, MA 2025 Sewer Rehabilitations. Bidders are advised that this Addendum must be acknowledged in the appropriate space provided on the Form for General Bid.

QUESTIONS & ANSWERS

Question 1. Please confirm the contractor is allowed to release filtered water removed during the pipe vacuuming process (known as “decant water”) into the sanitary or storm system.

- a. If the decant water is to be released to the sanitary system, please confirm the sanitary sewer operator has granted permission.**
- b. If the decant water is to be released to the storm system, please provide a copy of the MS4 permit.**

Answer 1: Decant water can only be released into the sanitary sewer system.

Question 2. Please confirm that the water introduced for the pipe jetting process is allowed to remain in the storm system.

Answer 2: Potable water introduced for the pipe jetting process is allowed to remain in the storm system.

Question 3. Are there any well water areas, wetland areas, ground water or other sensitive environments proximate to the work area? If so, are there specific controls required to protect these areas such as “pre-liners”?

Answer 3: There are no known sensitive resource areas such as well water areas, wetland areas, groundwater, or other sensitive environments, proximate to the work area. Pre-liners are not required as part of this project. The contractor may install a pre-liner at his own discretion, but additional payment will not be made for pre-liners.

Question 4. On C-101, section C1-2460 to FIT 1157 was shown to be an 18" diameter pipe. There's no bid item for 18" CIPP lining. Please clarify if this is a typo or there will be an item added to the original bid items.

Answer 4: The tables on sheet C101 have been updated to 15" diameter for segment C1-2460 to FIT-1157. An 18" CIPP item will not be added as a bid item. Furthermore, sheets C106 and C106-D are correct.

Question 5. Where to is the CCTV footage for this project?

Answer 5: CCTV footage is not part of the provided bidding materials for this project; however, CCTV Inspection Summaries are available in Appendix A of the Technical Specifications which can be accessed through the Google Drive link in Part 3 of the Issued For Bid Package.

Question 5.1: Can CCTV videos be provided for the locations where the point repairs are to take place?

Answer 5.1: CCTV footage is not part of the provided bidding materials for this project; however, CCTV Inspection Summaries are available in Appendix A of the Technical Specifications which can be accessed through the Google Drive link in Part 3 of the Issued For Bid Package.

Question 6: Segment 5170-5171 on Moreland Street is shown in the table but cannot locate on the plans. Can plans be provided showing this locating. Also, it is listed as 15", and there is not CIPP bid item in Alternate 1 for 15".

Answer 6: The CIPP table on sheet C103 is correct regarding the "storm over sewer" pipe 19-5170 to 19-5171; Additionally, sheets C114 and C114-A are correct. A 15" CIPP item has been added to Alternate Bid No. 1 as bid item 21c. Sheet C103 has been updated to include the storm manhole ID labels for 19-5170 and 19-5171.

Question 7: Segment 2460-1157 on Franklin St is listed as 18" and there is no bid item for 18" in the base. Please confirm what this should be.

Answer 7: The tables on sheet C101 have been updated to 15" diameter for segment C1-2460 to FIT-1157. An 18" CIPP item will not be added as a bid item. Furthermore, sheets C106 and C106-D are correct.

Question 8: Segment 1378-1377 on Franklin Street is shown on table but cannot locate on the plans. Could the location of this segment please be identified.

Answer 8: The segment C1-1378 to C1-1377 is located on Franklin Street between Pearl Street and Flint Street. The tables on sheet C101 are correct. Sheet C101 has been updated to reflect a bold highlight on segment C1-1378 to C1-1377.

Question 9: Segment 1414-1413 on Florence Street is shown on table but cannot locate on the plans. Could the location of this segment please be identified.

Answer 9: The segment C1-1414 to C1-1413 is located on Florence Street between Pearl Street and #44 Florence Street. The CIPP table on sheet C101 is correct. Sheet C101 has been updated to reflect a bold highlight on segment C1-1414 to C1-1413.

Question 10: On sheet C111, there is a call out to remove & replace the hydrant as necessary. Will this be paid under item 8a: Water and Drain Reconstruction? Also, on sheet C109, there is a hydrant not shown at #34 Florence Street in close proximity to the sewer relay from STA

1+03 to STA 1+29. Should the bidder figure to remove & replace hydrant similar to the call out on sheet C111, Perkins Street?

Answer 10: No, the “remove and replace hydrant” on sheet C111 will not be paid for under item 8a: Water and Drain Reconstruction. Removal, protection, and replacement of the hydrant on C111 shall be included as incidental to the adjacent excavation work and shall not be measured separately for payment, as described in Section 01 22 00 – Measurement and Payment, 1.02.A.8. Item 8a is only intended for water and drains encountered during excavation activities which are not shown in the plans or not located for the contractor in the field.

Yes, for the hydrant near #34 Florence Street, this hydrant shall be handled in the same manner as the hydrant on C111 on Perkins Street as described above. Removal, protection, and replacement of the hydrant near #34 Florence Street on C109 shall be included as incidental to the adjacent excavation work between and shall not be measured separately for payment, as described in Section 01 22 00 – Measurement and Payment, 1.02.A.8. Section 01 22 00 – Measurement and Payment, 1.02.A.8 has been updated to include this hydrant. Sheet C109 has been updated to show the missing hydrant with a call-out.

Question 11: On sheet C111, at the intersection of Perkins Street at Mount Vernon Street the drawings call to replace sewer from STA 3+49 to STA 3+58 with 12” PVC. Can the bidder assume the plan view was not bolded / highlighted but is the intent of designed work?

Answer 11: The section of sewer to be replaced between STA 3+49 to STA 3+58 with 12” PVC between manhole S2-1476 to S2-1475 is highlighted on the plan view of sheet C111. The pipe label and proposed work leader have been moved to different positions to clearly view the proposed replacement highlight.

Question 12: Throughout the drawings there are multiple proposed manholes where in locations a manhole didn’t exist, or the manhole is designed to be set at a deeper elevation. While visiting these locations we noticed high foundations at multiple locations, are there boring logs for each proposed manhole location and should the bidder assume rock in these locations?

Answer 12: No, there are not boring logs for each proposed manhole location. The bidder shall review the boring logs included in the Contract Documents, Appendix B - Pre-Construction Environmental Assessment, Somerville Sewer Rehab Design – ENG24-1097, dated March 3, 2025.

Question 13: Material Testing & Disposal: The plans and specs cite a boundary within which some contaminated materials may be found. Would surplus excavated materials generated from within the boundary need to be stockpiled and segregated separately from materials generated from outside of the boundary? Also, what if materials test with higher contamination levels than Group A? I assume Group A is Class A or <RCS-1 material? Perhaps the City would consider including a full set of soil handling and disposal items

including all common material items per TN as well as a lump sum item for soil and waste management

Answer 13: Excavation, stockpiling, transportation, and disposal of surplus soil material generated from within the Disposal Site Boundary (DSB) for Release Tracking Number (RTN) 3-23246 shall be in accordance with Sections 02 61 00.16 and 02 61 13 of the Technical Specifications. Work conducted within the DSB for RTN 3-23246, as shown on sheet C101, will be documented under a Utility-Related Abatement Measure (URAM) Plan. Soil material generated from within the DSB for RTN 3-23246 shall be segregated and tracked separately from soil material generated outside the DSB for RTN 3-23246. The subsurface data presented in Section 02 31 32 of the Technical Specifications supports transportation and disposal of soil material generated from within the DSB for RTN 3-23246 as Group A Material. Section 02 61 00.16 of the Technical Specifications defines Group A material as “excavated soil with contaminant concentrations less than MCP Reportable Concentrations (RCs) S-1 (RCS-1) Standard that meet the typical acceptance criteria for reuse at an in-state RCS-1 soil reclamation or similar soils reuse facility.” Based on the subsurface data presented in Section 02 31 32 of the Technical Specifications, no additional soil disposal categories are included in the contract documents.

Question 14: Insurance Requirements: What are the minimum insurance requirements? The sample contract refers to an Appendix C. What are the minimum coverages and limits we should figure for bidding purposes?

Answer 14: The insurance requirements can be found on Page 4 of the document entitled “Part 4 City Forms” available on the Google Drive. Article 8 Insurance Requirements refers to the location in the contract that the insurance specifications will ultimately fall into when the City awards construction contracts.

Question 15: Qualification Requirements: Can you be more specific about the info the Proposer is expected to provide in order to substantiate previous experience and current capacity to perform? In line item 2 there's great detail regarding specific experience for specific types of trenchless work but there isn't much in the way of excavation and water and sewer work which is critical on this contract. If the Proposer is predominantly a trenchless contractor what would they have to provide for qualifications for their excavation subcontractor?

Answer 15: A new quality requirement has been added, please see below:

“Proposer or its Subcontractor shall have at least five (5) projects of similar size and scope that include excavation, soil compaction, drainlaying, manhole & drainage structure construction, and water line construction within the last ten (10) years.”

Section 2.3 Minimum Quality Requirements has been revised in Attachment D.

Question 16: Streets need to be done first – is this listed in the bid specs?

Answer 16: Yes, please refer to SECTION 01 12 15 SCOPE AND SEQUENCE OF WORK, Part 3.01 (C), which states “*All work on Mount Pleasant Street, Mount Vernon Street, Lincoln Avenue, and Perkins Street shall be completed first and shall require coordination and alternate detours for the MassDOT Maffa Way Bridge Replacement Project. All other work may be scheduled at the Contractor’s discretion within the time of contract so long as it adheres to this scope and sequence of work and all plans and specifications. The schedule is also subject to approval by the Engineer.*”

Question 17: Boring logs for relay on Mt Pleasant. Lower the line and calling for new manhole, are there rock profiles or boring logs report.

Answer 17: No, rock profiles are unknown on Mount Pleasant Street. There are no boring logs on Mount Pleasant Street.

Question 18: #50 Franklin, building close. Specifically calls for vibration monitoring pre/post inspection.

Answer 18: The following sheets and buildings have been updated with call-outs for geotechnical monitoring as specified in Section 31 09 13 GEOTECHNICAL INSTRUMENTATION, Part 1.05 B (1).

- Sheet C106 - #50 Franklin Street
- Sheet C107 - #10 Franklin Ave
- Sheet C108 - #57-#59 Myrtle St
- Sheet C109 - #34 Florence St
- Sheet C110 - #9 Mount Vernon St
- Sheet C112 - #21-#39 Mount Pleasant St

Question 19: C101 soil and Contaminated water, dewatering, any work should bidder include in bid? Within plume area. List specific item# in bid form

Answer 19: The goal for backfill material is to replace the excavated material back into the trench, as long as the material complies with characteristics required in Section 31 00 00 - EARTHWORK. If there is any surplus material from within the disposal site boundary on C101, this surplus material shall be screened by the on-site environmental engineer. If the screening results deem the material as impacted, it shall be handled and disposed of under bid item 5c, in accordance with Section 02 61 13 - EXCAVATION AND STOCKPILING OF IMPACTED MATERIAL and Section 02 61 00.16 - TRANSPORTATION AND DISPOSAL OF IMPACTED MATERIAL.

If groundwater is encountered within the disposal site boundary on C101 during excavation activities, dewatering of this area shall be handled under bid item 6a.

Question 20: There are two 7d bid items. I assume the intention was for Pavement markings to be 7d, Permanent concrete sidewalk to be 7e, and Temporary hot mix asphalt sidewalk to be 7f?

Answer 20: Yes, the bid items under "Pavement and Sidewalk Replacement have been updated as follows:

Item 7d – Pavement Markings, lump sum

Item 7e – Temporary hot mix asphalt sidewalk, per linear foot

Item 7f – Permanent concrete sidewalk, per linear foot

The bid form and Section 01 22 00 – Measurement and Payment, 1.10.A, have been updated to reflect the correct bid item numbers to clarify 7d, 7e, and 7f.

REVISIONS

R1. Remove plan sheets C101, C103, C106-C112 and replace with Attachment A – Plan Sheets C101, C103, C106-C112 – Revision #1.

R2. Remove Bid Form and replace with Attachment B – Revised Bid Form.

R.3 Remove Section 01 22 00 – MEASUREMENT AND PAYMENT and replace with Attachment C – Revised Section 01 22 00 – MEASUREMENT AND PAYMENT.

R.4 Remove Jamie's email "CraigJ@wse.com" and replace with "CraigJ@wseinc.com."

R.5 Remove Section 2.3 Minimum Quality Requirements and replace with Attachment D "2.3 Minimum Quality Requirements Revised 4/10/2025"

ATTACHMENTS

Attachment updates are highlighted in blue within each document.

Attachment A – Plan Sheets C101, C103, C106-C112 – Revision #1

Attachment B – Revised Bid Form

Attachment C – Revised Section 01 22 00 – MEASUREMENT AND PAYMENT

Attachment D – Minimum Quality Requirements Revised 4/10/2025

END OF ADDENDUM NO. 1

Attachment A

Plan Sheets C101, C103, C106-C112 – Revision #1

RTN-3-23246 BOUNDARY REFERENCE
Figure 6-3 titled "Permanent Solution Status" from "Phase V Status Report
No. 27 and Remedial Monitoring Report No. 42, 50 Tufts Street, Somerville,
Massachusetts" issued by GEI Consultants in February 2025.

REPLACE MANHOLE FRAME AND COVER

BID	SUBAREA	MH	STREET / LOCATION
BASE BID	C1	1412	FLORENCE STREET
BASE BID	C1	1413	FLORENCE STREET
BASE BID	C1	2663	MYRTLE STREET
BASE BID	C1	2697	FRANKLIN STREET

MAINLINE CHEMICAL ROOT TREATMENT

BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)
BASE BID	C1	1344	C1	1362	FRANKLIN STREET	8	VC	257
BASE BID	C1	1373	C1	1375	FRANKLIN STREET	8	VC	163
BASE BID	C1	1378	C1	1379	FRANKLIN STREET	8	VC	197
BASE BID	C1	1387	C1	1386	FRANKLIN STREET	8	VC	99
BASE BID	C1	1394	C1	1408	WASHINGTON STREET	12	VC	194
BASE BID	C1	1395	C1	1393	MYRTLE STREET	8	VC	252
BASE BID	C1	1396	C1	1394	MYRTLE STREET	8	VC	248
BASE BID	C1	1400	C1	2389	MYRTLE STREET	8	VC	126
BASE BID	C1	1416	C1	1418	FLORENCE STREET	8	VC	211
BASE BID	C1	1420	C1	1421	FLORENCE STREET	8	VC	217
BASE BID	C1	1422	C1	1410	FLORENCE STREET	8	VC	75
BASE BID	C1	2388	C1	2650	MYRTLE STREET	8	VC	217
BASE BID	C1	2552	C1	2388	MYRTLE STREET	8	VC	116

HEAVY CLEANING

BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)
BASE BID	C1	2697	C1	2136	FRANKLIN STREET	21	BRICK	213
BASE BID	C1	2664	FIT	1156	MYRTLE STREET	15	BRICK	188
BASE BID	C1	1354	C1	2697	FRANKLIN STREET	18	BRICK	245
BASE BID	C1	1389	C1	1390	FRANKLIN AVENUE ¹	12	VC	435
BASE BID	C1	1390	C1	1391	FRANKLIN AVENUE	8	VC	159
BASE BID	C1	2661	C1	2666	FLORENCE STREET	12	PVC	340
BASE BID	FIT	1156	C1	2663	MYRTLE STREET	15	BRICK	388

Note:

1. Storm over sewer pipe.

INSTALL PRECAST MANHOLE

BID	SUBAREA	MH	MH TYPE	STREET / LOCATION	EXISTING STRUCTURE	APPROXIMATE FOOTAGE FROM DOWNSTREAM SEWER MANHOLE (LF)	APPROXIMATE DEPTH TO EXISTING INVERT (VF)
BASE BID	FIT	1156	COMBINED	MYRTLE STREET	STUB	127	8
BASE BID	FIT	1157	COMBINED	FRANKLIN STREET	STUB	200	9

FULL PIPE REPLACEMENT, MANHOLE TO MANHOLE

BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)	REINSTATE SERVICE
BASE BID	C1	1384	C1	1362	FRANKLIN STREET	8	VC	31	NONE

CUT PROTRUDING SERVICE CONNECTION

BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)	APPROXIMATE STATION
BASE BID	C1	1373	C1	1375	FRANKLIN STREET	8	VC	163	0+08, 1+31
BASE BID	C1	1392	C1	1393	WASHINGTON STREET	12	VC	261	1+50
BASE BID	C1	1395	C1	1393	MYRTLE STREET	8	VC	252	2+05
BASE BID	C1	1398	C1	2650	MYRTLE STREET	8	VC	140	0+89
BASE BID	C1	1399	C1	1397	MYRTLE STREET	8	VC	120	0+62
BASE BID	C1	1400	C1	2389	MYRTLE STREET	8	VC	126	0+87
BASE BID	C1	1410	C1	1408	FLORENCE STREET	8	VC	402	0+56, 0+57, 0+98, 1+22, 1+23, 2+93
BASE BID	C1	1420	C1	1421	FLORENCE STREET	8	VC	217	2+09
BASE BID	C1	2460	FIT	1157	FRANKLIN STREET	15	BRK	200	1+58
BASE BID	C1	2663	FIT	1156	MYRTLE STREET	15	BRK	388	0+92

