



Stantec Consulting Services Inc.
65 Network Drive, 2nd Floor, Burlington MA 01803-2767

July 31, 2021

Attention: Todd Borci, Enforcement Officer

US EPA Region I – New England
5 Post Office Square – Suite 100
Boston, MA 02109-3912

Subject: Town of Belmont
ORDER ON CONSENT Docket No. CWA-AO-R01-FY17-11
Report On Compliance

Dear Mr. Borci,

In accordance with the above referenced Order On Consent, we are submitting the following Report On Compliance (ROC) dated July 31, 2021, which describes activities conducted from January 1, 2021 through June 30, 2021 associated with the Wellington Brook and Winn's Brook tributary areas in the Town of Belmont. These two areas are designated as Sub-catchments 8 and 10, respectively. This report also includes activities associated with all sub-catchments in the Mystic River Watershed including, 1, 2, 3, 4, 5, 6, 8, 9, 9A, 10, 11, 11A, 12, 13, 15 and 15A. Refer to the November 2017 Investigation of the Winn's Brook and Wellington Brook Tributary Areas report and the January 2018 Report On Compliance for complete figures of each sub-catchment area.

A comprehensive Sewer System Rehabilitation Construction project, which includes removal of suspected and confirmed illicit sources of contamination to the storm drain and inflow and infiltration within the sewer, is completed. The project included all identified required rehabilitation work from the previous ROC dated January 31, 2020. A Private Sector Sump Pump Removal & Sewer System Rehabilitation Construction project, which includes disconnection of sump pumps and associated plumbing and continued removal storm drain illicit and contamination sources, started on July 21, 2021. Refer the contract drawings in **Attachment 1**. Several sub-catchments discharging to the Mystic River Watershed were resampled during this reporting period for *E. coli* and select locations for Ammonia.

V.1.a ILLICIT DISCHARGES IDENTIFIED

Charles River Watershed Sub-catchments 16-31

Completed

No work was conducted in the Charles River Watershed sub-catchments.

Planned

The Charles River Watershed sub-catchments will have comprehensive follow-up sampling completed during the next reporting period.

Design with community in mind



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Mystic River Watershed Sub-catchments 1-15A

Completed

Follow-up dry weather samples were collected for several sub-catchment areas in March 2021, after the majority of the rehabilitation, within areas 8 (8-2, 8-3, 8-5, 8-5,8-6), 10 (10-1 and 10-2), 11, 11A, 12, and 13 to evaluate the status of each sub-catchment. Refer to **Figure 1**. As shown in **Table 1**, Sub-catchments 8-2, 8-5, 11A, 12, and 13 were below the *E. coli* reportable threshold of 235 MPN/100mL. Sub-catchment 8-4 showed a significant improvement but is still above the threshold for *E. coli*. Sub-catchments 11 and 8-3 showed an increase in *E. coli* levels. Sub-catchments 8 and 10 are large tributaries and were broken down into smaller catchment areas to identify any masked contamination upstream. Refer to **Attachment 2**. Additional upstream tributary sampling is detailed below in sub-catchments where it was necessary.

Planned

Comprehensive investigations will continue in the Mystic River Watershed sub-catchments as described below.

Sub-catchments 1, 3, 4, 5, 6, 9, 9A, 13 and 15A

Completed

Sub-catchment 1 was further investigated as described below. From the previous report, Sub-catchments 3, 4, 5, 6, 9, and 9A were cleared as contamination sources. Sub-catchment 13 was sampled for *E. coli* and was below the threshold. Refer to **Table 1** and **Figure 1**.

Planned

Sub-catchment 15A will continue to be monitored due to previously tested elevated levels of ammonia.

Sub-catchment 1

Completed

Sub-catchment 1 had been previously cleared as a contamination source. However, follow up sampling, during last reporting period, within the tributary indicated an increased level of *E. Coli* from a 6" pipe from an easement at Fairview Ave and Van Ness Rd. Dyed water testing concluded that 58 Van Ness Road's sewer is illegally connected to drain. CCTV inspections were performed of the drain, however incomplete and so far, ranked as priority 2. Refer to **Figure 2**, and **Table 2**.

Planned

The identified illicit connection will be repaired as a change order in the ongoing Sump Pump Removal and Sewer System Rehabilitation Contract.



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Sub-catchment 2

Completed

The CCTV inspections on Hartley Rd, Herbert Rd, Houghton Rd, and Shaw Rd were conducted. Defects and recommended rehabilitation are shown in **Table 2** and **Figure 3**.

Planned

Outfall and tributary sampling will be conducted upon completion of the sewer and storm drain rehabilitation work in Sub-catchment Area 2.

Sub-catchment 8-1

Completed

The CCTV inspection on Lincoln Rd was conducted. Defects and recommended rehabilitation are shown in **Table 2**. A majority of the remaining houses that have not been rehabilitated or dyed-water tested/inspected were investigated as part of this reporting period. Refer to **Figure 4**.

Planned

The remaining houses suggested for dyed-water testing will be inspected. This sub-catchment area will be further sampled upstream to identify target areas for investigations.

Sub-catchment 8-2

Completed

Sub-catchment 8-2 sample had an *E. coli* concentration of 100 MPN/100 mL. This was a significant decrease from previous samples taken after rehabilitation was conducted upstream to remove contamination sources. Sub-tributary samples concluded a decrease in *E.coli* concentrations upstream, as well. Refer to **Figure 5**.

Planned

This sub-catchment area will be further monitored.

Sub-catchment 8-3

Completed

Sub-catchment 8-3 was sampled for *E. coli* that was elevated at 1,400 MPN/100 mL. *E. coli* was only 500 MPN/100 mL in the previous sample. Refer to **Attachment 2**.

Planned

This sub-catchment area will be further sampled upstream to identify target areas for investigations.



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Sub-catchment 8-4

Completed

Sub-catchment 8-4 sample had an *E. coli* concentration of 1,900 MPN/100 mL. This was a significant improvement from previous sample where *E. coli* was 22,000 MPN/100mL.

Planned

This sub-catchment area will be further sampled upstream to identify target areas for investigations.

Sub-catchment 8-5

Completed

Sub-catchment 8-5 sample had an *E. coli* concentration of 200 MPN/100 mL. This was a significant improvement from the previous sample where the *E. coli* was 4,800 MPN/100 mL

Planned

This sub-catchment area will be further sampled upstream to identify target areas for investigations.

Sub-catchment 8-6

Completed

Maple St, Bartlett Ave and Trapelo Rd

Select locations were sampled within the sub-catchment which showed vast improvements in the *E. coli* concentrations resulting below the threshold. One area in particular (8-6-22) had a significant decrease in *E. coli* concentration, although still above the threshold. Refer to **Figure 6** and **Attachment 2**.

Planned

This sub-catchment area will be monitored and further sampled upstream to identify target areas for investigations.

Sub-catchment 10-1

Completed

Sub-catchment 10-1 has notable improvements in the *E. coli* concentration resulting in <100 MPN/100mL. Previous sample results showed an *E. coli* concentration of 7,900 MPN/100mL. Additional samples were taken upstream, and the results are shown on **Figure 7** and **Attachment 2**.



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Planned

This sub-catchment area will be further monitored.

Sub-catchment 10-2

Completed

Select locations were sampled within the sub-catchment which showed an overall decrease in the *E. coli* concentrations, although still above the threshold. Refer to **Figure 8** and **Attachment 1**.

Planned

This sub-catchment area will be monitored and further sampled upstream to identify target areas for investigations.

Sub-catchments 11, 11A & 12

Completed

Outfall 11 showed an elevated level of *E. coli*, 4,900 MPN/100mL from the last reporting period. Outfall 11A had significant improvements of *E. coli* resulting below the threshold. However, both areas, 11 and 11A, carried higher concentrations of ammonia. Outfall 12 concluded *E. coli* and ammonia levels below the threshold. Refer to **Figure 9** and **Attachment 2**.

Planned

Follow-up outfall and tributary sampling will be conducted in outfall 11 and monitored in outfalls 11A and 12.

Spy Pond Outfalls – Outfall Areas 15 & 15A

Completed

No outfall samples were conducted in outfalls 15 and 15A.

Planned

Both Sub-catchments 15 and 15A will continue to be monitored.

V.1.b SSO EVENTS

See attached **Table 3**, which displays a list of blockages reported to the Town and removed.



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V.1.c ILLICIT DISCHARGE AND SSO EVENT MAP

The Illicit Discharge and SSO Event Maps have been updated through June 26, 2021 and are included in this **Report (Figures 10 & 11)**.

V.1.d CMOM-PROGRAM SELF-ASSESSMENT & CORRECTIVE ACTION PLAN ACTIVITIES

Activities undertaken this period include:

Section II. Continuing Sewer Assessment Plan: Item 9 - The Town is required to identify the origin of each load to be disposed of at the DPW Yard. As of November 2018, the Town is no longer allowing septage haulers to access the Town yard.

Section III. B. Collection System Management: Training, and Section IV. C. Collection System Operation: Safety - The Department of Public Works provides operations and equipment training to department staff. DPW is actively working to identify outside facilities and instructors in order to implement a safety training program.

Section III. E. Collection System Management: SSO Notification Program, Items 1 and 2 - The Department of Public Works is in receipt of the Massachusetts Department of Environmental Protection Sanitary Sewer Overflow (SSO)/Bypass Notification Form and the department is prepared to meet all reporting requirements when required to do so.

Section IV. D. Collection System Management: SSO Notification Program, Item 3 - The Department of Public Works provides to all sewer department staff an emergency response plan for SSO events. Regular staff training sessions are being programmed to ensure that new hires and current staff are prepared to respond to an SSO event.

V.1.e ADDITIONAL ACTIVITIES FOR ACHIEVING COMPLIANCE

Refer to the Part V.1.a.

V.1.f PROPOSED CHANGES TO REMEDIAL MEASURES

None.

V.1.g IDENTIFICATION OF ALL PLANS, REPORTS, AND OTHER SUBMISSIONS REQUIRED

No additional reports required for submission.



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V.1.h PLANS FOLLOWING THE REPORTING DEADLINES

Refer to the Part V.1.a.

V.1.i IDENTIFICATION OF NONCOMPLIANCE OF THE ORDER

None.

Below is a summary of rehabilitation work completed to date:

Completed this reporting period

All rehabilitation work as described in the Sanitary Sewer Rehabilitation contract drawings, have been completed. A detailed list and updated Record Drawings will be included in the next reporting period.

Please contact me if you have any questions regarding the information contained in this report.

Regards,
STANTEC CONSULTING SERVICES INC.

Robert H. Descheneau, P.E.
Senior Design Engineer
Phone: (781) 221-1083
Bobby.Descheneau@stantec.com

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TOWN OF BELMONT, MA

Figure 1
Mystic River Watershed Sampling Results
Belmont

Illicit Discharge Investigations
July 2021

1 inch = 250 feet



LEGEND

- ★ 2021 Outfall Sampling Data
- Drain Manhole
- Catch Basin
- Drain
- Catch Basin Outlet Drain
- Stream/Brook
- ▭ Parcels

Sample Number
Sample Date
Sample Result (MPN/100 mL)

OF 8-5
3/24/21 200

OF 8-3
3/24/21 1,400

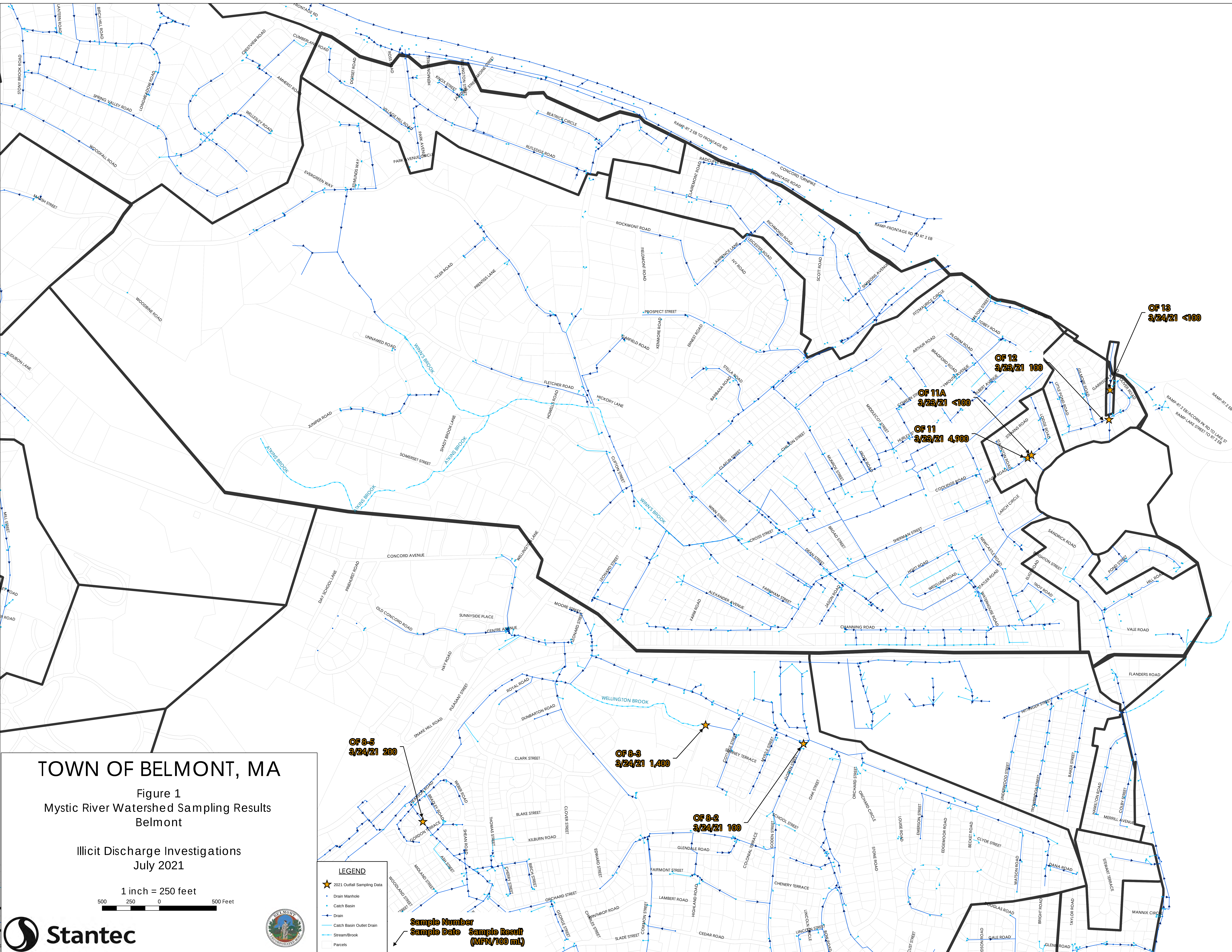
OF 8-2
3/24/21 100

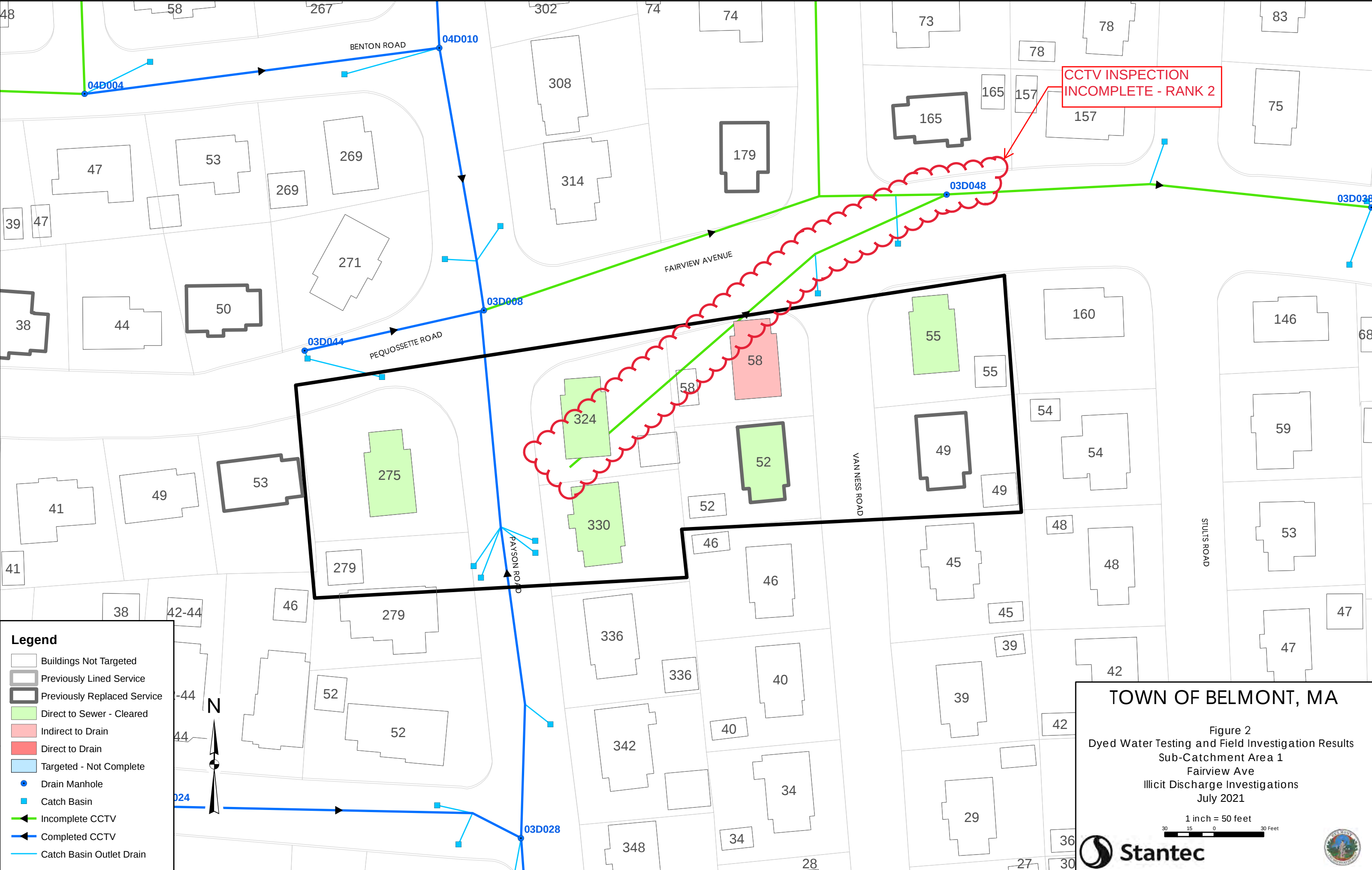
OF 11A
3/23/21 <100

OF 11
3/23/21 4,900

OF 12
3/23/21 100

OF 13
3/24/21 <100





Legend

Buildings Not Targeted

Previously Lined Service

Previously Replaced Service

Direct to Sewer - Cleared

Indirect to Drain

Direct to Drain

Targeted - Not Complete

Drain Manhole

Catch Basin

Incomplete CCTV

Completed CCTV

Catch Basin Outlet Drain

TOWN OF BELMONT, MA

Figure 2
Dyed Water Testing and Field Investigation Results
Sub-Catchment Area 1
Fairview Ave
Illicit Discharge Investigations
July 2021

1 inch = 50 feet

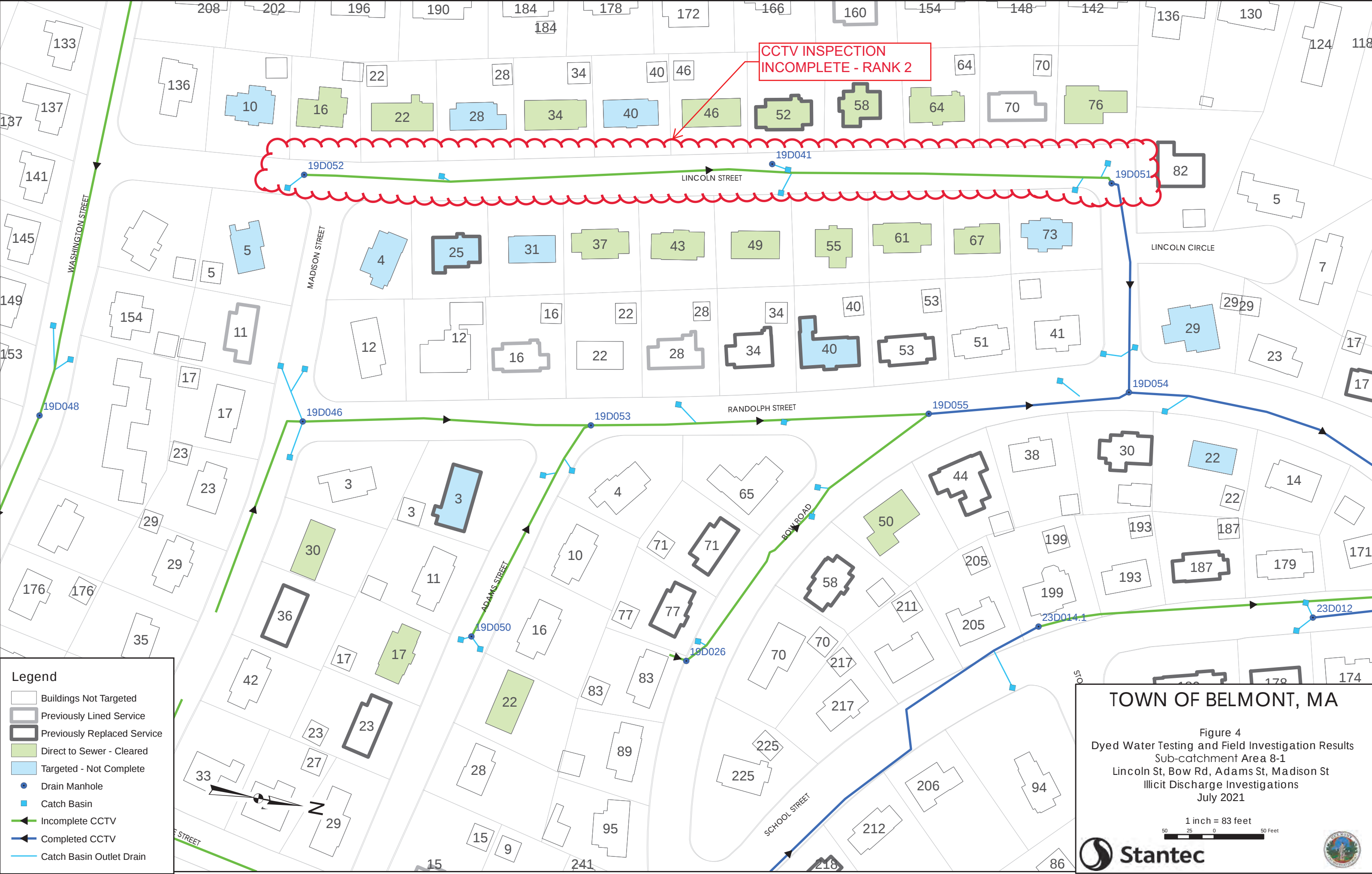


CCTV INSPECTION
COMPLETE - RANK 2

CCTV INSPECTION
INCOMPLETE - RANK 2

CCTV INSPECTION
INCOMPLETE - RANK 2

CCTV INSPECTION
COMPLETE - RANK 3



CCTV INSPECTION
INCOMPLETE - RANK 2

Legend

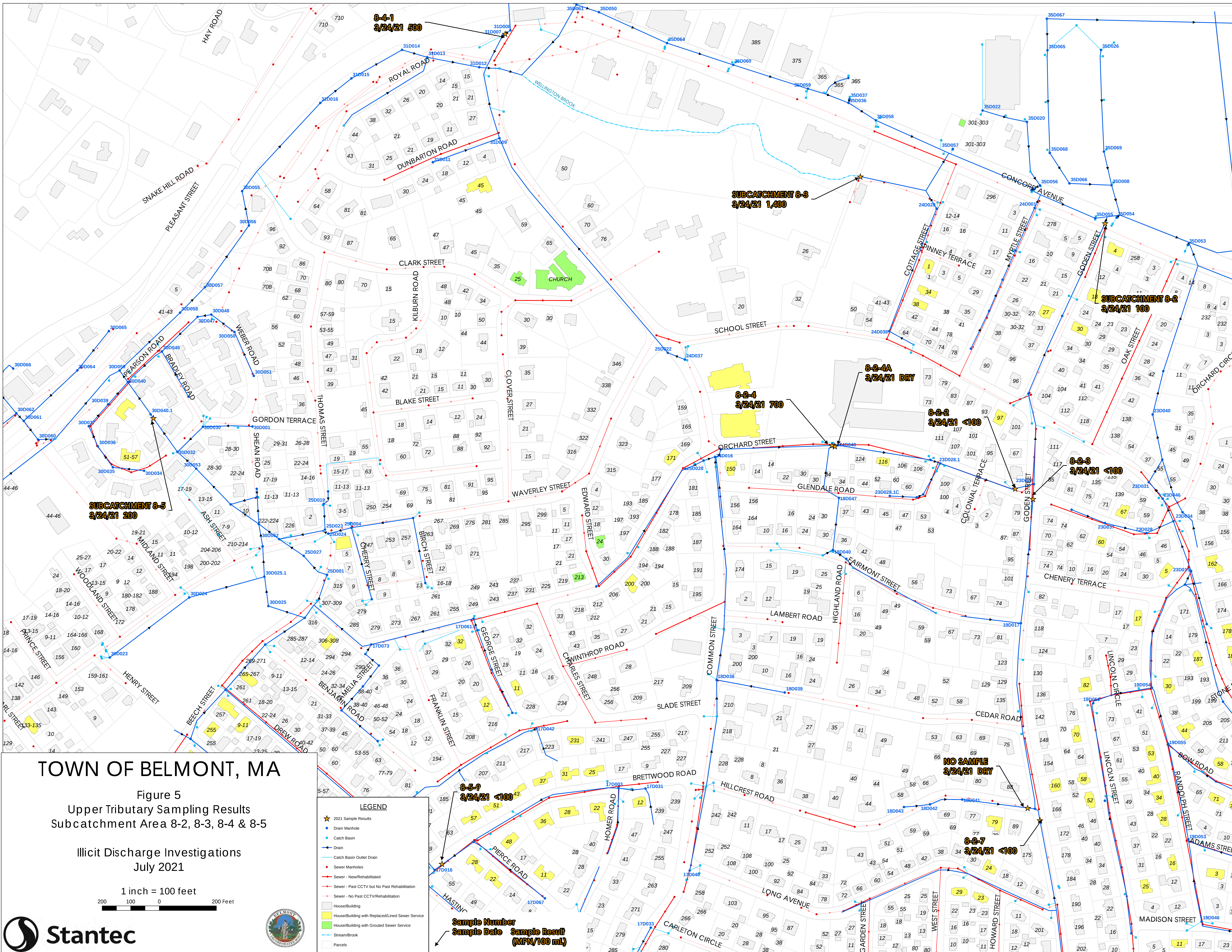
- Buildings Not Targeted
- Previously Lined Service
- Previously Replaced Service
- Direct to Sewer - Cleared
- Targeted - Not Complete
- Drain Manhole
- Catch Basin
- Incomplete CCTV
- Completed CCTV
- Catch Basin Outlet Drain

TOWN OF BELMONT, MA

Figure 4
Dyed Water Testing and Field Investigation Results
Sub-catchment Area 8-1
Lincoln St, Bow Rd, Adams St, Madison St
Illicit Discharge Investigations
July 2021

1 inch = 83 feet
50 25 0 50 Feet





8-4-1
3/24/21 500

SUBCATCHMENT 8-3
3/24/21 1,400

SUBCATCHMENT 8-2
3/24/21 100

8-2-4A
3/24/21 DRY

8-2-4
3/24/21 700

8-2-2
3/24/21 <100

8-2-3
3/24/21 <100

NO SAMPLE
3/24/21 DRY

8-2-7
3/24/21 <100

8-5-9
3/24/21 <100

Sample Number
Sample Date
Sample Result
(MPN/100 mL)

TOWN OF BELMONT, MA

Figure 5
Upper Tributary Sampling Results
Subcatchment Area 8-2, 8-3, 8-4 & 8-5

Illicit Discharge Investigations
July 2021

1 inch = 100 feet



LEGEND

2021 Sample Results

Drain Manhole

Catch Basin

Drain

Catch Basin Outlet Drain

Sewer Manholes

Sewer - New/Rehabilitated

Sewer - Past CCTV but No Past Rehabilitation

Sewer - No Past CCTV/Rehabilitation

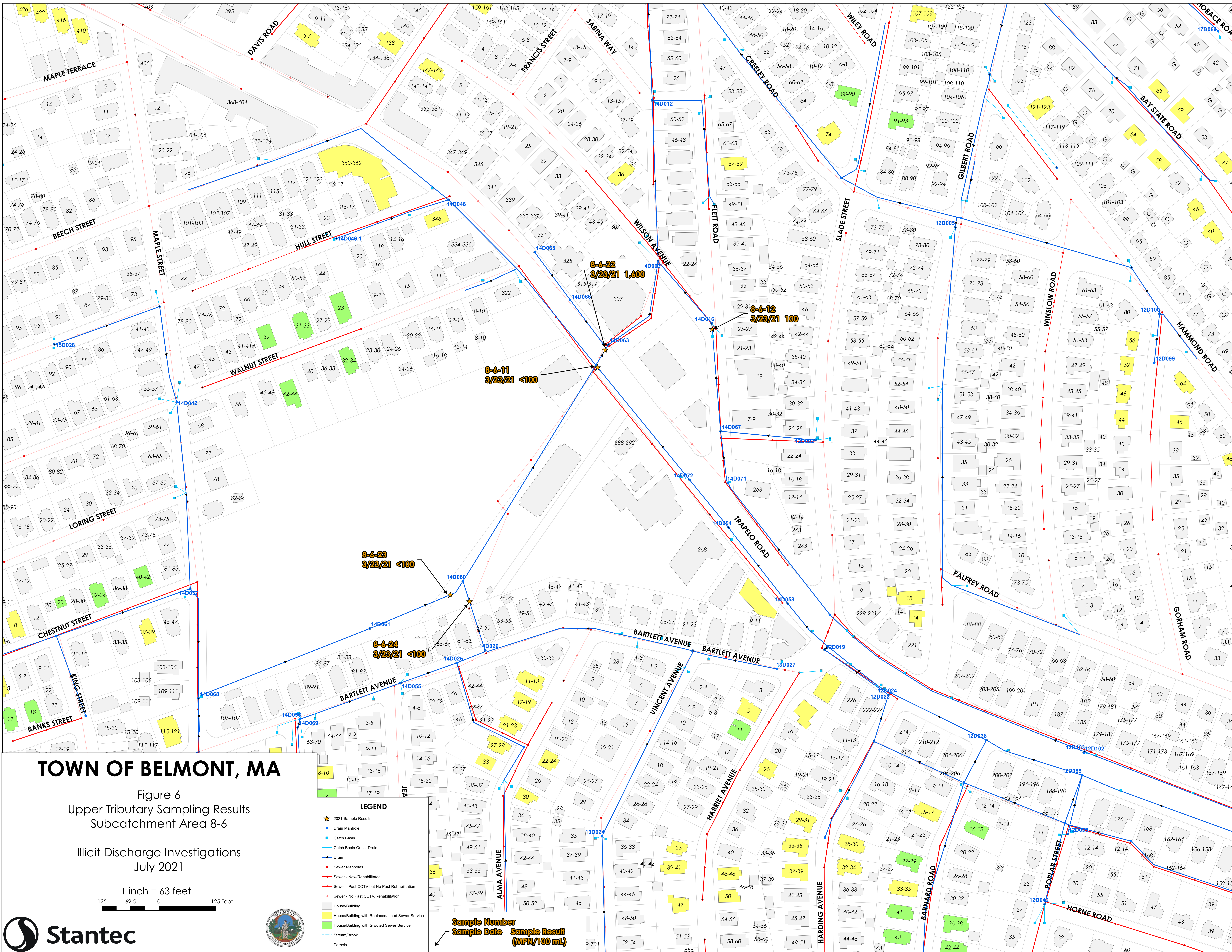
House/Building

House/Building with Replaced/Lined Sewer Service

House/Building with Grouted Sewer Service

Stream/Brook

Parcels



TOWN OF BELMONT, MA

Figure 6
Upper Tributary Sampling Results
Subcatchment Area 8-6

Illicit Discharge Investigations
July 2021

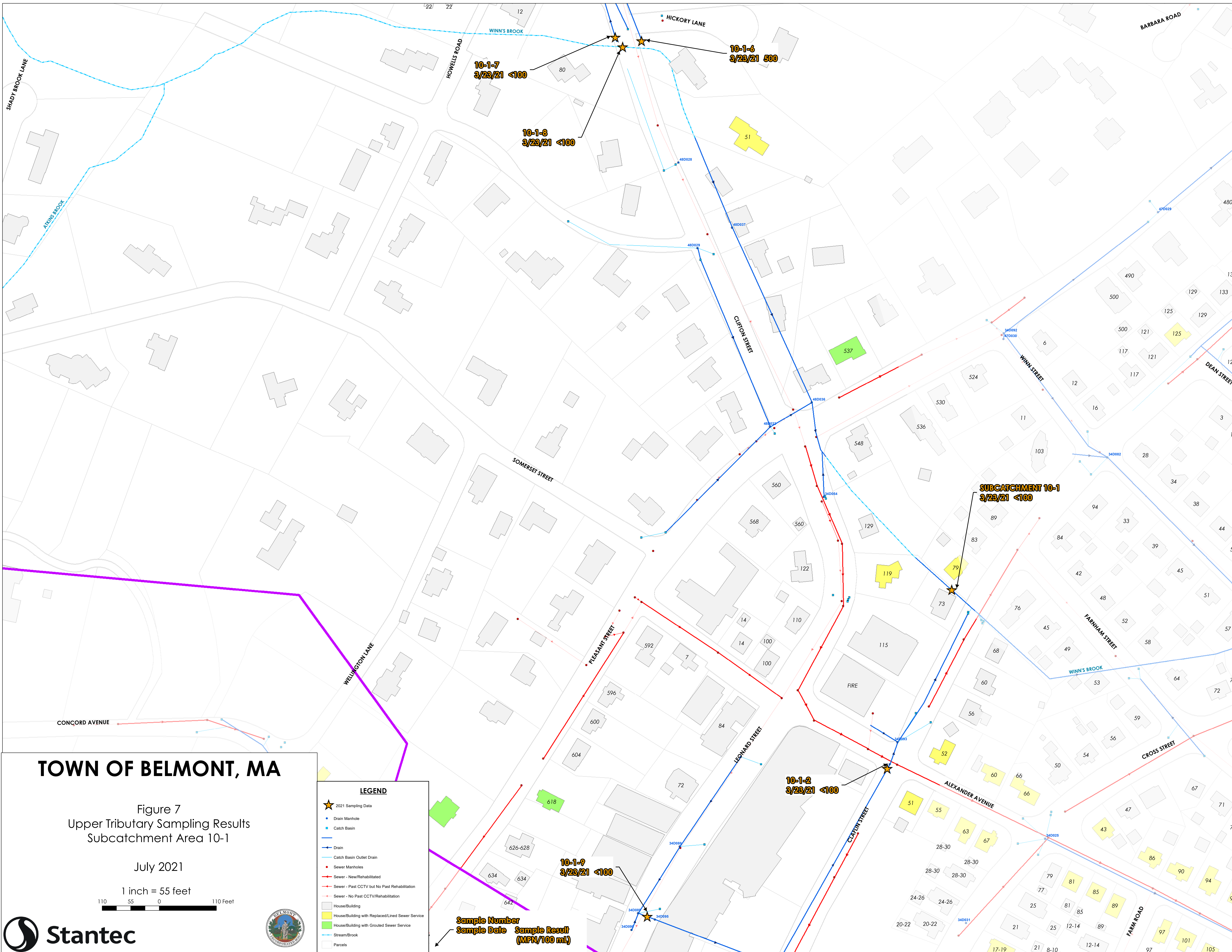
1 inch = 63 feet
125 62.5 0 125 Feet



LEGEND

- ★ 2021 Sample Results
- Drain Manhole
- Catch Basin
- Catch Basin Outlet Drain
- Drain
- Sewer Manholes
- Sewer - New/Rehabilitated
- Sewer - Past CCTV but No Past Rehabilitation
- Sewer - No Past CCTV/Rehabilitation
- House/Building
- House/Building with Replaced/Lined Sewer Service
- House/Building with Grouted Sewer Service
- Stream/Brook
- Parcels