OPEN CUT POINT REPAIR

BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)	APPROXIMATE STATION	TO APPROXIMATE STATION	REINSTATE SERVICE
BASE BID	C1	1344	C1	1362	FRANKLIN STREET	8	VC	257	1+48	2+15	1+55, 1+64
BASE BID	C1	1378	C1	1379	FRANKLIN STREET	8	VC	197	0+63	1+03	0+74
BASE BID	C1	1379	C1	1383	FRANKLIN STREET	8	VC	241	2+14	2+41	NONE
BASE BID	C1	1379	C1	1383	FRANKLIN STREET	8	VC	241	0+00	0+22	NONE
BASE BID	C1	1387	C1	1386	FRANKLIN STREET	8	VC	99	0+62	0+71	NONE
BASE BID	C1	1389	C1	1390	FRANKLIN AVENUE	8	VC	276	0+32	0+92	0+57, 0+72, 0+88
BASE BID	C1	1389	C1	1390	FRANKLIN AVENUE	8	VC	276	2+26	2+36	NONE
BASE BID	C1	1390	C1	1391	FRANKLIN AVENUE	8	VC	248	1+39	1+52	NONE
BASE BID	C1	1398	C1	2650	MYRTLE STREET	8	VC	140	0+23	0+70	NONE
BASE BID	C1	1412	C1	2661	FLORENCE STREET	12	BRK	116	0+00	0+20	0+06, 0+09, 0+18
BASE BID	C1	1413	C1	1412	FLORENCE STREET	12	VC	163	1+35	1+63	1+44, 1+53
BASE BID	C1	1421	C1	1422	FLORENCE STREET	8	VC	152	1+41	1+50	1+46
BASE BID	C1	1422	C1	1410	FLORENCE STREET	8	VC	75	0+00	0+28	NONE
BASE BID	C1	2388	C1	2650	MYRTLE STREET	8	VC	217	0+77	0+88	NONE
BASE BID	C1	2611	C1	2665	MYRTLE STREET	12	VC	108	0+86	1+08	NONE
BASE BID	FIT	1157	S2	2469	FRANKLIN STREET	15	VC	378	0+67	0+77	NONE

BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)	REINSTATE SERVICE(S)
BASE BID	C1	1344	C1	1362	FRANKLIN STREET	8	VC	257	NONE
BASE BID	C1	1348	C1	1344	FRANKLIN STREET	8	VC	32	NONE
BASE BID	C1	1362	C1	2390	FRANKLIN STREET	12	VC	221	0+05, 0+35, 0+52
BASE BID	C1	1373	C1	1375	FRANKLIN STREET	8	VC	163	0+08, 0+81, 1+31
BASE BID	C1	1378	C1	1377	FRANKLIN STREET	8	VC	160	0+73
BASE BID	C1	1378	C1	1379	FRANKLIN STREET	8	VC	197	0+74, 1+24, 1+48
BASE BID	C1	1379	C1	1383	FRANKLIN STREET	8	VC	241	0+25, 0+75, 1+47
BASE BID	C1	1383	C1	1384	FRANKLIN STREET	8	VC	216	1+07
BASE BID	C1	1385	C1	1384	FRANKLIN STREET	8	VC	148	0+83, 1+28
BASE BID	C1	1387	C1	1386	FRANKLIN STREET	8	VC	99	NONE
BASE BID	C1	1387	C1	1391	WASHINGTON STREET	10	VC	326	1+46, 1+68, 2+14, 2+54
BASE BID	C1	1389	C1	1390	FRANKLIN AVENUE	8	VC	276	0+57, 0+72, 0+88, 0+94, 1+13, 1+24, 1+44, 1+52, 1+76, 1+84, 1+98, 2+15, 2+35, 2+48, 2+59, 2+63, 2+71
BASE BID	C1	1390	C1	1391	FRANKLIN AVENUE	8	VC	248	0+17, 0+61, 0+66, 0+93, 1+07, 1+26, 1+57, 1+81, 1+88, 2+11, 2+21, 2+44
BASE BID	C1	1392	C1	1393	WASHINGTON STREET	12	VC	261	1+50
BASE BID	C1	1394	C1	1408	WASHINGTON STREET	12	VC	194	1+87
BASE BID	C1	1395	C1	1393	MYRTLE STREET	8	VC	252	0+20, 0+78, 1+53, 2+05
BASE BID	C1	1398	C1	2650	MYRTLE STREET	8	VC	140	0+39, 0+89
BASE BID	C1	1399	C1	1397	MYRTLE STREET	8	VC	120	0+62, 1+07
BASE BID	C1	1400	C1	1399	MYRTLE STREET	8	VC	114	NONE
BASE BID	C1	1400	C1	2389	MYRTLE STREET	8	VC	126	0+87
BASE BID	C1	1410	C1	1408	FLORENCE STREET	8	VC	402	0+56, 0+57, 0+73, 0+98, 1+22, 1+23, 1+33, 1+63, 2+25, 2+64, 2+93, 3+33
BASE BID	C1	1411	C1	1409	FLORENCE STREET	8	VC	351	0+05, 0+78, 1+25, 1+89, 1+95, 3+02
BASE BID	C1	1412	C1	2661	FLORENCE STREET	12	BRICK	116	0+06, 0+09, 0+18, 0+31, 1+03
BASE BID	C1	1413	C1	1412	FLORENCE STREET	12	VC	163	0+39, 0+48, 0+52, 0+77, 0+86, 1+44, 1+53
BASE BID	C1	1414	C1	1413	FLORENCE STREET	12	VC	222	1+70
BASE BID	C1	1416	C1	1418	FLORENCE STREET	8	VC	211	0+44
BASE BID	C1	1419	C1	1411	FLORENCE STREET	8	VC	129	0+29, 0+59, 0+96
BASE BID	C1	1420	C1	1421	FLORENCE STREET	8	VC	217	NONE
BASE BID	C1	1421	C1	1422	FLORENCE STREET	8	VC	152	0+39, 0+79, 1+14, 1+46
BASE BID	C1	1422	C1	1410	FLORENCE STREET	8	VC	75	0+29, 0+52, 0+74
BASE BID	C1	2388	C1	2650	MYRTLE STREET	8	VC	217	0+30, 0+96
BASE BID	C1	2390	C1	1371	FRANKLIN STREET	12	VC	219	0+52, 2+03
BASE BID	C1	2460	FIT	1157	FRANKLIN STREET	15	BRICK	200	0+63, 0+99, 1+14, 1+58, 1+72, 1+74, 1+78
BASE BID	C1	2552	C1	2388	MYRTLE STREET	8	VC	116	1+07
BASE BID	C1	2611	C1	2665	MYRTLE STREET	12	VC	108	0+49, 0+82
BASE BID	C1	2661	C1	2666	FLORENCE STREET	12	PVC	340	0+70, 0+77
BASE BID	C1	2664	FIT	1156	MYRTLE STREET	15	BRICK	188	UNKNOWN ²
BASE BID	FIT	1156	C1	2663	MYRTLE STREET	15	BRICK	388	2+84, 2+92, 2+96, 3+12, 3+39, 3+42, 3+70, 3+72, 3+81
BASE BID	FIT	1157	S2	2469	FRANKLIN STREET	15	VC	378	0+04, 0+36, 0+68 ²

Note:

1. Storm over sewer pipe.

2. TV inspection for the specific pipe is incomplete due to collapse or heavy debris. Pipe shall be fully inspected after the excavation repair and/or heavy cleaning. Number of service connections may change due to complete inspection.

CEMENTITIOUS LINING OF SEWER MANHOLES

BID	SUBAREA	MH	MH TYPE	STREET / LOCATION	MATERIAL	APPROXIMATE MH DEPTH (VF)
BASE BID	C1	1344	SEWER	FRANKLIN STREET	BRICK	10
BASE BID	C1	1348	SEWER	FRANKLIN STREET	BRICK	10
BASE BID	C1	1371	SEWER	FRANKLIN STREET	BRICK	13
BASE BID	C1	1373	SEWER	FRANKLIN STREET	BRICK	8
BASE BID	C1	1375	SEWER	FRANKLIN STREET	BRICK	13
BASE BID	C1	1377	SEWER	FRANKLIN STREET	BRICK	6
BASE BID	C1	1378	SEWER	FRANKLIN STREET	BRICK	7
BASE BID	C1	1379	SEWER	FRANKLIN STREET	BRICK	9
BASE BID	C1	1383	SEWER	FRANKLIN STREET	BRICK	7
BASE BID	C1	1385	SEWER	FRANKLIN STREET	BRICK	15
BASE BID	C1	1386	SEWER	FRANKLIN STREET	BRICK	10
BASE BID	C1	1387	SEWER	WASHINGTON STREET	BRICK	10
BASE BID	C1	1391	SEWER	WASHINGTON STREET	BRICK	9
BASE BID	C1	1392	SEWER	WASHINGTON STREET	BRICK	9
BASE BID	C1	1396	SEWER	MYRTLE STREET	BRICK	9
BASE BID	C1	1399	SEWER	MYRTLE STREET	BRICK	10
BASE BID	C1	1408	SEWER	FLORENCE STREET	BRICK	10
BASE BID	C1	1410	SEWER	FLORENCE STREET	BRICK	8
BASE BID	C1	1411	SEWER	FLORENCE STREET	BRICK	7
BASE BID	C1	1413	COMBINED	FLORENCE STREET	BRICK	3
BASE BID	C1	1416	SEWER	FLORENCE STREET	BRICK	8
BASE BID	C1	1418	SEWER	FLORENCE STREET	BRICK	12
BASE BID	C1	1420	SEWER	FLORENCE STREET	BRICK	7
BASE BID	C1	1421	SEWER	FLORENCE STREET	BRICK	13
BASE BID	C1	1422	SEWER	FLORENCE STREET	BRICK	8
BASE BID	C1	2388	SEWER	MYRTLE STREET	BRICK	11
BASE BID	C1	2389	SEWER	MYRTLE STREET	BRICK	11
BASE BID	C1	2390	SEWER	FRANKLIN STREET	BRICK	12
BASE BID	C1	2611	COMBINED	MYRTLE STREET	BRICK	7
BASE BID	C1	2650	SEWER	MYRTLE STREET	BRICK	9
BASE BID	C1	2663	COMBINED	MYRTLE STREET	BRICK	8
BASE BID	C1	2665	COMBINED	MYRTLE STREET	BLOCK	5
BASE BID	C1	2666	COMBINED	FLORENCE STREET	BRICK	7

Project: CITY OF SOMERVILLE, MA



2024 SEWER REHAB DESIGN

DEPARTMENT OF
INFRASTRUCTURE AND ASSET
MANAGEMENT, 1 FRANEY ROAD,
SOMERVILLE, MA 02145

Weston & Sampson

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Consultants:

Revisions:

No.	Date	Description
1	04/10/2025	ADDENDUM NO. 1

COA:

Seal



Digitally signed by
Patrick A. Terrien
Civil
No. 46717
Date: 2025.04.10
15:44:48 -04'00'

Issued For:

BID

Scale:

AS NOTED

Date:

MARCH 2025

Drawn By:

ZSO

Reviewed By:

JMC

Approved By:

GROUT AND PATCH SEWER MANHOLES						
BID	SUBAREA	MH	MH TYPE	STREET / LOCATION	MATERIAL	APPROXIMATE MH DEPTH (VF)
ALT BID NO. 1	S1	2500	SEWER	FREMONT STREET	LINED	8
ALT BID NO. 2	S1	2271	SEWER	MOUNT VERNON AVENUE	PRECAST	12

GROUT AND PATCH SEWER MANHOLES						
BID	SUBAREA	MH	MH TYPE	STREET / LOCATION	MATERIAL	APPROXIMATE MH DEPTH (VF)
ALT BID NO. 3	S2	2734	SEWER	ILLINOIS AVENUE	BRICK	7

MAINLINE CHEMICAL ROOT TREATMENT							
BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL
ALT BID NO. 1	S1	980	S1	982	FREMONT STREET	10	VC
ALT BID NO. 1	S1	985	S1	980	FREMONT STREET	8	VC
ALT BID NO. 2	S1	987	S1	988	FREMONT STREET	8	VC
ALT BID NO. 2	S2	1699	S2	2279	HEATH STREET	12	VC

CUT PROTRUDING SERVICE CONNECTION								
BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)
ALT BID NO. 1	S1	985	S1	980	FREMONT STREET	8	VC	246
ALT BID NO. 1	S1	1933	S1	1110	MORELAND STREET	8	VC	155
ALT BID NO. 1	S1	1934	S1	1984	MORELAND STREET	8	VC	251
ALT BID NO. 1	S1	1984	S1	1932	MORELAND STREET	8	VC	87
ALT BID NO. 2	S1	1643	S1	1644	CENTURY STREET	8	VC	192
ALT BID NO. 2	S1	1931	S1	1932	EAST ALBION STREET	8	VC	219
ALT BID NO. 2	S1	2273 A	S1	2273 B	MOUNT VERNON AVENUE	8	VC	65
ALT BID NO. 2	S2	1699	S2	1648	HEATH STREET	12	VC	197

REPLACE GRAVITY SEWER SERVICE CONNECTION								
BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)
ALT BID NO. 2	S1	1930	S1	1931	ASH AVENUE	8	VC	287

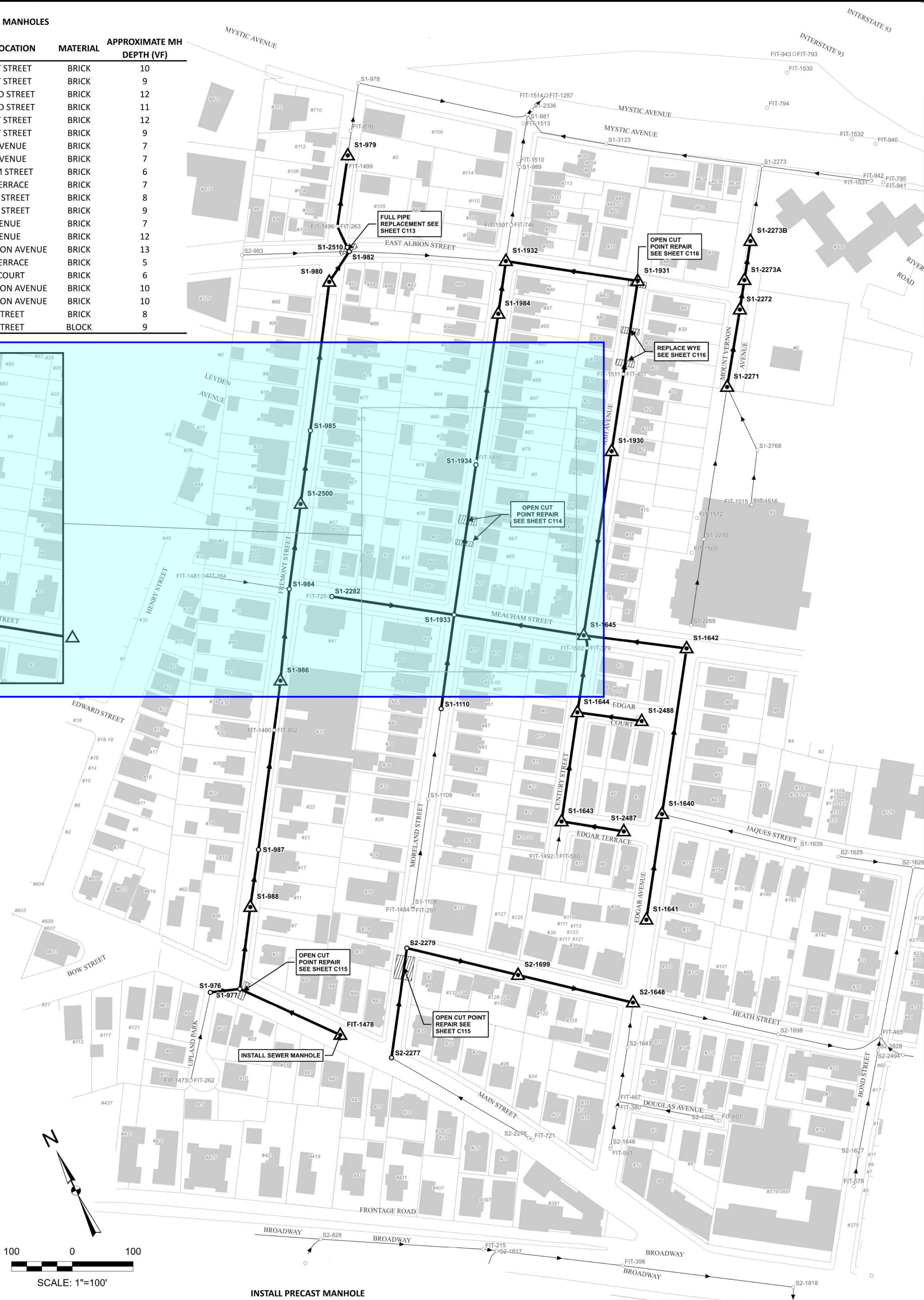
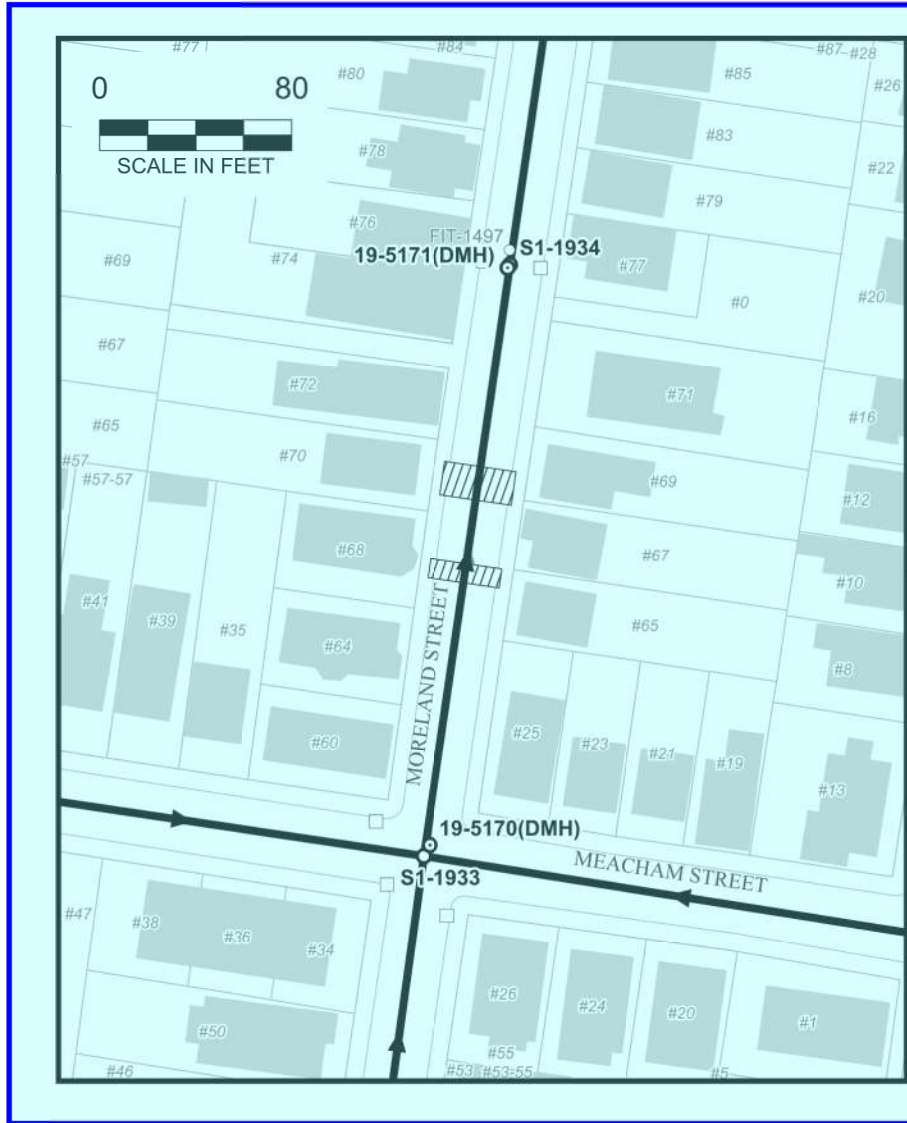
FULL PIPE REPLACEMENT, MANHOLE TO MANHOLE								
BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)
ALT BID NO. 1	S1	982	S1	2510	FREMONT STREET	10	VC	8