Sample Number
Sample Date
Sample Result
(MPN/100 mL)



TOWN OF BELMONT, MA

Figure 7
Upper Tributary Sampling Results
Subcatchment Area 10-1

July 2021

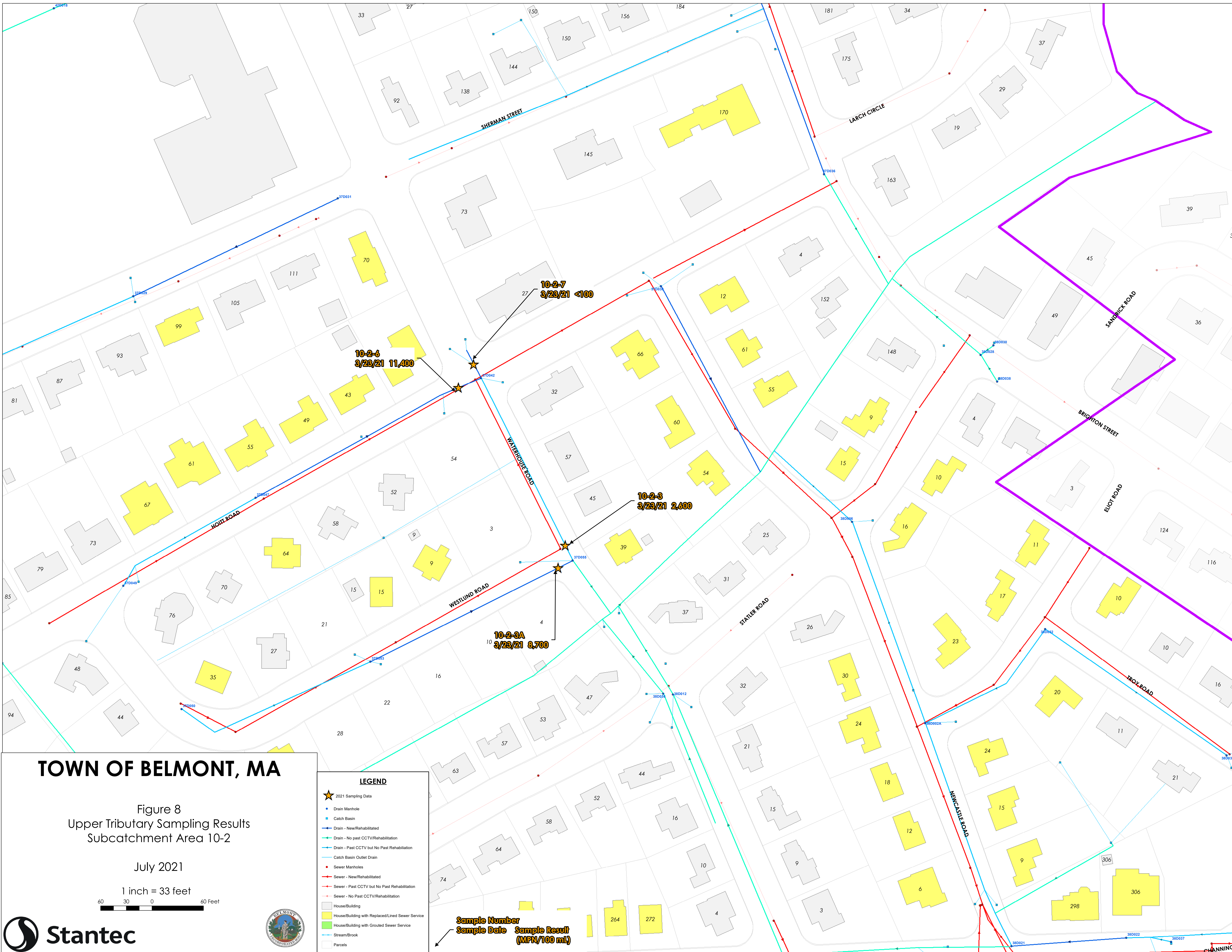
1 inch = 55 feet



LEGEND

- ★ 2021 Sampling Data
- Drain Manhole
- Catch Basin
- Drain
- Catch Basin Outlet Drain
- Sewer Manholes
- Sewer - New/Rehabilitated
- Sewer - Past CCTV but No Past Rehabilitation
- Sewer - No Past CCTV/Rehabilitation
- House/Building
- House/Building with Replaced/Lined Sewer Service
- House/Building with Grouted Sewer Service
- Stream/Brook
- Parcels

Sample Number
Sample Date
Sample Result
(MPN/100 mL)



TOWN OF BELMONT, MA

Figure 8
Upper Tributary Sampling Results
Subcatchment Area 10-2

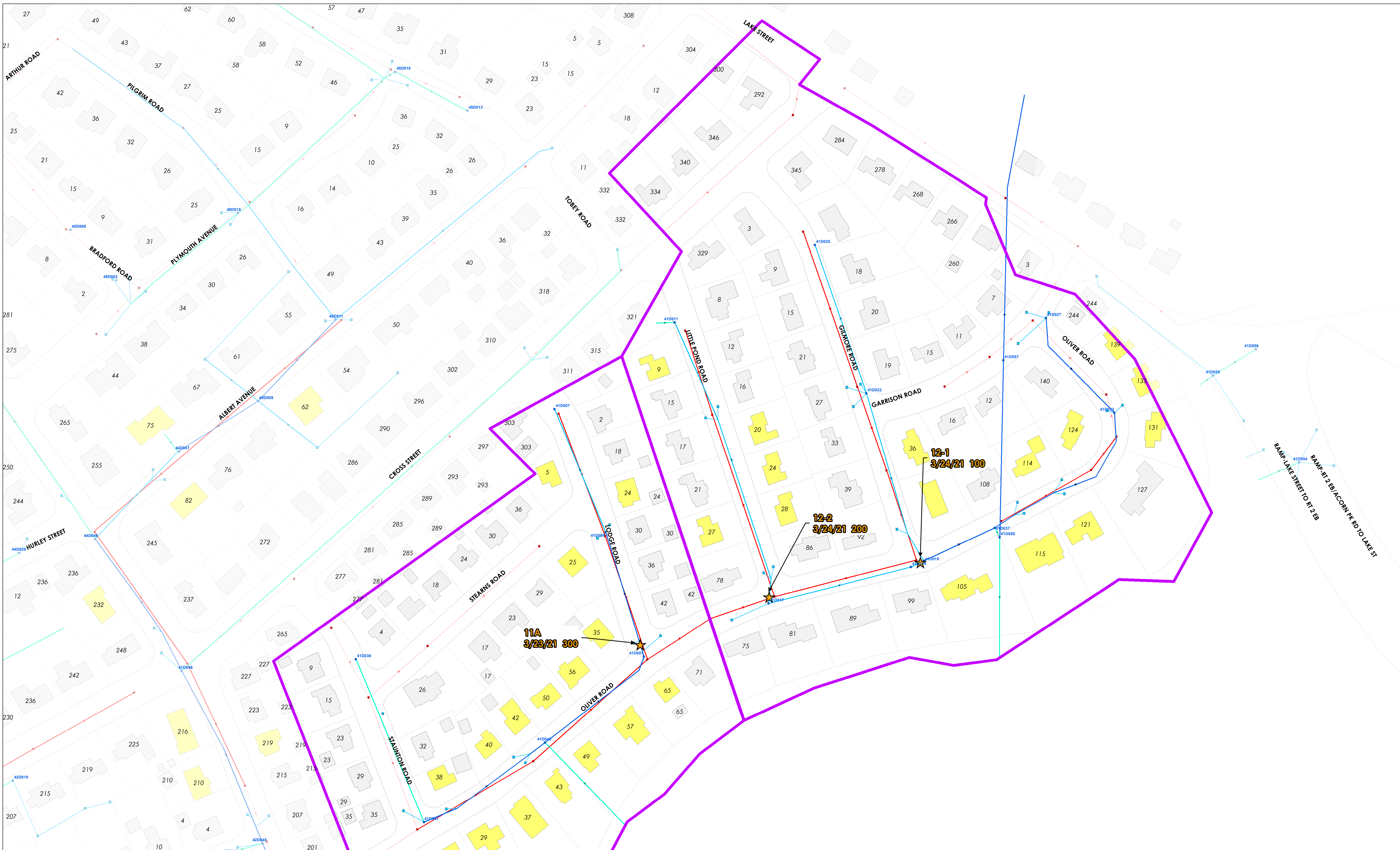
July 2021

1 inch = 33 feet
60 30 0 60 Feet



- LEGEND**
- ★ 2021 Sampling Data
 - Drain Manhole
 - Catch Basin
 - Drain - New/Rehabilitated
 - Drain - No past CCTV/Rehabilitation
 - Drain - Past CCTV but No Past Rehabilitation
 - Catch Basin Outlet Drain
 - Sewer Manholes
 - Sewer - New/Rehabilitated
 - Sewer - Past CCTV but No Past Rehabilitation
 - Sewer - No Past CCTV/Rehabilitation
 - House/Building
 - House/Building with Replaced/Lined Sewer Service
 - House/Building with Grouted Sewer Service
 - Stream/Brook
 - Parcels

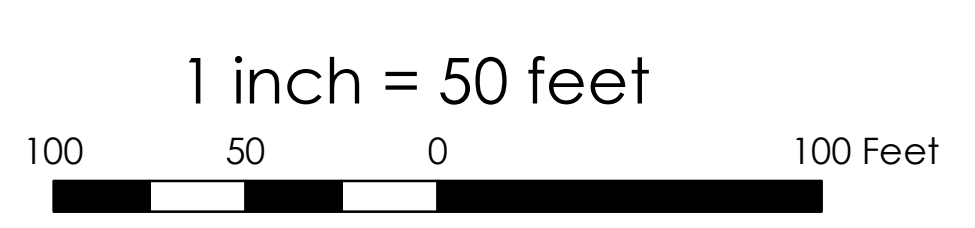
Sample Number
Sample Date
Sample Result
(MPN/100 mL)



TOWN OF BELMONT, MA

Figure 9
Upper Tributary Sampling Results
Subcatchment Area 11, 11A & 12

July 2021



LEGEND

2021 Sampling Data

Drain Manhole

Catch Basin

Drain - New/Rehabilitated

Drain - No past CCTV/Rehabilitation

Drain - Past CCTV but No Past Rehabilitation

Catch Basin Outlet Drain

Sewer Manholes

Sewer - New/Rehabilitated

Sewer - Past CCTV but No Past Rehabilitation

Sewer - No Past CCTV/Rehabilitation

House/Building

House/Building with Replaced/Lined Sewer Service

House/Building with Grouted Sewer Service

Stream/Brook

Parcels

Sample Number
Sample Date
Sample Result
(MPN/100 mL)



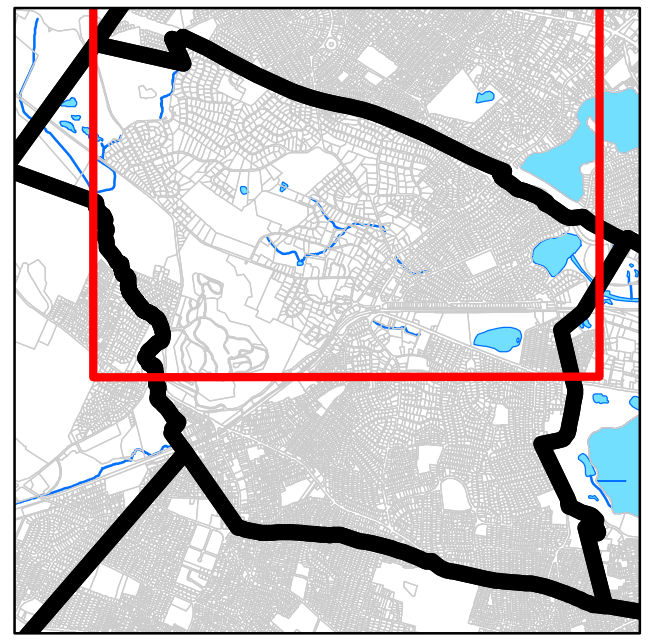
LEGEND

- Matchline
- Stream/Brook
- Water
- Building
- Parcel
- Rehabilitated Potential Indirect Sources
- Blockage Reported
- Illicit Connections

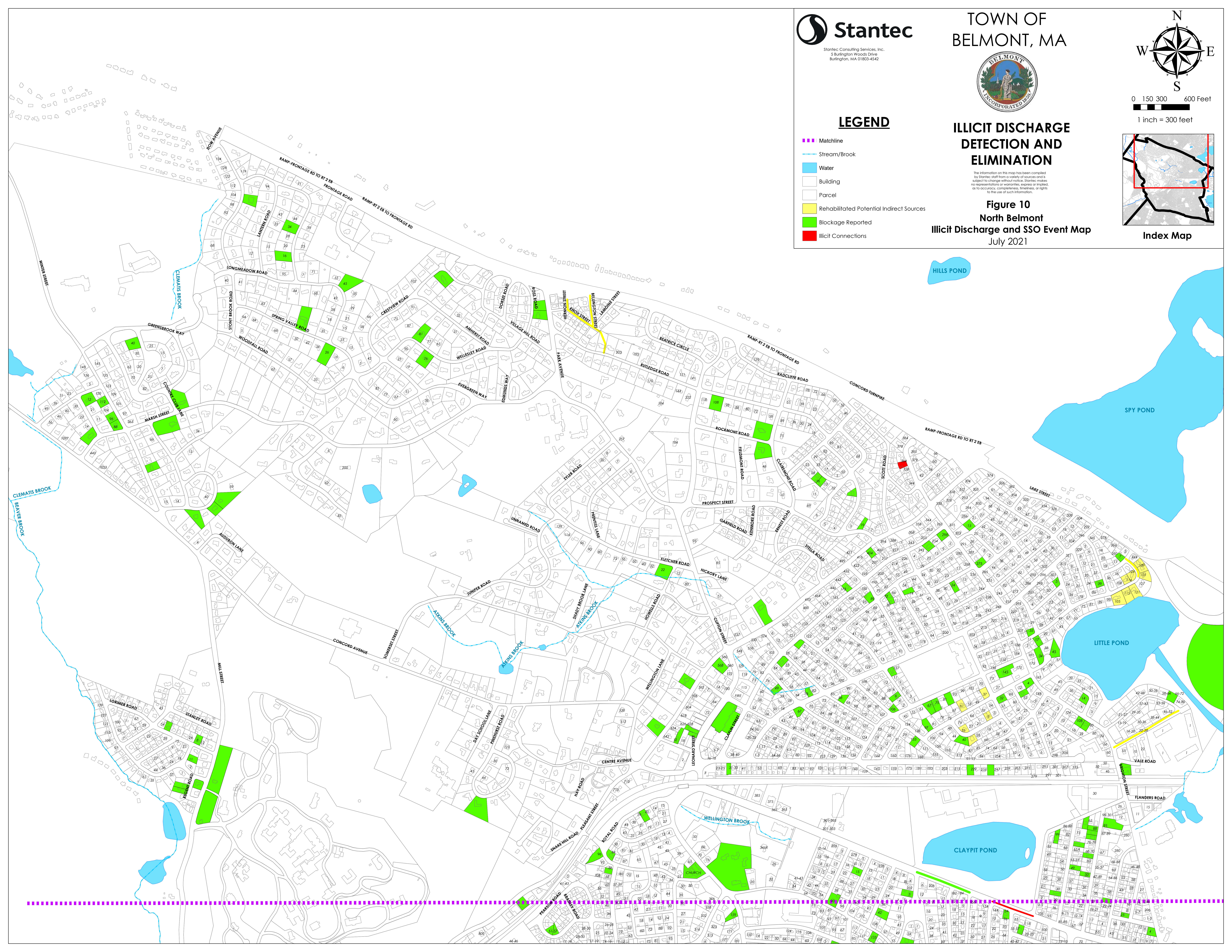
**ILLICIT DISCHARGE
DETECTION AND
ELIMINATION**

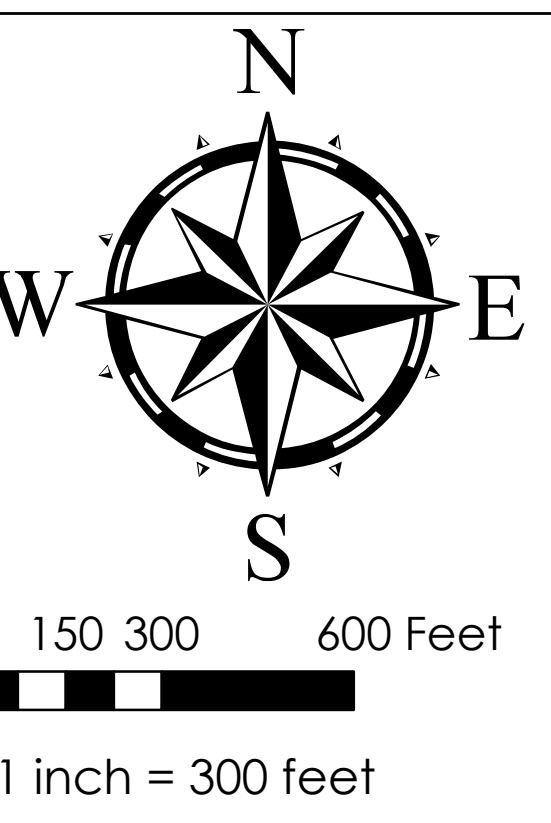
The information on this map has been compiled by Stantec staff from a variety of sources and is subject to change without notice. Stantec makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or origin of the use of such information.

Figure 10
North Belmont
Illicit Discharge and SSO Event Map
July 2021



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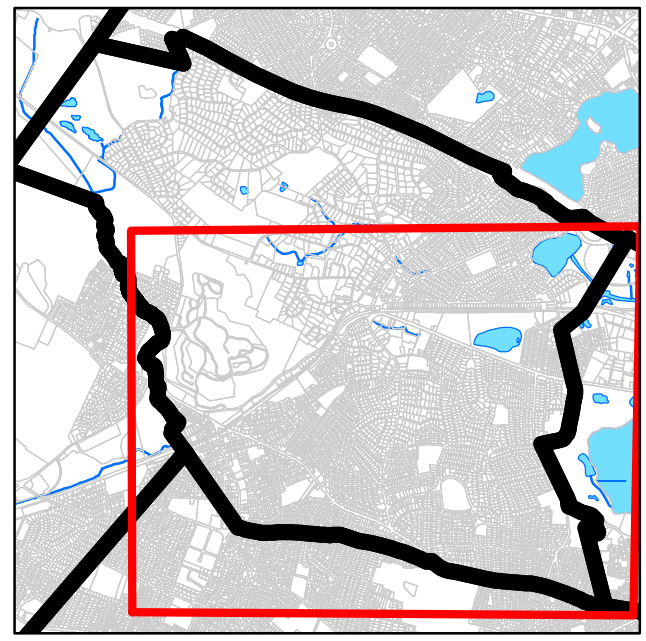
LEGEND

- Matchline
- Stream/Brook
- Water
- Building
- Parcel
- Rehabilitated Potential Indirect Sources
- Blockage Reported
- Illicit Connections

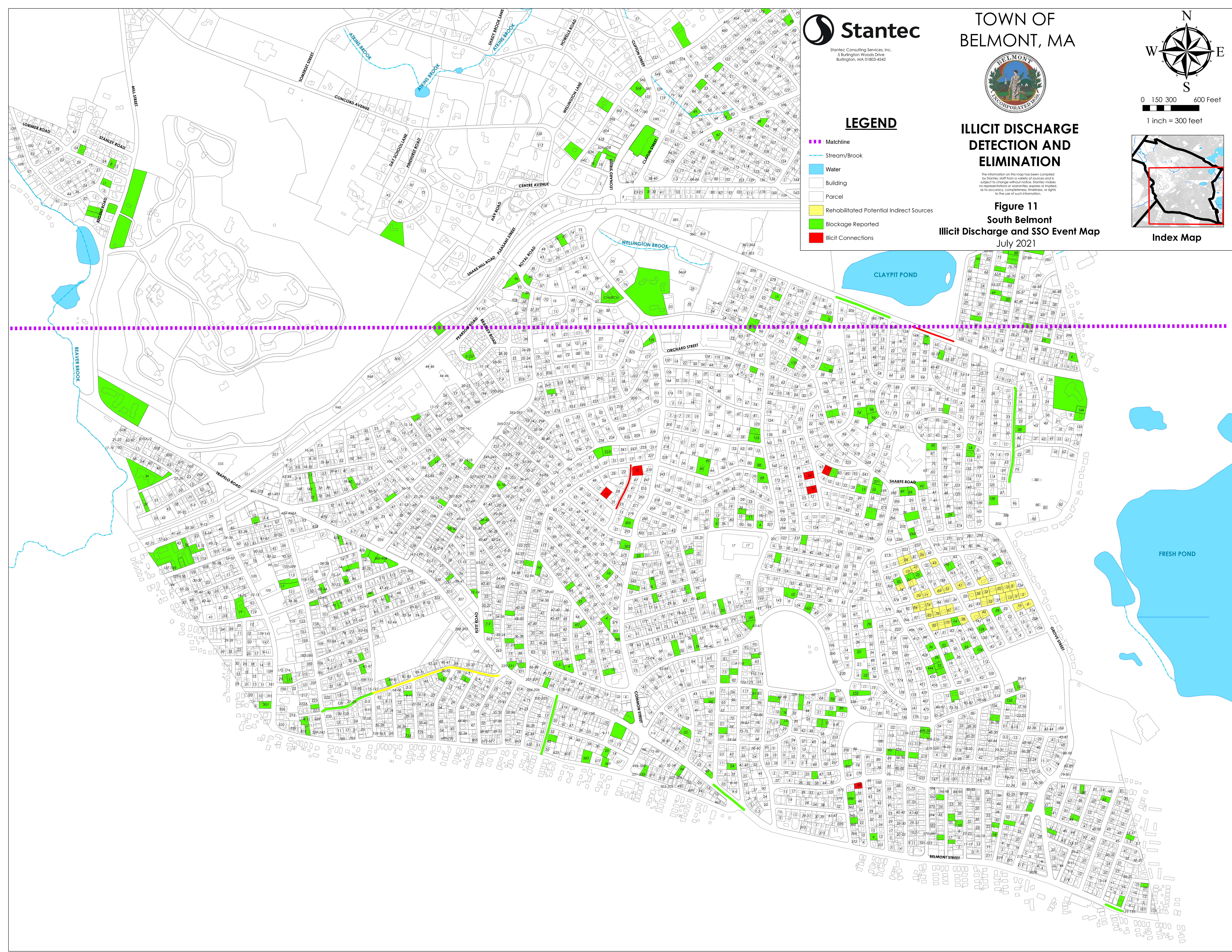
ILLICIT DISCHARGE DETECTION AND ELIMINATION

The information on this map has been compiled by Stantec staff from a variety of sources and is subject to change without notice. Stantec makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or origin, to the use of such information.

Figure 11
South Belmont
Illicit Discharge and SSO Event Map
July 2021



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BELMONT, MA
2021 IDDE INVESTIGATIONS - EPA Compliance Report July 2021

TABLE 1
Sub-catchment Areas - Reporting Period Sampling Results

Dry Weather Sub-catchment Sampling																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Sampling Parameter	Unit	Threshold Value	Sampling Location, Sampling Date, and Measured Value																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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			11/8/2016	6/23/2017	7/18/2017	11/9/2020	12/16/2020	11/8/2016	7/18/2017	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016	11/10/2020	11/8/2016

Dry Weather Sub-catchment Sampling																											
Sampling Parameter	Unit	Threshold Value	Sampling Location, Sampling Date, and Measured Value																								
			OF-11			OF-11A			OF-12			OF-13			OF-16			OF-15A									
			11/8/2016	6/23/2017	11/9/2020	3/23/2021	11/8/2016	6/23/2017	11/10/2020	3/23/2021	11/8/2016	6/23/2017	11/10/2020	3/24/2021	11/8/2016	11/10/2020	3/24/2021	11/8/2016	7/27/2017	12/11/2018	11/10/2020	11/8/2016	11/10/2020				
E-Coli	MPN/100mL	235	>10,000	13,800	1,200	4,900	8,600	>20,000	2,600	<100	>10,000	16,000	200	700	100	50	100	<100	DRY	10,200	3,000	1,900	700	1,950	14,900	12,600	<100
Enterococci	MPN/100mL	61	2700	N.T.	N.T.	N.T.	3200	N.T.	N.T.	N.T.	300	N.T.	N.T.	N.T.	50	N.T.	N.T.	DRY	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.
Ammonia (NH ₄)	mg/L	0.5	0.35	0.6	0.25	1	3	>6	0.6	1	0.35	4	0.25	0	0	0.4	1	N.T.	DRY	0.25	0.5	0.25	0	0.60	3.00	0.75	0.00
Surfactants	ppm	0.25	0.30	0.5	N.T.	N.T.	0.50	0.6	N.T.	N.T.	0.25	0.4	N.T.	N.T.	N.T.	0.25	N.T.	N.T.	DRY	N.T.	0.5	N.T.	N.T.	0.425	0.40	N.T.	N.T.
Chlorine (Cl ₂)	mg/L	0.23	N.T.	N.T.	N.T.	N.T.	0.17	N.T.	N.T.	N.T.	0.29	N.T.	N.T.	N.T.	0	N.T.	N.T.	DRY	N.T.	N.T.	N.T.	N.T.	N.T.	0.25	N.T.	N.T.	N.T.
Salinity	ppt	0	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	DRY	N.T.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.
Conductivity	us	0	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	DRY	N.T.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.
Temperature	°C	11.5	N.T.	N.T.	N.T.	N.T.	10.1	N.T.	N.T.	N.T.	17.9	N.T.	N.T.	N.T.	N.T.	13.6	N.T.	N.T.	DRY	N.T.	N.T.	N.T.	N.T.	17.6	N.T.	N.T.	N.T.
pH		7.66	N.T.	N.T.	N.T.	7.55	N.T.	N.T.	N.T.	7.65	N.T.	N.T.	N.T.	N.T.	7.68	N.T.	N.T.	DRY	N.T.	N.T.	N.T.	N.T.	N.T.	7.65	N.T.	N.T.	N.T.

Dry Weather Sub-catchment Sampling																																						
Sampling Parameter	Unit	Threshold Value	Sampling Location, Sampling Date, and Measured Value																																			
			8-1					8-2					8-3				8-4				8-5				8-6				8-7									
			11/8/2016	7/18/2017	8/17/2017	11/9/2020		11/8/2016	7/27/2017	8/17/2017	11/9/2020	3/24/2021		11/8/2016	11/9/2020	3/24/2021		11/8/2016	3/27/2020	11/9/2020	3/24/2021		11/8/2016	7/27/2017	11/9/2020	3/24/2021		11/8/2016	7/27/2017	11/9/2020	3/24/2021		11/8/2016	7/27/2017	11/9/2020	3/24/2021		
E-Coli	MPN/100mL	235	ND	1,700	800	1,350	1,950	1,100	1,300	19,700	100	ND	500	1,400	ND	22,000	1,900	1,100	220	4,800	200	1,550	14,400	1,200	10,600	1,300	1,250	ND	7,900									
Enterococci	MPN/100mL	61	50	N.T.	N.T.	N.T.	360	N.T.	N.T.	N.T.	N.T.	ND	N.T.	N.T.	N.T.	ND	N.T.	2,600	N.T.	N.T.	N.T.	N.T.	150	N.T.	N.T.	N.T.	N.T.	450	N.T.	N.T.								
Ammonia (NH ₄)	mg/L	0.5	0.3	0.3	0.3	0	2.0	0.3	0.1	0.25	N.T.	0.1	0.25	0.4	0.3	0	N.T.	0.6	0.25	2	2	0.1	0.2	0.4	0.25	0	0	0.25	0	0	0.25	0	0	0.25	0	0	0.25	0
Surfactants	ppm	0.25	0.25	0.1	0.1	N.T.	0.25	N.T.	0.25	N.T.	N.T.	0.15	N.T.	N.T.	N.T.	0.20	N.T.	N.T.	0.20	N.T.	N.T.	N.T.	0.25	N.T.	N.T.	N.T.	N.T.	0.25	N.T.	N.T.								
Chlorine (Cl ₂)	mg/L	0.37	N.T.	N.T.	N.T.	N.T.	0.17	N.T.	N.T.	N.T.	N.T.	N.T.	0.24	N.T.	N.T.	N.T.	0.63	N.T.	N.T.	0.10	N.T.	N.T.	0.08	N.T.	N.T.	N.T.	N.T.	0.21	N.T.	N.T.								
Salinity	ppt	0	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	0	N.T.	N.T.									
Conductivity	us	0	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N.T.	0	N.T.	N.T.									
Temperature	°C	6.7	N.T.	N.T.	N.T.	N.T.	10.4	N.T.	N.T.	N.T.	N.T.	N.T.	14.9	N.T.	N.T.	N.T.	19.1	N.T.	N.T.	12.1	N.T.	N.T.	4.8	N.T.	N.T.	N.T.	N.T.	5.8	N.T.	N.T.								
pH		8.14	N.T.	N.T.	N.T.	N.T.	7.83	N.T.	N.T.	N.T.	N.T.	N.T.	7.65	N.T.	N.T.	N.T.	7.58	N.T.	N.T.	7.95	N.T.	N.T.	7.82	N.T.	N.T.	N.T.	N.T.	7.82	N.T.	N.T.								