OPEN CUT POINT REPAIR										
BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)	APPROXIMATE STATION	TO REINSTATE SERVICE
ALT BID NO. 1	S1	1933	S1	1934	MORELAND STREET	8	VC	253	1+15	1+19
ALT BID NO. 1	S1	1933	S1	1934	MORELAND STREET	8	VC	253	1+50	1+51
ALT BID NO. 1	S2	2279	S2	2277	MORELAND STREET	10	VC	184	0+13	0+52
ALT BID NO. 2	S1	977	FIT	1478	MAIN STREET	8	VC	187	0+02	0+12
ALT BID NO. 2	S1	1930	S1	1931	ASH AVENUE	8	VC	287	1+95	2+05
ALT BID NO. 2	S1	1930	S1	1931	ASH AVENUE	8	VC	287	2+77	2+87

CURED-IN-PLACE MANHOLE TO MANHOLE LINER										
BID	SUBAREA	MH	TO SUBAREA	TO MH	STREET / LOCATION	PIPE DIA (IN)	MATERIAL	APPROXIMATE MH TO MH LENGTH (LF)	REINSTATE SERVICE(S)	
ALT BID NO. 1	19	5170	19	5171	MORELAND STREET	15	VC	240	NONE	
ALT BID NO. 1	S1	980	S1	982	FREMONT STREET	10	VC	67	NONE	
ALT BID NO. 1	S1	984	S1	2500	FREMONT STREET	8	VC	139	0+53, 0+84, 1+07, 1+09, 1+31	
ALT BID NO. 1	S1	985	S1	980	FREMONT STREET	8	VC	246	0+20, 0+23, 0+46, 0+70, 0+72, 0+96, 0+98, 1+00, 1+41, 1+49, 1+75, 2+00, 2+30	
ALT BID NO. 1	S1	1933	S1	1110	MORELAND STREET	8	VC	155	0+03, 0+27, 0+28, 0+73, 1+05, 1+13, 1+34, 1+42	
ALT BID NO. 1	S1	1933	S1	1934	MORELAND STREET	8	VC	253	0+57, 0+65, 0+86, 0+91, 1+12, 1+19, 1+19, 1+40, 1+51, 1+70, 1+81, 1+90, 2+04, 2+37	
ALT BID NO. 1	S1	1934	S1	1984	MORELAND STREET	8	VC	251	0+13, 0+21, 0+34, 0+54, 0+63, 0+79, 0+97, 1+04, 1+23, 1+36, 1+50, 1+65, 1+78, 1+80	
ALT BID NO. 1	S1	1934	S1	1984	MORELAND STREET	8	VC	251	1+83, 2+24	
ALT BID NO. 1	S1	1984	S1	1932	MORELAND STREET	8	VC	87	0+05, 0+28, 0+29	
ALT BID NO. 1	S1	2500	S1	985	FREMONT STREET	8	VC	122	0+24, 0+31, 0+42, 0+61, 0+91, 1+05	
ALT BID NO. 1	S1	2510	S1	979	FREMONT STREET	10	VC	146	0+42, 0+71, 0+97, 1+21, 1+23	
ALT BID NO. 1	S2	2279	S2	2277	MORELAND STREET	10	VC	184	0+08, 0+15, 0+41, 0+79, 1+35	
ALT BID NO. 2	S1	977	FIT	1478	MAIN STREET	8	VC	187	0+03	
ALT BID NO. 2	S1	977	S1	976	MAIN STREET	8	VC	51	0+04, 0+45	
ALT BID NO. 2	S1	977	S1	988	FREMONT STREET	8	VC	140	1+26, 1+29	
ALT BID NO. 2	S1	986	S1	984	FREMONT STREET	8	VC	150	0+15, 0+17, 0+46, 1+20, 1+22	
ALT BID NO. 2	S1	987	S1	986	FREMONT STREET	8	VC	282	0+06, 0+08, 0+57, 0+62, 0+93, 1+01, 1+13, 1+40, 1+55, 1+95, 2+09, 2+32, 2+52	
ALT BID NO. 2	S1	987	S1	988	FREMONT STREET	8	VC	95	0+27, 0+54	
ALT BID NO. 2	S1	1641	S1	1640	EDGAR AVENUE	8	VC	175	0+15, 0+31, 0+55	
ALT BID NO. 2	S1	1642	S1	1640	EDGAR AVENUE	8	VC	279	0+09, 0+28, 0+74, 1+11, 1+85, 2+71	
ALT BID NO. 2	S1	1643	S1	1644	CENTURY STREET	8	VC	192	0+13, 0+59, 0+97, 1+24, 1+28, 1+69	
ALT BID NO. 2	S1	1643	S1	2487	EDGAR TERRACE	8	VC	103	0+37, 0+62, 0+64, 0+96, 0+98	
ALT BID NO. 2	S1	1644	S1	1645	CENTURY STREET	8	VC	125	0+22, 0+40, 0+76, 0+81, 1+18	
ALT BID NO. 2	S1	1644	S1	2488	EDGAR COURT	8	VC	108	0+42, 0+69, 1+03, 1+05	
ALT BID NO. 2	S1	1645	S1	1642	MEACHAM STREET	8	VC	174	NONE	
ALT BID NO. 2	S1	1645	S1	1930	ASH AVENUE	8	VC	309	0+45, 0+72, 0+99, 1+01, 1+26, 1+50, 1+72, 1+86, 1+98, 2+22, 2+47	
ALT BID NO. 2	S1	1645	S1	1933	MEACHAM STREET	8	VC	215	0+63, 1+12, 1+14, 1+37, 1+40, 1+62, 1+65, 1+92	
ALT BID NO. 2	S1	1930	S1	1931	ASH AVENUE	8	VC	287	0+19, 0+27, 0+39, 0+75, 0+78, 1+08, 1+13, 1+25, 1+45, 1+48, 1+84, 2+00, 2+18, 2+20	
ALT BID NO. 2	S1	1931	S1	1932	EAST ALBION STREET	8	VC	219	2+61, 2+80	
ALT BID NO. 2	S1	2271	S1	2272	MOUNT VERNON AVENUE	8	VC	135	0+61, 0+63, 0+66, 0+93, 1+09, 1+11, 1+13, 1+40	
ALT BID NO. 2	S1	2272	S1	2273 A	MOUNT VERNON AVENUE	8	VC	56	0+66, 1+28	
ALT BID NO. 2	S1	2273 A	S1	2273 B	MOUNT VERNON AVENUE	8	VC	65	NONE	
ALT BID NO. 2	S1	2282	S1	1933	MEACHAM ROAD	8	VC	207	0+52	
ALT BID NO. 2	S2	1699	S2	1648	HEATH STREET	12	VC	197	NONE	
ALT BID NO. 2	S2	1699	S2	2279	HEATH STREET	12	VC	189	0+25, 0+33, 0+35, 0+58, 0+85, 0+90, 1+19, 1+34, 1+55, 1+79, 1+84	

Note:
1. Storm over sewer pipe.

CEMENTITIOUS LINING OF SEWER MANHOLES						
BID	SUBAREA	MH	MH TYPE	STREET / LOCATION	MATERIAL	APPROXIMATE MH DEPTH (VF)
ALT BID NO. 1	S1	979	SEWER	FREMONT STREET	BRICK	10
ALT BID NO. 1	S1	980	SEWER	FREMONT STREET	BRICK	9
ALT BID NO. 1	S1	1932	SEWER	MORELAND STREET	BRICK	12
ALT BID NO. 1	S1	1984	SEWER	MORELAND STREET	BRICK	11
ALT BID NO. 2	S1	986	SEWER	FREMONT STREET	BRICK	12
ALT BID NO. 2	S1	988	COMBINED	FREMONT STREET	BRICK	9
ALT BID NO. 2	S1	1640	COMBINED	EDGAR AVENUE	BRICK	7
ALT BID NO. 2	S1	1641	COMBINED	EDGAR AVENUE	BRICK	7
ALT BID NO. 2	S1	1642	COMBINED	MEACHAM STREET	BRICK	6
ALT BID NO. 2	S1	1643	SEWER	EDGAR TERRACE	BRICK	7
ALT BID NO. 2	S1	1644	SEWER	CENTURY STREET	BRICK	8
ALT BID NO. 2	S1	1645	SEWER	CENTURY STREET	BRICK	9
ALT BID NO. 2	S1	1930	SEWER	ASH AVENUE	BRICK	7
ALT BID NO. 2	S1	1931	SEWER	ASH AVENUE	BRICK	12
ALT BID NO. 2	S1	2272	SEWER	MOUNT VERNON AVENUE	BRICK	13
ALT BID NO. 2	S1	2487	SEWER	EDGAR TERRACE	BRICK	5
ALT BID NO. 2	S1	2488	SEWER	EDGAR COURT	BRICK	6
ALT BID NO. 2	S1	2273A	SEWER	MOUNT VERNON AVENUE	BRICK	10
ALT BID NO. 2	S1	2273E	SEWER	MOUNT VERNON AVENUE	BRICK	10
ALT BID NO. 2	S2	1648	SEWER	HEATH STREET	BRICK	8
ALT BID NO. 2	S2	1699	COMBINED	HEATH STREET	BLOCK	9

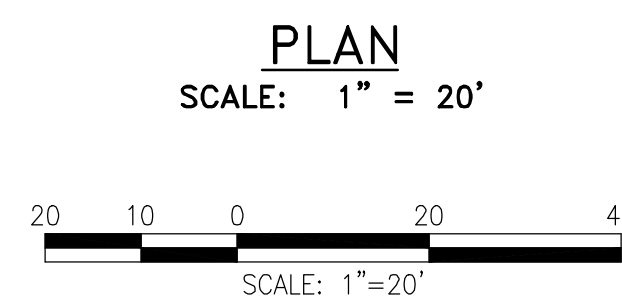



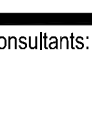

1. FOR EACH REPLACE CONNECTION A PUSH CAM INSPECTION WILL BE CONDUCTED FROM THE MAINLINE SEWER TO THE PROPERTY LINE.
2. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY IN ANY LOCATION WHERE A UTILITY POLE NEEDS TO BE RESTRAINED TO COMPLETE WORK.
3. THE EXISTING SEWER FROM C1-1362 (STA 0+00; FRANKLIN STREET PERPENDICULAR) TO C1-1384 (STA 0+33; FRANKLIN STREET PERPENDICULAR) HAS HORIZONTAL BENDS AT STA 0+11 AND STA 0+17. CONTRACTOR SHALL FURNISH AND INSTALL SEWER WITHOUT THE USE OF BENDS.
4. THE CONTRACTOR SHALL BE AWARE THAT MANHOLES WITH CNO LABELS DO NOT CONTAIN INVERT ELEVATIONS FROM SURVEY; INVERTS ARE BASED ON PREVIOUS MANHOLE INSPECTIONS.
5. SPECIFIC TREES, WHERE THE LIMITS OF EXCAVATION ARE LESS THAN FIVE (5) FEET FROM THE TRUNK OF THE TREE, SHALL BE REMOVED PRIOR TO EXCAVATION. SEVEN (7) DAYS PRIOR TO TREE REMOVAL, THE CONTRACTOR SHALL INFORM THE CITY OF SOMERVILLE TREE WARDEN FOR PROPER AUTHORIZATION AND DOCUMENTATION.
6. THE PIPE INVERTS FOR THE PROPOSED SMH AT FIT-1157 ARE ESTIMATED BASED ON INVERTS OF DOWNSTREAM SMH C1-2460 AND EXISTING GRADE ELEVATIONS.
7. WORK ON FRANKLIN STREET WILL BE CONDUCTED UNDER A UTILITY-RELATED ABATEMENT MEASURE (URAM) IN ACCORDANCE WITH THE MASSACHUSETTS CONTINGENCY PLAN (MCP).
8. IN AREAS WHERE WORK REQUIRES THE REMOVAL OF THE OWNER'S PROPERTY INCLUDING BUT NOT LIMITED TO BENCHES, PARKING METERS, PARKING SIGNS, AND HYDRANTS, THE CONTRACTOR SHALL REMOVE THESE ITEMS PRIOR TO CONSTRUCTION AND HANDLE AS SPECIFIED IN 01 11 00 CONTROL OF WORK AND MATERIALS.
9. CONTRACTOR SHALL REFER TO SECTION 31 09 13 - GEOTECHNICAL INSTRUMENTATION FOR REQUIREMENTS FOR PRE AND POST CONSTRUCTION SURVEY OF ADJACENT FOUNDATION (S) DURING EXCAVATION ACTIVITIES.

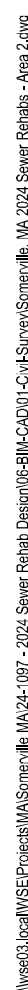


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1. FOR EACH REPLACE WYE CONNECTION A PUSH CAM INSPECTION WILL BE CONDUCTED FROM THE MAINLINE SEWER TO THE PROPERTY LINE.
2. THE CONTRACTOR SHALL BE AWARE THAT MANHOLES WITH CNO LABELS DO NOT CONTAIN INVERT ELEVATIONS FROM SURVEY; INVERTS ARE BASED ON PREVIOUS MANHOLE INSPECTIONS.
3. THERE IS AN EXISTING 10" VC DRAIN THAT LIES DIRECTLY ON TOP OF THE EXISTING 8" VC SEWER FROM C1-1389 TO C1-1390.
4. WORK ON FRANKLIN AVENUE WILL BE CONDUCTED UNDER A UTILITY-RELATED ABATEMENT MEASURE (URAM) IN ACCORDANCE WITH THE MASSACHUSETTS CONTINGENCY PLAN (MCP).
5. IN AREAS WHERE WORK REQUIRES THE REMOVAL OF THE OWNER'S PROPERTY INCLUDING BUT NOT LIMITED TO BENCHES, PARKING METERS, PARKING SIGNS, AND HYDRANTS, THE CONTRACTOR SHALL REMOVE THESE ITEMS PRIOR TO CONSTRUCTION AND HANDLE AS SPECIFIED IN SECTION 01 011 00 CONTROL OF WORK AND MATERIALS.
6. CONTRACTOR SHALL REFER TO SECTION 31 09 13 - GEOTECHNICAL INSTRUMENTATION FOR REQUIREMENTS FOR PRE AND POST CONSTRUCTION SURVEY OF ADJACENT FOUNDATION (S) DURING EXCAVATION ACTIVITIES.



Project: CITY OF SOMERVILLE, MA  2025 SEWER REHABILITATIONS DEPARTMENT OF INFRASTRUCTURE AND ASSET MANAGEMENT, 1 FRANNEY ROAD, SOMERVILLE, MA 02145		
<div style="display: flex; justify-content: space-between; align-items: center;">  <div> <p>Weston & Sampson Engineers, Inc. 55 Walkers Brook Drive, Suite 100 Reading, MA 01867 978.532.1900 800.SAMPSON</p> <p>www.westonandsampson.com</p> </div> </div>		
Consultants:		
COA:		
<div style="display: flex; align-items: center;"> <div style="flex: 1;">  <p style="text-align: right; margin-top: 10px;"> <i>Patrick Terrien</i> Date: 2025.04.10 15:44:51-04'00' </p> </div> <div style="flex: 1; padding-left: 20px;"> <p>Issued For:</p> <p style="text-align: center; font-size: 1.2em;">BID</p> <p>Scale: AS NOTED</p> </div> </div>		
<div style="display: flex; justify-content: space-between;"> <div> <p>Date: MARCH 2025</p> <p>Drawn By: ARO</p> <p>Reviewed By: JMC</p> <p>Approved By: PAT</p> <p>W&S Project No.: ENG24-1097</p> <p>W&S File No.:</p> </div> </div>		
Drawing Title:		
FRANKLIN AVENUE SEWER PLAN C1-1389 TO C1-1391		
Sheet Number:		
C107		



DEPARTMENT OF
INFRASTRUCTURE AND ASSET
MANAGEMENT, 1 FRANEY ROAD
SOMERVILLE, MA 02145

Weston & Sampson Engineers, Inc.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867

Consultants

Revisions:		
No.	Date	Description
1	04/10/2025	ADDENDUM NO. 1

304



Digitally signed
Patrick A. Terrie
PE
Date: 2025.04.
15:44:51-04'0

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BID

Scale: AS NOTED

Date: MARCH 2025

Reviewed By: IMC

Approved By: PA

W&S Project No.: ENG24 -1097

W&S File No.:

ving Title:

MYRTLE STREET SEWER PLAN

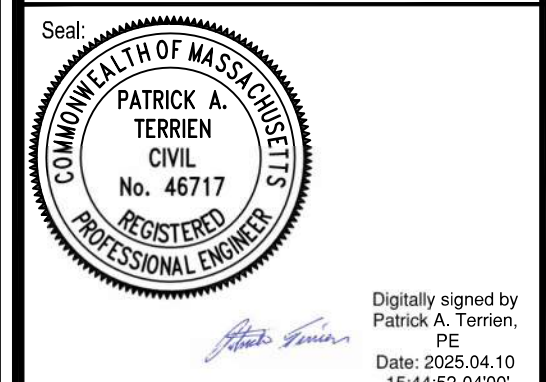
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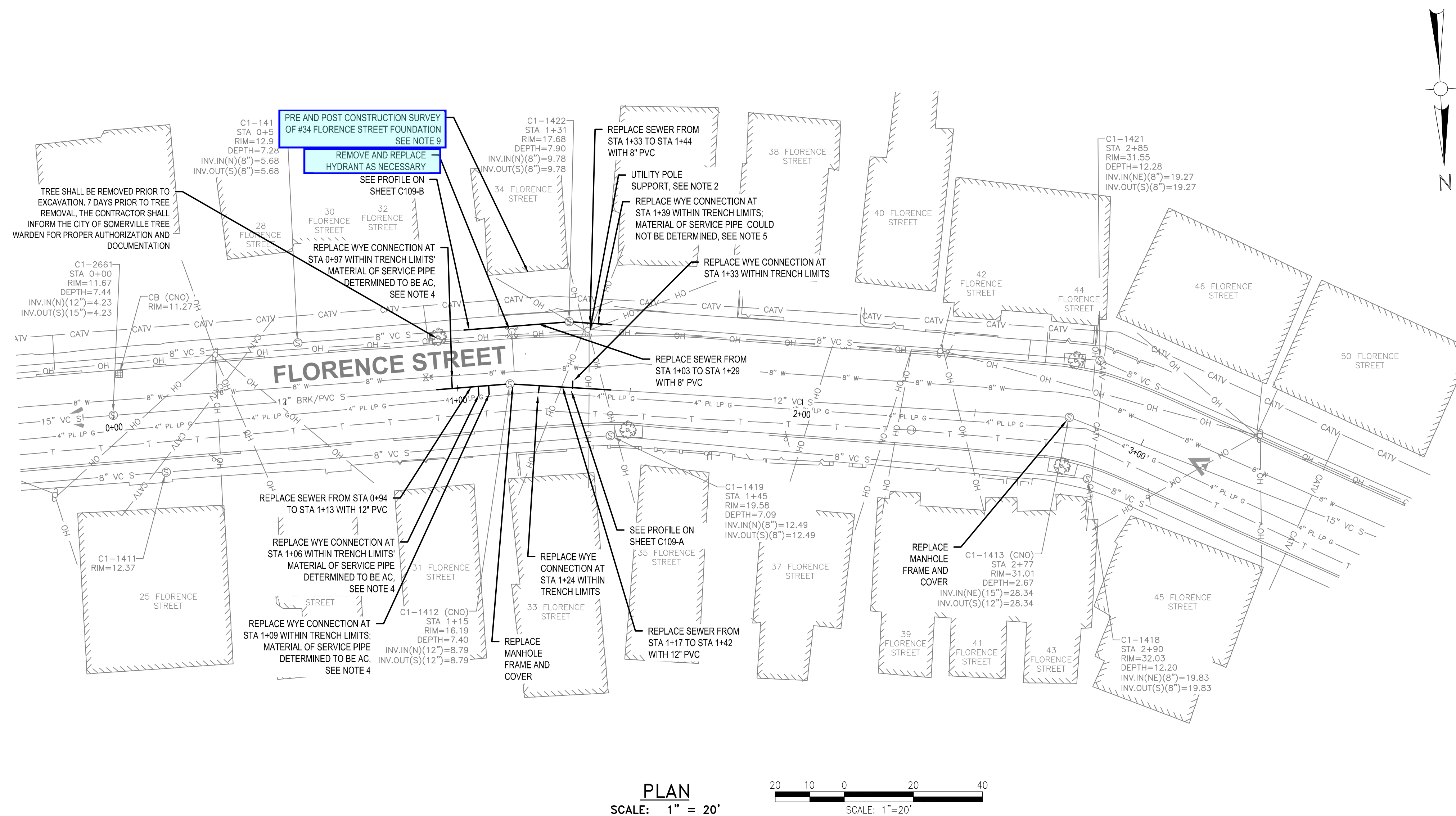
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Date:	MARCH 2025
Drawn By:	ARO
Reviewed By:	JMC
Approved By:	PAT
W&S Project No.:	ENG24 -1097
W&S File No.:	

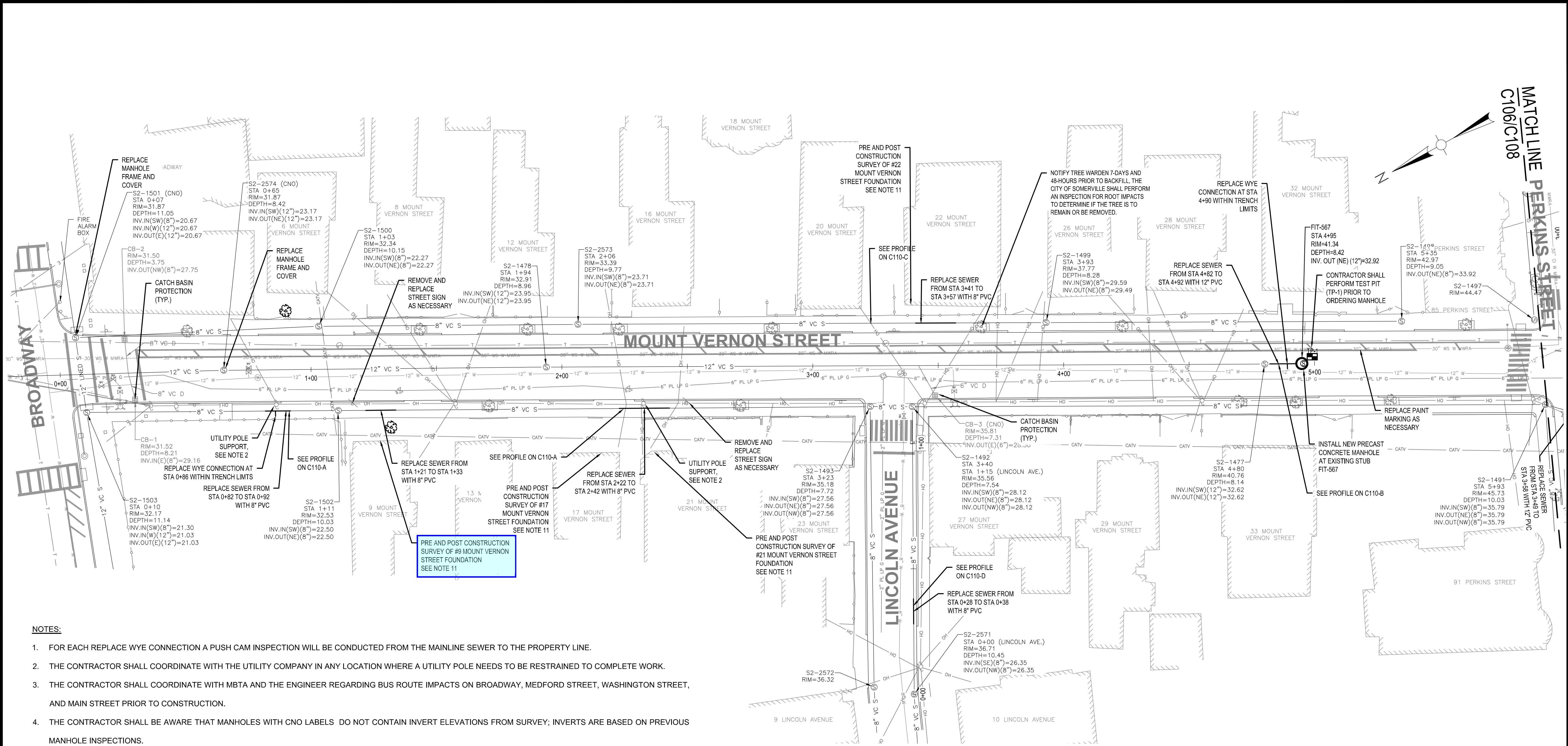
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FLORENCE STREET
SEWER PLAN

Sheet Number:
C109



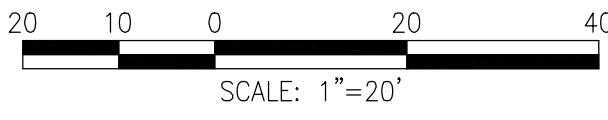
1. FOR EACH REPLACE WYE CONNECTION A PUSH CAM INSPECTION WILL BE CONDUCTED FROM THE MAINLINE SEWER TO THE PROPERTY LINE.
2. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY IN ANY LOCATION WHERE A UTILITY POLE NEEDS TO BE RESTRAINED TO COMPLETE WORK.
3. THE EXISTING SEWER FROM C1-2861 (STA 0+00) TO C1-1412 (STA 1+15) HAS PORTIONS OF BRICK PIPE (STA 0+02 TO STA 0+55 AND STA 0+94 TO STA 1+13) AND PVC PIPE (STA 0+55 TO STA 0+94).
4. THE CONTRACTOR SHALL BE AWARE THAT MANHOLES WITH CNO LABELS DO NOT CONTAIN INVERT ELEVATIONS FROM SURVEY; INVERTS ARE BASED ON PREVIOUS MANHOLE INSPECTIONS.
5. THE BUILDING CONNECTION MATERIAL WAS OBSERVED TO BE ASBESTOS CEMENT (AC) PIPE THROUGH CCTV INSPECTION.
6. THE BUILDING CONNECTION MATERIAL COULD NOT BE DETERMINED THROUGH CCTV INSPECTION, THE CONTRACTOR SHALL BE AWARE OF THE POTENTIAL FOR THIS MATERIAL TO BE AC.
7. ASBESTOS MATERIALS SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH SECTION 02 61 26 13 - ASBESTOS ABATEMENT FOR UNDERGROUND UTILITIES.
8. SPECIFIC TREES, WHERE THE LIMITS OF EXCAVATION ARE LESS THAN FIVE (5) FEET FROM THE TRUNK OF THE TREE, SHALL BE REMOVED PRIOR TO EXCAVATION. SEVEN (7) DAYS PRIOR TO TREE REMOVAL, THE CONTRACTOR SHALL INFORM THE CITY OF SOMERVILLE TREE WARDEN FOR PROPER AUTHORIZATION AND DOCUMENTATION.
9. CONTRACTOR SHALL REFER TO SECTION 31 09 13 - GEOTECHNICAL INSTRUMENTATION FOR REQUIREMENTS FOR PRE AND POST CONSTRUCTION SURVEY OF ADJACENT FOUNDATION (S) DURING EXCAVATION ACTIVITIES.



NOTES:

- FOR EACH REPLACE WYE CONNECTION A PUSH CAM INSPECTION WILL BE CONDUCTED FROM THE MAINLINE SEWER TO THE PROPERTY LINE.
- THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY IN ANY LOCATION WHERE A UTILITY POLE NEEDS TO BE RESTRAINED TO COMPLETE WORK.
- THE CONTRACTOR SHALL COORDINATE WITH MBTA AND THE ENGINEER REGARDING BUS ROUTE IMPACTS ON BROADWAY, MEDFORD STREET, WASHINGTON STREET, AND MAIN STREET PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE AWARE THAT MANHOLES WITH CNO LABELS DO NOT CONTAIN INVERT ELEVATIONS FROM SURVEY; INVERTS ARE BASED ON PREVIOUS MANHOLE INSPECTIONS.
- SPECIFIC TREES, WHERE THE LIMITS OF EXCAVATION ARE GREATER THAN OR EQUAL TO FIVE (5) FEET FROM THE TRUNK OF THE TREE, SHALL BE PROTECTED AND NOT REMOVED PRIOR TO EXCAVATION. SEVEN (7) DAYS AND AGAIN 48-HOURS PRIOR TO BEGINNING EXCAVATION, THE CONTRACTOR SHALL INFORM THE CITY OF SOMERVILLE TREE WARDEN FOR PROPER AUTHORIZATION AND DOCUMENTATION. AFTER THE EXCAVATION IS COMPLETE AND PRIOR TO BACKFILL, THE CITY OF SOMERVILLE TREE WARDEN SHALL PERFORM THE INSPECTION FOR ROOT IMPACTS TO DETERMINE IF THE TREE IS TO REMAIN OR BE REMOVED. IF THE CITY OF SOMERVILLE TREE WARDEN ISSUES AUTHORIZATION FOR TREE REMOVAL, THE TREE OF INTEREST SHALL BE REMOVED AFTER EXCAVATION REPAIR AND BACKFILL HAVE BEEN COMPLETED.
- ALL WORK ON MOUNT PLEASANT STREET, MOUNT VERNON STREET, PERKINS STREET. AND LINCOLN AVENUE SHALL BE COMPLETED AND FINISHED TOGETHER, PRIOR TO COMMENCING WORK IN ANY OTHER LOCATION OF THIS PROJECT.
- ALL WORK ON MOUNT VERNON STREET AND PERKINS STREET SHALL BE PERFORMED IN ACCORDANCE WITH THE MWRA 8(M) PERMIT, INCLUDED IN SPECIFICATION SECTION 00 31 43.
- FOR ALL MOUNT VERNON STREET AND PERKINS STREET WORK, THE CONTRACTOR SHALL PROVIDE THE MWRA WITH AT LEAST 72-HOURS NOTICE PRIOR TO COMMENCING CONSTRUCTION OPERATIONS. THE MWRA SHALL BE NOTIFIED BY CONTACTING THE MWRA'S INSPECTION DEPARTMENT, BY CALLING WARREN MURPHY (617-305-5833), LOCATED AT 2 GRIFFIN WAY, CHELSEA, MA 02150.
- THE CONTRACTOR SHALL ADHERE TO THE 8(M) PERMIT TERMS AND CONDITIONS AND THE 8(M) PERMIT SPECIAL TERMS AND CONDITIONS (EXHIBIT A) THROUGHOUT THE DURATION OF THE WORK ON MOUNT VERNON STREET AND PERKINS STREET.. THE MWRA 8(M) PERMIT AND THE SPECIAL TERMS AND CONDITIONS (EXHIBIT A) ARE INCLUDED IN SPECIFICATION SECTION 00 31 43 PERMITS.
- IN AREAS WHERE WORK REQUIRES THE REMOVAL OF THE OWNER'S PROPERTY INCLUDING BUT NOT LIMITED TO BENCHES, PARKING METERS, PARKING SIGNS, AND HYDRANTS, THE CONTRACTOR SHALL REMOVE THESE ITEMS PRIOR TO CONSTRUCTION AND HANDLE AS SPECIFIED IN SECTION 01 11 00 CONTROL OF WORK AND MATERIALS.
- CONTRACTOR SHALL REFER TO SECTION 31 09 13 - GEOTECHNICAL INSTRUMENTATION FOR REQUIREMENTS FOR PRE AND POST CONSTRUCTION SURVEY OF AJDACENT FOUNDATION (S) DURING EXCAVATION ACTIVITIES.