ND Most Recent Reporting Period
N.D. Sampled - None Detected
N.T. Not Tested
NS Not Sampled - Very little flow or wet but no flow
DRY System was dry

BELMONT, MASSACHUSETTS
2021 IDDE INVESTIGATIONS - EPA Compliance Report July 2021

TABLE 2
MYSTIC RIVER WATERSHED TRIBUTARY AREAS
SANITARY SEWER AND STORM DRAIN MAINLINE - RECOMMENDED REHABILITATION

Street	Outfall Area	Priority*	Type	Manhole No.			Pipe Diameter (inches)	Pipe Material	Length Surveyed (feet)	Recommended Rehabilitation		No. of Service Connections	No. of Protruding Services	Location of Protruding Services	Notes
				Direction	Start	End				Line	Replace				
OUTFALL 1															
Fairview Ave	1	2-INC	Drain	Upstream	03D048	Upstream	6	VC	58	NRR	NRR	0			Incomplete Inspection - Pipe in good condition up to 58' moderate rootball
OUTFALL 2															
Houghton Rd	2	INC	Drain	Downstream	09D035	09D038	12	VC	142	NRR	NRR	3			3 services (20'(3:00), 73'(9:00), 90'(3:00))
Houghton Rd	2	2-INC	Drain	Downstream	09D038	09D035	12	VC	13	NRR	NRR	0			Incomplete Inspection - Heavy roots at 13'
Herbert Rd	2	2	Drain	Downstream	09D058	09D059	12	VC	295	NRR	NRR	9	3	146'(2"), 169'(2"), 268'(1")	minor to moderate roots at joints throughout; heavy roots in service at 62'; no cracks in pipe
Hartley Rd	2	2-INC	Drain	Downstream	09D067	09D064	12	VC	166	NRR	NRR	6	1	166'(3")	Incomplete Inspection -minor to moderate roots at joints throughout; minor to severe roots in service at 33', 42, 67', 115';, no cracks in pipe
Hartley Rd	2	INC	Drain	Upstream	09D064	09D067	12	VC	0	NRR	NRR				Incomplete Inspection - Heavy Rootball at start of pipe
Shaw Rd	2	3	Drain	Downstream	09D103	09D029	12	VC	332	332	NRR	6			several locations with minor longitudinal cracks
OUTFALL 8-1															
Lincoln Rd	8-1	2-INC	Drain	Upstream	19D051	19D052	12	VC	78	NRR	NRR	1			Incomplete Inspection - Utilize push camera due to bend at MH; pipe in good condition up to 78'
Lincoln Rd	8-1	2-INC	Drain	Downstream	19D052	19D051	12	VC	227	NRR	NRR	2			Incomplete Inspection - could not inspect beyond 227' due to bend at MH; pipe in good condition with one location with minor cracks
TOTALS									1,311	332	0	27	4		

* 1 (Excellent Condition) - 5 (Severe Deterioration)
** Distance from Starting Manhole in feet (Orientation of Service Lateral)

Table 3**01-02-2021 to 06-26-2021 Total Stoppage**

Date	Address	Results
2021-01-02	15 GODEN ST	Rodded roots @ 12', 18', & 24'
2021-01-03	141 WASHINGTON ST	No Access
2021-01-05	17 ROSS RD	Rodded house service mega roots 42'
2021-01-05	26 AUDREY RD	Flushed house service from manhole roots & grease
2021-01-06	26 SPRING VALLEY RD	6' grease & 36' roots
2021-01-07	92 DOUGLAS RD	No Access
2021-01-08	275 BRIGHTON ST	18' roots
2021-01-12	2 YORK RD	There wasn't a sewer back up roddeed anyways
2021-01-14	64-66 BAKER ST	No Stoppage roddeed anyways
2021-01-14	48 LORIMER RD	Roots at 30 & 36'
2021-01-17	75 LEONARD ST	Flushed line in the Claflin St parking lot
2021-01-19	15 GORHAM RD	18' roots and pushed paper out
2021-01-20	135 SYCAMORE ST	Main line
2021-01-21	16 RUSSELL TER	No Access
2021-01-24	86 BAKER ST	Main line
2021-01-26	57 MORaine ST	Flushed mainline and house service
2021-01-26	89 CHILTON ST	Roots @ 30ft
2021-01-30	47 UNITY AVE	Main line
2021-01-31	40 WESTLUND RD	Flushed House Service
2021-01-31	105 TRAPELO RD	Flushed House Service
2021-02-09	35 AUDREY RD	Flushed main line
2021-02-04	389 COMMON ST	Internal Problem
2021-02-05	6 BROAD ST	No Access Flushed from manhole in street
2021-02-10	134 CONCORD AVE	Flushed main line
2021-02-13	531 BELMONT ST	Rodded service pushed out @ 42'
2021-02-15	39 GILMORE RD	Rodded service & flushed line
2021-02-12	191 TRAPELO RD	Pushed out paper 6' cleared
2021-02-17	36 AUDREY RD	Flushed main- wipes & disposable diapers
2021-02-21	43 OAK AVE	Flushed line
2021-02-22	60-62 PAYSON RD	Pushed Out
2021-02-24	1 COLONIAL TER	36' Roots
2021-02-24	24 PINE ST	Push out 42' wipes
2021-02-25	36 AUDREY RD	Flushed main
2021-02-26	593 PLEASANT ST	Main line-flushed
2021-02-28	45 LARCH CIR	Paper @ 45'
2021-03-26	18 NEWTON ST	a pair of underwear
2021-03-01	16 PREBLE GARDENS RD	12' pushed out - light roots
2021-03-03	50 BAKER ST	No access the clean out was covered by hardwood floors
2021-03-07	63 CARLETON RD	No Access
2021-03-09	35 AUDREY RD	Wipes & adult diapers
2021-03-09	115 WHITE ST	Flushed line
2021-03-10	35 HILLSIDE TER	Internal
2021-03-10	90 SCHOOL ST	12', 50', & 60' Roots

2021-03-10	180 BEECH ST	Pushed out 60'
2021-03-13	115 MILL ST	Flushed main line
2021-03-15	15 ARTHUR RD	Flushed from manhole-went out 26'
2021-03-19	40 WESTLUND RD	Flushed main
2021-03-24	21 HERBERT RD	Rodded line-30' roots
2021-03-22	4 HOWARD ST	18' roots & 36' mega roots
2021-03-19	112 PAYSON RD	18' pushed out
2021-03-27	14 GILBERT RD	No entry-cap stuck
2021-03-29	39 BENTON RD	Rodded line 80'-Internal
2021-04-02	13 ALMA AVE	12' Pushed out
2021-04-06	25 MERRILL AVE	Roots at 10', 12', 48' and flushed main
2021-04-07	354 PAYSON RD	Mainline
2021-04-09	18 FALMOUTH ST	30' roots
2021-04-09	6 BROAD ST	Flushed from manhole on street to house
2021-04-10	50 GALE RD	No Access
2021-04-11	21 HERBERT RD	36' roots
2021-04-11	232 PAYSON RD	12-18' roots
2021-04-12	4 GORHAM RD	Resident's lateral pipe is broken
2021-04-15	75 SHERMAN ST	Flushed main
2021-04-15	130 BRIGHT RD	36' & 48' roots
2021-04-15	11 TOWNSEND RD	18' roots
2021-04-16	14 GALE RD	Rod line 12' roots
2021-04-17	388 TRAPELO RD	Flushed main - grease
2021-04-18	10 THAYER ST	Flushed main
2021-04-19	69 PINEHURST RD	No Access
2021-04-19	40 PAYSON RD	Roots @ 24'
2021-04-16	17 DOUGLAS RD	12-20' Pushed out
2021-04-20	336 PAYSON RD	Rodded and Flushed house service
2021-04-20	37 WILSON AVE	No backup-no access
2021-04-21	110 WATSON RD	Rodded line-internal problem
2021-04-21	36 THAYER RD	12' pushout
2021-04-22	26 CUMBERLAND RD	Flushed from MH to house (baby wipes)
2021-04-22	285 COMMON ST	No Access
2021-04-22	22 HARTLEY RD	Rodded line-clear-internal problem-upstairs toilet backed up
2021-04-22	51 SPRING VALLEY RD	cleared line
2021-04-22	78 ELIZABETH RD	Main line flushed and cleared-grease
2021-04-25	21 HERBERT RD	Rodded 36' paper & roots - cleared
2021-04-26	17 GRANT AVE	Flushed main
2021-04-29	303 COMMON ST	No Backup found
2021-04-30	23 PARTRIDGE LN	Flushed from manhole to house
2021-05-03	91 BAKER ST	Rodded 48' paper and roots
2021-05-01	148 OAKLEY RD	Flushed main line-pine @ oakley
2021-05-03	14 GILBERT RD	No Access
2021-05-04	148 OAKLEY RD	Mainline flushed grease
2021-05-05	14 GILBERT RD	36' pushout
2021-05-07	330 PAYSON RD	Flushed House Service
2021-05-09	81 CUSHING AVE	Main line

2021-05-10	43 OAK AVE	No Backup-flushed house service
2021-05-10	75 SHERMAN ST	Main line flushed
2021-05-10	10 JACOB RD	Flushed from manhole
2021-05-11	159 COMMON ST	Rodded-Roots@30'
2021-05-11	26 ROYAL RD	36' Roots
2021-05-14	336 PAYSON RD	Main line flushed
2021-05-17	12-14 WORCESTER ST	Line flushed & rodded (clear) Note: pipe is flat and holds water
2021-05-22	35 AUDREY RD	Flushed and Cleared Main
2021-05-25	5 LODGE RD	Flushed from manhole in driveway to street, lots of paper and roots
2021-05-25	2 CONCORD AVE	Sewer backup at temple, main line blocked, 145ft block between Merrill Ave & Colby St off Blanchard Rd.
2021-05-26	108 RUTLEDGE RD	Bagged twice-roots & paper at 72'
2021-05-29	139 DALTON RD	Rodded 66' bagged line
2021-05-29	44 MAPLE ST	Pushed out at 6'
2021-06-01	45 LONGMEADOW RD	36' Roots
2021-06-01	503 SCHOOL ST	12-18' Roots
2021-06-03	35 HILLSIDE TER	Flushed from Manhole in driveway - clear
2021-06-08	25 MERRILL AVE	12 ft roots
2021-06-08	LESLIE RD	18-24' push out
2021-06-10	28 TEMPLE ST	No Backup
2021-06-10	74 STONE RD	Roots at 15ft, 20ft, & 66ft
2021-06-10	569 BELMONT ST	Flushed from manhole, checked with owner, cleared
2021-06-13	106 DEAN ST	Owner resolved issue
2021-06-17	137 BELMONT ST	Roots @ 12' & 24"
2021-06-21	42 OAK ST	45' push out
2021-06-26	77 BOW RD	No Access

Attachment 1

Private Sector Sump Pump Removal & Sewer System

Rehabilitation

Contract Drawings



TOWN OF BELMONT, MASSACHUSETTS

PRIVATE SECTOR SUMP PUMP
REMOVAL & SEWER SYSTEM
REHABILITATION

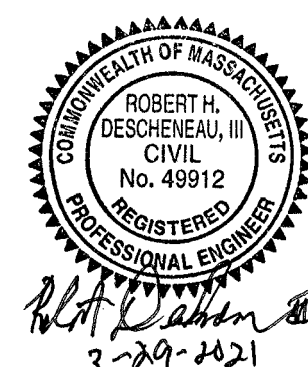
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WRA-P11-04-3-1124 &
MWRA PROJECT NO.
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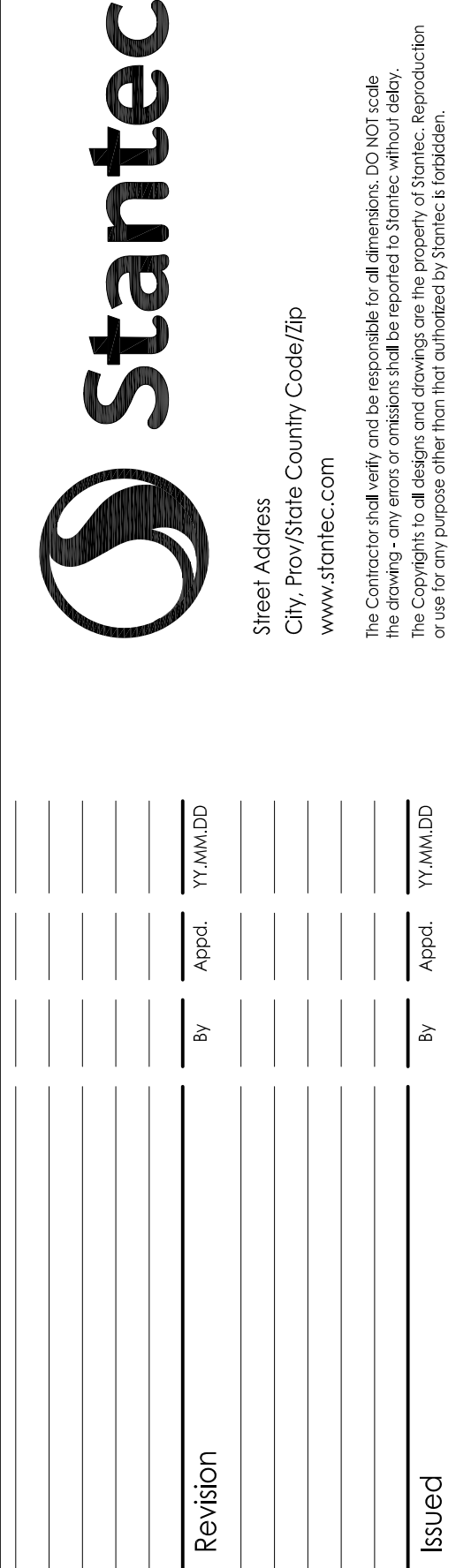
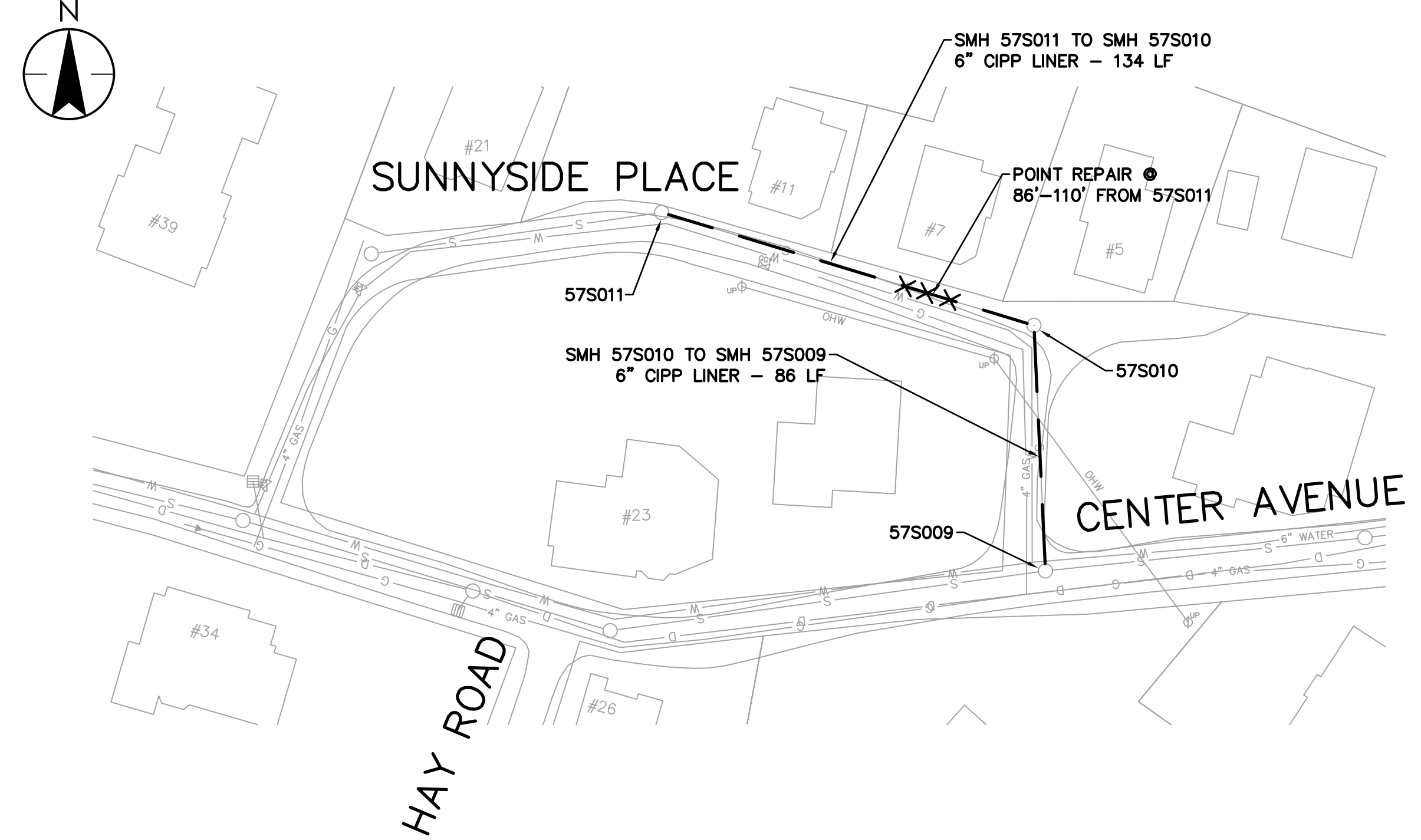
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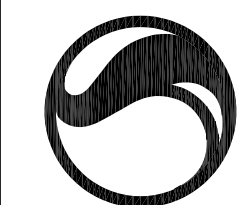
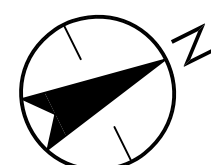
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2	G-002	KEY PLAN NORTH
3	G-003	KEY PLAN SOUTH
4	C-001	LEGEND, ABBREVIATIONS AND GENERAL NOTS
5	C-101	KING STREET, BARTLETT AVENUE AND SUNNYSIDE PLACE
6	C-102	HOMER ROAD AND HASTINGS ROAD
7	C-103	PALFREY ROAD, GARDEN STREET AND VAN NESS ROAD
8	C-104	LEONARD STREET
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28	C-124	SUMP PUMP – GODEN ST, CONCORD AVE AND BAKER ST
29	C-125	SUMP PUMP – WASHINGTON ST, DALTON RD, LIVERMORE RD AND BETTS RD
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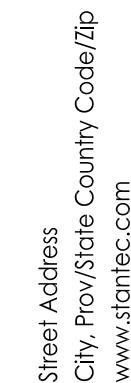
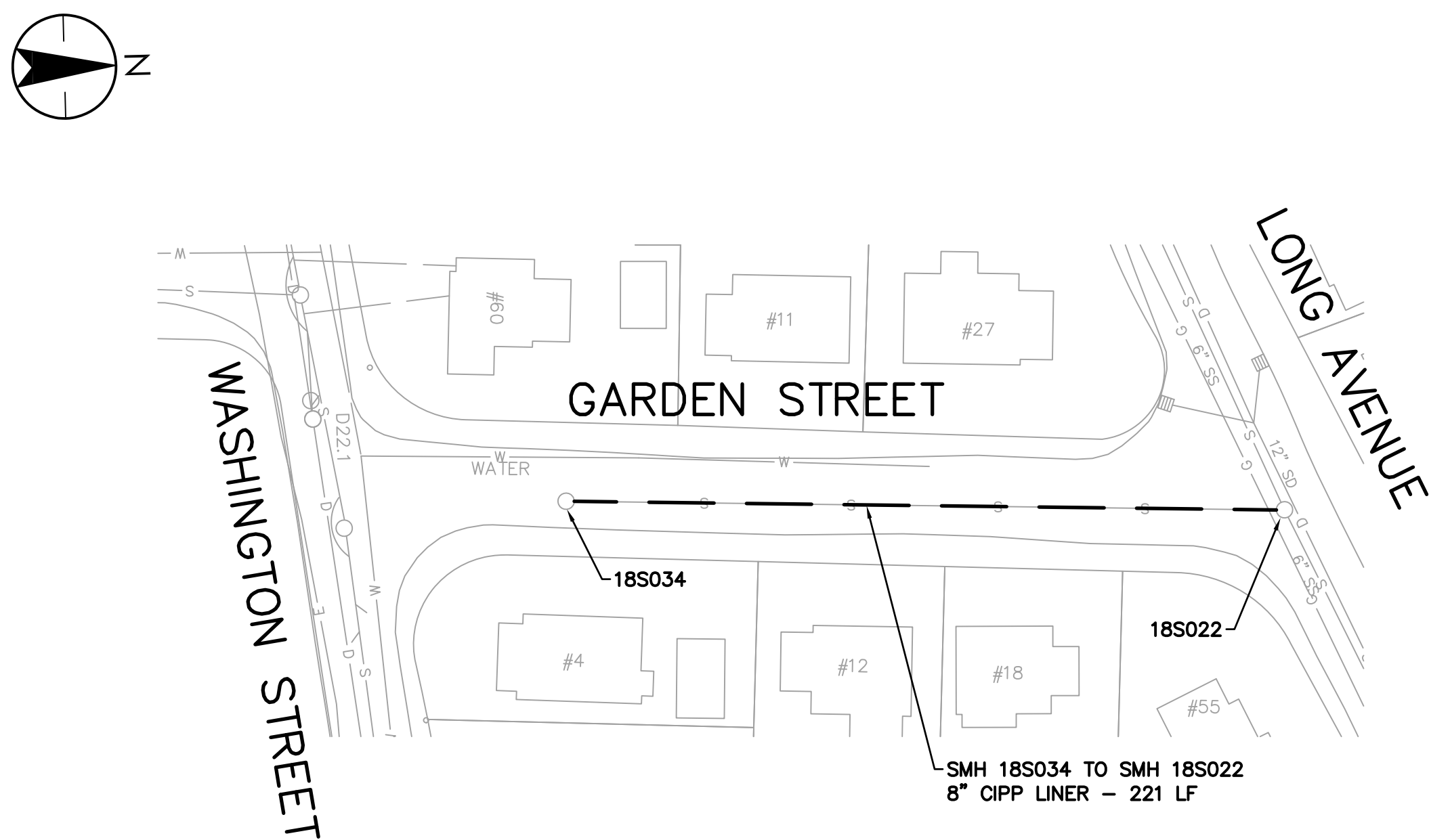
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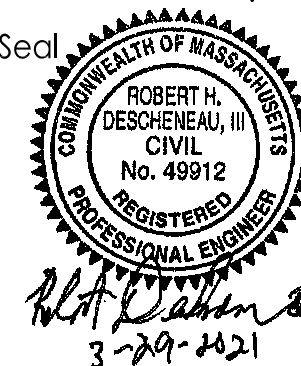
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PRIVATE SECTOR SUMP PUMP REMOVAL &
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BELMONT, MASSACHUSETTS
PALFREY ROAD, GARDEN STREET AND VAN NESS ROAD

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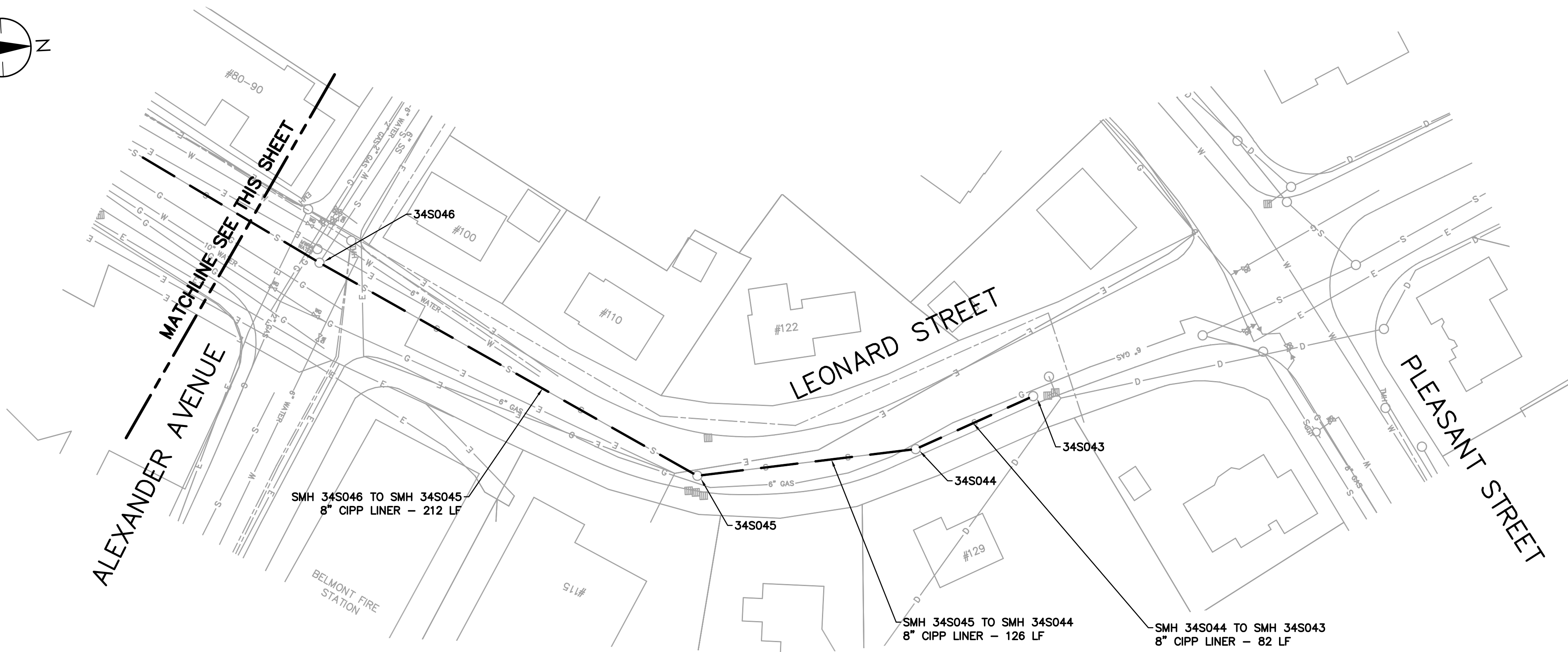
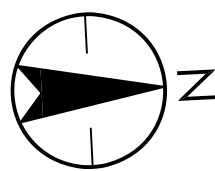
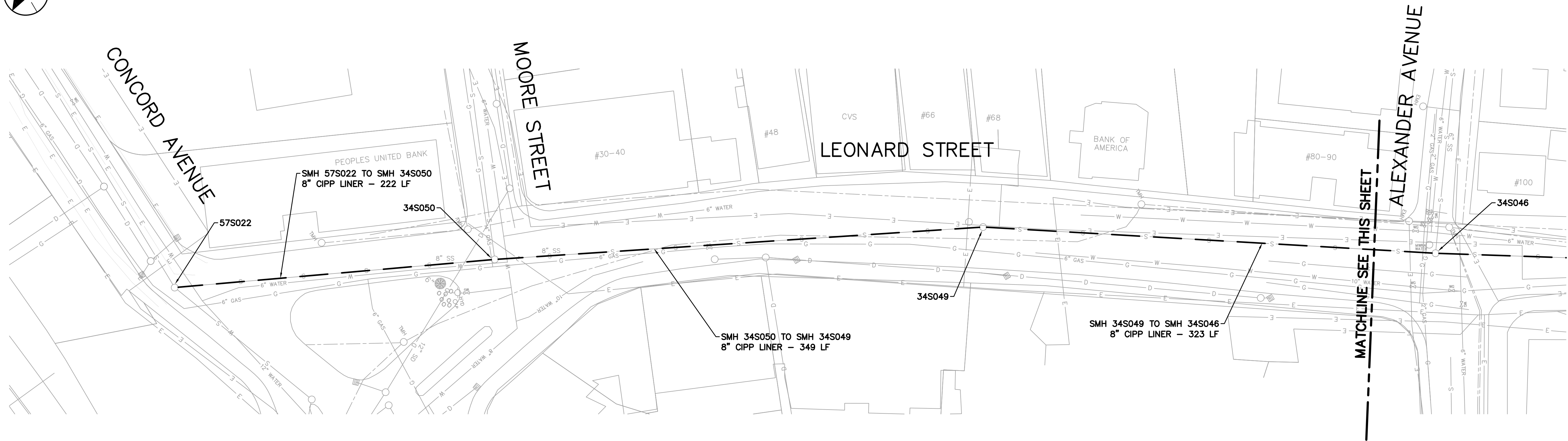
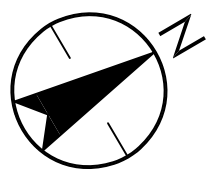
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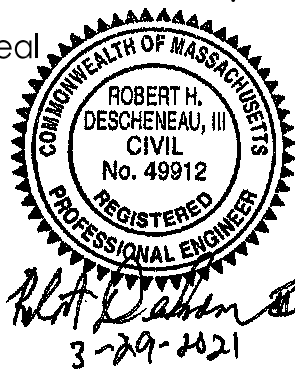
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BELMONT, MASSACHUSETTS
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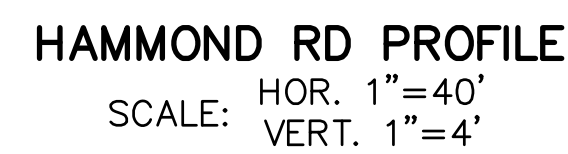
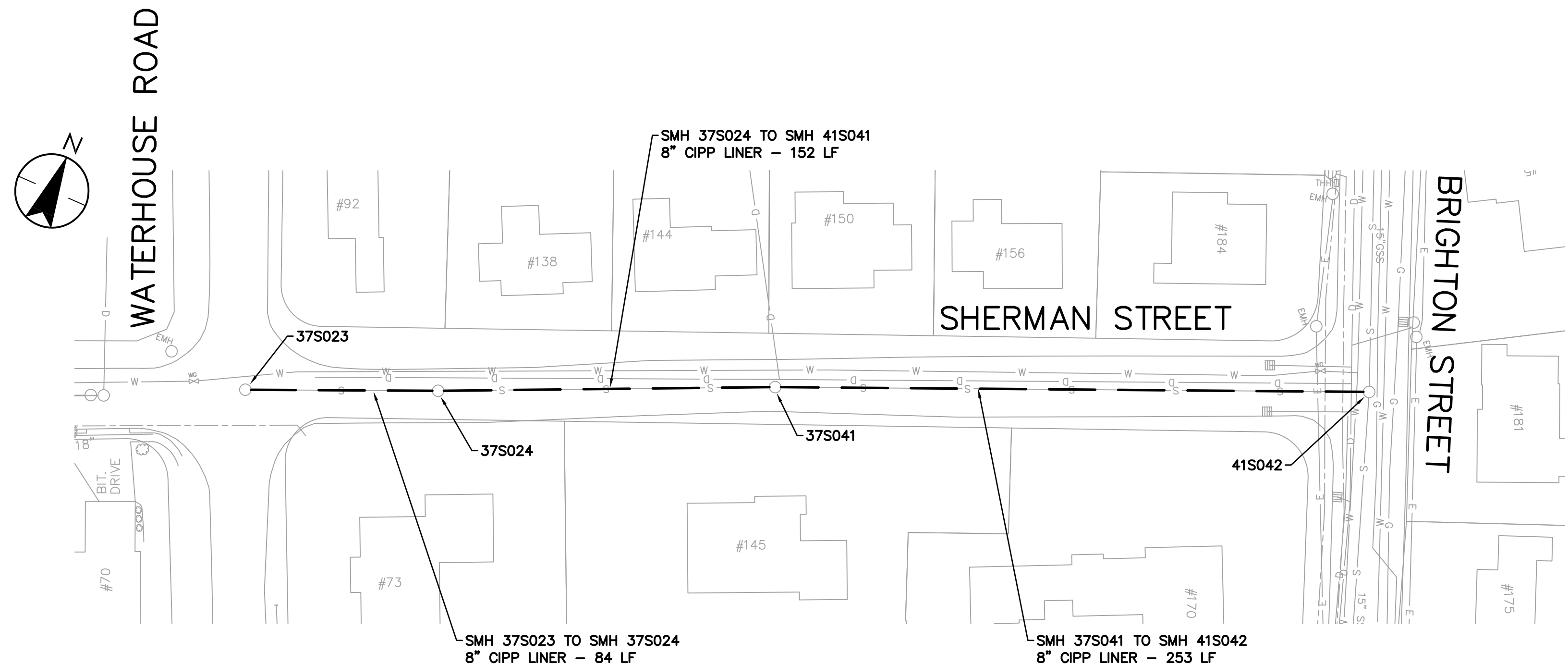
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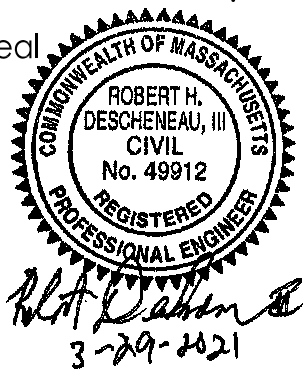
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BELMONT, MASSACHUSETTS
SHERMAN STREET AND HAMMOND ROAD