PLAN
SCALE: 1" = 20'



BASE BID

Project:
CITY OF SOMERVILLE, MA

2025 SEWER REHABILITATIONS

DEPARTMENT OF
INFRASTRUCTURE AND ASSET
MANAGEMENT, 1 FRANEY ROAD,
SOMERVILLE, MA 02145

Weston & Sampson

Weston & Sampson Engineers, Inc.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
978.532.1900 800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description
1	04/10/2025	ADDENDUM NO. 1

COA:

Seal:

Digitally signed by
Patrick A. Terrien,
FE
Date: 2025.04.10
15:44:52-04'00'

Issued For:
BID

Scale:
AS NOTED

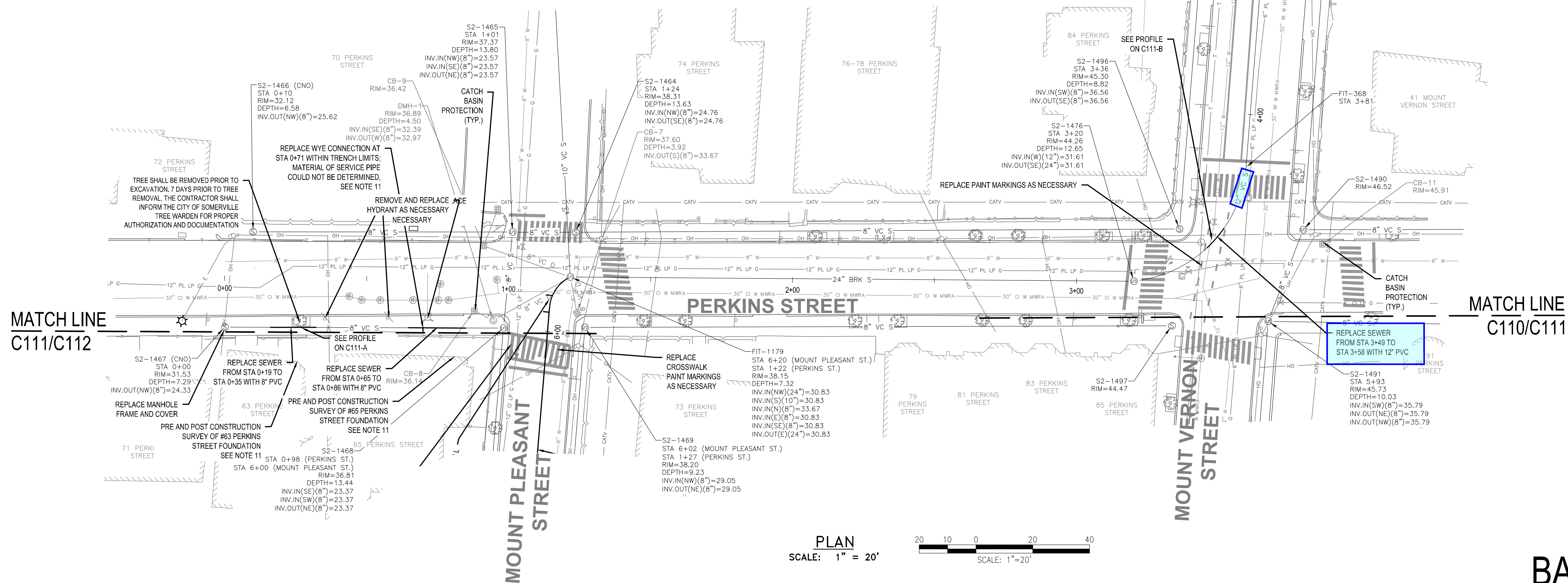
Date:
MARCH 2025
Drawn By:
RJA
Reviewed By:
JMC
Approved By:
PAT

W&S Project No.:
ENG24 -1097
W&S File No.:

Drawing Title:
MOUNT VERNON
STREET AND
LINCOLN AVENUE
SEWER PLAN

Sheet Number:
C110

1. FOR EACH REPLACE WYE CONNECTION A PUSH CAM INSPECTION WILL BE CONDUCTED FROM THE MAINLINE SEWER TO THE PROPERTY LINE.
2. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY IN ANY LOCATION WHERE A UTILITY POLE NEEDS TO BE RESTRAINED TO COMPLETE WORK.
3. THE CONTRACTOR SHALL BE AWARE THAT MANHOLES WITH CNO LABELS DO NOT CONTAIN INVERT ELEVATIONS FROM SURVEY; INVERTS ARE BASED ON PREVIOUS MANHOLE INSPECTIONS.
5. SPECIFIC TREES, WHERE THE LIMITS OF EXCAVATION ARE LESS THAN FIVE (5) FEET FROM THE TRUNK OF THE TREE, SHALL BE REMOVED PRIOR TO THE EXCAVATION. SEVEN (7) DAYS PRIOR TO TREE REMOVAL, THE CONTRACTOR SHALL INFORM THE CITY OF SOMERVILLE TREE WARDEN FOR PROPER AUTHORIZATION AND DOCUMENTATION.
6. ALL WORK ON MOUNT PLEASANT STREET, MOUNT VERNON STREET, PERKINS STREET. AND LINCOLN AVENUE SHALL BE COMPLETED AND FINISHED TOGETHER, PRIOR TO COMMENCING WORK IN ANY OTHER LOCATION OF THIS PROJECT.
7. ALL WORK ON MOUNT VERNON STREET AND PERKINS STREET SHALL BE PERFORMED IN ACCORDANCE WITH THE MWRA 8(M) PERMIT, INCLUDED IN SPECIFICATION SECTION 00 31 43.
8. FOR ALL MOUNT VERNON STREET AND PERKINS STREET WORK, THE CONTRACTOR SHALL PROVIDE THE MWRA WITH AT LEAST 72-HOURS NOTICE PRIOR TO COMMENCING CONSTRUCTION OPERATIONS. THE MWRA SHALL BE NOTIFIED BY CONTACTING THE MWRA'S INSPECTION DEPARTMENT, BY CALLING WARREN MURPHY (617-305-5833), LOCATED AT 2 GRIFFIN WAY, CHELSEA, MA 02150.
9. THE CONTRACTOR SHALL ADHERE TO THE 8(M) PERMIT TERMS AND CONDITIONS AND THE 8(M) PERMIT SPECIAL TERMS AND CONDITIONS (EXHIBIT A) THROUGHOUT THE DURATION OF THE WORK ON MOUNT VERNON STREET AND PERKINS STREET.. THE MWRA 8(M) PERMIT AND THE SPECIAL TERMS AND CONDITIONS (EXHIBIT A) ARE INCLUDED IN SPECIFICATION SECTION 00 31 43 PERMITS.
10. THE BUILDING CONNECTION MATERIAL COULD NOT BE DETERMINED THROUGH CCTV INSPECTION, THE CONTRACTOR SHALL BE AWARE OF THE POTENTIAL FOR THIS MATERIAL TO BE AC.
11. ASBESTOS MATERIALS SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH SECTION 02 61 26 13 - ASBESTOS ABATEMENT FOR UNDERGROUND UTILITIES..
10. IN AREAS WHERE WORK REQUIRES THE REMOVAL OF THE OWNER'S PROPERTY INCLUDING BUT NOT LIMITED TO BENCHES, PARKING METERS, PARKING SIGNS, AND HYDRANTS, THE CONTRACTOR SHALL REMOVE THESE ITEMS PRIOR TO CONSTRUCTION AND HANDLE AS SPECIFIED IN SECTION 01 11 00 CONTROL OF WORK AND MATERIALS.
11. CONTRACTOR SHALL REFER TO SECTION 31 09 13 - GEOTECHNICAL INSTRUMENTATION FOR REQUIREMENTS FOR PRE AND POST CONSTRUCTION SURVEY OF ADJACENT FOUNDATION (S) DURING EXCAVATION ACTIVITIES.




BASE BID

Weston & SampsonSM
Weston & Sampson Engineers, Inc.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
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[illegible]

COA:

Seal:



Patrick Terrien

Digitally signed by
Patrick A. Terrien,
PE,
Date: 2025.04.10
15:44:55-04'00'

Issued For:	BID
Scale:	AS NOTED

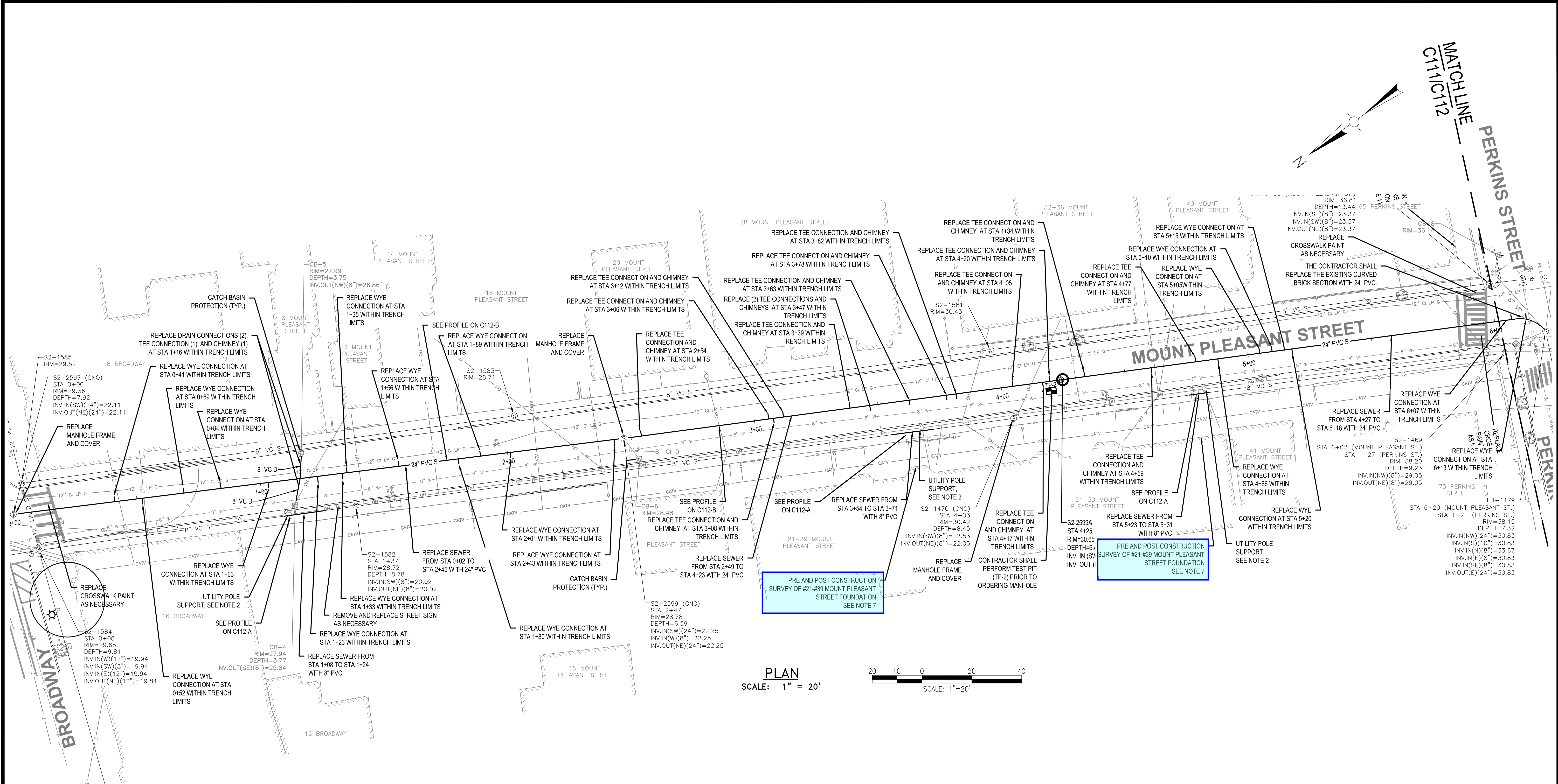
Date:	MARCH 2025
Drawn By:	RJA
Reviewed By:	JMC
Approved By:	PAT
W&S Project No.:	ENG24 -1097
W&S File No.:	

Drawing Title:

PERKINS STREET
AND MOUNT VERNON
STREET SEWER PLAN

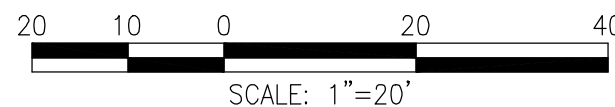
Sheet Number:

C111



- NOTES:**
- FOR EACH REPLACE WYE CONNECTION A PUSH CAM INSPECTION WILL BE CONDUCTED FROM THE MAINLINE SEWER TO THE PROPERTY LINE.
 - THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY IN ANY LOCATION WHERE A UTILITY POLE NEEDS TO BE RESTRAINED TO COMPLETE WORK.
 - THE CONTRACTOR SHALL BE AWARE THAT MANHOLES WITH CNO LABELS DO NOT CONTAIN INVERT ELEVATIONS FROM SURVEY; INVERTS ARE BASED ON PREVIOUS MANHOLE INSPECTIONS.
 - ALL WORK ON MOUNT PLEASANT STREET, MOUNT VERNON STREET, PERKINS STREET, AND LINCOLN AVENUE SHALL BE COMPLETED AND FINISHED TOGETHER, PRIOR TO COMMENCING WORK IN ANY OTHER LOCATION OF THIS PROJECT.
 - THE BEND AT FIT-1179 SHALL BE ACHIEVED BY USE OF DEFLECTIONS IN THE 24" PVC PIPE, FITTINGS, AND FACTORY BENDS THAT SHALL NOT EXCEED 22.5-DEGREES. BENDS SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NOT MEASURED SEPARATELY FOR PAYMENT.
 - IN AREAS WHERE WORK REQUIRES THE REMOVAL OF THE OWNER'S PROPERTY INCLUDING BUT NOT LIMITED TO BENCHES, PARKING METERS, PARKING SIGNS, THE CONTRACTOR SHALL REMOVE THESE ITEMS PRIOR TO CONSTRUCTION AND HANDLE AS SPECIFIED IN 01 11 00 CONTROL OF WORK AND MATERIALS.
 - CONTRACTOR SHALL REFER TO SECTION 31 09 13 - GEOTECHNICAL INSTRUMENTATION FOR REQUIREMENTS FOR PRE AND POST CONSTRUCTION SURVEY OF ADJACENT FOUNDATION (S) DURING EXCAVATION ACTIVITIES.

PLAN
SCALE: 1" = 20'



Project:
CITY OF SOMERVILLE, MA

2025 SEWER REHABILITATIONS

DEPARTMENT OF
INFRASTRUCTURE AND ASSET
MANAGEMENT, 1 FRANEY ROAD,
SOMERVILLE, MA 02145

Weston & Sampson
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Consultants:

No.	Date	Description
1	04/10/2025	ADDENDUM NO. 1

No.	Date	Description
1	04/10/2025	ADDENDUM NO. 1

COA:

Seal:
COMMONWEALTH OF MASSACHUSETTS
PATRICK A. TERRIEN
CIVIL
No. 46717
REGISTERED
PROFESSIONAL ENGINEER

Digitally signed by
Patrick A. Terrien,
FE
Date: 2025.04.10
15:44:53-04'00'

Issued For:	BID
Scale:	AS NOTED
Date:	MARCH 2025
Drawn By:	RJA
Reviewed By:	JMC
Approved By:	PAT
W&S Project No.:	ENG24 -1097
W&S File No.:	

Drawing Title:

MOUNT PLEASANT
SEWER PLAN

Sheet Number:

C112

BASE BID

Attachment B

Revised Bid Form

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
BASE BID (Items 1 to 15)			
1		Sewers Complete in Place	
1a	157 l.f.	8-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
1b	363 l.f.	8-inch PVC sewers, where excavation length is greater than or equal to 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
1c	21 l.f.	12-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
1d	70 l.f.	12-inch PVC sewers, where excavation length is greater than or equal to 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
1e	10 l.f.	15-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
1f	623 l.f.	24-inch PVC sewers, where excavation length is greater than or equal to 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
1g	20 v.f.	6-inch PVC sewer service chimneys, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
2		Sewer Manholes and Appurtenances	
2a	4 manholes	Precast concrete manhole base with standard frame and cover, 4.0 ft. diameter, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
2b	32 v.f.	Precast concrete manhole walls and cones, 4.0 ft. diameter, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
3		Removal and Disposal of Asbestos Cement Pipe	
3a	36 l.f.	Removal and disposal of asbestos cement pipe, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
4		Tree Removal	
4a	7 trees	Pre-Excavation Tree and Stump Removal, where excavation is less than 5 feet from tree trunk, per tree	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
4b	2 trees	Post-Excavation Tree and Stump Removal, where excavation is greater than or equal to 5 feet from tree trunk, per tree	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
5		Additional Earthwork	
5a	100 c.y.	Earth excavation and backfill above normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
5b	100 c.y.	Earth excavation and backfill below normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
5c	100 tons	Disposal of Group A material from within Disposal Site Boundary, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
5d	50 c.y.**	Rock excavation and disposal, per cubic yard (minimum)	\$3,000.00
		Sixty _____	
		_____ and _____ (dollars)	
		Zero _____	
		_____ (cents)	
		(\$ 60.00 _____)	
5e	50 c.y.**	Rock excavation and disposal, per cubic yard (additional)	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
5f	100 c.y.	Test pits, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
5g	100 c.y.	Additional crushed stone, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
5h	100 c.y.	Additional gravel, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
6		Special Dewatering within Disposal Site Boundary	
6a	1 l.s.	Special Dewatering within Disposal Site Boundary, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
7		Pavement and Sidewalk Replacement	
7a	893 l.f.	Permanent binder course trench width pavement (6-inches thick), per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
7b	925 l.f.	Permanent top course pavement (2-inches thick) including cold planing, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
7c	25 tons	Additional pavement, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

7d	1 l.s.	Pavement markings, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

7e	501 l.f.	Temporary hot mix asphalt sidewalk, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

7f	461 l.f.	Permanent concrete sidewalk, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
8		Water and Drain Reconstruction	
8a	11 each	Water and drain reconstruction within sewer trench limits, each	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
9		Sewer Line Chemical Root Treatment	
9a	3,028 l.f.	Chemical root treatment of 8-inch to 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
10		Structural Cured-in-Place Pipe	
10a	7,964 l.f.	Structural Cured-in-place pipe for 8-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
10b	326 l.f.	Structural Cured-in-place pipe for 10-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
10c	2,501 l.f.	Structural Cured-in-place pipe for 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
10d	1,154 l.f.	Structural Cured-in-place pipe for 15-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
10e	160 services	Grout reinstated service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
11		Service Connection Rehabilitation	
11a	18 services	Cutting of protruding service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
12		Sewer Manhole Rehabilitation	
12a	552 v.f.	Cementitious lining of manholes, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
12b	6 mh	Grout and patch manhole to stop leaks, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
12c	11 frames and covers	Furnish and install manhole frame and cover, per frame and cover	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
13		Heavy Cleaning and Inspection of Sewers	
13a	1,023 l.f.	Heavy cleaning and television inspection of 8-inch to 12-inch diameter sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
13b	821 l.f.	Heavy cleaning and television inspection of 15-inch to 18-inch diameter sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
13c	213 l.f.	Heavy cleaning and television inspection of 21-inch diameter sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
13d	15 tons	Debris disposal, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
14		Construction Zone Safety Plan	
14a	1 l.s.	Construction Zone Safety Plan, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
15		Mobilization	
15a	1 l.s.	Mobilization, lump sum (not more than 5% of Items 1 to 14)	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

The Total Amount of BASE BID (Items 1 to 15, inclusive) is:

_____ Dollars
(In Words)

and _____ Cents (\$ _____)
(In Words) (In Figures)

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
ALTERNATE 1 (Items 16 to 25)			
16		Sewers Complete in Place	
16a	22 l.f.	8-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
16b	8 l.f.	10-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
16c	39 l.f.	10-inch PVC sewers, where excavation length is greater than or equal to 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
17		Additional Earthwork	
17a	25 c.y.	Earth excavation and backfill above normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
17b	25 c.y.	Earth excavation and backfill below normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
17c	15 c.y.	Test pits, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
17d	15 c.y.	Additional crushed stone, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
17e	15 c.y.	Additional gravel, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
18		Pavement Replacement	
18a	76 l.f.	Permanent binder course trench width pavement (6-inches thick), per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
18b	84 l.f.	Permanent top course pavement (2-inches thick) including cold planing, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
18c	5 tons	Additional pavement, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
19		Water and Drain Reconstruction	
19a	2 each	Water and drain reconstruction within sewer trench limits, each	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
20		Sewer Line Chemical Root Treatment	
20a	313 l.f.	Chemical root treatment of 8-inch to 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
21		Structural Cured-in-Place Pipe	
21a	1,253 l.f.	Structural Cured-in-place pipe for 8-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
21b	397 l.f.	Structural Cured-in-place pipe for 10-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
21c	240 l.f.	Structural Cured-in-place pipe for 15-inch storm sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
21d	75 services	Grout reinstated service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
22		Service Connection Rehabilitation	
22a	6 services	Cutting of protruding service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
23		Sewer Manhole Rehabilitation	
23a	41 v.f.	Cementitious lining of manholes, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
23b	1 mh	Grout and patch manhole to stop leaks, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
24		Construction Zone Safety Plan	
24a	1 l.s.	Construction Zone Safety Plan, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
25		Mobilization	
25a	1 l.s.	Mobilization, lump sum (not more than 5% of Items 16 to 24)	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

The Total Amount of ALTERNATE 1 (Items 16 to 25, inclusive) is:

_____ Dollars
(In Words)

and _____ Cents (\$ _____)
(In Words) (In Figures)

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
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ALTERNATE 2 (Items 26 to 37)

26 Sewers Complete in Place

26a	30 l.f.	8-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

27 Building Connection Systems

27a	1 wye	8x6 inch wye for PVC pipe, not specifically included in mainline pipe replacements, per wye	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
28		Sewer Manholes and Appurtenances	
28a	1 manholes	Precast concrete manhole base with standard frame and cover, 4.0 ft. diameter, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
28b	10 v.f.	Precast concrete manhole walls and cones, 4.0 ft. diameter, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
29		Additional Earthwork	
29a	10 c.y.	Earth excavation and backfill above normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
29b	10 c.y.	Earth excavation and backfill below normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
29c	10 c.y.**	Rock excavation and disposal, per cubic yard (minimum)	\$600.00
		Sixty _____ and _____ (dollars)	
		Zero _____ (cents)	
		(\$ 60.00 _____)	
29d	10 c.y.**	Rock excavation and disposal, per cubic yard (additional)	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
29e	10 c.y.	Test pits, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
29f	10 c.y.	Additional crushed stone, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
29g	10 c.y.	Additional gravel, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
30		Pavement Replacement	
30a	36 l.f.	Permanent binder course trench width pavement (6-inches thick), per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
30b	42 l.f.	Permanent top course pavement (2-inches thick) including cold planing, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
30c	5 tons	Additional pavement, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
30d	1 l.s.	Pavement markings, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
31		Water and Drain Reconstruction	
31a	3 each	Water and drain reconstruction within sewer trench limits, each	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
32		Sewer Line Chemical Root Treatment	
32a	284 l.f.	Chemical root treatment of 8-inch to 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
33		Structural Cured-in-Place Pipe	
33a	3,554 l.f.	Structural Cured-in-place pipe for 8-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
33b	386 l.f.	Structural Cured-in-place pipe for 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
33c	118 services	Grout reinstated service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
34		Service Connection Rehabilitation	
34a	4 services	Cutting of protruding service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
35		Sewer Manhole Rehabilitation	
35a	143 v.f.	Cementitious lining of manholes, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
35b	1 mh	Grout and patch manhole to stop leaks, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
36		Construction Zone Safety Plan	
36a	1 l.s.	Construction Zone Safety Plan, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
37		Mobilization	
37a	1 l.s.	Mobilization, lump sum (not more than 5% of Items 26 to 36)	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

The Total Amount of ALTERNATE 2 (Items 26 to 37, inclusive) is:

_____ Dollars
(In Words)

and _____ Cents (\$ _____)
(In Words) (In Figures)

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
ALTERNATE 3 (Items 38 to 52)			
38		Sewers Complete in Place	
38a	37 l.f.	8-inch PVC sewers, where excavation length is less than 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
38b	29 l.f.	12-inch PVC sewers, where excavation length is greater than or equal to 20 linear feet, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
39		Building Connection Systems	
39a	1 wye	8x6 inch wye for PVC pipe, not specifically included in mainline pipe replacements, per wye	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
40		Sewer Manholes and Appurtenances	
40a	1 manholes	Precast concrete manhole base with standard frame and cover, 4.0 ft. diameter, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
40b	9 v.f.	Precast concrete manhole walls and cones, 4.0 ft. diameter, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
41		Removal and Disposal of Asbestos Cement Pipe	
41a	6 l.f.	Removal and disposal of asbestos cement pipe, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
42		Tree Removal	
42a	1 tree	Pre-Excavation Tree and Stump Removal, where excavation is less than 5 feet from tree trunk, per tree	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
43		Additional Earthwork	
43a	10 c.y.	Earth excavation and backfill above normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
43b	10 c.y.	Earth excavation and backfill below normal grade, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
43c	10 c.y.**	Rock excavation and disposal, per cubic yard (minimum)	\$600.00
		Sixty	
		and (dollars)	
		Zero	
		(cents)	
		(\$ 60.00)	
43d	10 c.y.**	Rock excavation and disposal, per cubic yard (additional)	\$
		and (dollars)	
		(cents)	
		(\$)	
43e	10 c.y.	Test pits, per cubic yard	\$
		and (dollars)	
		(cents)	
		(\$)	
43f	10 c.y.	Additional crushed stone, per cubic yard	\$
		and (dollars)	
		(cents)	
		(\$)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
43g	10 c.y.	Additional gravel, per cubic yard	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
44		Pavement Replacement	
44a	39 l.f.	Permanent binder course trench width pavement (6-inches thick), per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
44b	45 l.f.	Permanent top course pavement (2-inches thick) including cold planing, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
44c	5 tons	Additional pavement, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
44d	1 l.s.	Pavement markings, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
45		Water and Drain Reconstruction	
45a	2 each	Water and drain reconstruction within sewer trench limits, each	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
46		Sewer Line Chemical Root Treatment	
46a	363 l.f.	Chemical root treatment of 8-inch to 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
47		Structural Cured-in-Place Pipe	
47a	1,190 l.f.	Structural Cured-in-place pipe for 8-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
47b	637 l.f.	Structural Cured-in-place pipe for 10-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
47c	415 l.f.	Structural Cured-in-place pipe for 12-inch sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
47d	60 services	Grout reinstated service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
48		Service Connection Rehabilitation	
48a	1 service	Cutting of protruding service connections, per service	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
49		Sewer Manhole Rehabilitation	
49a	143 v.f.	Cementitious lining of manholes, per vertical foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
49b	1 mh	Grout and patch manhole to stop leaks, per manhole	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
49c	1 mh	Build manhole bench and invert in manhole S2-2734 on Illinois Avenue	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
50		Heavy Cleaning and Inspection of Sewers	
50a	356 l.f.	Heavy cleaning and television inspection of 8-inch to 12-inch diameter sewers, per linear foot	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
50b	10 tons	Debris disposal, per ton	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	
51		Construction Zone Safety Plan	
51a	1 l.s.	Construction Zone Safety Plan, lump sum	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
52		Mobilization	
52a	1 l.s	Mobilization, lump sum (not more than 5% of Items 38 to 51)	\$ _____
		_____ and _____ (dollars)	
		_____ (cents)	
		(\$ _____)	

The Total Amount of ALTERNATE 3 (Items 38 to 52, inclusive) is:

_____ Dollars
(In Words)

and _____ Cents (\$ _____)
(In Words) (In Figures)

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Item No.	Estimated Quantity*	Bid Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figure
TOTAL AMOUNT OF BASE BID (Items 1 to 15)			
\$ _____		(In Words)	(\$ _____) (In Figures)
TOTAL AMOUNT OF BASE BID PLUS ALTERNATE BID NO. 1 (Items 1 to 25)			
\$ _____		(In Words)	(\$ _____) (In Figures)
TOTAL AMOUNT OF BASE BID PLUS ALTERNATE BID NO. 1 PLUS ALTERNATE BID NO. 2 (Items 1 to 37)			
\$ _____		(In Words)	(\$ _____) (In Figures)
TOTAL AMOUNT OF BASE BID PLUS ALTERNATE BID NO. 1 PLUS ALTERNATE BID NO. 2 PLUS ALTERNATE BID NO. 3 (Items 1 to 52)			
\$ _____		(In Words)	(\$ _____) (In Figures)

*Quantity assumed for comparison of bids.

**The unit prices in Items 5d, 29c and 43c are the minimum allowed for rock excavation and disposal. The bidder may add to the minimum in Items 5e, 29d, and 43c.

Attachment C

Revised Section 01 22 00 – MEASUREMENT AND PAYMENT

SECTION 01 22 00

MEASUREMENT AND PAYMENT

PART 1 - DESCRIPTION

1.01 GENERAL:

- A. The following subsections describe the measurement of and payment for the work to be done under the items listed in Form for General Bid.
- B. All work performed as described in these contract documents will be paid for under one or more of the items listed in the Form for General Bid. All other activities required in connection with performance of the work, including all work required under Division 1, General Requirements, whether described in the contract documents or mandated by applicable codes, permits and laws, will not be separately paid for unless specifically provided for in the form for general bid, but will be considered incidental to performance of the overall project.
- C. Each unit or lump-sum price stated in Form for General Bid shall constitute full compensation as herein specified for each item of work completed in accordance with the drawings and specifications, including cleanup.
- D. The payment items listed herein and in the Form for General Bid are intended to provide full payment for the work shown on the drawings and specified herein. Any work called for or implied in the Contract Documents but not listed as a payment item shall be considered incidental to the overall project.
- E. Unless otherwise noted, each item shall be furnished and installed in accordance with the technical specification section whether a specific applicable payment item exists or not.
- F. Unless otherwise noted, all earthwork shall be included under any item requiring excavation. The prices for those items that involve excavation shall include compensation for disposal of surplus excavated material, and installation of all necessary sheeting and bracing.
- G. In all items involving excavation, the price shall be based on doing the entire excavation in earth. Where rock is excavated, the price therefor shall be in addition to the cost of excavating earth and no deduction shall be made in the amount for earth excavation.
- H. The price for all pipe items for sewers, wyes, tees, building connections, chimneys, service connections, and other pipelines shall constitute full compensation for furnishing, laying, jointing, and testing pipe; earth excavation and backfill; crushed stone bedding; and cleaning up.

1.02 SEWERS COMPLETE IN PLACE:

A. PVC SEWERS:

1. The length of sewers to be paid for under the appropriate subdivisions of this item shall be measured by the linear foot along the completed sewer mainline, including wyes and chimney tee (DI) connections, of actual sewers installed.
2. Locations where a sewer service is being replaced within the limits of the mainline repair, replacement of wye or chimney tee (DI) connection at the mainline shall be considered incidental to the work and shall not be measured separately for payment.
3. In locations where a only sewer service wye is being replaced and the mainline sewer is not specifically called out for replacement, replacement of mainline sewer, as described in specification section 33 01 30.66; 3.04, 2, shall be considered incidental to the work and shall not be measured separately for payment.
4. The unit prices under the appropriate subdivisions of this item shall constitute full compensation for constructing the sewers, complete in place, as indicated on the drawings and as specified, including removal and disposal of existing sewers where necessary, furnishing and installing pipe, fittings, and bends, drop connections, making connections to the existing sewer, excavation, backfill, bedding, select material, clearing, grubbing, tree protection, testing, removal and disposal of existing pavement and sidewalks, and all work incidental thereto and not specifically included for payment under other items, as described in Section 33 01 30.66, POINT REPAIR OF GRAVITY SEWERS.
5. All required instrumentation and monitoring as described in Section 31 09 13 – GEOTECHNICAL INSTRUMENTATION shall be considered incidental to the work and shall not be measured separately for payment .
6. In locations where a crosswalk that contains granite curbing and pavers must be removed and replaced to perform the repair, the curbing and pavers shall be removed, stored during construction, and reinstalled after the minimum 90-days at no additional cost to the Owner. The removal, storage, and reinstallation of the curbing and pavers shall be considered incidental to the work and shall not be measured separately for payment.
 - a. In the event a paver is broken, new pavers shall be “Boston Colonial Pavers”, color “Beacon Hill Blend”, as manufactured by Ideal Concrete Block Company, Inc. New pavers due to broken pavers shall be considered incidental to the work and shall not be measured separately for payment.
7. In areas where work requires the removal of the Owner’s property including but not limited to benches, parking meters, and street signs, the Contractor shall remove these items prior to construction, retain and protect during construction, and following the completion of the work, shall reinstall these materials to match

original site conditions. The removal, storage, and reinstallation of these items shall be considered incidental to the work and shall not be measured separately for payment. Shall any damage occur to these assets, the Contractor shall replace them at no additional cost to the Owner.