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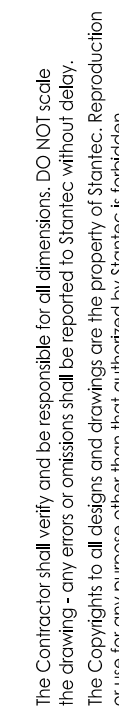
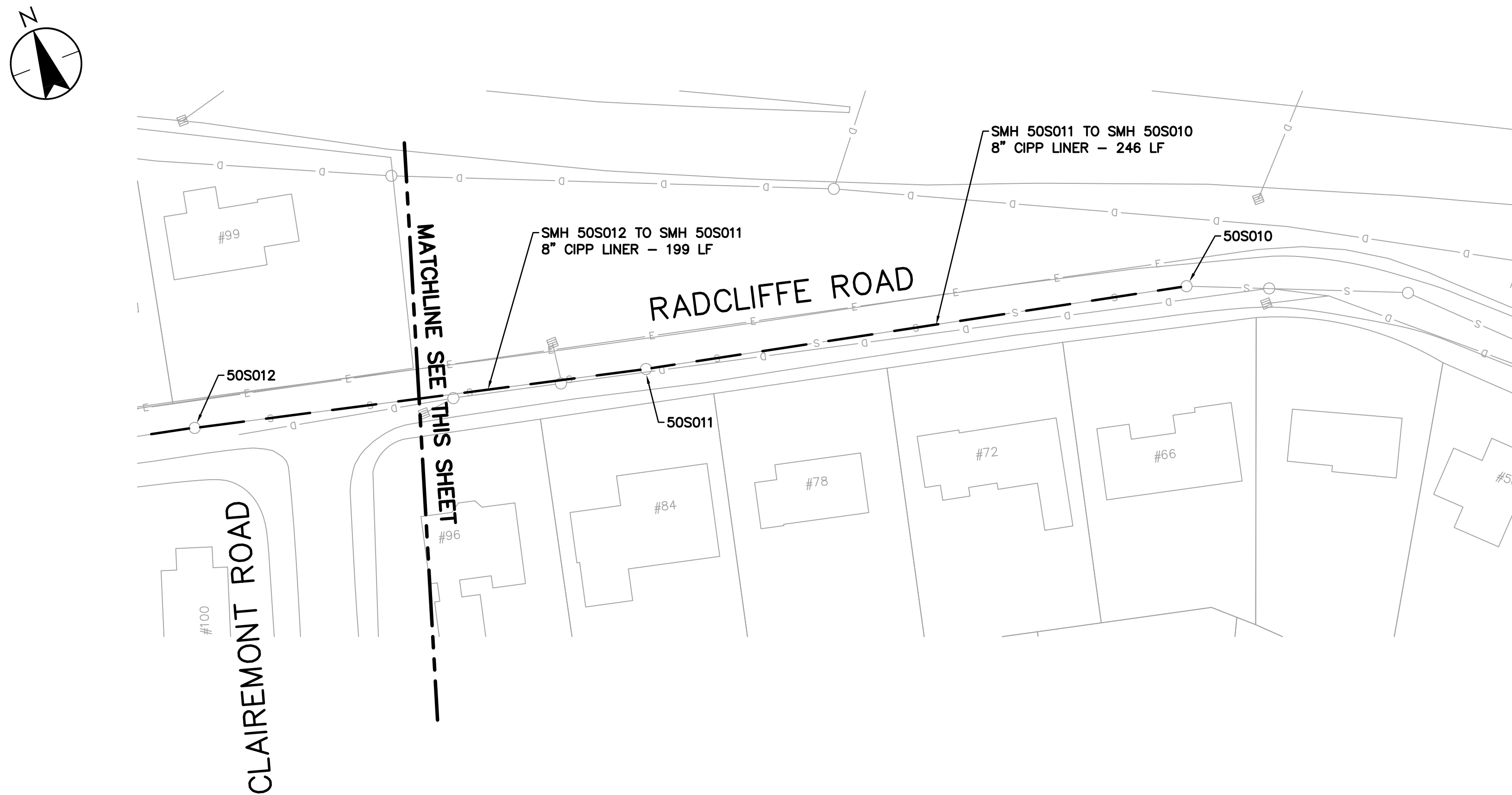
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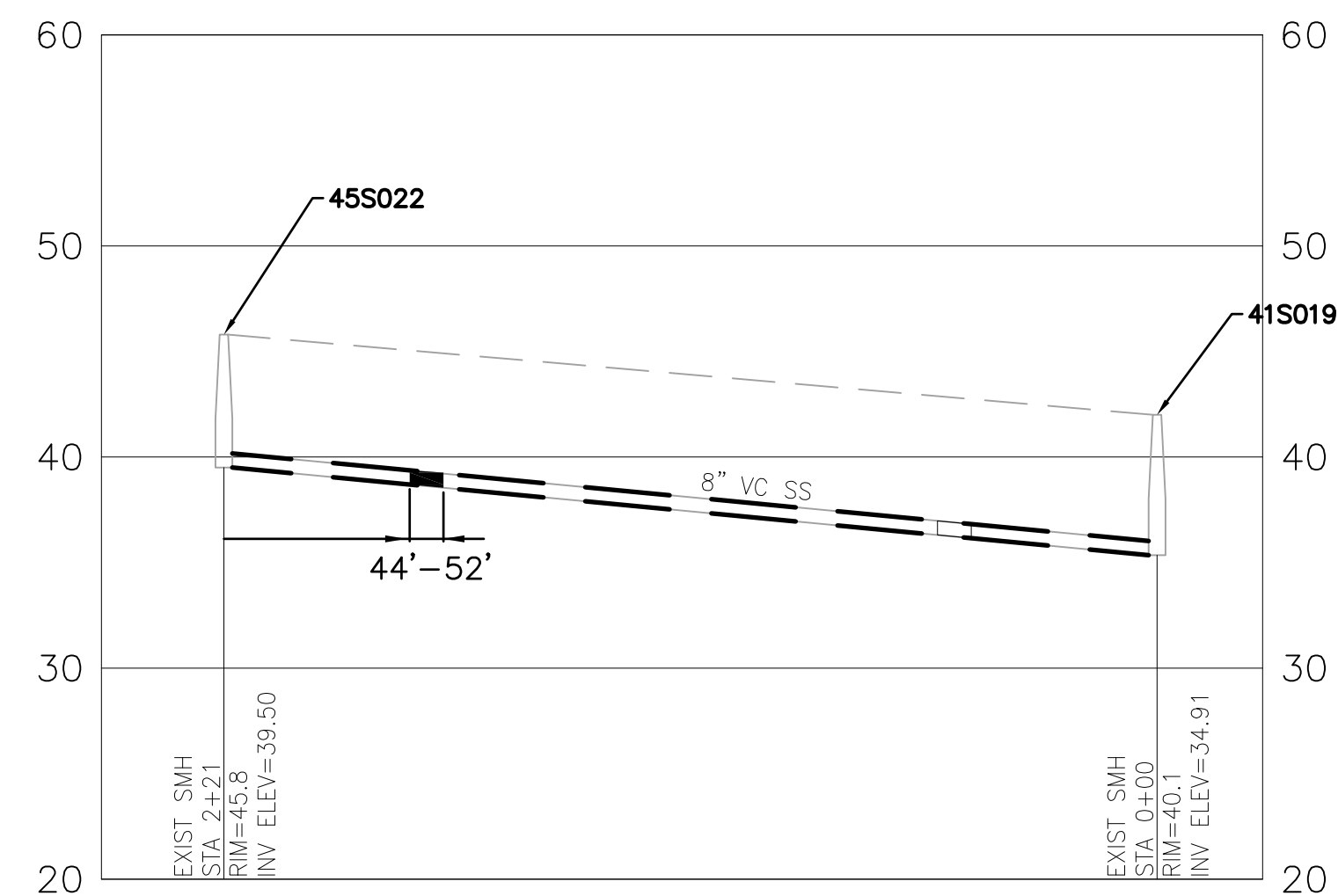
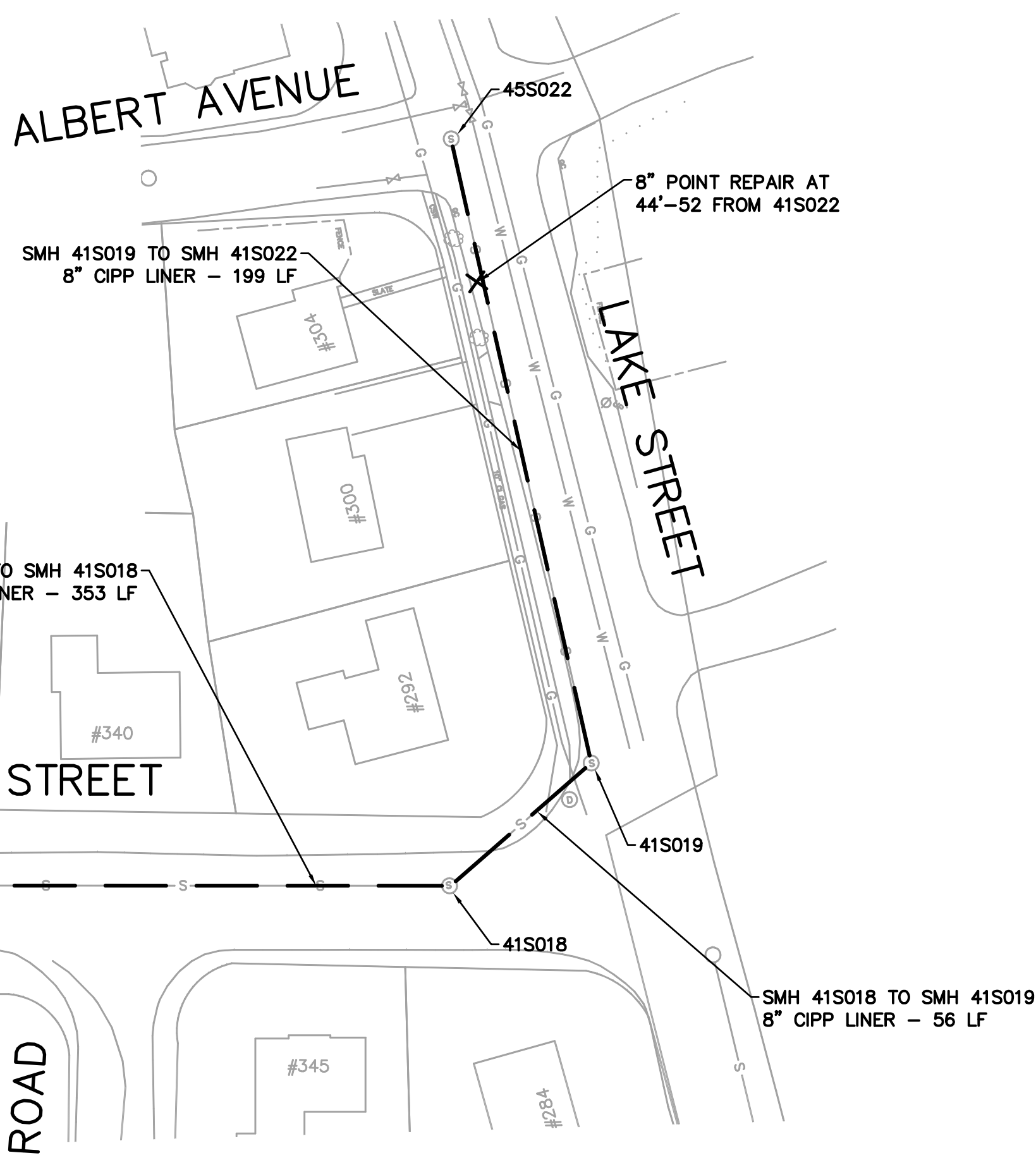
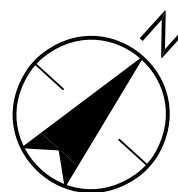
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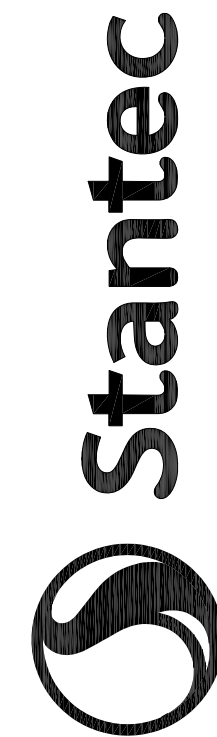
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LAKE ST PROFILE
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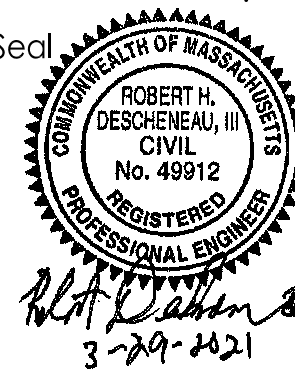


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BELMONT, MASSACHUSETTS
CROSS STREET AND LAKE STREET

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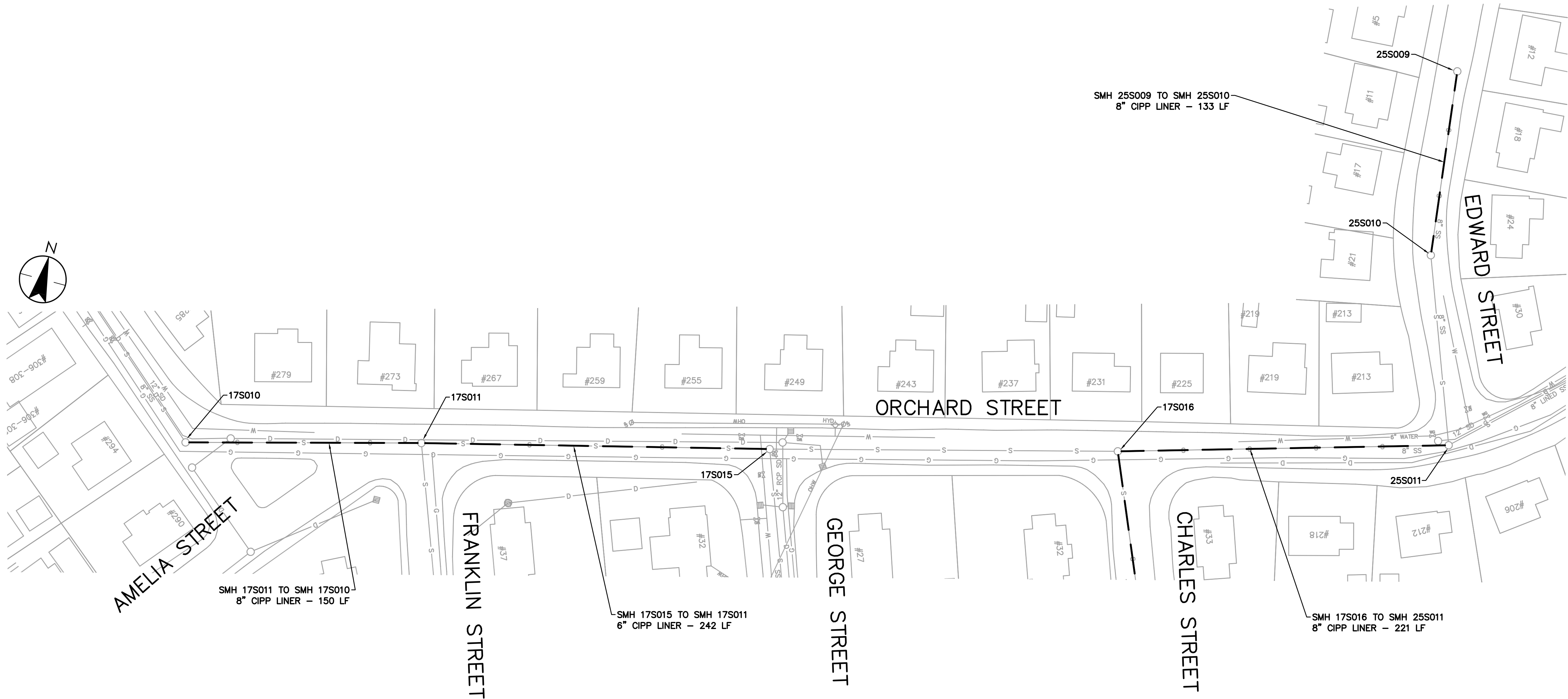
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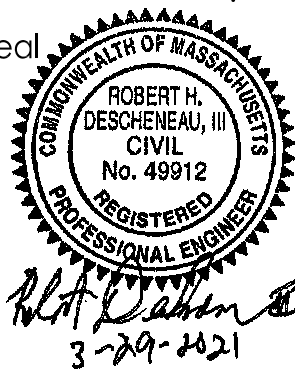
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ORCHARD STREET AND EDWARD STREET

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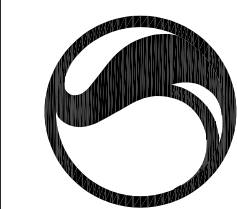
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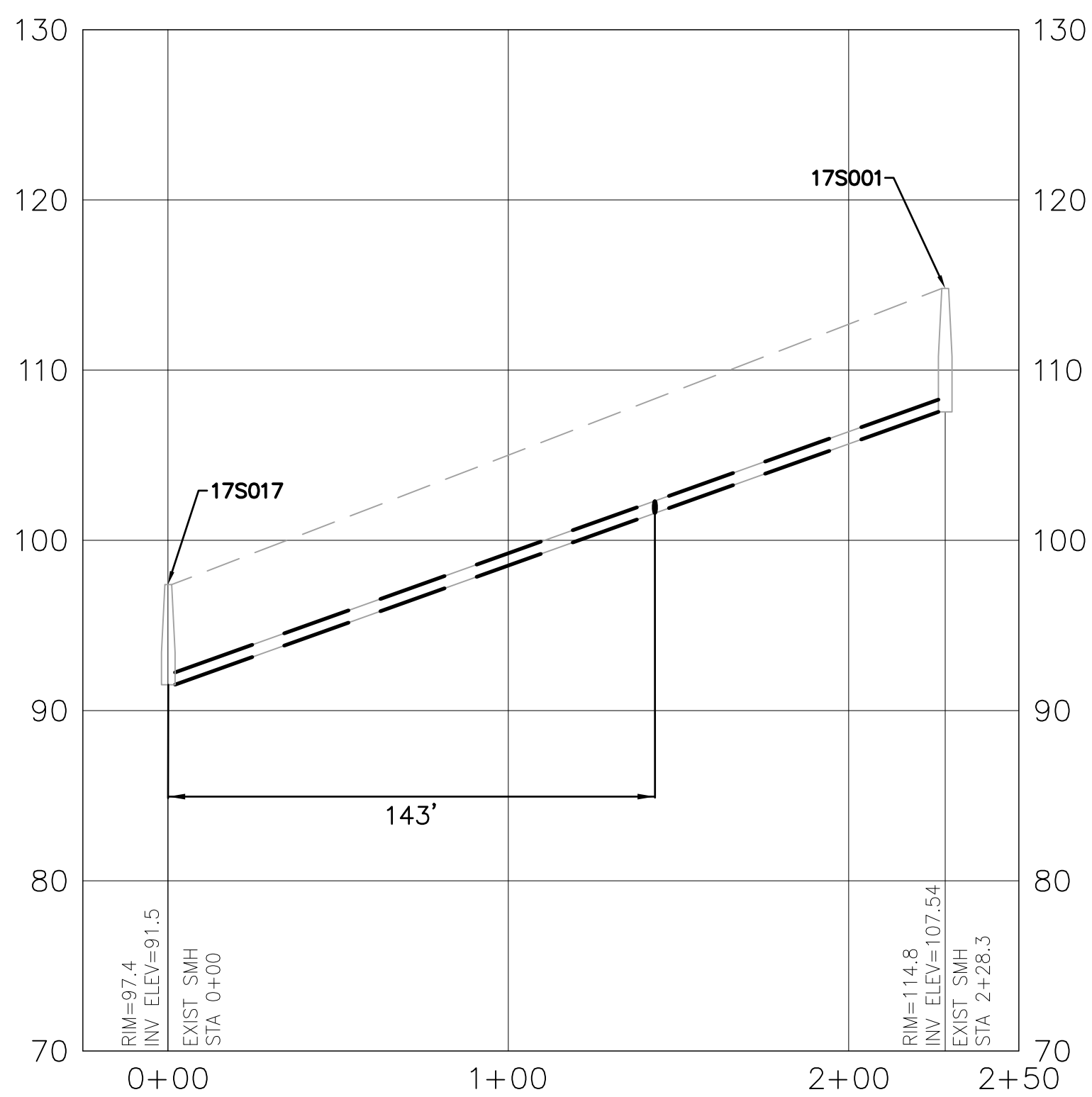
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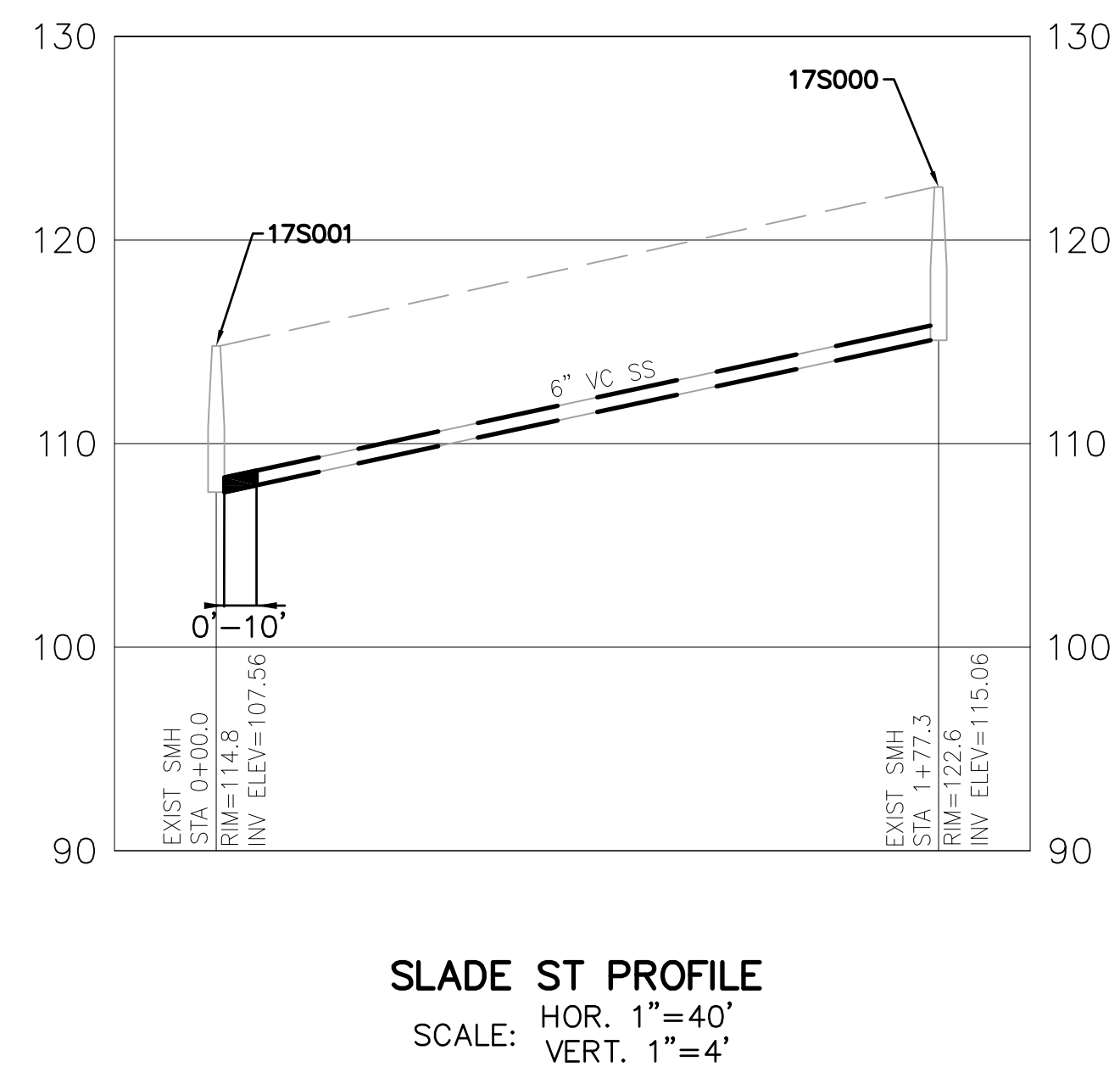
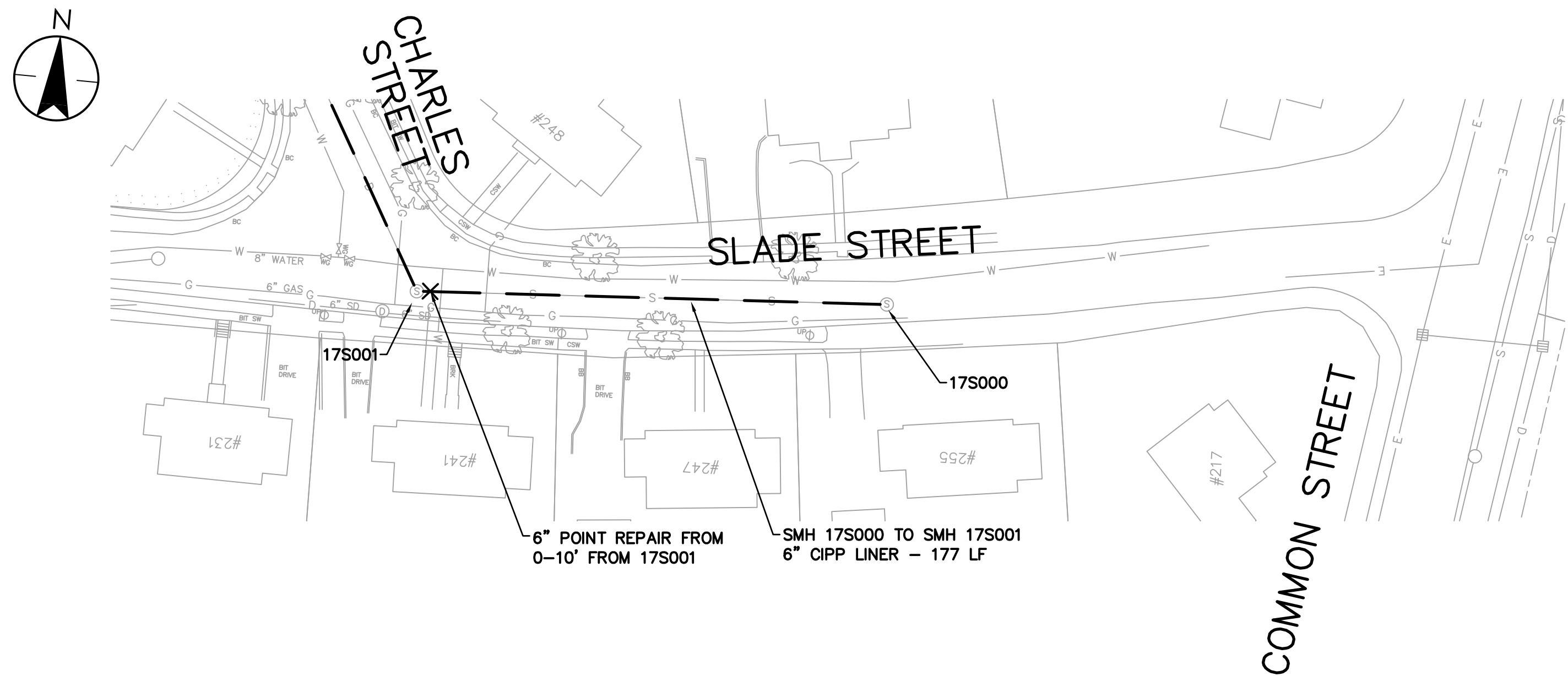
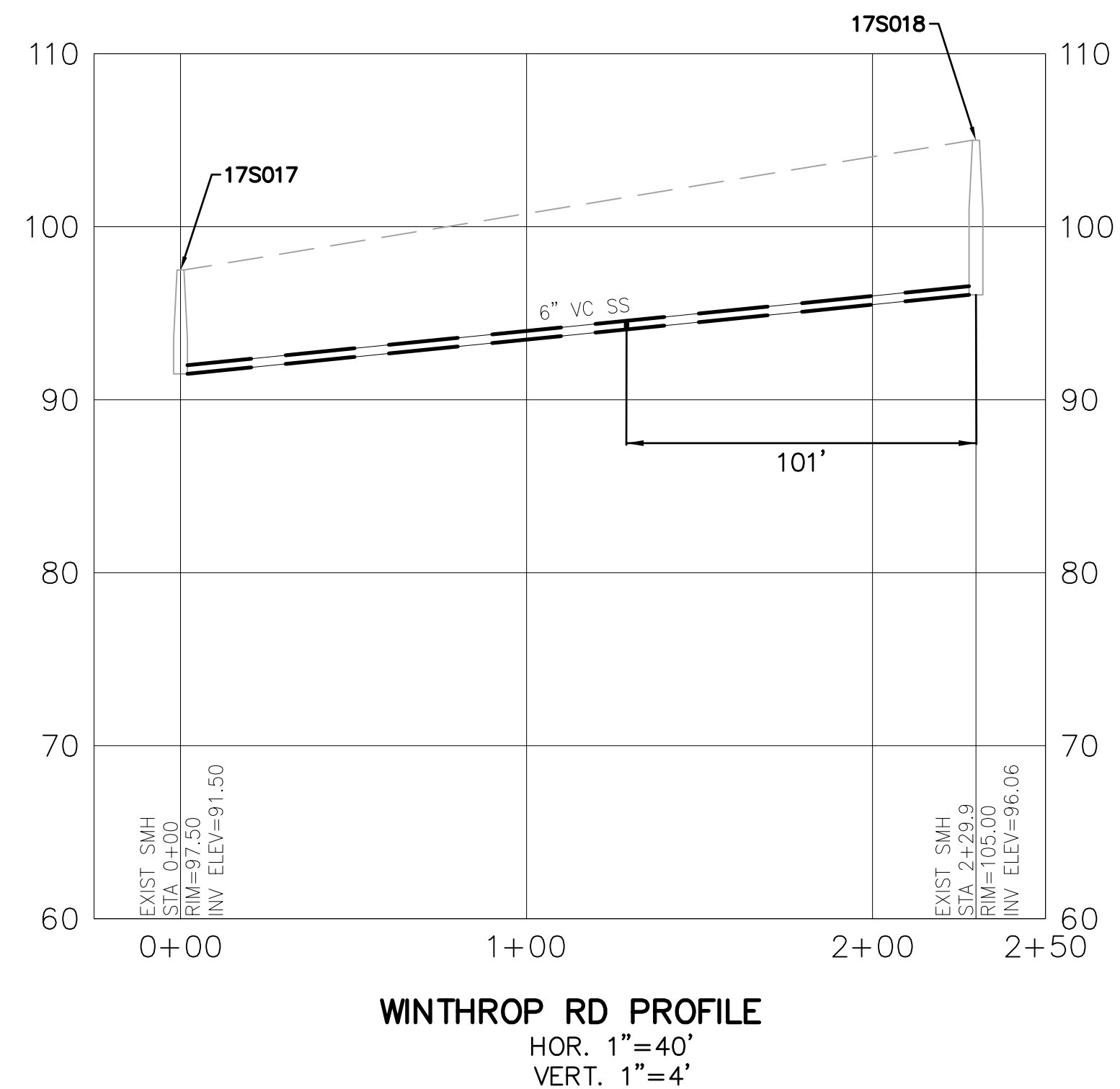
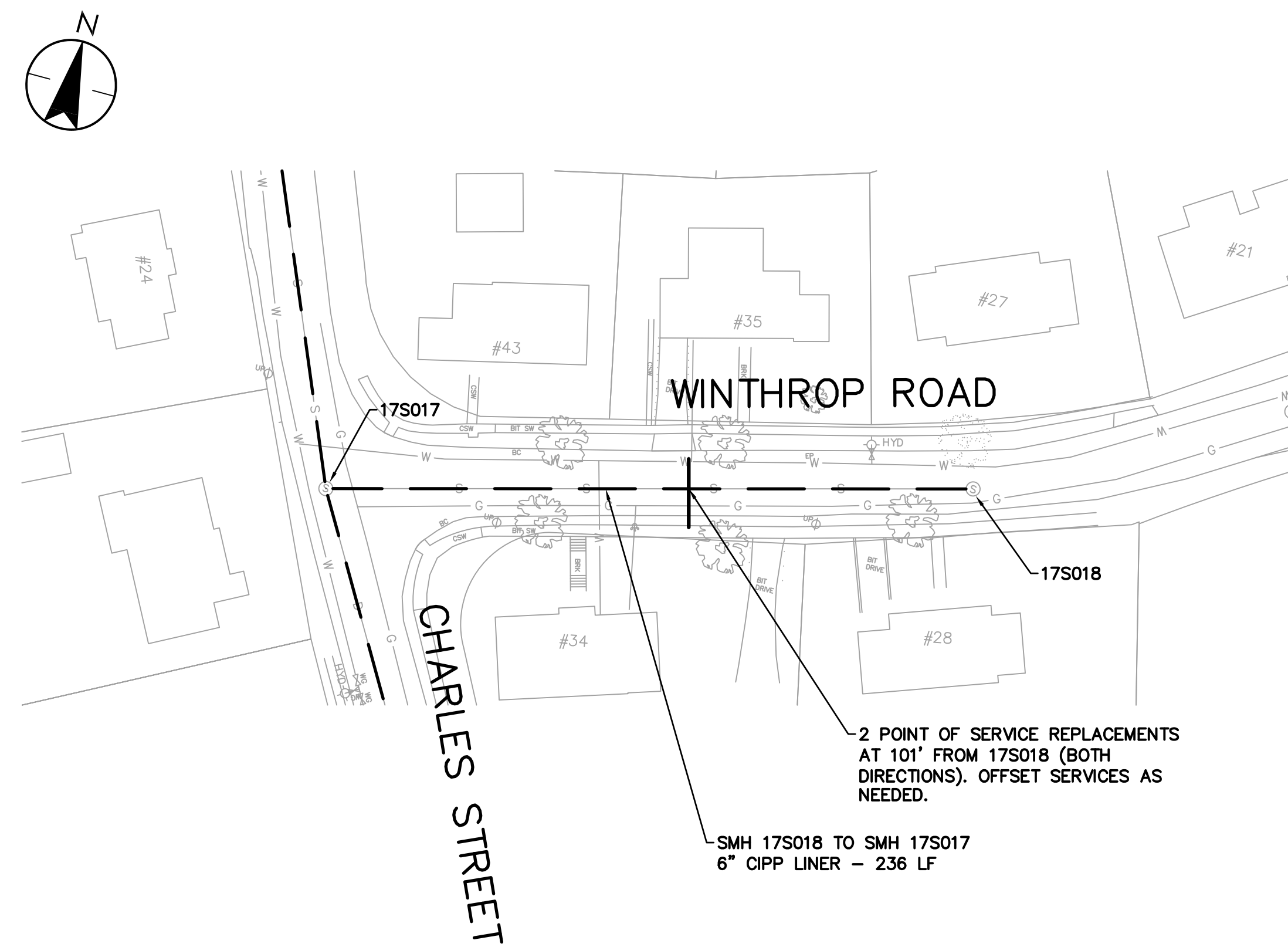
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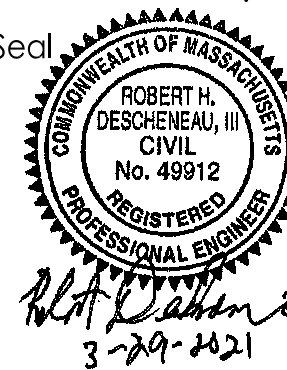
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MWRA PROJECT NO. WRA-P-11-04-3-1160