8. A hydrant is located within an excavation area of sewer pipe S2-1468 to S2-1467, see sheet C111 of the Drawings. A hydrant is located within an excavation area of sewer pipe C1-1422 to C1-1410, see sheet C109 of the Drawings. The Contractor shall remove the hydrants prior to construction, retain and protect during construction, and following the completion of the work, shall reinstall the hydrants to original site conditions. The removal, storage, and reinstallation of the hydrants shall be considered incidental to the work and shall not be measured separately for payment. Shall any damage occur to the hydrants, the Contractor shall replace them at no additional cost to the Owner.
9. Prior to connecting new sewer services, the existing sewer service pipes shall be televised (starting at the edge of the trench, upstream to the building) using a color “push” camera. This inspection shall be considered incidental and shall not be measured separately for payment.
10. Payment for 8-inch diameter PVC gravity sewer, where excavation length is less than 20 linear feet, shall be paid at the contract unit price under Items 1a, 16a, 26a, and 38a.
11. Payment for 8-inch diameter PVC gravity sewer, where excavation length is greater than or equal to 20 linear feet, shall be paid at the contract unit price under Item 1b.
12. Payment for 10-inch diameter PVC gravity sewer, where excavation length is less than 20 linear feet, shall be paid at the contract unit price under Item 16b.
13. Payment for 10-inch diameter PVC gravity sewer, where excavation length is greater than or equal to 20 linear feet, shall be paid at the contract unit price under Item 16c.
14. Payment for 12-inch diameter PVC gravity sewer, where excavation length is less than 20 linear feet, shall be paid at the contract unit price under Item 1c.
15. Payment for 12-inch diameter PVC gravity sewer, where excavation length is greater than or equal to 20 linear feet, shall be paid at the contract unit price under Items 1d and 38b.
16. Payment for 15-inch diameter PVC gravity sewer, where excavation is less than 20 linear feet, shall be paid at the contract unit price under Item 1e.
17. Payment for 24-inch diameter PVC gravity sewer, where excavation length is greater than or equal to 20 linear feet, shall be paid at the contract unit price under Item 1f.

1.03 BUILDING CONNECTIONS SYSTEMS:

A. WYES:

1. The unit price to be paid for under the appropriate subdivisions of this item shall be measured for payment per wye installed within the main sewer.
2. The contract unit price under the appropriate sub-divisions of this item shall constitute full compensation for furnishing and installing wyes in the main sewer, complete, as indicated on the drawings and/or specified, including removal and disposal of existing wyes, removal and replacement of building connections within mainline trench limits, and up to four (4) linear feet of adjacent mainline replacement where necessary, furnishing and installing pipe, fittings, and bends, excavation, backfill, pavement replacement, making connections to the existing sewer, bedding, select material, clearing, grubbing, tree protection, testing, removal and replacement of sidewalks, removal and replacement of crosswalks, and curbing, and all work incidental thereto and not specifically included for payment under other items.
3. In locations where a only sewer service wye connection is being replaced and the mainline sewer is not specifically called out for replacement, replacement of mainline sewer, as described in specification section 33 01 30.66; 3.04, 2, shall be considered incidental to the work and shall not be measured separately for payment.
4. Prior to connecting new sewer services, the existing sewer service pipes shall be televised (starting at the edge of the trench, upstream to the building) using a color "push" camera. This inspection shall be considered incidental and shall not be measured separately for payment.
5. All required instrumentation and monitoring as described in Section 31 09 13 – GEOTECHNICAL INSTRUMENTATION shall be considered incidental to the work and shall not be measured separately for payment.
6. The work under this item shall be paid at the contract unit price under Items 26a and 38a.

B. CHIMNEYS:

1. The unit price to be paid for under the appropriate subdivisions of this item shall be measured for payment per vertical foot of chimney completed in place. Measurement shall be based on the distance from the crown of the sewer to the plug of the top wye branch of the completed chimney.
2. The contract unit price under the appropriate subdivisions of this item shall constitute full compensation for constructing the chimney, including removal and disposal of existing chimney where necessary, excavation and backfill, vertical pipe

and encasement, wye and plug at the top, and the additional incremental cost of the transition pipe and fittings needed at the top of the chimney, as shown on the drawings and/or as specified, including all work incidental thereto and not specifically included for payment under other items.

3. Prior to connecting new sewer services, the existing sewer service pipes shall be televised (starting at the edge of the trench, upstream to the building) using a color "push" camera. This inspection shall be considered incidental and shall not be measured separately for payment.
4. If the Contractor decides to replace the PVC pipe with DI Pipe, it will be permitted at no additional cost to the Owner.
5. The work under this item shall be paid at the contract unit price under Item 1g.

1.04 SEWER MANHOLES AND APPURTENANCES:

A. MANHOLE BASES, FRAMES and COVERS:

1. Bases, frames and covers shall be measured per set installed in place.
2. The unit price for this item shall include removal and disposal of existing manhole or lamphole where necessary, excavation, crushed stone bedding, and backfill; furnishing and installing base, invert channels, gaskets, sealants, connections and couplings, up to five (5) linear feet of each incoming and outgoing pipe, pavement replacement; and all incidental work necessary to complete the precast concrete base as shown on the drawings and as specified herein.
3. The unit price for this item shall also include furnishing and installing the frame and cover, and grouting the frame to the brick courses.
4. The work under this item shall be paid at the contract unit price under Items 2a, 27a, and 39a.

B. MANHOLE WALLS AND CONES:

1. Precast concrete manhole walls and cones shall be measured per vertical foot installed in place. Measurement shall be based on the vertical distance from the invert of the pipeline to the top of the completed frame at finished grade.
2. Walls and cones shall be paid at the contract unit prices under the item "Precast Concrete Manhole Walls and Cones." The unit price for this item shall include removal and disposal of existing manhole or lamphole where necessary, excavation and backfill; furnishing and installing walls, cones, gaskets, seals, and bricks and grout to grade, pavement replacement; and all incidentals necessary to complete the precast concrete walls and cones as shown on the drawings and specified herein.

3. The work under this item shall be paid at the contract unit price under Items 2b, 27b, and 39b.
- C. CONNECTIONS TO EXISTING SEWERS:

Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.

1.05 REMOVAL AND DISPOSAL OF ASBESTOS CEMENT (AC) PIPE:

1. The unit price to be paid for this item shall be measured for payment per linear foot of asbestos cement pipe removed and properly disposed.
2. The unit price for this item shall constitute full compensation for all incidental work necessary to complete removal and proper disposal of asbestos cement pipe as shown on the drawings and/or specified herein, as described in Section 02 61 26.13, ASBESTOS ABATEMENT FOR UNDERGROUND UTILITIES.
3. The work under this section shall be paid at the contract unit price under Items 3a and 41a.

1.06 TREE REMOVAL

A. PRE-EXCAVATION TREE AND STUMP REMOVAL

1. Where designated on the Drawings and the limits of excavation based on pipe diameter and depth to invert of an open cut point repair are less than five (5) feet from the trunk of a tree, the tree shall be removed prior to excavation, as authorized by the City of Somerville Tree Warden.
2. The unit price for this item shall constitute full compensation for removal and disposal of the tree and tree stump, installation of tree-well space in sidewalk and all labor, tools, equipment and materials required to complete the work described in the Specification Section 31 13 13 TREE PRUNING AND TREE AND STUMP REMOVALS and shown on the Drawings.
3. The work under this item shall be paid only if tree removal is authorized by the City of Somerville Tree Warden at the contract unit price under Item 4a and 41a.

B. POST-EXCAVATION TREE AND STUMP REMOVAL

1. Where designated on the Drawings and the limits of excavation based on pipe diameter and depth to invert of an open cut point repair are greater than or equal to five (5) feet from the trunk of a tree, the contractor shall not remove the tree prior to excavation of the trench for the open cut point repair. After trench excavation is complete and prior to backfill, the City of Somerville Tree Warden is to observe the impacted tree roots and will determine if the tree shall be removed. If the City of Somerville Tree Warden decides the tree shall be removed, the contractor is to

remove the impacted tree.

2. The unit price for this item shall constitute full compensation for removal and disposal of the tree and tree stump, installation of tree-well space in sidewalk and all labor, tools, equipment and materials required to complete the work described in the Specification Section 31 13 13 TREE PRUNING AND TREE AND STUMP REMOVALS and shown on the Drawings.
3. The work under this item shall be paid only if tree removal is authorized by the City of Somerville Tree Warden at the contract unit price under Item 4b.

1.07 ADDITIONAL EARTHWORK:

A. EXCAVATION AND BACKFILL OF UNSUITABLE MATERIAL ABOVE NORMAL GRADE:

1. If, in the opinion of the Engineer, the material at or above normal grade is unsuitable for use as backfill, it shall be removed and disposed of to such depths and widths within the limits of payment as the Engineer may order. Normal grade is defined as the elevation of the trench bottom, as shown on the drawings.
2. The quantity of earth excavation and backfill above normal grade to be included for payment shall be the number of cubic yards of material ordered to be removed and measured by the Engineer within the normal trench limits shown on the contract drawings.
3. Removal of topsoil, paving materials, frozen material or rock excavation above the normal grade of the trench excavation will not be considered for payment.
4. The unit price for this item shall constitute full compensation for excavation of unsuitable material above normal grade, disposal of unsuitable material and furnishing, installing and compacting approved backfill materials.
5. The Contractor will not be reimbursed for excavation of unsuitable material above normal grade, which has not been ordered by the Engineer.
6. The work under this section shall be paid at the contract unit price under Items 5a, 17a, 29a, and 43a.

B. EARTH EXCAVATION AND BACKFILL BELOW NORMAL GRADE:

1. If, in the opinion of the Engineer, the material at or below normal grade for the bottom of trench excavation is unsuitable for foundation, it shall be removed to such depths and widths within the limits of payment as the Engineer may order. Normal grade is defined as the elevation of the proposed sewer trench bottom, as shown on the drawings.

2. The quantity of earth excavation below normal grade (limit of normal excavation) to be included for payment under this item shall be the number of cubic yards of unsuitable material excavated, measured to the depths and lengths ordered, and to the width between payment limits for normal excavation as indicated on the drawings.
3. The unit price for this item shall constitute full compensation for excavation below normal grade, disposal of unsuitable material and furnishing, installing and compacting gravel borrow as indicated on the drawings.
4. The Contractor will not be reimbursed for over-excavation that has not been ordered by the Engineer. The Contractor shall backfill any such overexcavated areas in accordance with the specifications, at no additional cost to the Owner.
5. The Contractor will not be reimbursed under this pay item for rock excavation that qualifies for payment under the pay item for "rock excavation and disposal".
6. The work under this section shall be paid at the contract unit price under Items 5b, 17b, 29b, and 43b.

C. DISPOSAL OF GROUP A MATERIAL FROM WITHIN DISPOSAL SITE BOUNDARY:

1. The quantity of Group A material (as defined in Section 02 61 00.16, TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIAL) for removal and disposal to be paid for under this Item shall be the number of tons of Group A material removed and disposed. Transportation and disposal of surplus soil material outside of the Disposal Site Boundary shall not be measured for payment.
2. The unit price for this item constitutes full compensation to provide removal of Group A material, complete, as described in and required by the Contract Documents including, but not limited to; furnishing all labor, material, tools, and equipment required to handle, stockpile, characterize for disposal, load and legally haul by licensed common carrier, and dispose of excavated Group A material. Contract price shall also include moving and storing Group A soils on site. The work shall include disposal at a licensed disposal site.
3. The work under this section shall be paid at the contract unit price under Item 5c.

1.08 ROCK EXCAVATION AND DISPOSAL:

- A. The cost of pre-blast surveys, vibration air blast monitoring, blasting records and post-blast inspection shall be considered incidental to the cost of rock excavation and disposal and will not be separately paid.
- B. Rock excavated and disposed of off-site by the Contractor shall be measured by the cubic

yard, within the limits of excavation as defined in Paragraph C below. The unit price established by the Engineer under Item Numbers 5d, 29c, and 43c are the minimum unit prices to be used for rock excavation. The unit price to be inserted by the Contractor in its bid under Item Numbers 5e, 29d, and 43d is intended to reflect the Contractor's additional costs for performing the rock excavation, should it decide that the minimum unit price in Item Number 5e is insufficient compensation.

- C. Payment limits for rock excavation in trenches containing one pipe shall be as defined on the drawings. When two or more pipes are installed parallel to one another and the trench payment limits overlap, rock excavation in the overlap section will only be paid once.
- D. Where rock is encountered, it shall be uncovered but not excavated until measurements have been made by the Engineer, unless in the opinion of the Engineer, satisfactory measurements can be made in some other manner.
- E. Payment for this item includes rock excavation and disposal, furnishing and installing gravel borrow in its place, and providing all required documentation.
- F. The bidder should include in its bid for items involving excavation, the cost of doing the entire excavation as earth, the price for the Item "Rock Excavation and Disposal" being intended to cover the difference between the cost of rock excavation and the cost of earth excavation. The price for this item shall be paid in addition to any payment made for earth excavation.
- G. For all manholes and structures, measurement will be to one foot outside the widest dimension of the structure or shall be the maximum connecting trench width, whichever is greater. No allowance will be made for overbreakage.
- H. TEST PITS:
 - 1. Test pits as ordered by the Engineer and not incidental to construction shall be measured per cubic yard excavated and backfilled under the Item "Test Pits."
 - 2. Test pits shall be paid at the contract unit price under the item "Test Pits." The unit price under this item shall constitute full compensation for all excavation, backfill, pavement repair, surface restoration, or other work incidental to excavation or restoration of test pits.
 - 3. The work under this item shall be paid at the contract unit price under Items 5f, 17c, 29e, and 43e.
- I. ADDITIONAL CRUSHED STONE:
 - 1. Additional crushed stone ordered by the Engineer shall be measured in place per cubic yard installed.
 - 2. Additional crushed stone shall be paid at the contract price for work completed and

shall constitute full compensation for furnishing and placing crushed stone.

3. The work under this item shall be paid at the contract unit price under Items 5g, 17d, 29f, and 43f.

J. ADDITIONAL GRAVEL

1. Additional gravel ordered by the Engineer shall be measured in place per cubic yard installed.
2. Additional gravel shall be paid at the contract price for work completed and shall constitute full compensation for furnishing and placing crushed stone.
3. The work under this shall be paid at the contract unit price under Items 5h, 17e, 29f, and 43g.

1.09 SHEETING LEFT IN PLACE:

- A. Unless designated otherwise, the work as specified in Section 31 50 00 - SUPPORT OF EXCAVATION shall not be separately measured for payment, but shall be considered incidental to the pipeline or structure for which it is required.
- B. No payment will be made for trench boxes, sheeting, or steel plates used at the Contractor's option in the course of the work.
- C. Requirements under the MWRA 8(m) permit for support of excavation shall not be separately measured for payment, but shall be considered incidental to the pipeline or structure for which it is required.

1.10 PAVEMENT REPLACEMENT:

A. BITUMINOUS PAVEMENT:

1. Bituminous pavement shall be measured per linear foot or ton of work completed and shall be paid at the contract unit prices under the subdivisions of the item "Pavement Replacement" as further described below.
2. Pavement disturbed by the Contractor's operations outside of payment limits shall not be paid for under these items, but shall be repaired to its original condition by the Contractor at no additional cost to the Owner.
3. Items measured per linear foot shall be measured along the centerline of the completed mainline trench.
4. Permanent Pavement Binder Course (Trench Width):

Binder course trench pavement shall be measured per linear foot and shall include furnishing, preparation and installation of 6-inches of binder course trench pavement and joint sealant as specified. Maintenance and repair of permanent binder course trench pavement shall also be included.

5. Permanent Pavement Top Course:

Top course permanent pavement shall be measured per linear foot and shall include cold planning and removal of 2-inches of binder course pavement, furnishing, preparation and installation of top course pavement and joint sealant as shown on the drawings (including the 1-foot cutback on all sides) and as specified.

6. Payment for cold planing and overlay pavement shall include cold planing, overlay pavement, tack coats, grading and compaction as specified.

7. Payment for pavement pulverization/recycling shall include pulverization, recycling, fine grading, tack coats and compaction as specified.

8. Additional Pavement:

a. Additional pavement beyond the payment limits of the trench shall be measured per ton for payment at the unit price, where ordered by the Engineer and not included for payment under other items.

b. Payment for additional pavement shall include furnishing, preparation and installation of the additional pavement ordered by the Engineer, outside of the normal trench limits.

9. Raising and adjusting of new and existing castings shall be incidental to pavement replacement and not included separately for payment. Castings belonging to private utilities shall be raised by their own forces at their expense.

10. The lump sum item for "Pavement Markings" shall constitute full compensation for supplying all material, labor, tools, and equipment to install temporary and permanent 4-inch wide thermoplastic marking strips with glass beads, bike lane markings.

11. The work under this shall be paid at the contract unit price under Items 7a, 7b, 7c, 7d, 18a, 18b, 18c, 30a, 30b, 30c, 30d, 44a, 44b, 44c, and 44d.

B. SIDEWALK REPLACEMENT:

1. Sidewalk replacement shall be measured per linear foot of work completed and shall be paid at the contract unit prices under the subdivisions of the item "Pavement and Sidewalk Replacement" as further described below.

2. Items measured per linear foot shall be measured along the centerline of the

completed mainline trench.

3. Temporary Hot Mix Asphalt Sidewalks

- a. The item Temporary hot mix asphalt sidewalk” shall include removal of existing sidewalks (by milling or saw cutting and excavation), furnishing, preparation of compacted gravel borrow sub base installed during temporary paving operations, tack coats, joint sealant, and permanent cement concrete sidewalks as specified.
- b. All sidewalks that are damaged outside of the limits of completed mainline excavation shall be considered incidental and shall not be measured separately for payment.
- c. Temporary hot mix asphalt sidewalks shall be measured per square foot at the unit price under Item 7e.

4. Permanent Concrete Sidewalks:

- a. The item “Permanent concrete sidewalk repair” shall include removal of temporary sidewalks (by milling or saw cutting and excavation), furnishing, preparation of compacted gravel borrow sub base installed during temporary paving operations, and permanent cement concrete sidewalks as specified.
- b. All sidewalks that are damaged outside of the limits of completed mainline excavation shall be considered incidental and shall not be measured separately for payment.
- c. Permanent concrete sidewalks shall be measured per square foot at the unit price under Item 7f.

1.11 WATER AND DRAIN RECONSTRUCTION

- A. Reconstruction of water mains, water service connections, and drains shall be measured per water main, water service connection, or drain reconstructed and shall be paid at the contract unit price under Items 8a, 19a, 31a, and 45a.
- B. Only pipe which is not shown on the drawings or not located for the Contractor in the field shall be considered for payment.
- C. Pipes damaged by the Contractor which pass below the proposed pipeline or are outside the specified trench limits shall be repaired by the Contractor at no cost to the Owner.

1.12 CHEMICAL ROOT TREATMENT:

- A. SEWER LINE CHEMICAL ROOT TREATMENT:

1. Chemical root treatment shall be measured at the unit price bid per linear foot of sewer treated.
2. Measurement shall be based on the actual length of treated sewer from center line of manhole to center line of manhole. Sewers shall be chemically treated for root control as specified in Section 33 01 30.51, SEWER LINE CHEMICAL ROOT TREATMENT.
3. Bypass pumping and plugging or blocking of sewer flow shall be considered incidental to the work and shall not be measured separately for payment.
4. The work under this section shall be paid at the contract unit price under Items 9a, 20a, 32a, and 46a.

1.13 STRUCTURAL CURED-IN-PLACE PIPE:

A. GENERAL:

1. The work of this item shall be measured at the unit price bid per linear foot of lined pipe. Lined pipe shall be measured as the actual length of structural cured-in-place pipe installed and shall be the shortest distance from the inside edge of the inversion manhole to the inside edge of the tail manhole.
2. The contract unit price to be paid per linear foot of structural cured-in-place pipe installed shall constitute full compensation for supplying all material, labor, tools, and equipment to install cured-in-place pipe as specified in Section 33 01 30.72, CURED-IN-PLACE PIPE.
3. Cleaning and television inspection prep work, prior to cured-in-place pipe installation, shall be considered incidental to the work and shall not be measured separately for payment.
4. Grouting of any infiltration sources required to install the liner shall be considered incidental to the work and shall not be measured separately for payment.
5. Dye testing of service connections related to the structural cured-in-place pipe prep or installation process shall be considered incidental to the work and shall not be measured separately for payment.
6. Odor control and air monitoring as specified in Section 33 01 30.72, CURED-IN-PLACE PIPE shall be considered incidental to the work and shall not be measured separately for payment.
7. Reinstating and brushing of service connections shall be considered incidental to the work and shall not be measured separately for payment.
8. Bypass pumping and plugging or blocking of flow shall be considered incidental to the work and shall not be measured separately for payment.

9. Cleaning and television inspection of relined pipes shall be considered incidental to the work and shall not be measured separately for payment.
10. Capture and disposal of cure water shall be considered incidental to the work and shall not be measured separately for payment.
11. Notification, including printing and distributing, as required per Specification Section 33 01 30.72, 3.06, shall be considered incidental to the work and shall not be measured separately for payment.
12. All cured-in-place pipes shall be designed by the Contractor in accordance with ASTM F1216 as described in Specification 33 01 30.72, CURED-IN-PLACE PIPE.
13. The work shall be paid for at the contract unit price under Items 10a, 10b, 10c, 10d, 21a, 21b, 21c, 33a, 33b, 47a, 47b, and 47c.

B. GROUT REINSTATED SERVICE CONNECTION IN STRUCTURAL CURED-IN-PLACE PIPE:

1. The work of this item shall be measured per service connection grouted in structural cured-in-place pipe.
2. The contract unit price per service to be paid shall constitute full compensation for supplying all material, labor, tools, and equipment required to TV inspect, and pressure test, and grout the service connection as specified in Section 33 01 30.65, SERVICE CONNECTION REHABILITATION.
3. The work shall be paid for at the contract unit price under Items 10e, 21c, 33c, and 47d.

C. Ten percent of the payment for the subdivisions of the item “Structural Cured-in-place Pipe” shall be withheld until the pipeline rehabilitations have satisfactorily completed and passed field testing/inspection(s) as specified in Section 33 01 30.72, CURED-IN-PLACE PIPE.

1.14 SERVICE CONNECTION REHABILITATION:

A. CUTTING PROTRUDING SERVICE CONNECTION:

1. The work of this item shall be measured per protruding service connection cut.
2. The contract unit price per service to be paid shall constitute full compensation for supplying all material, labor, tools, and equipment required to cut the protruding service connection as specified in Section 33 01 30.65, SERVICE CONNECTION REHABILITATION.

3. Bypass pumping and plugging or blocking of sewer flow shall be considered incidental to the work and shall not be measured separately for payment.
4. Television inspection of cut service connections shall be considered incidental to the work and shall not be measured separately for payment.
5. The work shall be paid for at the contract unit price under Items 11a, 22a, 34a, and 48a.

1.15 SEWER MANHOLE REHABILITATION:

A. CEMENTITIOUS LINING OF MANHOLES:

1. The work of this item shall be measured at the unit price bid per vertical foot of manhole actually lined, which shall be measured from top of manhole bench to bottom of manhole frame.
2. The contract unit price per vertical foot of manhole to be paid shall constitute full compensation for supplying all material, labor, tools, and equipment required to line the manhole as specified in Section 33 01 30.62, SEWER MANHOLE REHABILITATION. Cementitious lining includes invert sealing, exterior chemical grouting, and interior sealing.
3. Bypass pumping and plugging or blocking of sewer flow shall be considered incidental to the work and shall not be measured separately for payment.
4. The work under this section shall be paid at the contract unit price under Items 12a, 23a, 35a, and 49a.
5. Ten percent of the payment for this item shall be withheld until the manhole rehabilitations have been satisfactorily completed and passed field testing/inspection(s) as specified in Section 33 01 30.62, SEWER MANHOLE REHABILITATION.

B. GROUT AND PATCH MANHOLES TO STOP LEAKS:

1. The work of this item shall be measured per manhole grouted and patched.
2. The contract unit price per manhole to be paid shall constitute full compensation for supplying all material, labor, tools, and equipment required to grout and patch manholes as specified in Section 33 01 30.62, SEWER MANHOLE REHABILITATION.
3. Bypass pumping and plugging or blocking of sewer flow shall be considered incidental to the work and shall not be measured separately for payment.
4. The work under this section shall be paid for at the contract unit price under Items 12b, 23b, 35b, and 49b.

5. Ten percent of the payment for this item shall be withheld until the manhole rehabilitations have been satisfactorily completed and passed field testing/inspection(s) as specified in Section 33 01 30.62, SEWER MANHOLE REHABILITATION.

C. BUILD MANHOLE BENCH AND INVERT IN MANHOLE S2-2734 ON ILLINOIS AVENUE:

1. The work of this item shall be measured per manhole bench and invert built.
2. The contract unit price per manhole to be paid shall constitute full compensation for supplying all material, labor, tools, and equipment required to build the manhole bench and invert as specified in Section 33 01 30.62, SEWER MANHOLE REHABILITATION.
3. The installed cured-in-place pipe in the sanitary sewer of manhole S2-2734 will not be reinstated after lining is complete. the drain pipe running through the S2-2734 shall be opened within the manhole after lining is complete. The bench and invert to be built is intended to meet the storm drain pipe elevation. The work of this item to open the drain within manhole S2-2734 shall be included as incidental and not be measured separately for payment.
4. The work under this section shall be paid at the contract unit price under Item 49c.

D. FURNISH AND INSTALL MANHOLE FRAMES AND COVERS:

1. The work of this item shall be measured per manhole frame and cover installed.
2. Pavement replaced related to furnish and install manhole frames and covers shall be considered incidental to the work and shall not be measured separately for payment.
3. The contract unit price to be paid per manhole frame and cover installed shall constitute full compensation for supplying all material, labor, tools, and equipment required to install the manhole frame and cover, including removal and disposal of existing frame and cover, as described in Section 33 01 30.62 SEWER MANHOLE REHABILITATION.
4. The work under this section shall be paid at the contract unit price under Item 12c.

1.16 HEAVY CLEANING AND INSPECTION OF SEWERS

A. HEAVY CLEANING AND INSPECTION OF SEWERS:

1. The work under this item shall be measured at the unit price bid per linear foot cleaned and inspected. Diameter of the pipe shall be taken as the greater of the

dimensions in oval and rectangular pipe.

2. Measurement shall be based on the actual length of sewer cleaned and inspected from center line of manhole to center line of manhole. Sewers shall be cleaned and inspected as specified in Section 33 01 30.61, SEWER CLEANING AND INSPECTION. Verification of adequate cleaning shall be made by television inspection.
3. Cutting of protruding services, hydraulic cutting of roots, and removal of settled concrete in locations indicated on the plans shall be considered incidental to the work.
4. The television inspection work, external hard drives, by-pass pumping, plugging or blocking of sewer flow, and cleaning of sewers shall be considered incidental to the work and shall not be considered for payment. External hard drives, as described in Section 01 33 19, DOCUMENTATION shall be given to the Owner upon completion of the project.
5. The work under this section shall be paid at the contract unit price under Items 13a, 13b, 13c, and 50a.

B. DEBRIS DISPOSAL:

1. The work under this item shall be measured at the unit price bid per ton of debris removed, tested, and disposed of.
2. The contract unit price to be paid for debris disposal shall constitute full compensation for supplying all materials, tools, labor, and equipment required to dispose of all material resulting from the heavy cleaning operation, including storage, testing, transportation, and legal disposal of all debris, as described in Section 33 01 30.61, SEWER CLEANING AND INSPECTION.
3. The work under this section shall be paid at the contract unit price under Items 13d and 50b.

1.03 SPECIAL DEWATERING WITHIN DISPOSAL SITE BOUNDARY:

The lump sum for items 6a shall constitute full compensation to the Contractor for furnishing all equipment, materials, and labor for obtaining, installing, operating, maintaining, sampling, and removing a temporary dewatering and treatment system for removal, treatment, and discharge of construction dewatering within the Disposal Site Boundary in accordance with Section 31 23 19, DEWATERING for the estimated duration of one month.

1.17 CONSTRUCTION ZONE SAFETY PLAN:

The lump sum for items 13a, 23a, 35a, and 50a shall constitute full compensation to the

Contractor for furnishing all signage; traffic control devices; obtaining, installing, and removing “No Parking” signs at each work location; submitting site specific traffic management plans for each work location, as required by the Somerville Traffic and Parking Department; submitting weekly Right-of-Way Occupancy Request; attending a virtual weekly Right-of-Way Construction Coordination Meeting as specified in Section 01 55 26.23, SIGNAGE and Section 01 56 00, CONSTRUCTION ZONE SAFETY PLAN.

1.18 MOBILIZATION:

The lump sum for Items 14a, 24a, 36a, and 51a shall constitute full compensation to the Contractor for the general mobilization necessary to make the contract operational, exclusive of the cost of materials but including furnishing and maintaining the temporary facilities. The total for mobilization for BASE BID shall not exceed five (5) percent of the total of Items 1 to 14. The total for mobilization for ALTERNATE NUMBER ONE shall not exceed five (5) percent of the total of Items 16 to 24. The total for mobilization for ALTERNATE NUMBER TWO shall not exceed five (5) percent of the total of Items 26 to 36. The total for mobilization for ALTERNATE NUMBER THREE shall not exceed five (5) percent of the total of Items 38 to 51.

1.19 CLEARING AND GRUBBING:

Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.

1.20 TREE PRUNING:

Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.

1.21 SUPPORT OF EXCAVATION:

Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.

1.22 SIGNAGE:

Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.

1.23 CURBING REPLACEMENT:

Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.

1.24 TRACER TAPE:

- Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.
- 1.25 LANDSCAPING:
- Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.
- 1.26 LOAMING AND SEEDING:
- Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.
- 1.27 FIELD CONCRETE:
- Unless otherwise indicated, the work of this section shall not be separately measured for payment, but shall be considered incidental to the project.
- 1.28 ELECTRICAL:
- Unless otherwise indicated, the work of this division shall not be separately measured for payment, but shall be considered incidental to the project.
- 1.29 PROTECTION AND RELOCATION OF EXISTING STRUCTURES AND UTILITIES:
- Unless otherwise indicated, protection or temporary removal and replacement of existing utilities and structures as described in Section 01 11 00 shall not be separately measured for payment, but shall be considered incidental to the project.
- 1.30 TRAFFIC SIGNAL LOOPING
- Repair and/or replacement of traffic signal looping by authorized installers shall not be separately measured for payment but shall be considered incidental to the project.
- 1.31 PRICE ADJUSTMENTS MANDATED BY MGL CHAPTER 30, SECTION 38A
- Price adjustments for certain payment items shall be as described in Specification Section 01 22 00.13 PRICE ADJUSTMENTS. Payment shall be made at the unit prices included in Form for General Bid or, if no such items are contained in Form for General Bid, by change order.
- 1.32 HEALTH AND SAFETY PLAN:
- The work of this section shall not be separately measured for payment but shall be considered incidental to the project.
- 1.33 UTILITY POLE SUPPORT

Unless otherwise indicated, all associated coordination and work required for utility pole support shall not be separately measured for payment but shall be considered incidental to the project.

1.34 WEEKLY PROJECT COORDINATION MEETINGS

The contractor shall attend weekly in-person project coordination meetings with the Owner and Engineer. All associated coordination and work required for these meetings shall not be separately measured for payment but shall be considered incidental to the project. The time and day shall be discussed during the pre-construction meeting. This meeting is separate from the “Right-of-Way” coordination meeting.

END OF SECTION

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Attachment D

Minimum Quality Requirements Revised 4/10/2025

2.3 Minimum Quality Requirements **revised 4/10/2025**

Quality requirements, or basic business requirements, are the minimum set of standards that an entity must meet and certify to be considered responsible and responsive. **Please complete the Quality Requirements form, below, and submit it with your completed bid.** The City of Somerville will disqualify any response that does not meet the minimum quality requirements. A "No" response to items **1-5 6**, or a failure to respond to any of the following minimum standards, will result in disqualification of your bid.

QUALITY REQUIREMENTS		YES	NO
1.	Proposer shall have successfully completed at least ten (10) projects involving construction of similar size and scope in the same state as the Project covered by the Contract Documents within the last ten (10) years.		
2.	Proposer or its Subcontractor shall have a minimum of five (5) years continuous experience in CIPP lining and manhole rehabilitation for projects of similar size and scope. The lead field personnel shall have a minimum 5 years' experience with proposed CIPP and manhole rehabilitation technologies and have demonstrated competency and experience to perform resin wet-out, removal of intruding service connections, CIPP liner installation, CIPP liner curing, robotic service reinstatements, and manhole rehabilitation.		
3.	Proposer or its Subcontractor shall have at least five (5) projects of similar size and scope that include temporary street repair, final paving, and surface restoration within public streets within the last ten (10) years;		
4.	Proposer or its Subcontractor overseeing the bypass pumping system shall have provided bypass pumping for a minimum of 10 years and five (5) projects of similar size and scope.		
5.	All employees on the project shall possess a minimum 10-hour OSHA construction safety training.		
6.	<u>Proposer or its Subcontractor shall have at least five (5) projects of similar size and scope that include excavation, soil compaction, drainlaying, manhole & drainage structure construction, and water line construction within the last ten (10) years.</u>		
7.	Optional: Are you a Mass. Supplier Diversity Office MBE/WBE certified minority or woman owned business? Additional minority designations may be submitted by attaching supporting documentation.		

In order to provide verification of affirmative responses to items **1-5 6**, under the quality requirements listed in the Quality Requirements Form, Offeror must submit written information that details the general background, experience, and qualifications of the organization. Subcontractors, if applicable, must be also included.