BELMONT, MASSACHUSETTS

WINTHROP ROAD AND SLADE STREET

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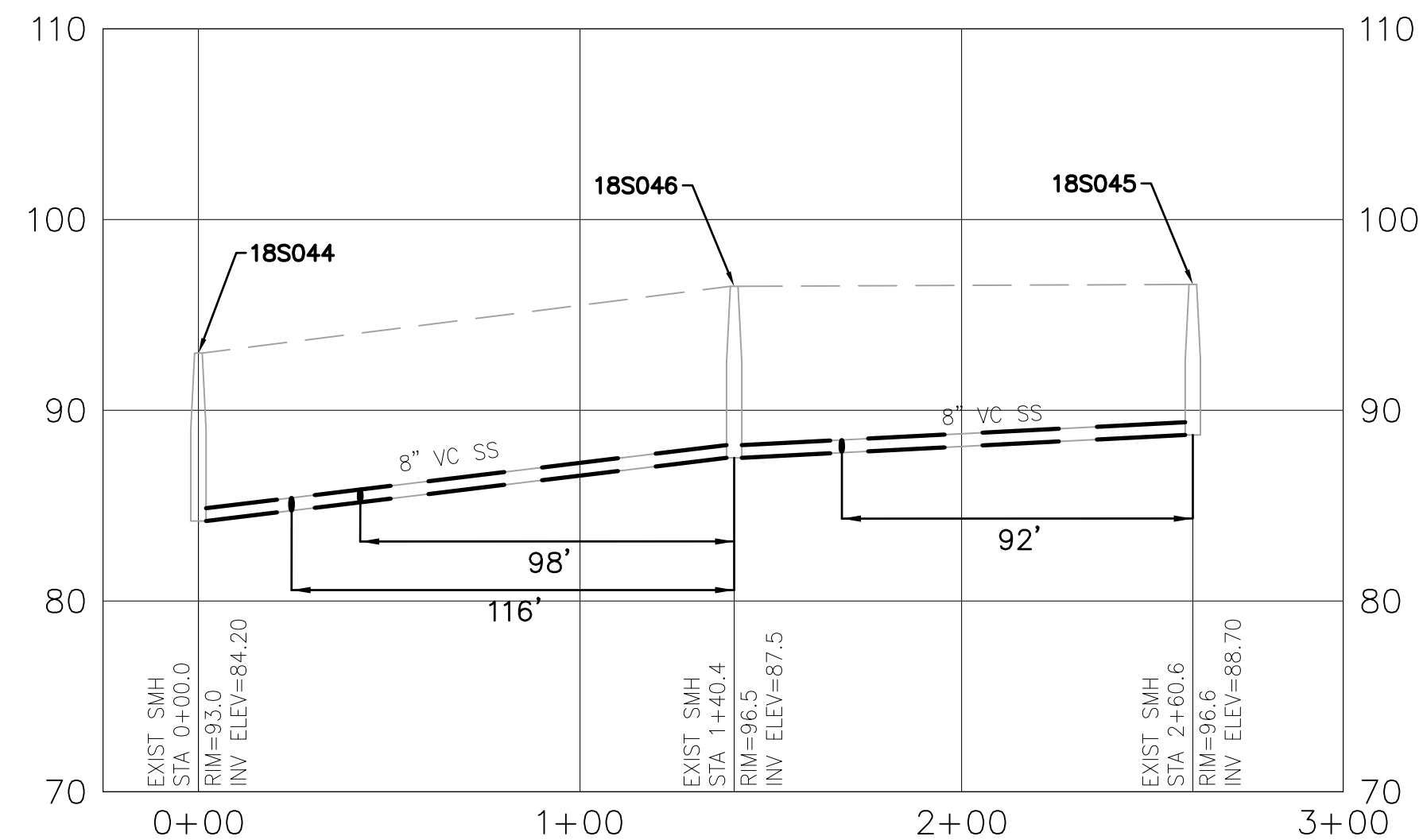
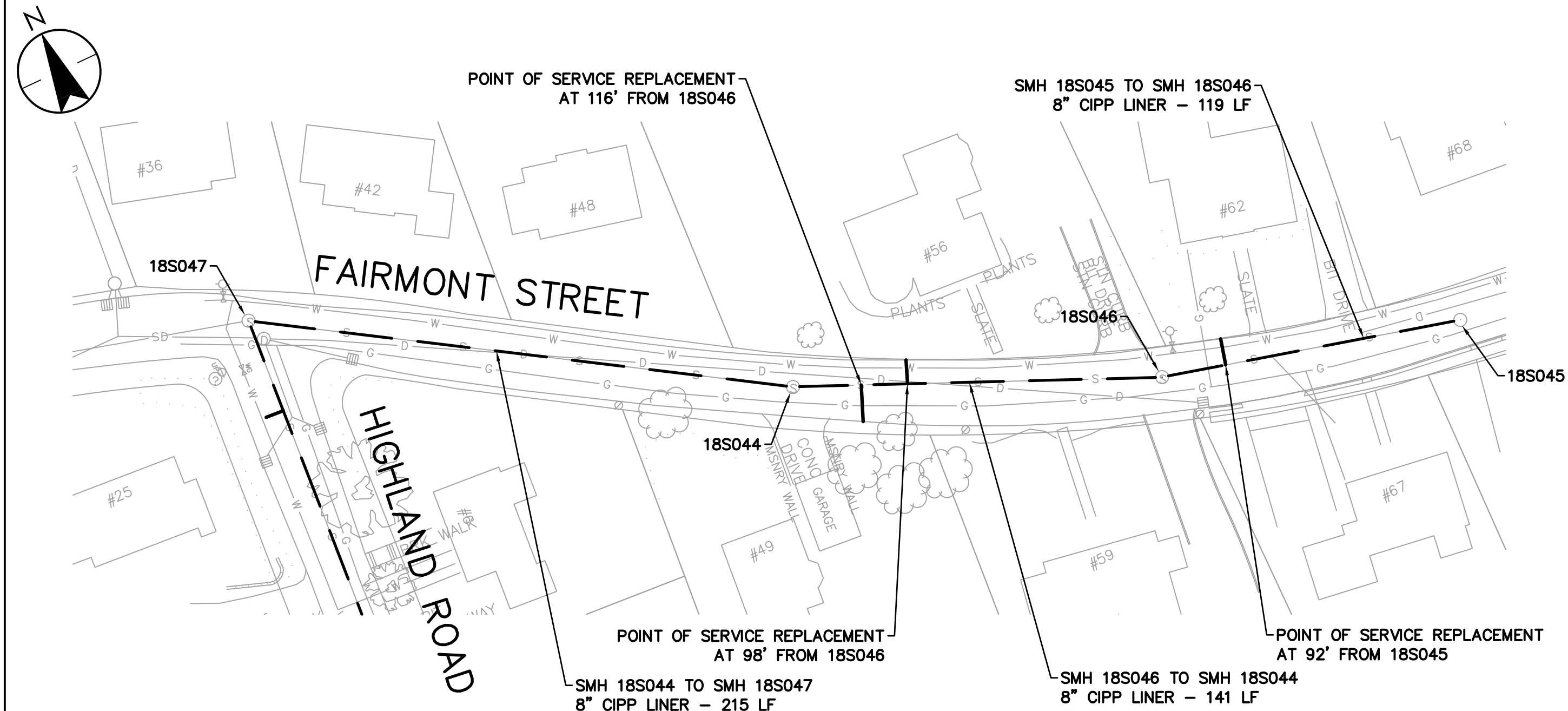
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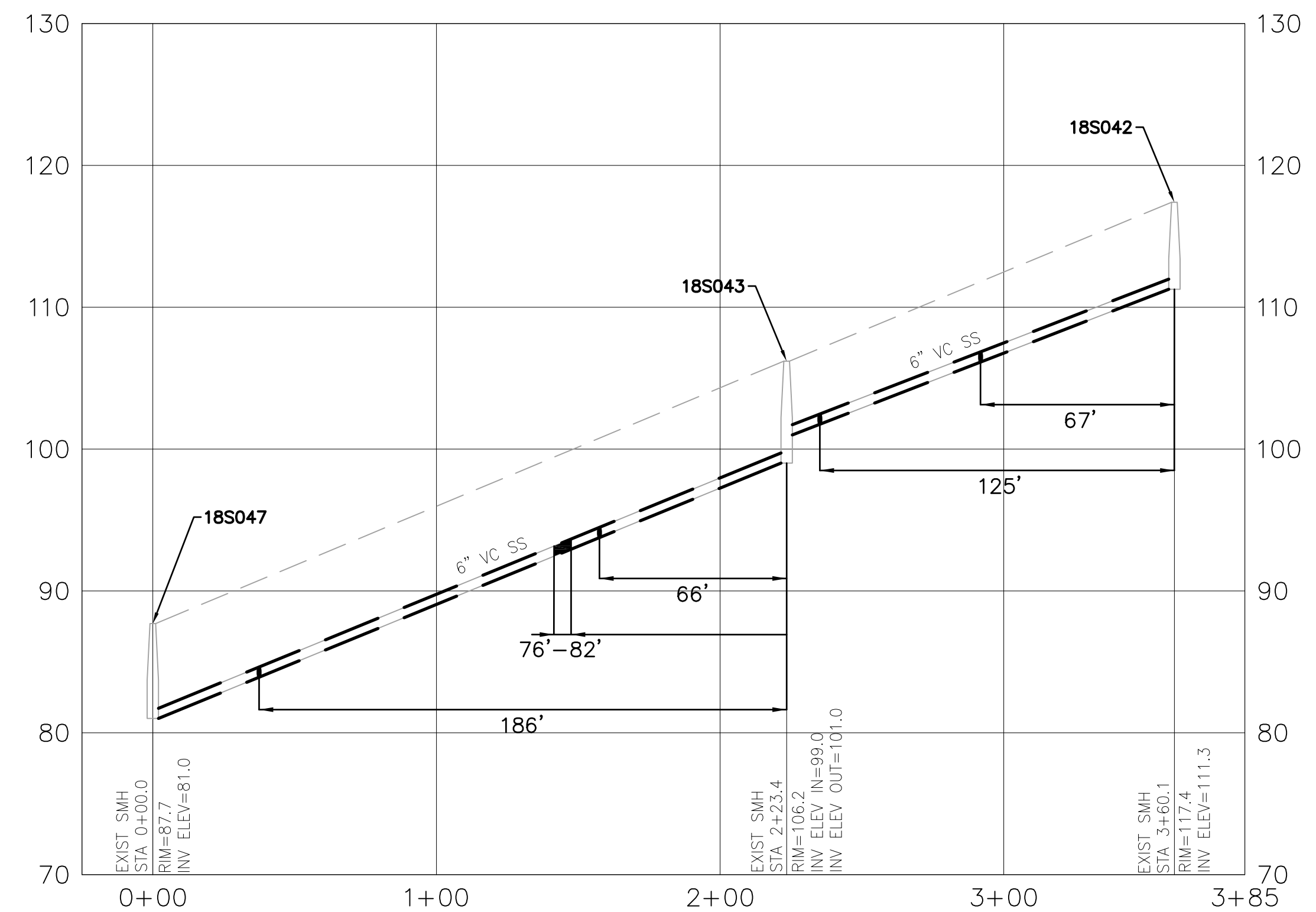
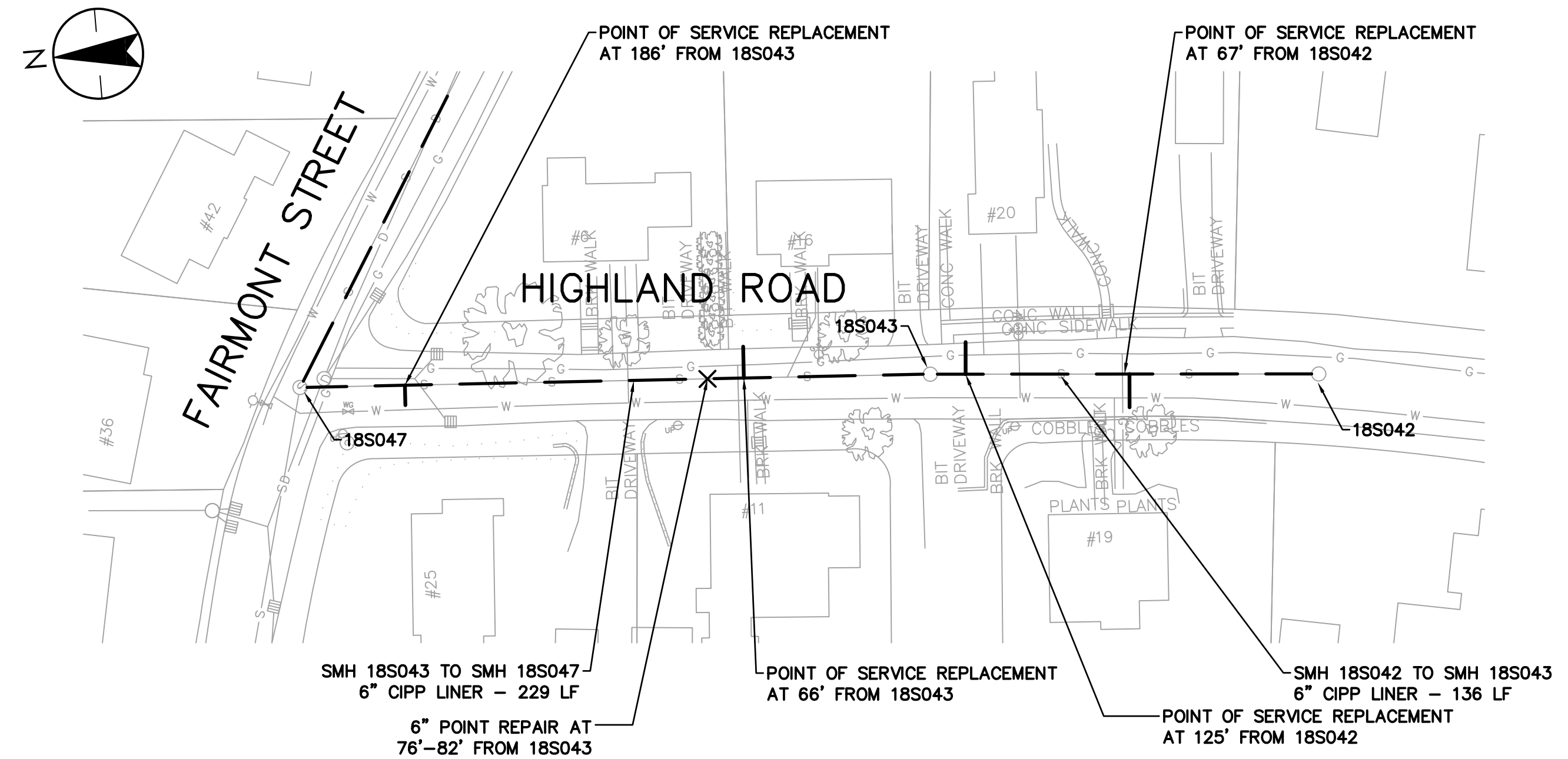
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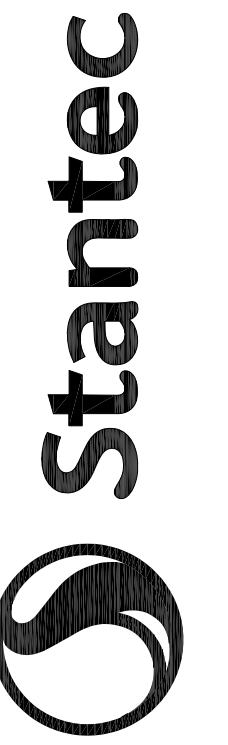
16 of



FAIRMONT ST PROFILE
SCALE: HOR. 1"=40'
VERT. 1"=4'



HIGHLAND RD PROFILE
SCALE: HOR. 1"=40'
VERT. 1"=4'



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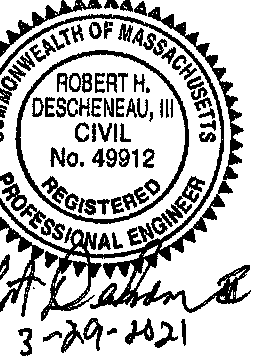
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[illegible]

TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION

MWRA PROJECT NO. WRA-P-11-04-3-1124 &
MWRA PROJECT NO. WRA-P-11-04-3-1160
BELMONT, MASSACHUSETTS

FAIRMONT STREET AND HIGHLAND ROAD

Permit-Seal 

Project Number: 195113362

File Name:

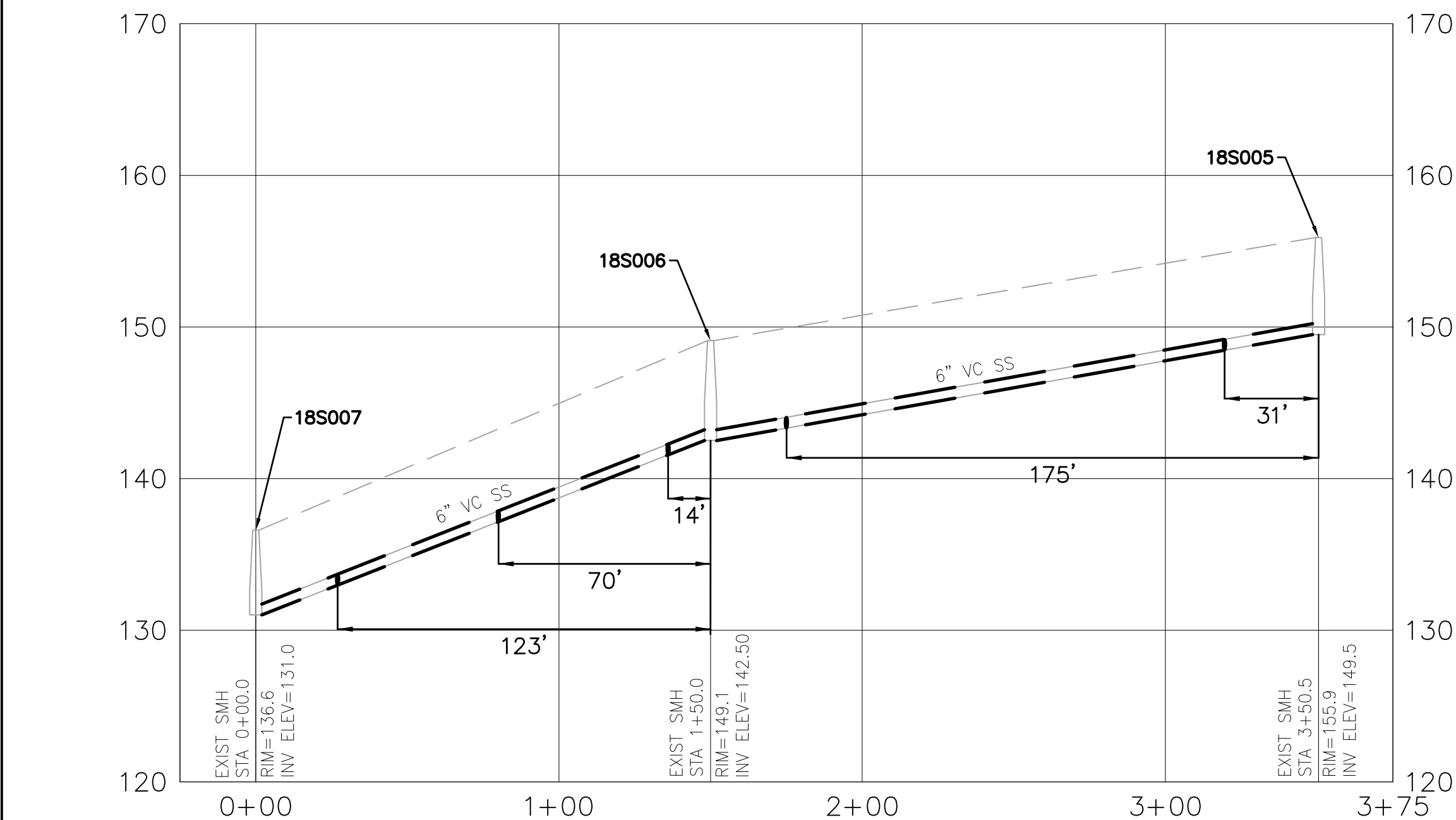
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Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C-114

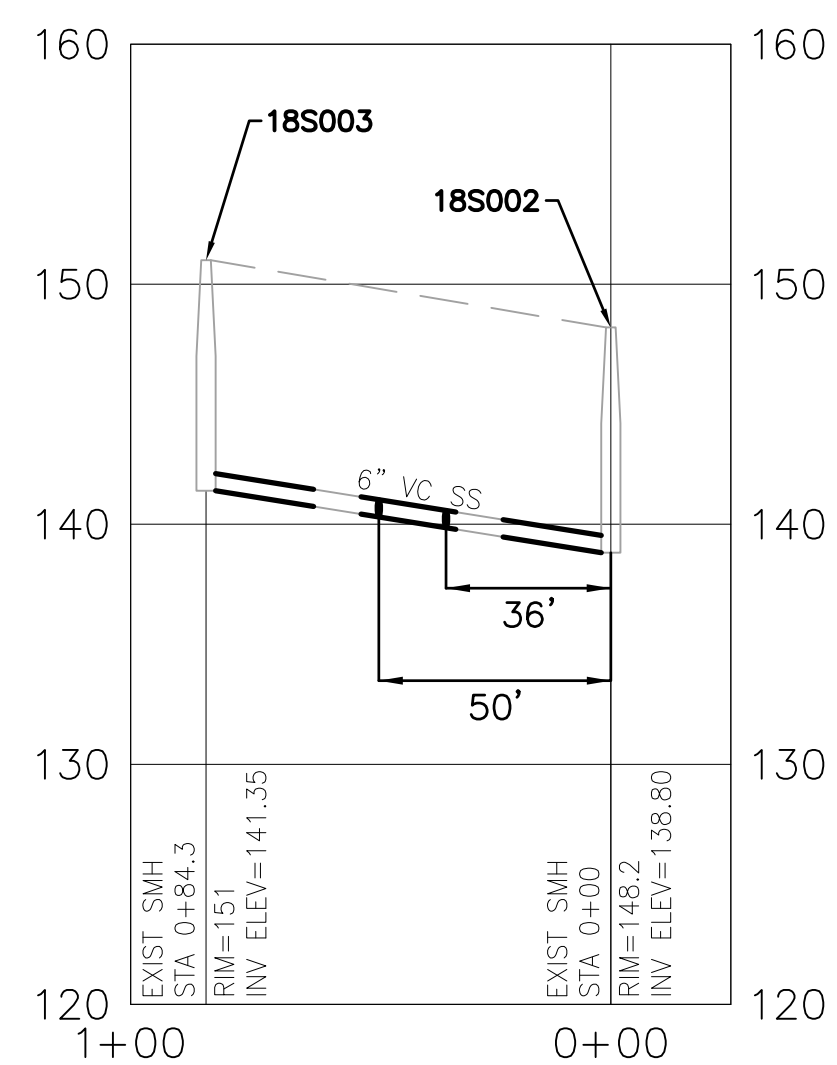
Revision Sheet

0

8 of



V:\1951\active\195113342\5_design\Sump Pump Removal\civil\drawings\civil\C-115 HILLCREST RD.dwg
2021/03/29 11:25 AM By: DiCecca, Alicia



Profile view of a proposed road section. The vertical axis represents elevation in feet (80 to 140), and the horizontal axis represents stationing (2+00 to 0+00).

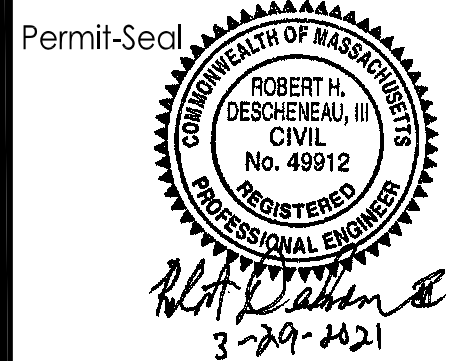
The profile shows a 6% vertical curve (VC) with a length of 92 feet. The existing ground is shown as a dashed line, and the proposed road is shown as a solid line.

Key points and data:

- Station 1+60.1: RM=127.3, INV ELEV=118.9
- Station 0+00: RM=117.7, INV ELEV=110.4
- Offset: 9' (at STA 1+60.1)
- Curve Length: 92' (72' - 92')
- Curve Grade: 6% VC SS

[illegible]

TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION
MMWRA PROJECT NO. WRA-P-11-04-3-1124 &
MMWRA PROJECT NO. WRA-P-11-04-3-1160
BELMONT, MASSACHUSETTS



Project Number: 195113362

File Name:

AMD	RHD	RPB	21.03.31
Dwn.	Chkd.	Dsgn.	YY.MM.DD

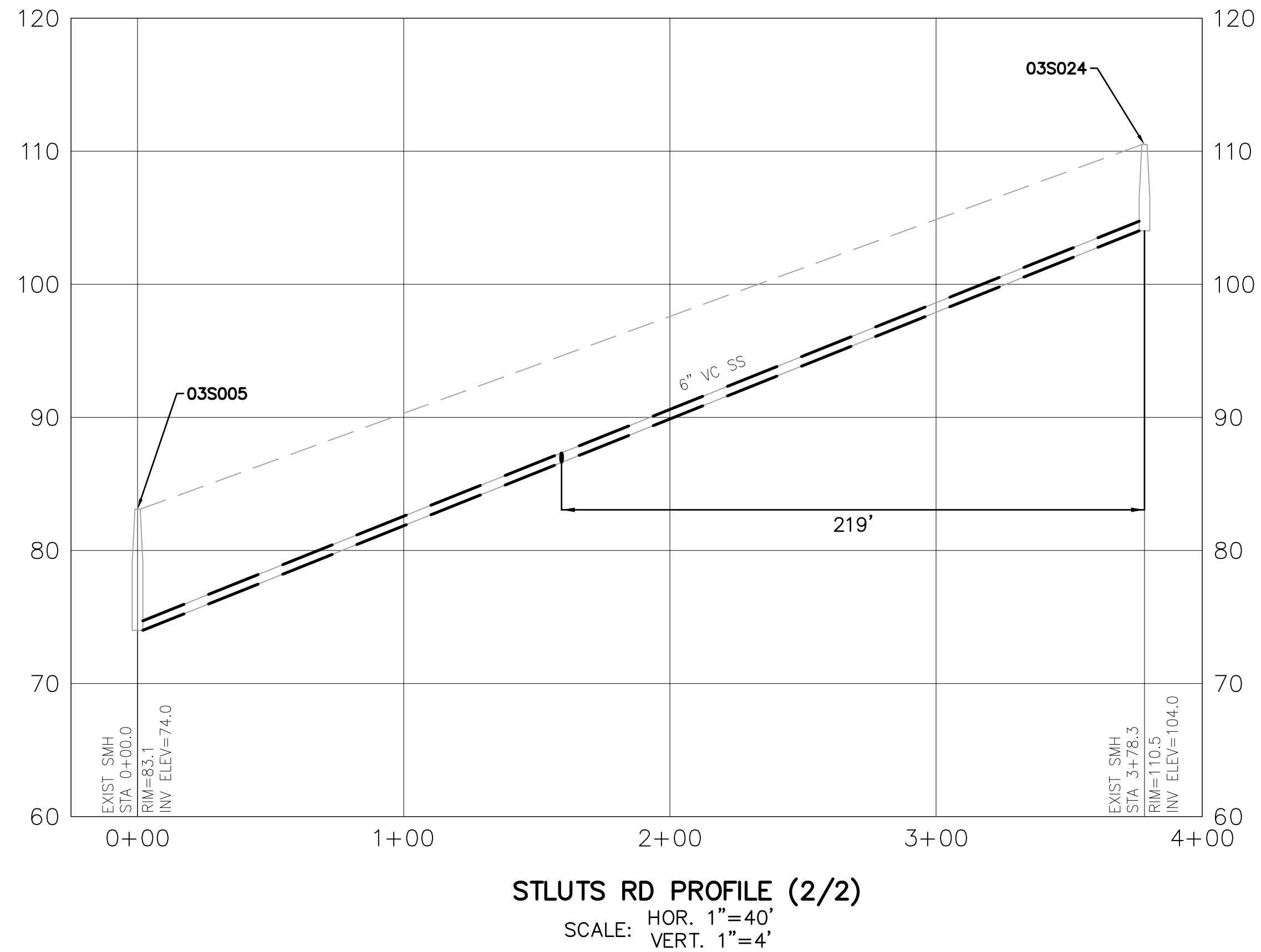
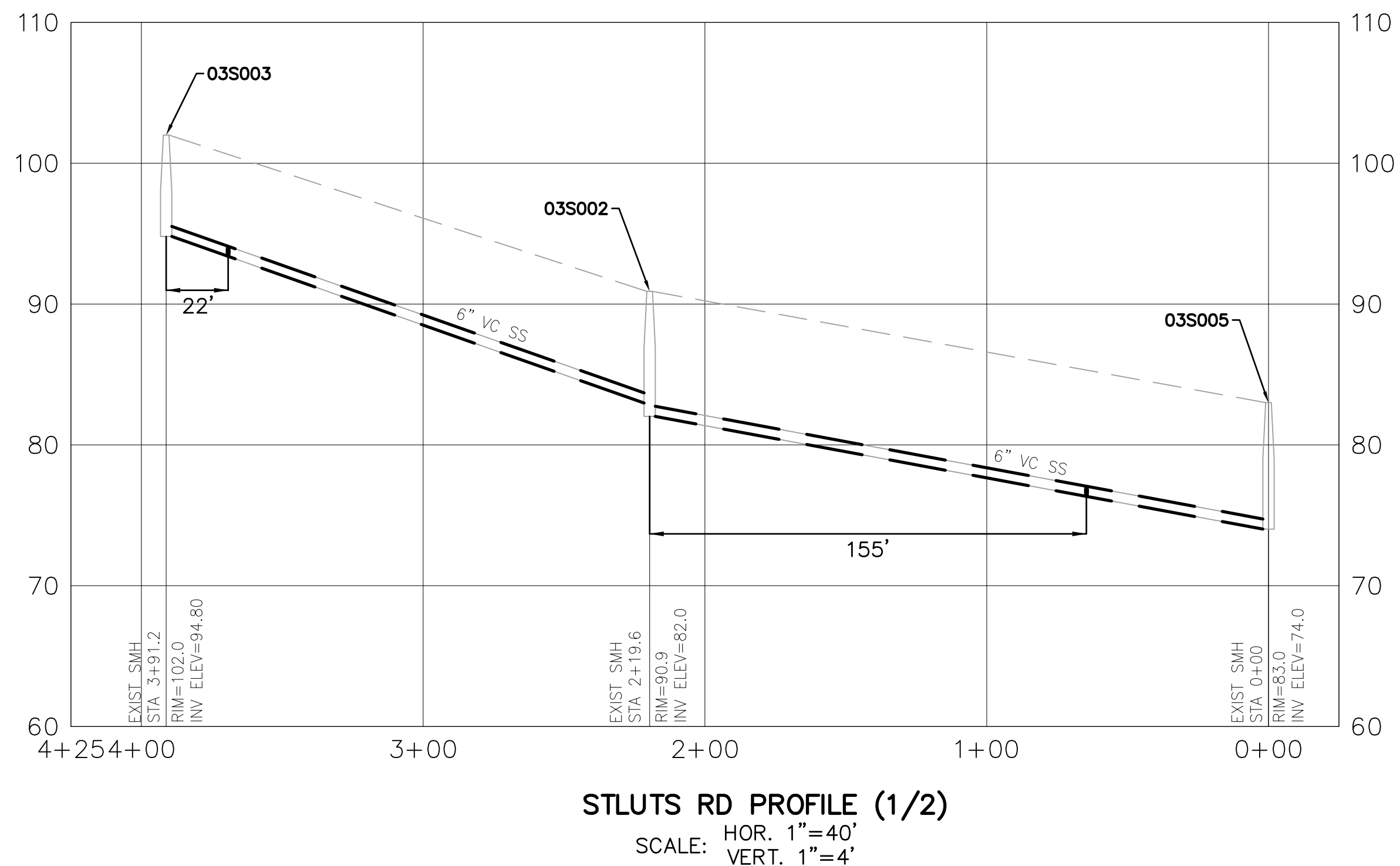
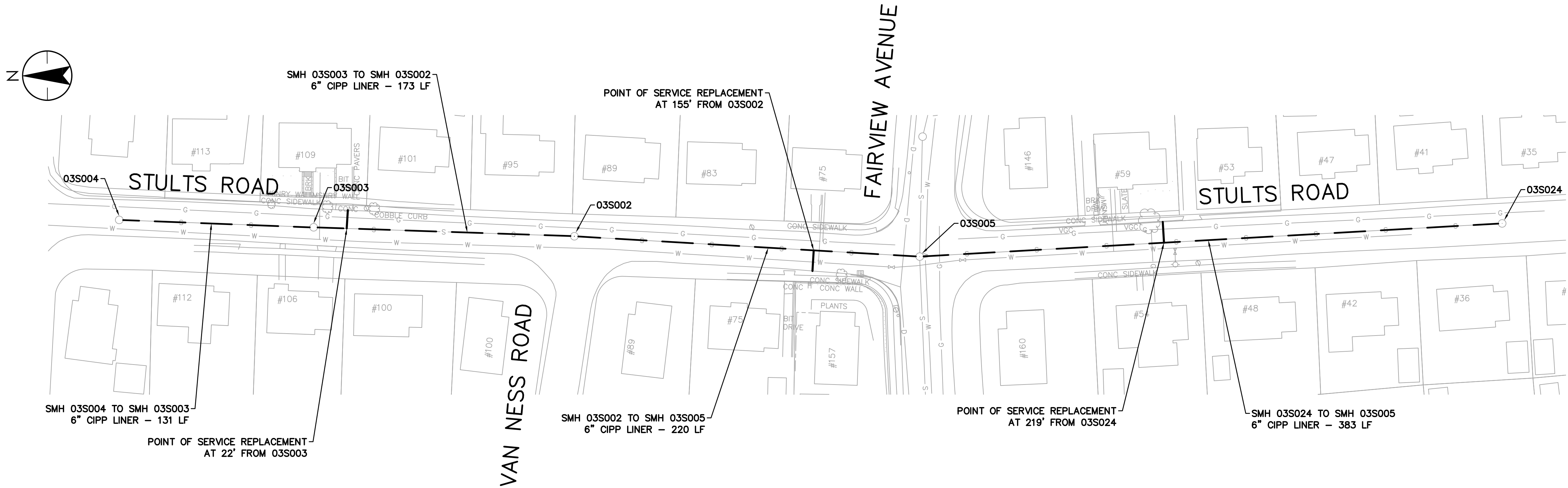
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Drawing No.		C-115	

Revision Sheet

0 19 of

\\STANT\cadd\116\11600_S_dwg\11600_Sump Removal\11600_Sump Removal.dwg
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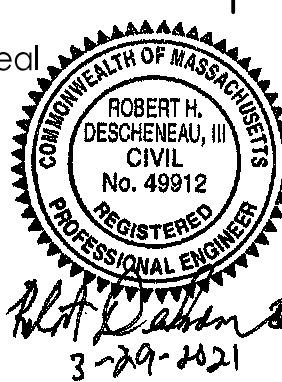
ORIGINAL SHEET - ANSI D



Revision		By	Appd.	YY.MM.DD
Issued		By	Appd.	YY.MM.DD

TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION
MWRA PROJECT NO. WRA-P11-04-3-1124 &
MWRA PROJECT NO. WRA-P11-04-3-1160
BELMONT, MASSACHUSETTS
STULTS ROAD

Permit Seal



Project Number: 195113362

File Name:

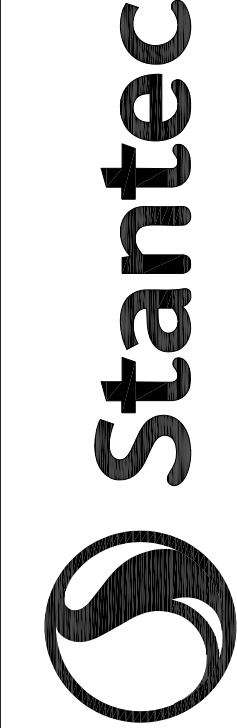
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Dwn	Chkd	Dsgn	YY.MM.DD

Drawing No. C-116

Revision Sheet

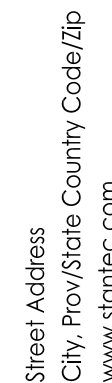
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20 of



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City, Prov/State Country Code/Zip
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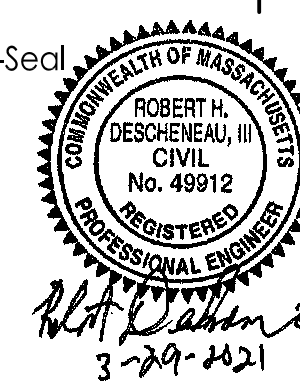
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**TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION**

MWRA PROJECT NO. WRA-P11-04-3-1124 &
MWRA PROJECT NO. WRA-P-11-04-3-1160

WOODS ROAD AND BACON ROAD

Permit-Seal



Project Number: 195113362

File Name

AMD	RHD	RPB	21.03.31
Dwn.	Chkd.	Dsgn.	YY.MM.DD

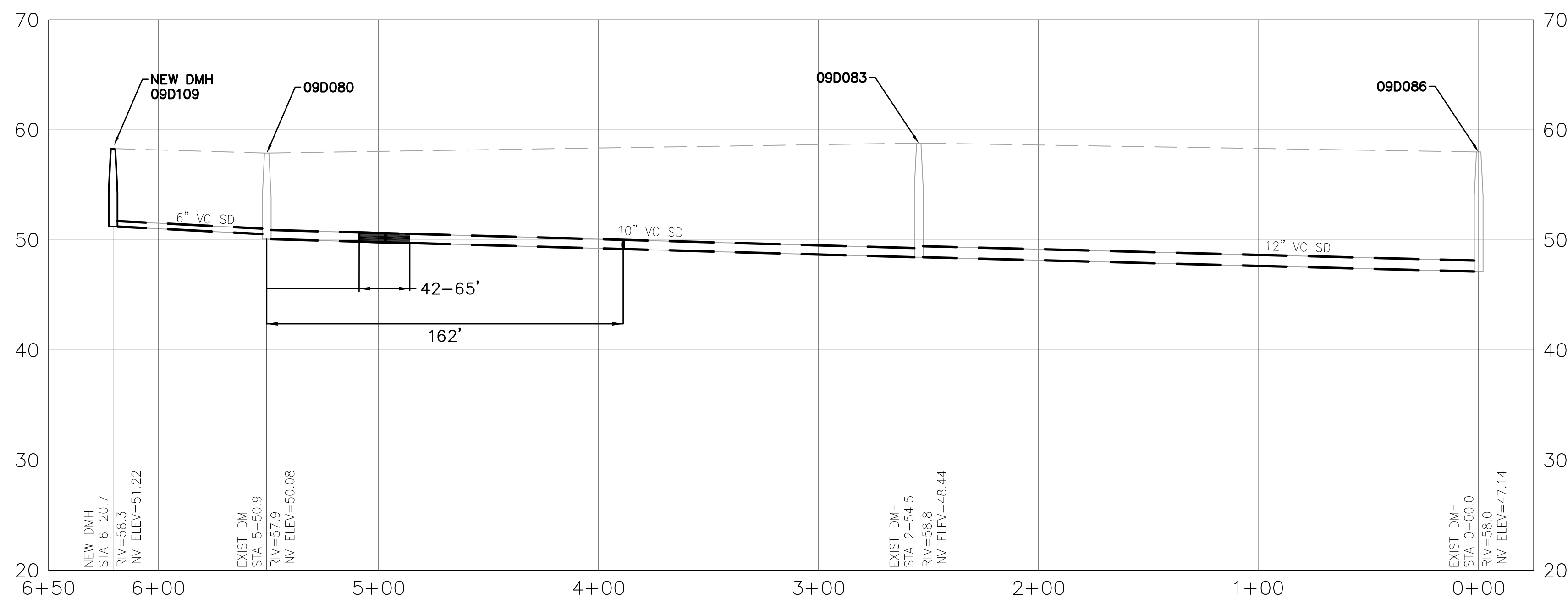
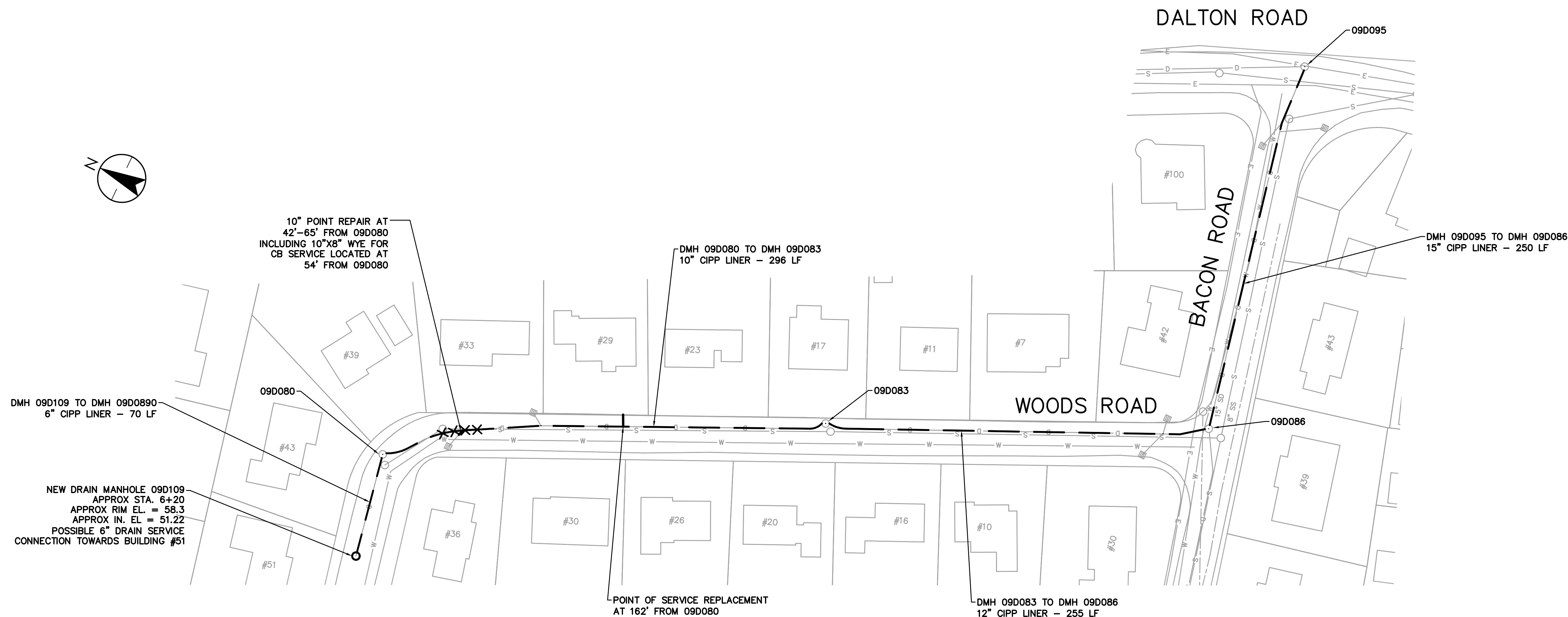
Dwg. No.	C-118
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Revision Sheet

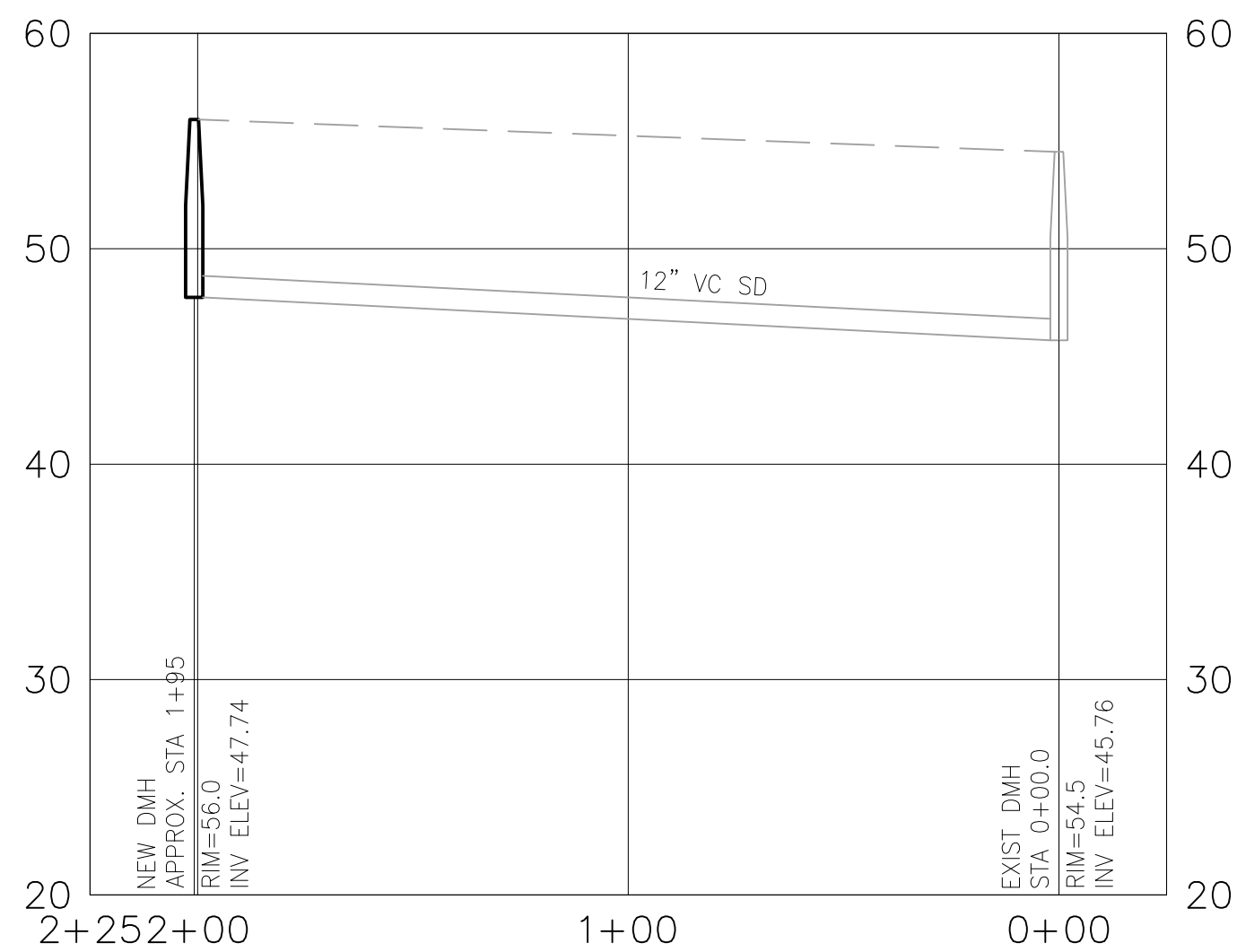
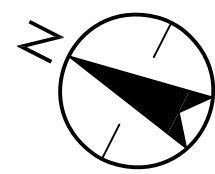
Revision Sheet

C

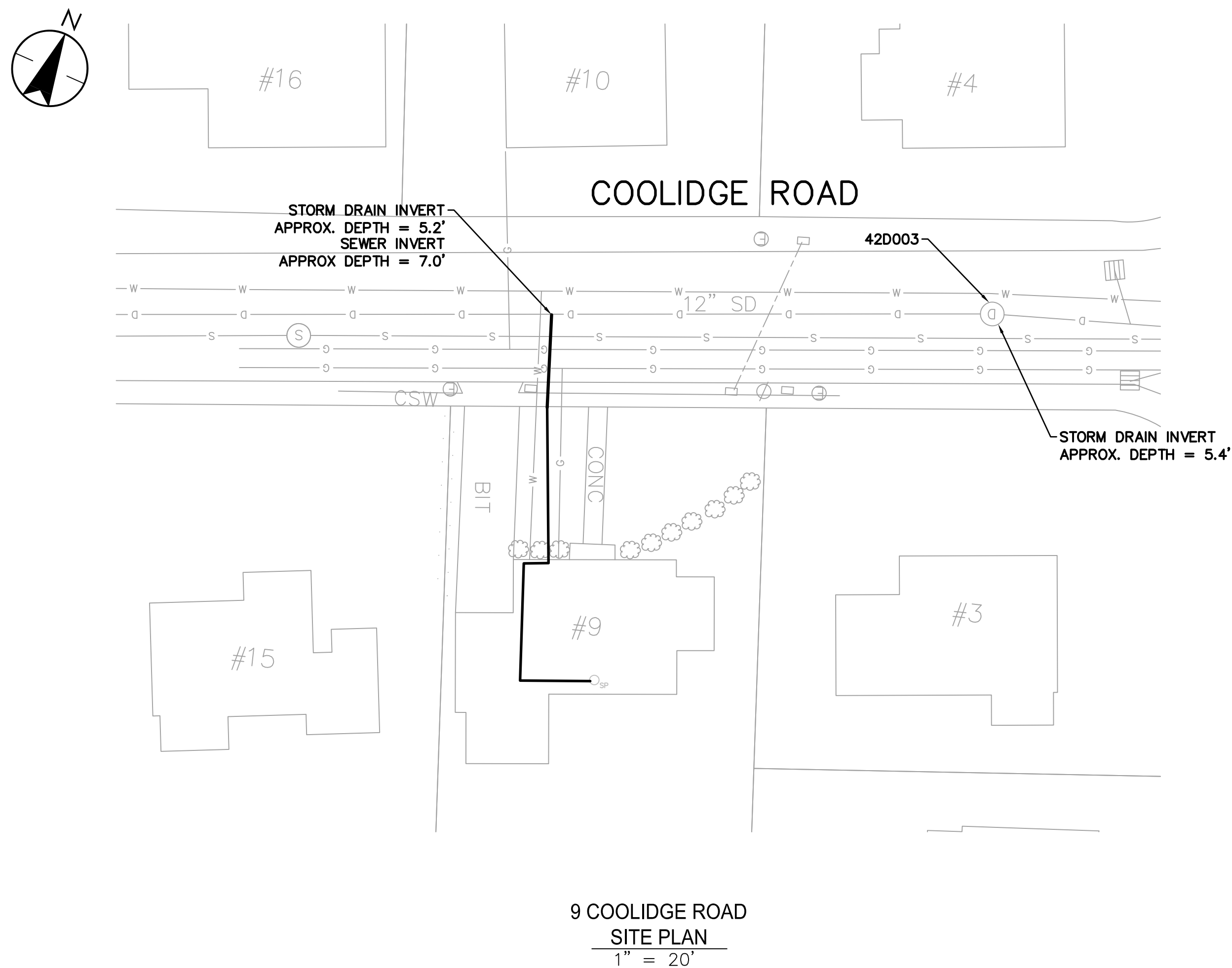
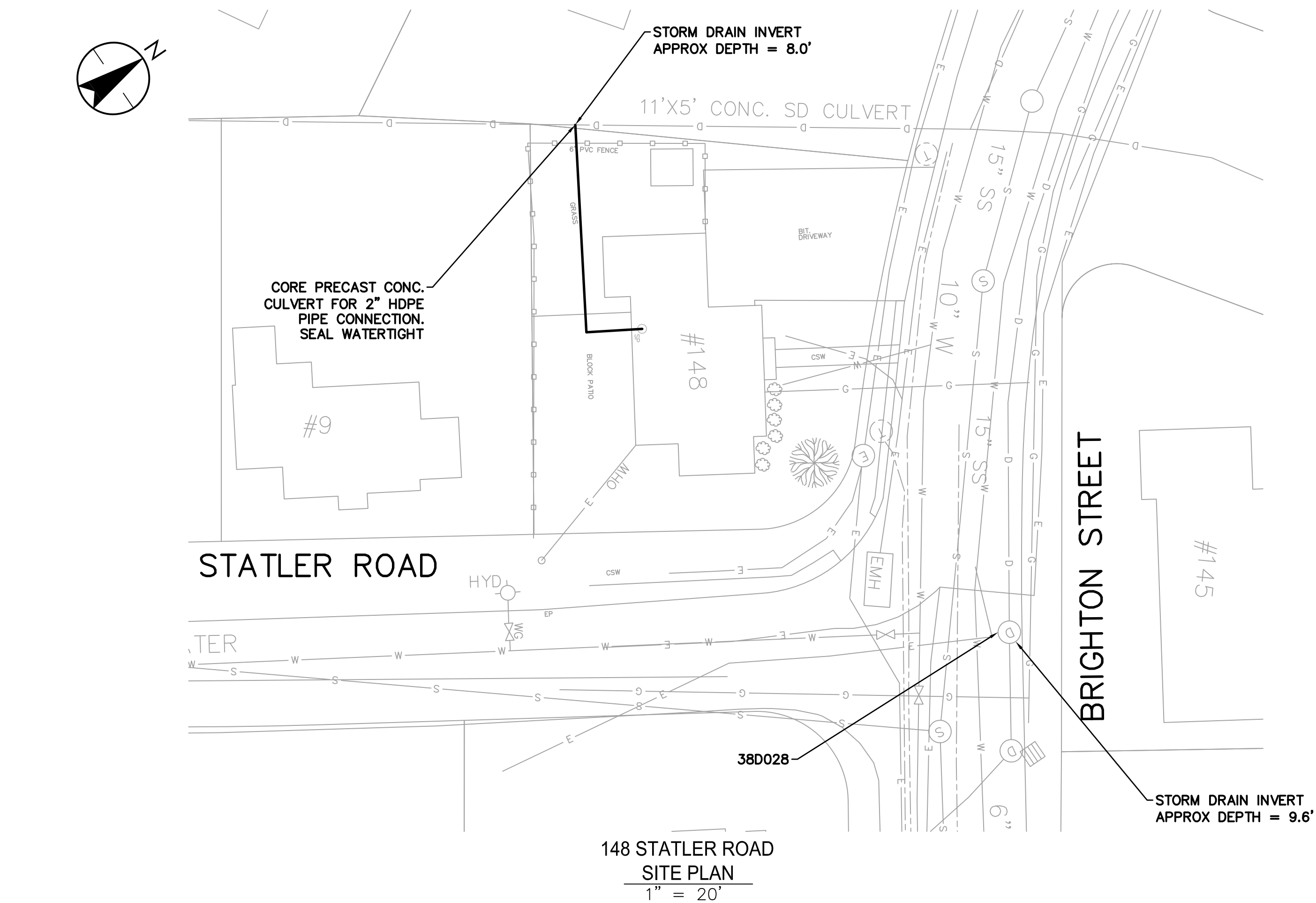
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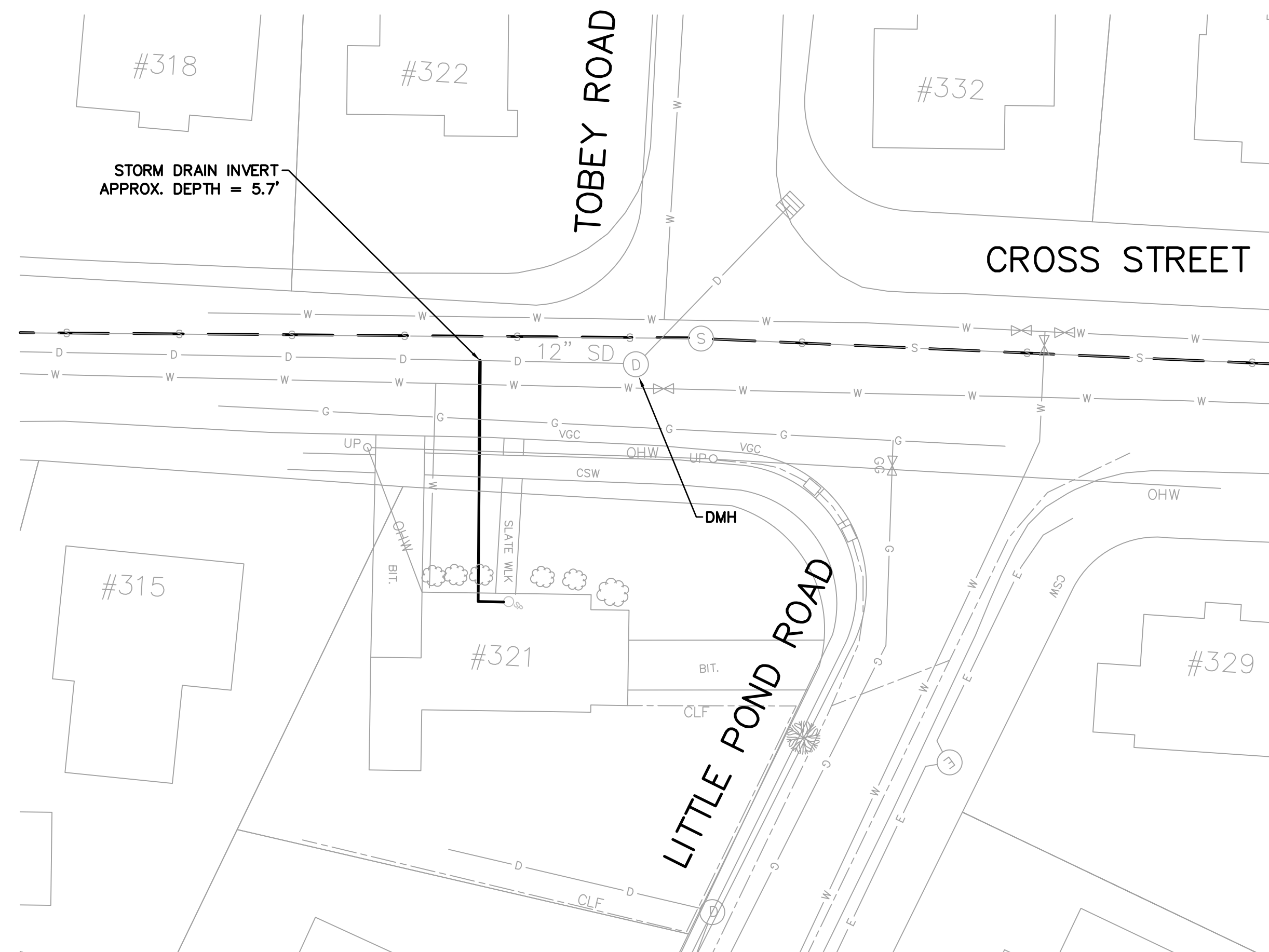
WOODS RD PROFILE
SCALE: HOR. 1"=40'
VERT. 1"=4'



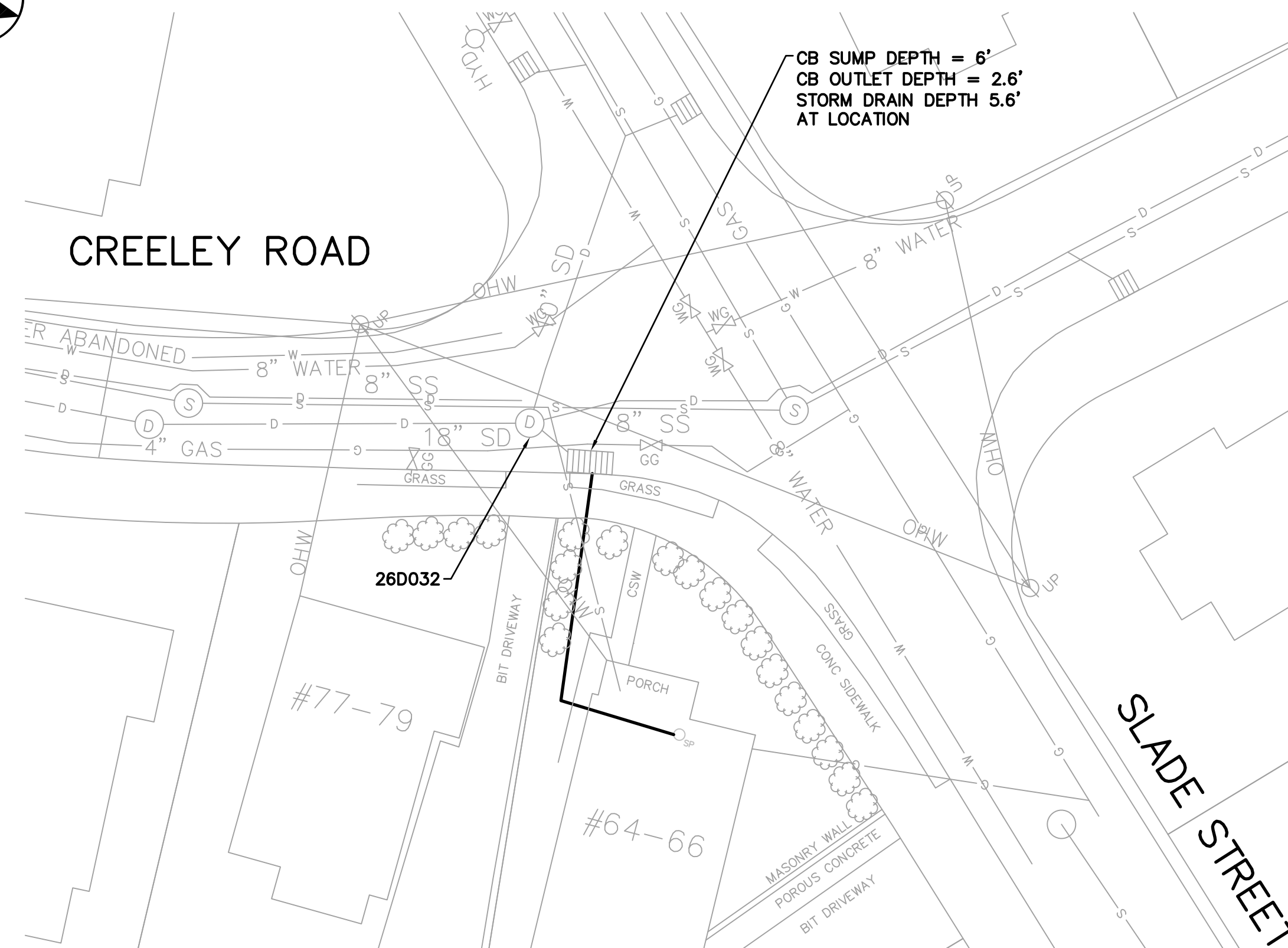
23 of



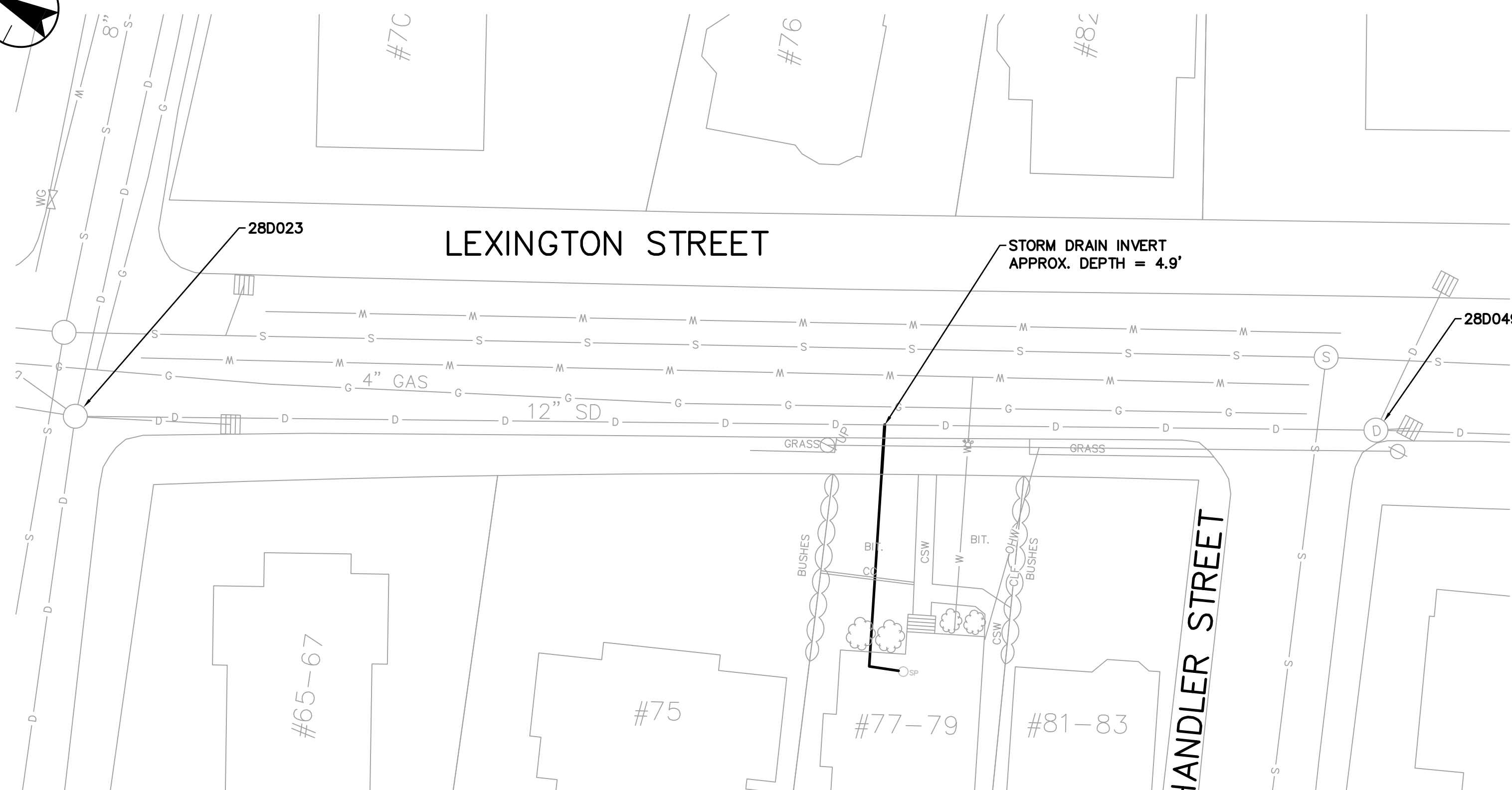
1. SEE SHEET NO. 29/DRAWING NO. C-501 FOR
SUMP PUMP RELOCATION DETAILS AND NOTES



321 CROSS STREET
SITE PLAN
1" = 20'



64-66 SLADE STREET
SITE PLAN
1" = 20'

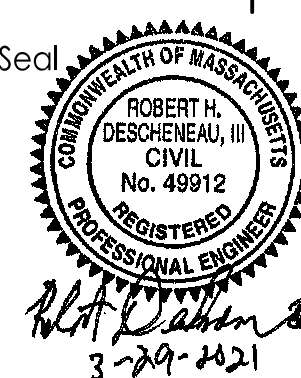


77-79 LEXINGTON STREET
SITE PLAN
1" = 20'

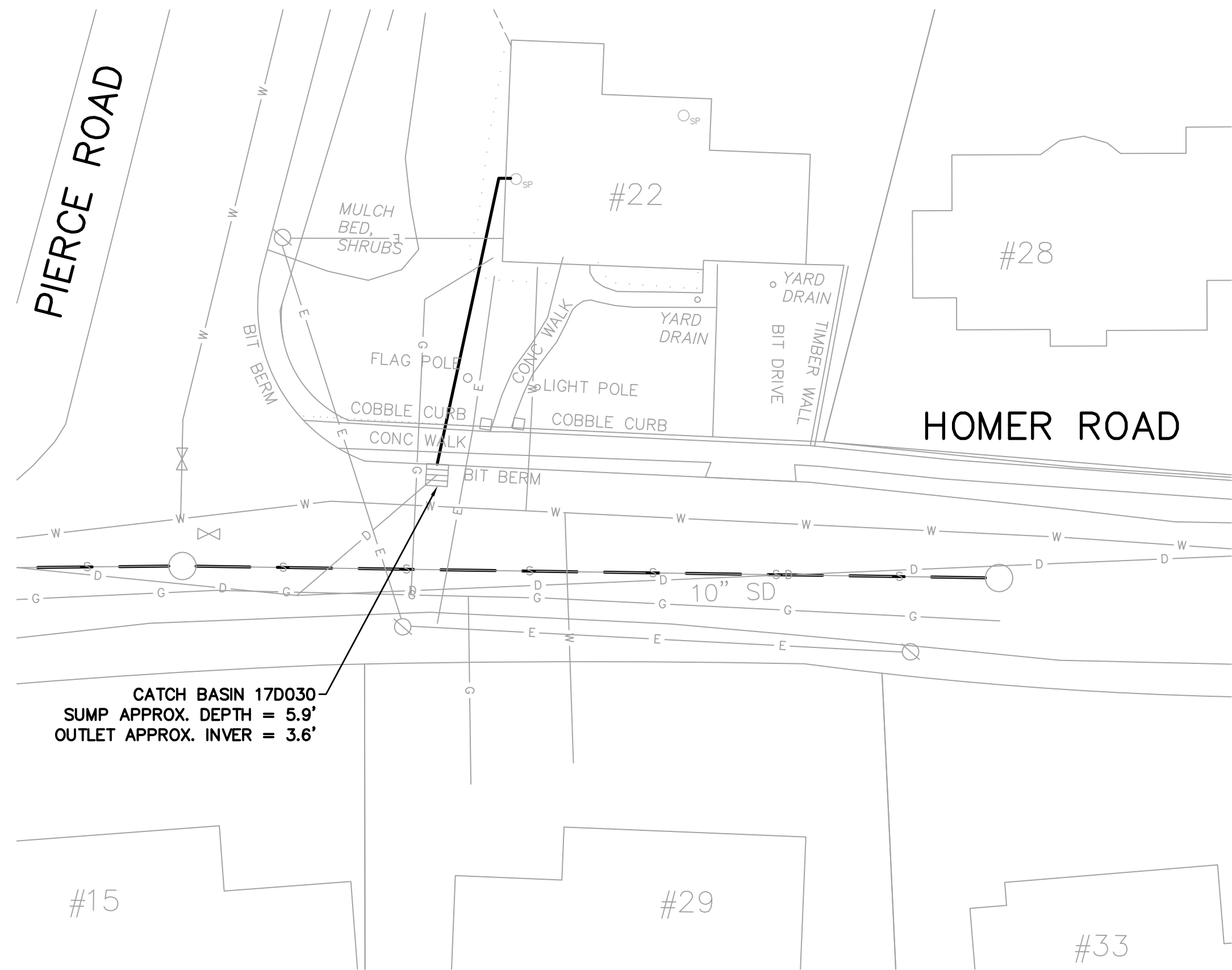
1. SEE SHEET NO. 29/DRAWING NO. C-501 FOR
SUMP PUMP RELOCATION DETAILS AND NOTES.

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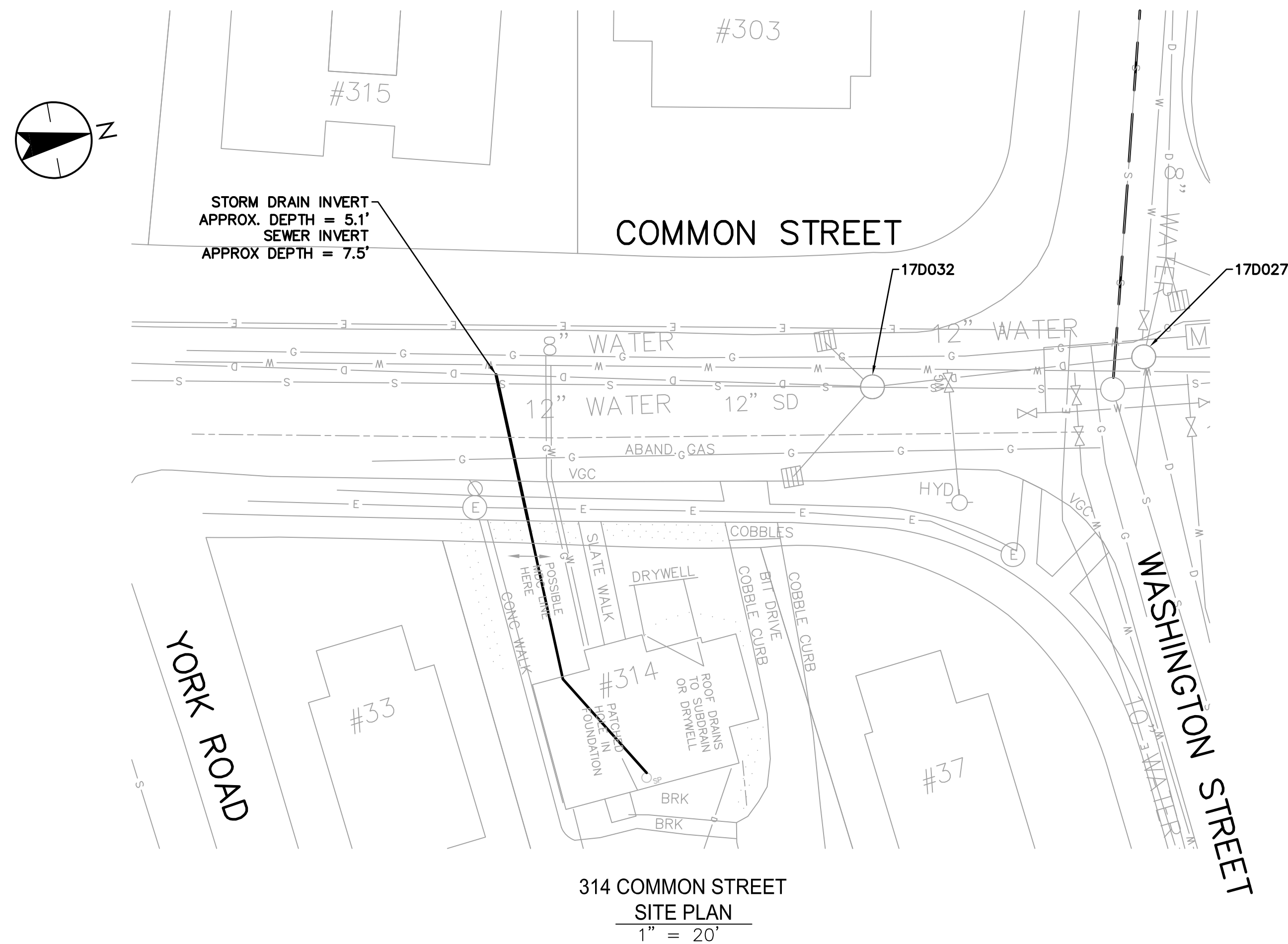
BELMONT, MASSACHUSETTS
PUMP PUMP - CROSS ST, LEXINGTON ST AND SLADE ST



Revision Sheet

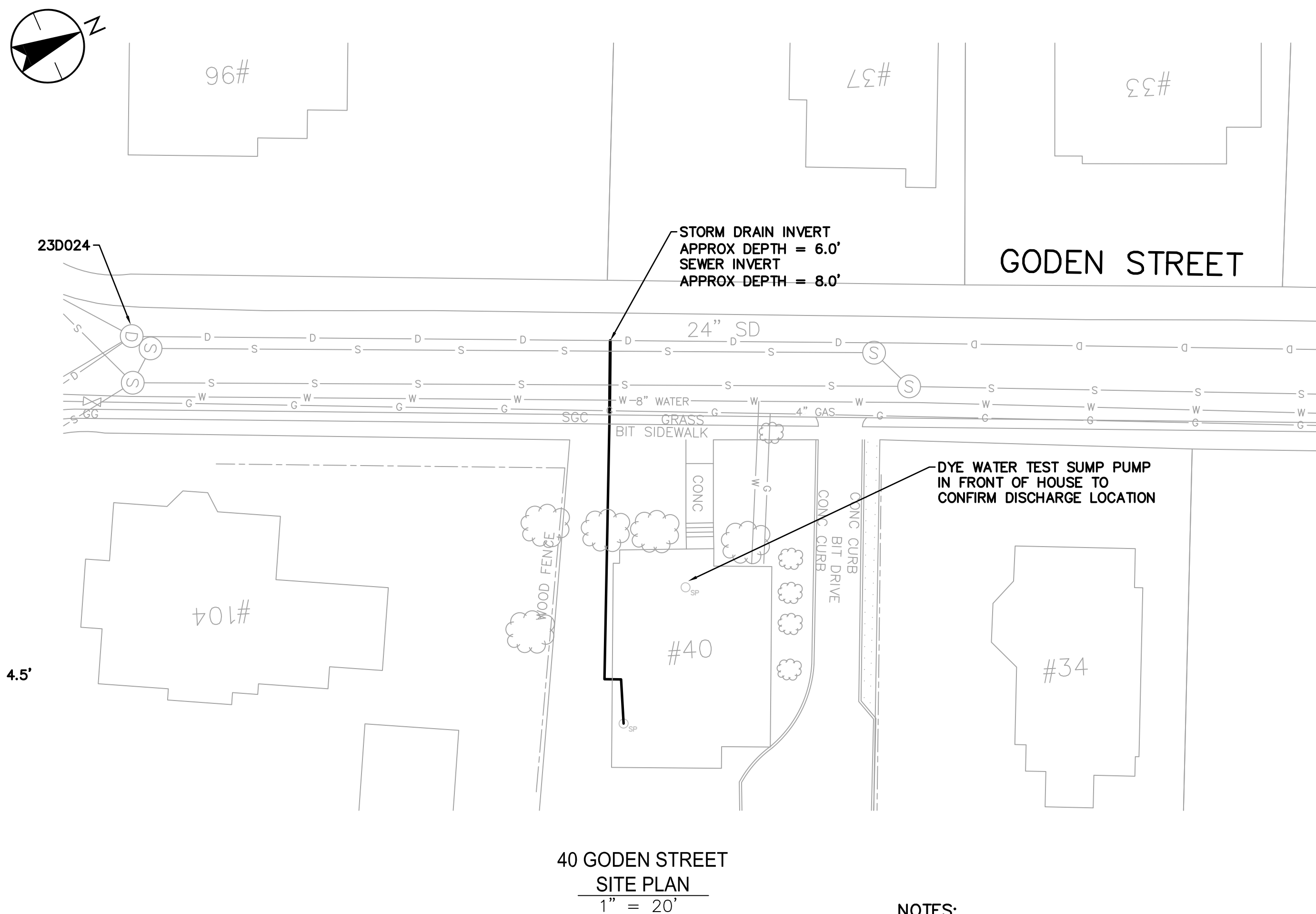
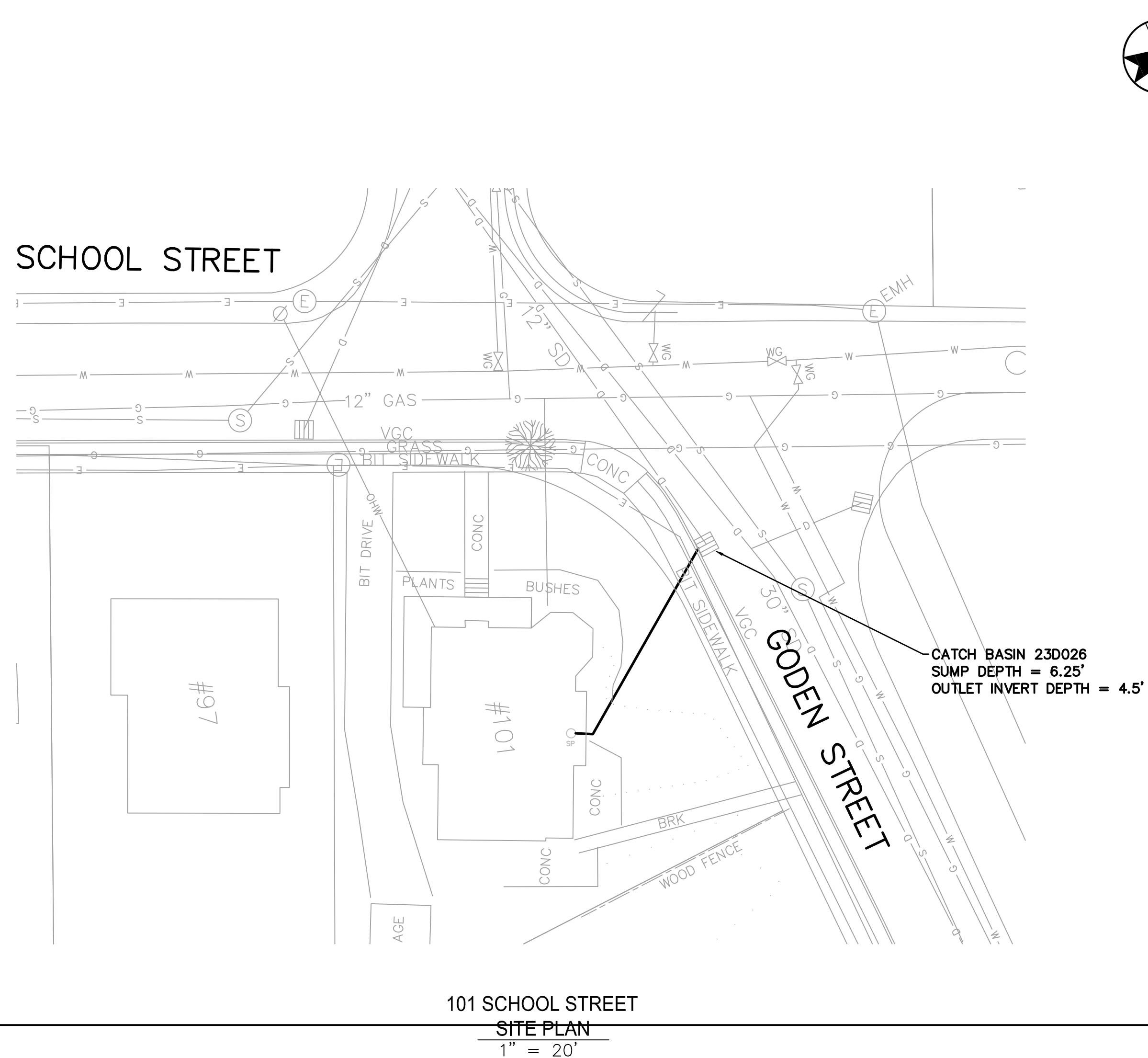
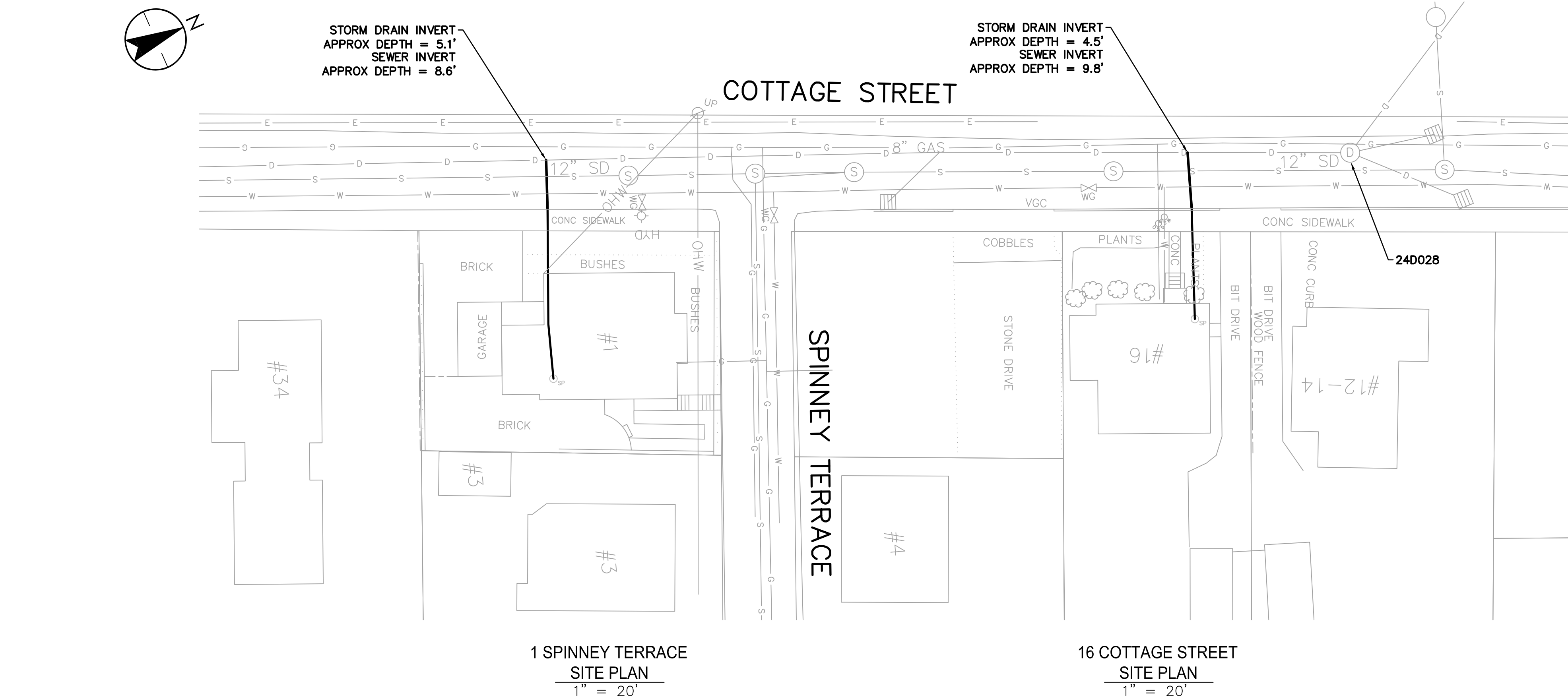


22 HOMER ROAD
SITE PLAN
1" = 20'



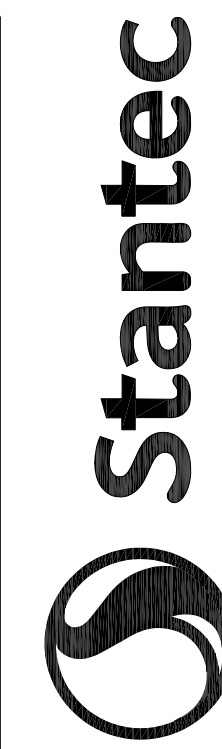
314 COMMON STREET
SITE PLAN
1" = 20'

1. SEE SHEET NO. 29/DRAWING NO. C-501 FOR
SUMP PUMP RELOCATION DETAILS AND NOTES.



NOTES:

1. SEE SHEET NO. 29/DRAWING NO. C-501 FOR
SUMP PUMP RELOCATION DETAILS AND NOTES.

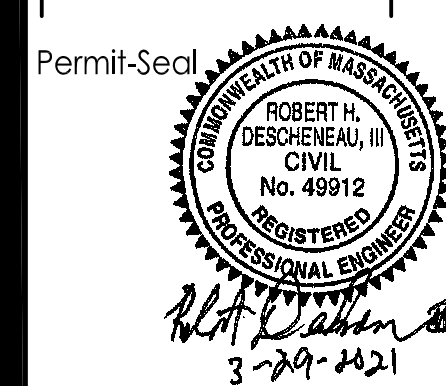


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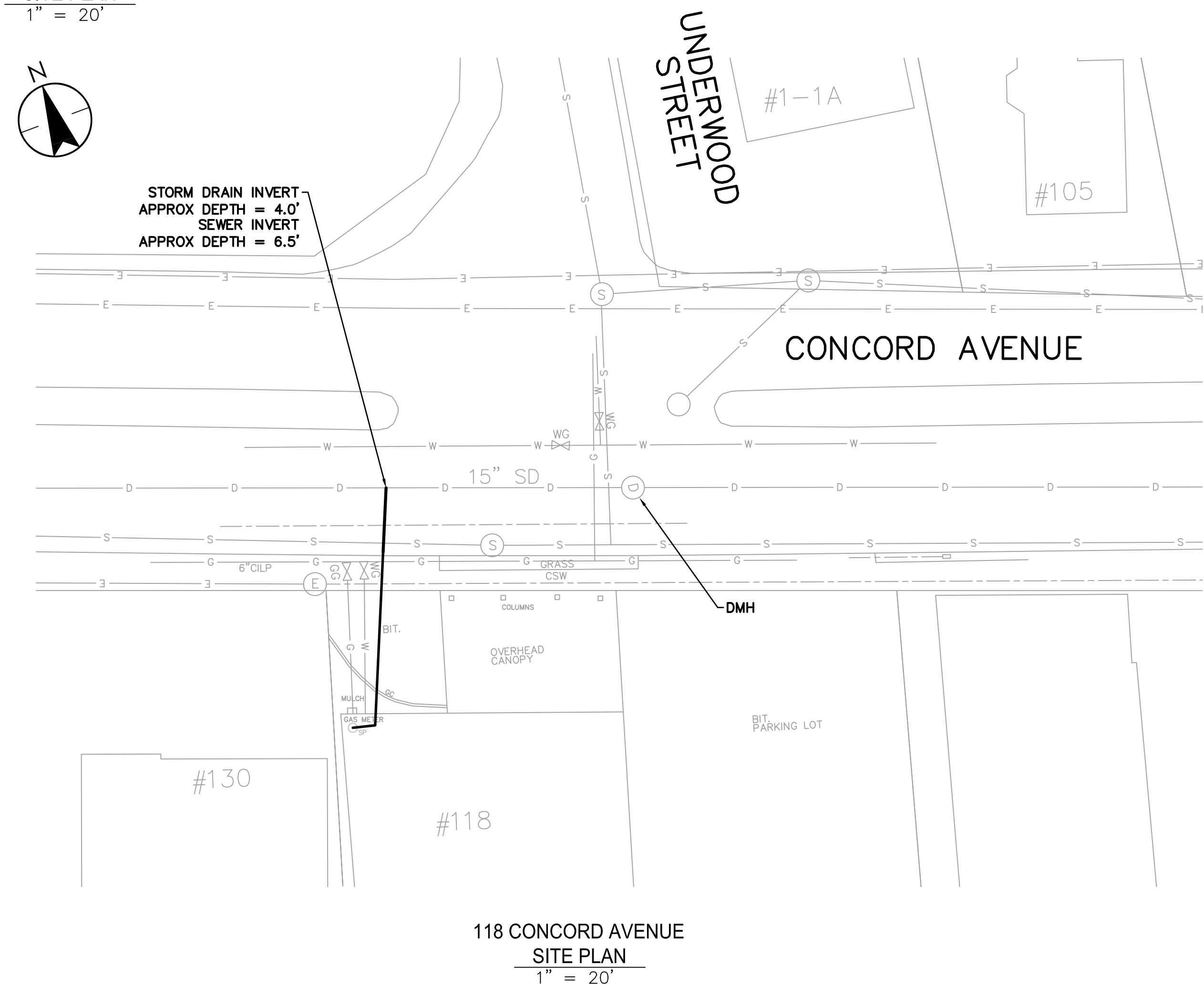
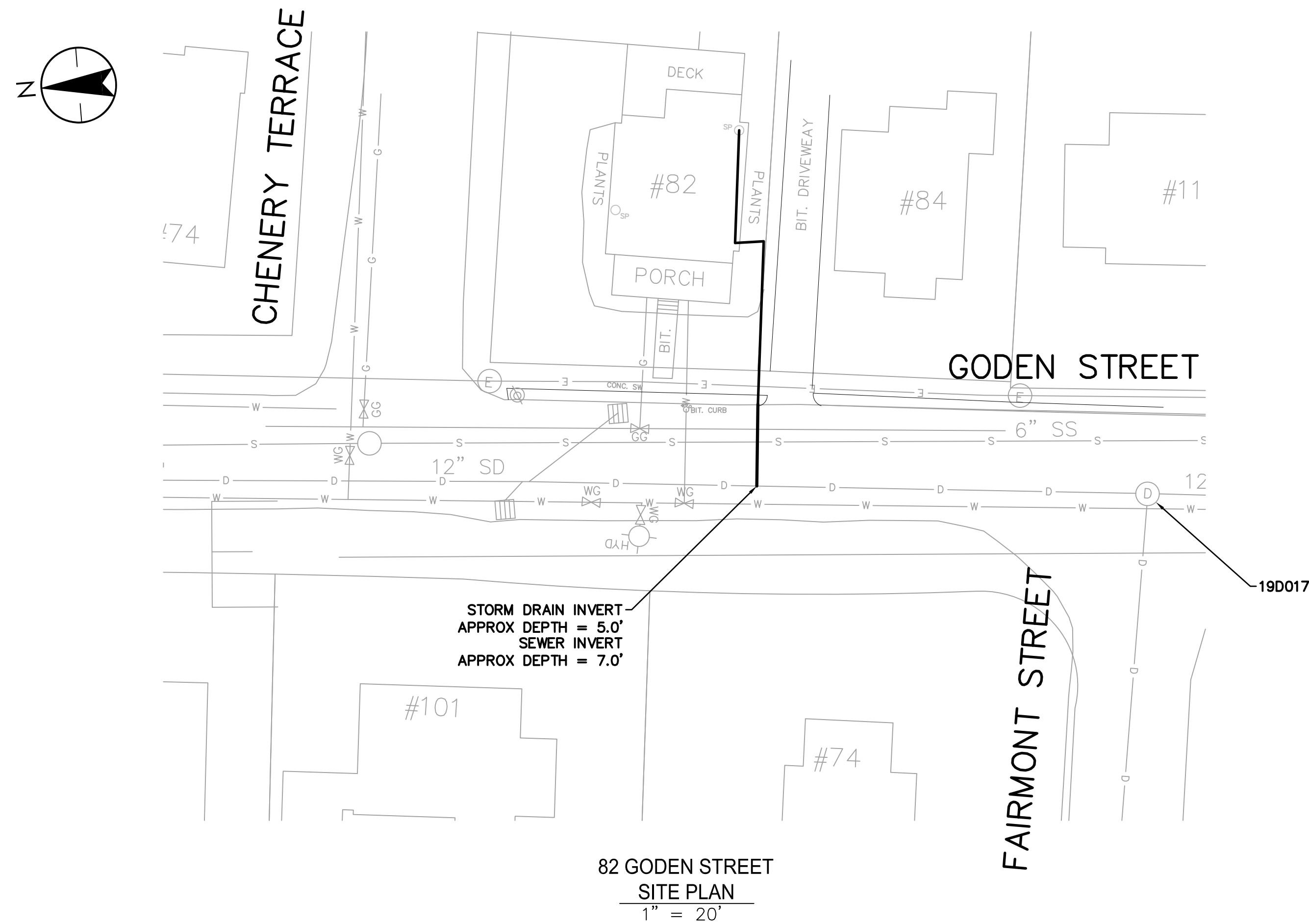
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[illegible]

TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION
MMWRA PROJECT NO. WRA-P11-04-3-1124 &
MMWRA PROJECT NO. WRA-P-11-04-3-1160
BELMONT, MASSACHUSETTS
SUMP PUMP - COTTAGE ST, SPINNEY TERR, GODEN ST AND SCHOOL ST

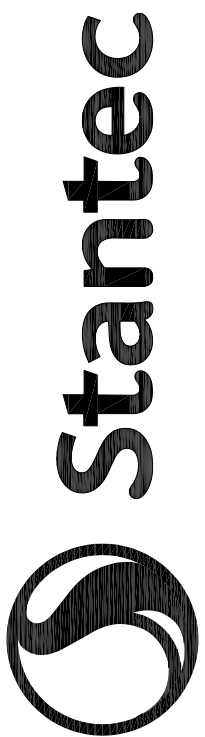


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File Name:			
AMD	RHD	RPB	21.03
Dwn.	Chkd.	Dsgn.	YY.MM
Drawing No.		C-123	
Revision		Sheet	
0		27 of	



NOTES:

1. SEE SHEET NO. 29/DRAWING NO. C-501 FOR
SUMP PUMP RELOCATION DETAILS AND NOTES.



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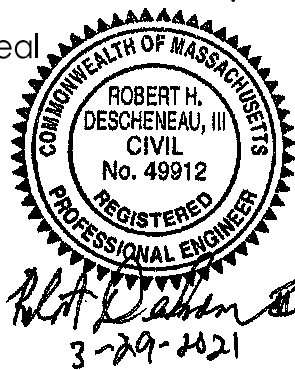
TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION

MWRA PROJECT NO. WRA-P11-04-3-1124 &
MWRA PROJECT NO. WRA-P11-04-3-1160

BELMONT, MASSACHUSETTS

SUMP PUMP - GODEN ST, CONCORD AVE AND BAKER ST

Permit-Seal



Project Number: 195113362

File Name:

AMD	RHD	RPB	21.03.31
Dwn.	Chkd.	Dsgn.	YY.MM.DD

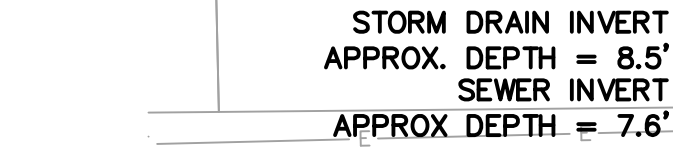
Drawing No. C-124

Revision Sheet

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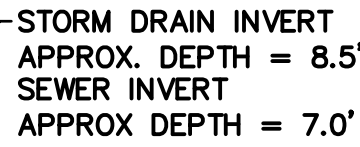
28 of

MUNROE STREET

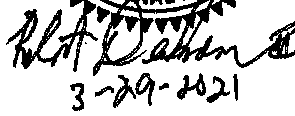


LIVERMORE ROAD

1. SEE SHEET NO. 29/DRAWING NO. C-501 FOR
SUMP PUMP RELOCATION DETAILS AND NOTES.

4 ANIS RO
SITE PLA[illegible]

Permit-Sea



File Name:

Drawing No. C-126

0

30 of

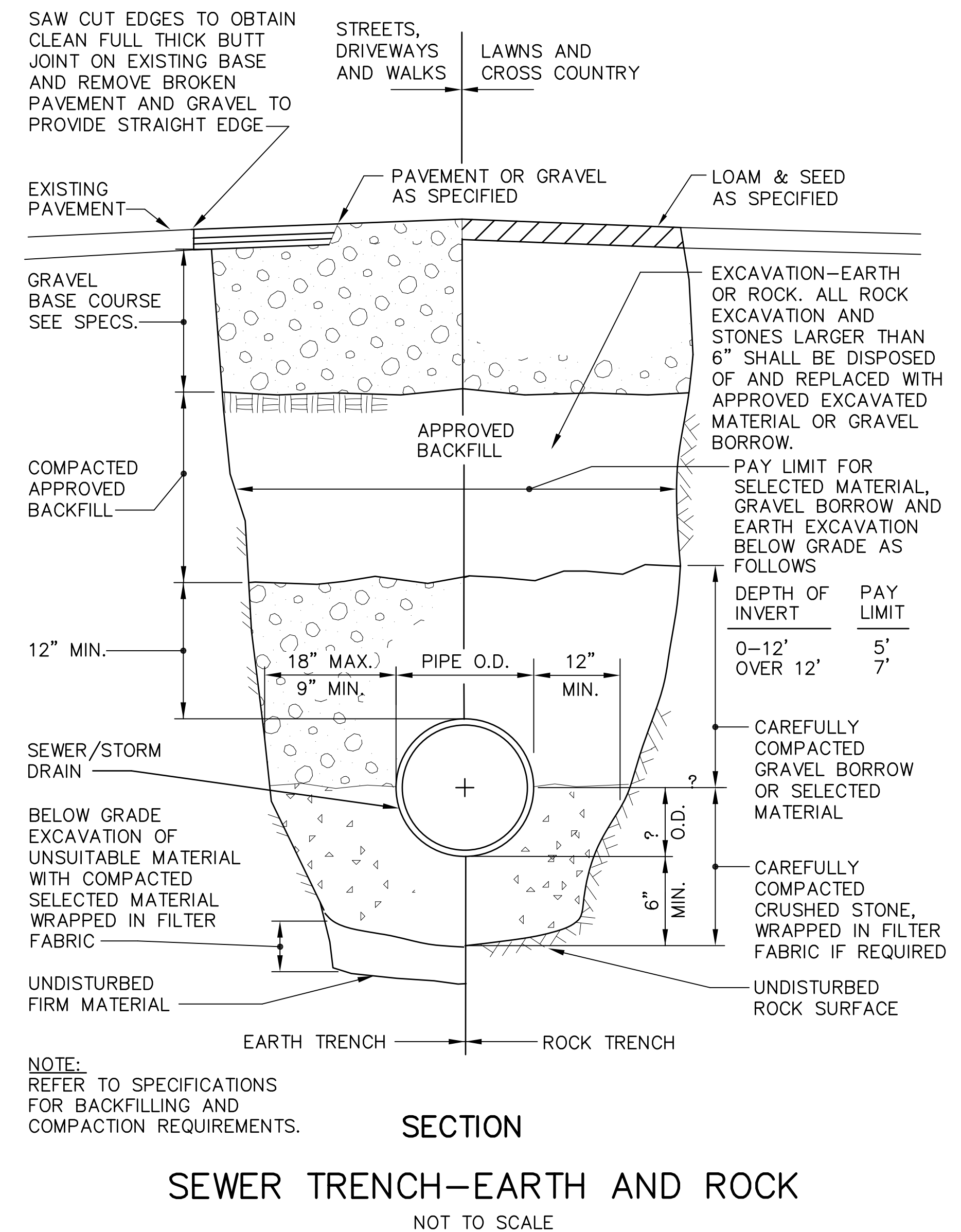
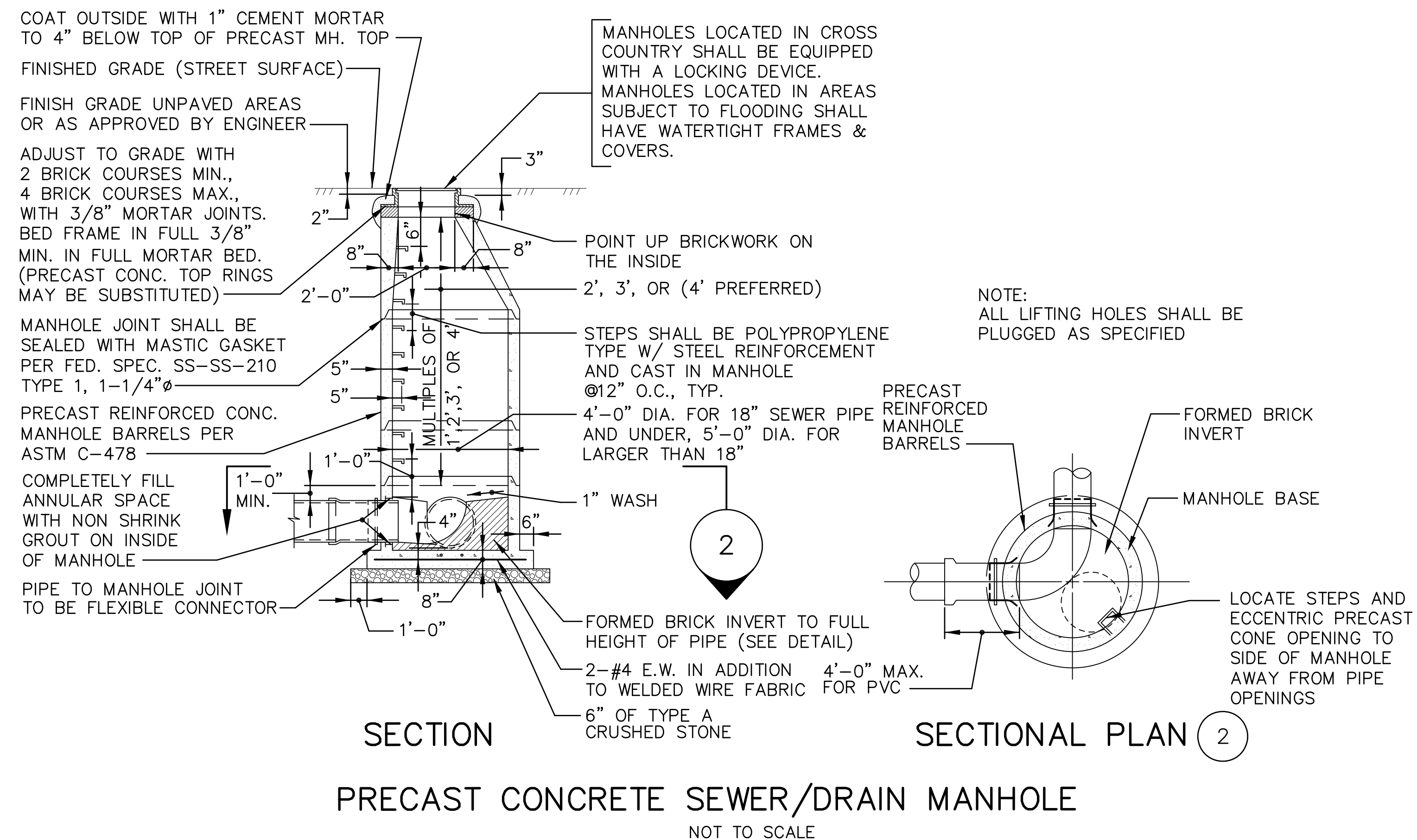
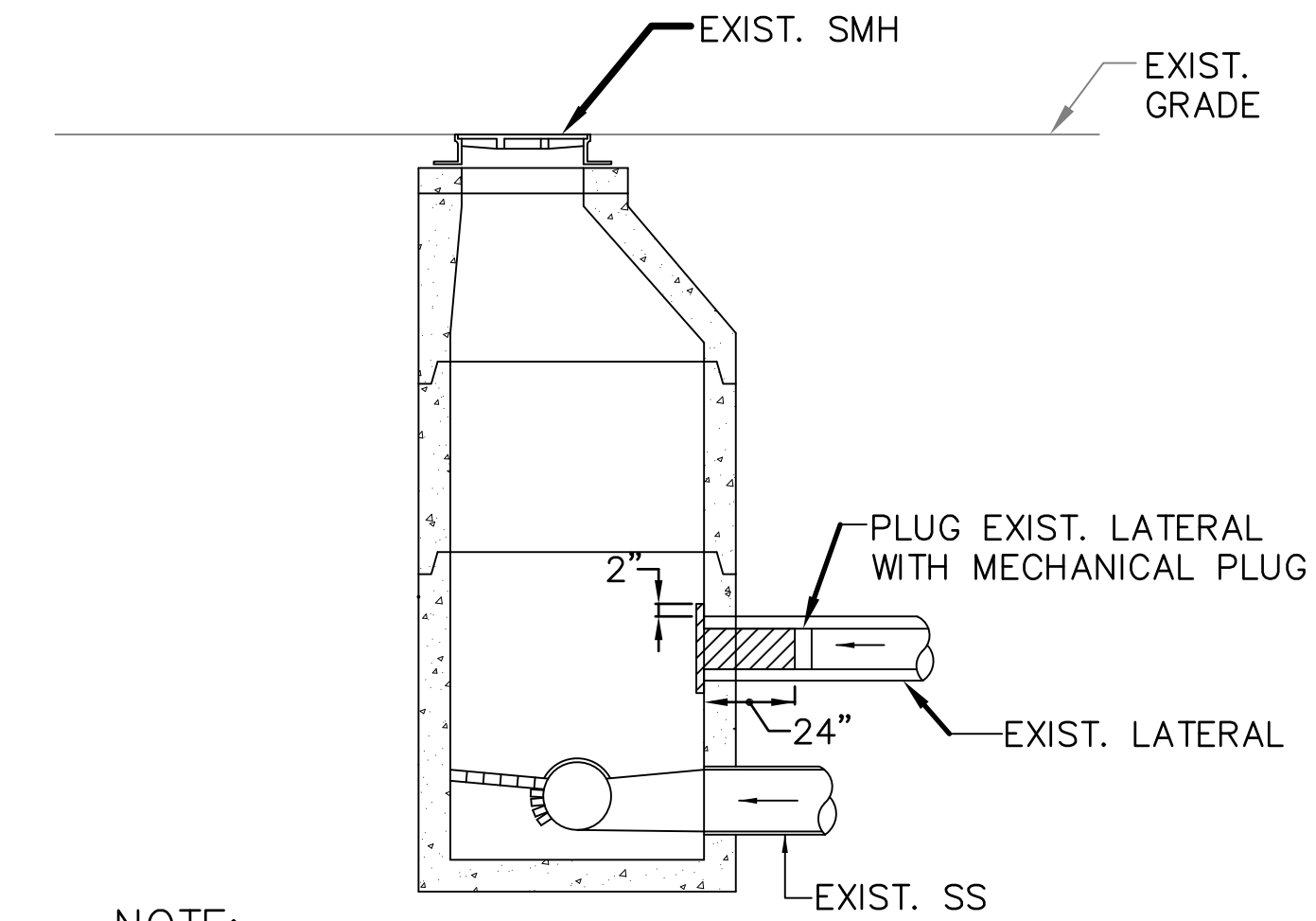
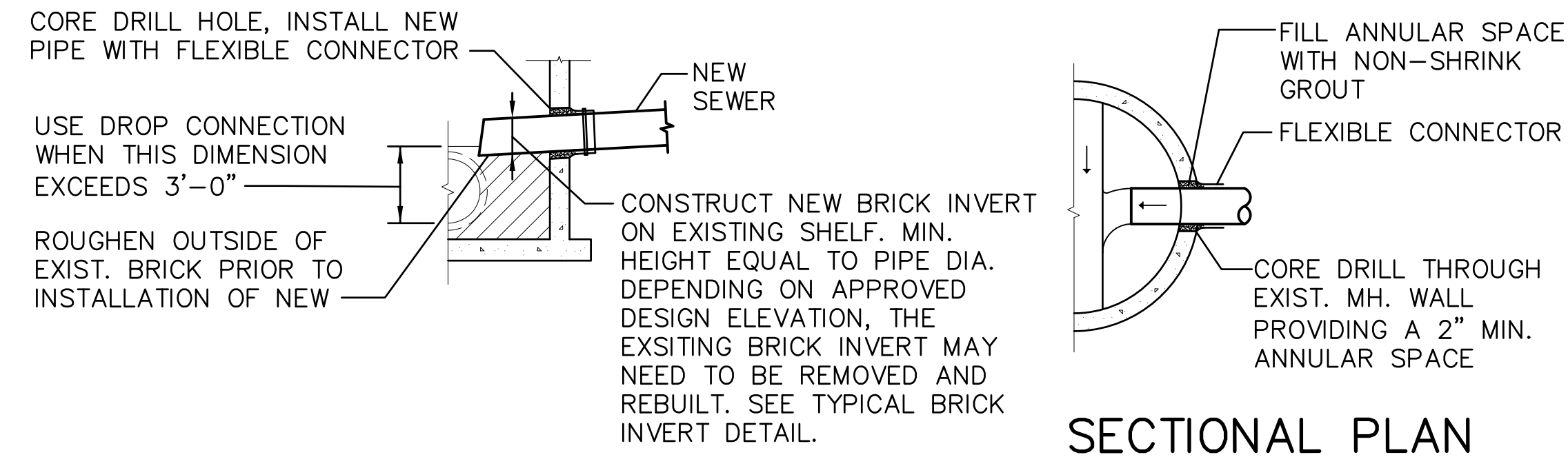
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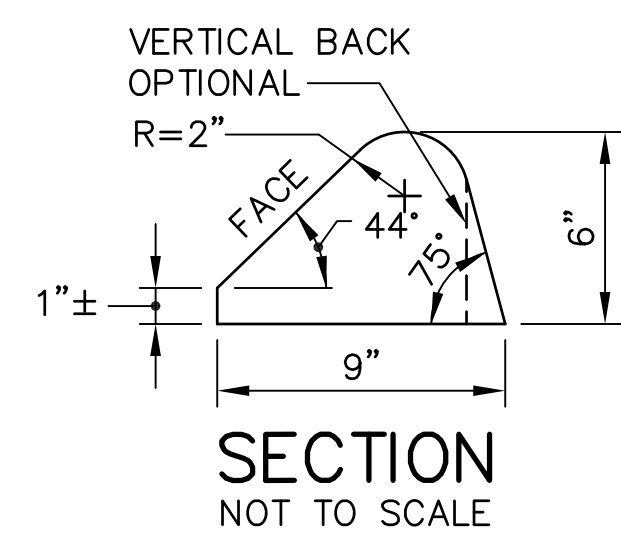


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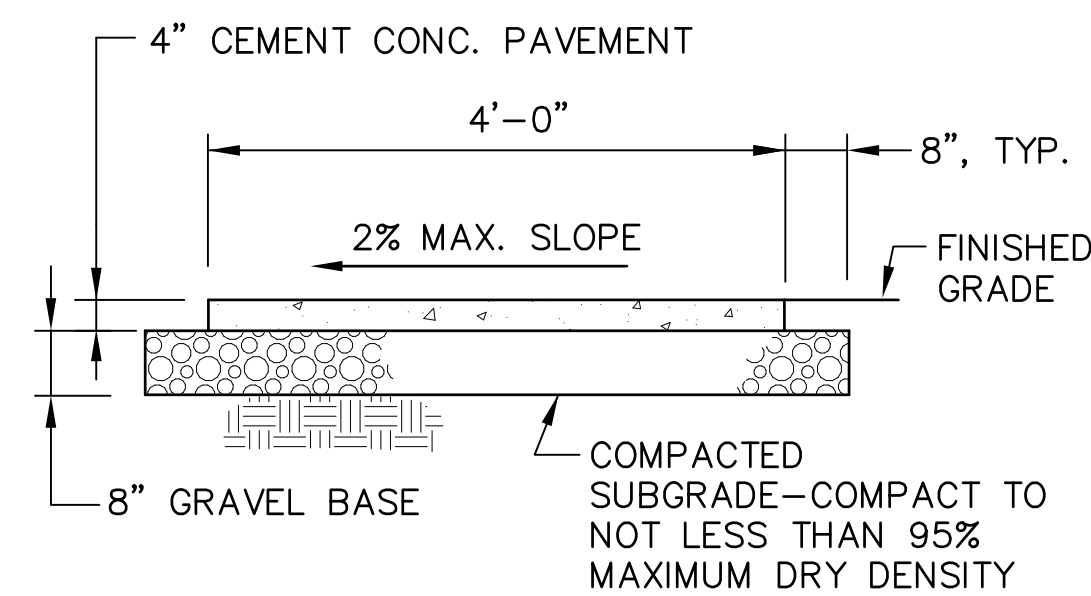


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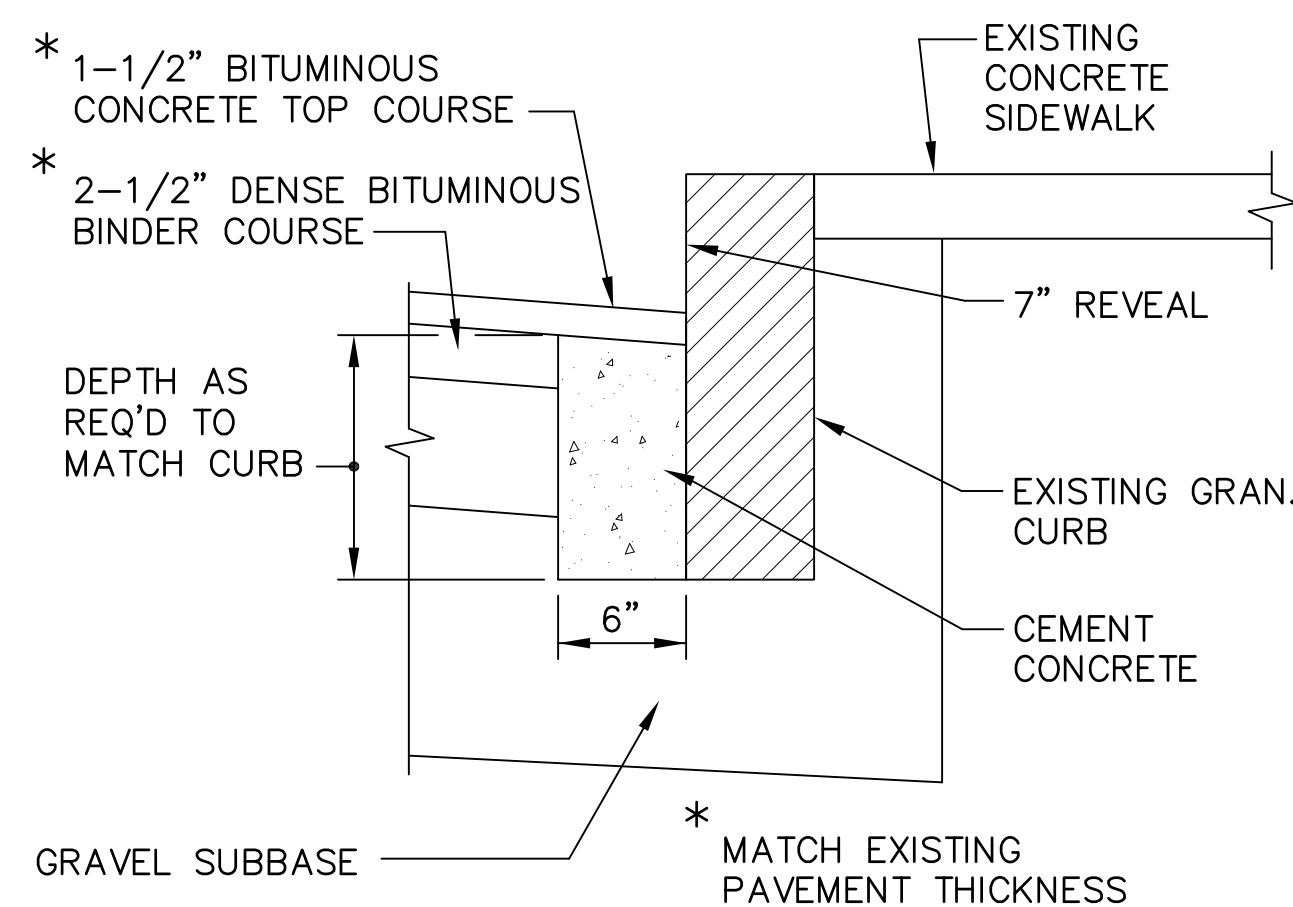


BITUMINOUS CONCRETE CURB
NOT TO SCALE

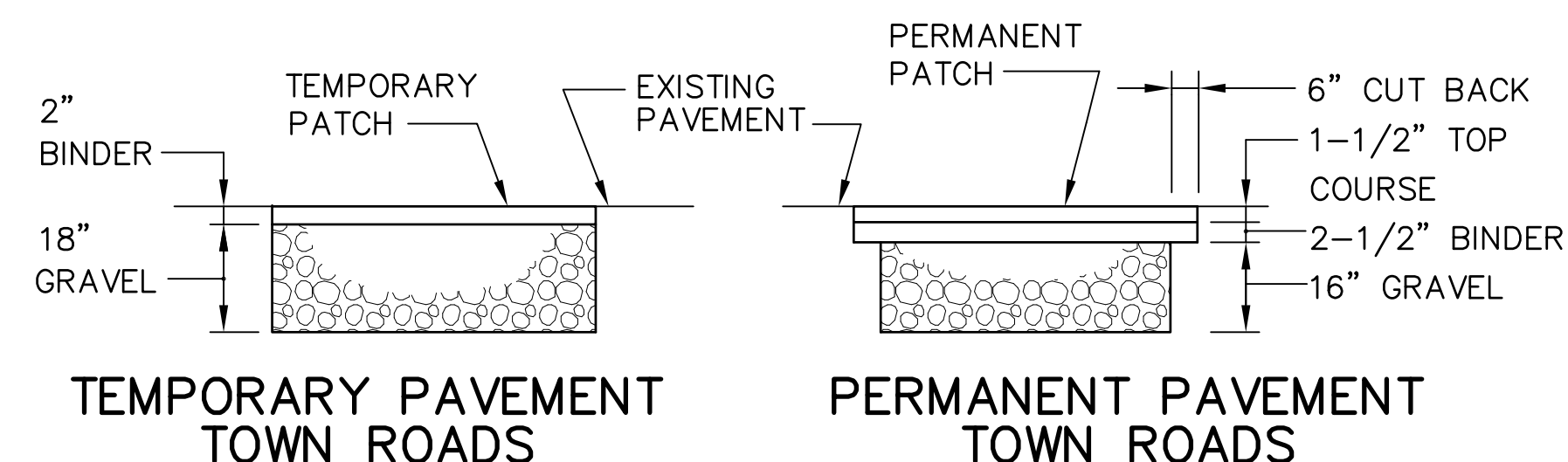


SECTION WITHOUT CURB
NOT TO SCALE

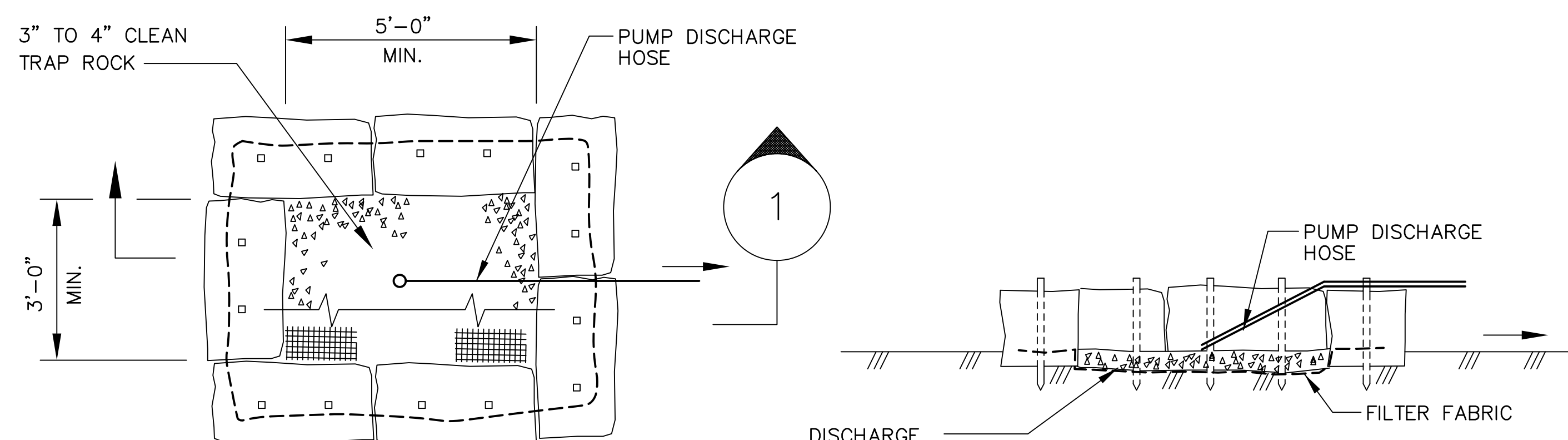
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NOT TO SCALE



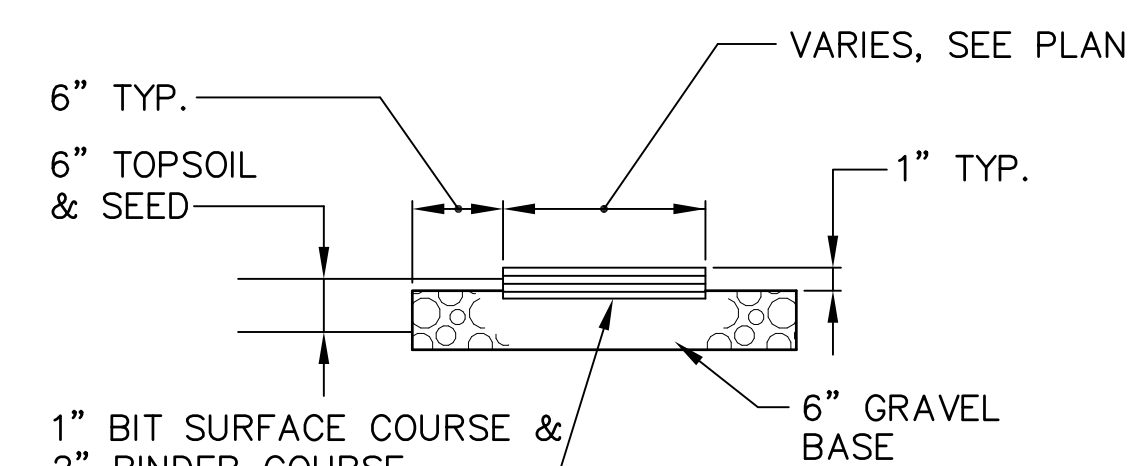
NOT TO SCALE



NOT TO SCALE



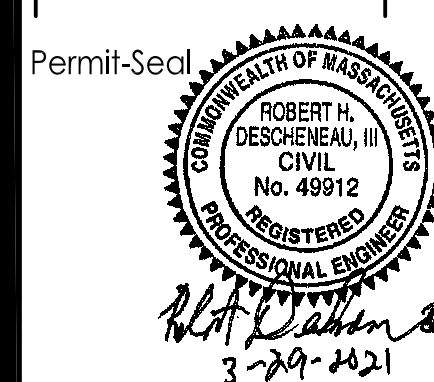
SEDIMENT CONTROL BASIN
NOT TO SCALE



NOT TO SCALE

[illegible]

TOWN OF BELMONT, MASSACHUSETTS
PRIVATE SECTOR SUMP PUMP REMOVAL &
SEWER SYSTEM REHABILITATION
MWRA PROJECT NO. WRA-P11-04-3-1124 &
MWRA PROJECT NO. WRA-P-11-04-3-1160
BELMONT, MASSACHUSETTS
MISCELLANEOUS DETAILS 2 OF 2



Project Number:		195113362	
File Name:		C-501-C-503 DETAILS.DWG	
AMD	RHD	RPB	21.03.31
Dwn.	Chkd.	Dsgn.	YY.MM.DD
Drawing No.		C-503	
Revision		Sheet	

Attachment 1

**Sub-catchment Areas 8-2, 8-3, 8-4,
8-5, 8-6, 10-1, 10-2, 11, 11A, 12, 13**

Tributary Areas

Outfall 8-2 Tributary Sampling																										
Sampling Parameter	Unit	Threshold Value	Sampling Location, Sampling Date, and Measured Value																							
			Sample No.	8-2					8-2-1			8-2-2			8-2-3			8-2-4			8-2-4A			8-2-5	8-2-6	8-2-7
			Date	11/8/2016	7/27/2017	8/11/2017	11/9/2020	3/24/2021	7/26/2019	7/27/2017	8/11/2017	7/27/2017	7/26/2019	3/24/2021	7/27/2017	7/26/2019	3/24/2021	8/10/2017	7/26/2019	3/24/2021	10/17/2017	7/26/2019	3/24/2021	9/26/2017	9/26/2017	3/24/2021
			MH #	23D045	23D045	23D045	23D045	23D045	23D045	24D016	24D016	23D028	23D028	23D028	23D028	23D028	24D040	24D040	24D040	24D040	24D040	24D040	23D028.1	19D017	19D013	
			Location Description	Concord ave at Goden from Goden	Concord ave at Goden from Goden	Concord ave at Goden from Goden	Concord ave at Goden from Goden	Concord ave at Goden from Goden	Concord ave at Goden from Goden	Common and Orchard from Common 4" pipe	Common and Orchard from Common 4" pipe	Orchard and Goden from Orchard	Orchard and Goden from Orchard	Orchard and Goden from Orchard	Orchard and Goden from Goden	Orchard and Goden from Goden	Orchard and Goden from Goden	Orchard in front of school from 15" on Orchard St	Orchard in front of school from 15" on Orchard St	Orchard in front of school from 15" on Orchard St	Orchard in front of school from Easement	Orchard in front of school from Easement	Orchard in front of school from Easement	Orchard St at Glendale Rd from Orchard St	Farimont and Goden. Sample sheet does not indicate sample location. GIS indicates NS	From Upstream on Goden St at Hillcrest Rd
E. Coli	MPN/100mL	235		1950	1100	1300	19,700	100	<100	>20,000	>20,000	10,500	300	<100	900	<100	<100	>20,000	<100	700	ND	200	DRY	N.T	N.T	<100
Ammonia (NH ₃)	mg/L	0.5		2	0.3	0.1	0.25	N.T.	N.T.	6	5	3	N.T.	N.T.	0.1	N.T.	N.T.	6	N.T.	N.T.	0.1	N.T.	N.T.	3	0	N.T.
Surfactants	ppm	0.25		0.25	N.T.	0.25	N.T.	N.T.	N.T.	N.T.	0.75	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	0.4	N.T.	N.T.	N.T.	N.T.	N.T.	0.5	N.T	N.T.
Enterococcus	/100mL			300	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.

Most Recent Reporting Period

ND

Sampled - None Detected

N.T.

Not Tested

NS

Not Sampled - Very little flow or wet but no flow

DRY

System was dry

					Outfall 8-3 Tributary Sampling				
Sampling Parameter	Unit	Threshold Value			Sampling Location, Sampling Date, and Measured Value				
			Sample No.	8-3					
			Date	11/8/2016	11/9/2020	3/24/2021			
			MH #	Culvert	Culvert	Culvert			
			Location Description	Concord Ave @ Library	Concord Ave @ Library	Concord Ave @ Library			
E. Coli	MPN/100mL	235		ND	500	1,400			
Ammonia (NH ₃)	mg/L	0.5		0.1	0.25	0.4			
Surfactants	ppm	0.25		0.15	N.T.	N.T.			
Enterococcus	/100mL			ND	N.T.	N.T.			

Most Recent Reporting Period

ND Sampled - None Detected
 N.T. Not Tested
 NS Not Sampled - Very little flow or wet but no flow
 DRY System was dry

				Outfall 8-4 Tributary Sampling						
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value						
			Sample No.	8-4			8-4-1			
			Date	11/8/2016	11/9/2020	3/24/2021	3/24/2021			
			MH #	Culvert	Culvert	Culvert	31D007			
			Location Description	Common St near Royal Rd	Common St near Royal Rd	Common St near Royal Rd	Royal Rd and Common St from Concord Ave across Railroad			
E. Coli	MPN/100mL	235		ND	22,000	1,900	500			
Ammonia (NH ₃)	mg/L	0.5		0.3	0	N.T.	0.1			
Surfactants	ppm	0.25		0.2	N.T.	N.T.	N.T.			
Enterococcus	/100mL			ND	N.T.	N.T.	N.T.			

Most Recent Reporting Period

ND Sampled - None Detected

N.T. Not Tested

NS Not Sampled - Very little flow or wet but no flow

DRY System was dry

				Table 4 - Outfall 8-5 Tributary Sampling																																		
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value																																		
				Sample No.	OF 8-5								8-5-1			8-5-2			8-5-3		8-5-4		8-5-5		8-5-6			8-5-7		N/A	N/A	N/A	8-5-9		8-5-10		8-5-11	
				Date	11/8/2016	7/27/2017	8/11/2017	11/9/2018	7/26/2019	3/27/2020	11/9/2020	3/24/2021	7/27/2017	8/11/2017	7/26/2019	9/27/2017	11/9/2018	7/26/2019	8/11/2017	9/27/2017	7/26/2019	11/9/2018	7/26/2019	11/9/2018	11/9/2018	7/26/2019	3/27/2020	11/9/2018	9/27/2017	9/27/2017	9/27/2017	3/27/2020	3/24/2021	3/27/2020	3/27/2020			
				MH #	30D040.1	30D040.1	30D040.1	30D040.1	30D040.1	30D040.1	30D040.1	30D040.1	17D016	17D016	17D016	17D009	17D009	17D009	30D012	17D009	17D009	17D003	17D003	17D003	17D016	17D016	17D016	17D073	17D003	17D003	17D031	17D016	17D016	26D007	17D073			
				Location Description	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Between and behind 60- 66 & 68-74 Pearson	Brettwood and Hastings from Brettwood Rd	Brettwood and Hastings from Brettwood Rd	Brettwood and Hastings from Brettwood Rd	Brettwood and Pierce from Pierce	Brettwood and Pierce from Pierce	Brettwood and Pierce from Pierce	Waverly at Shean - no sampling location on sheet	Brettwood and Pierce from Brettwood	Brettwood and Pierce from Brettwood	Brettwood Rd at Homer Rd from Homer Rd	Brettwood Rd at Homer Rd - Outgoing pipe combined flow	Brettwood Rd from Brettwood Rd	Brettwood and Hastings from Hastings Rd	Brettwood and Hastings from Hastings Rd (Called 8-5-8)	Brettwood and Hastings from Hastings Rd (Called 8-5-8)	Waverly and Cherry	Orchard and Amelia from Amelia	Homer and Brettwood from Brettwood	12 Brettwood upstream of Homer	Brettwood and Hastings from Brettwood Rd	Brettwood and Hastings from Brettwood Rd	Drew at Beech from Beech St	279 Orchard upstream pipe			
E. Coli	MPN/100mL	235			1,100	7,400	300	1,200	2,200	220	4,800	200	12,400	3,100	400	16,000	600	500	1,000	7,400	300	<100	300	N.T.	N.T.	400	114	N.T.	DRY	N.T	N.T	600	<100	1	12			
Ammonia (NH ₃)	mg/L	0.5			0.6	0.05	1	0.1	N.T.	0.25	2	N.T.	4.5	3	N.T.	4.5	0.1	N.T.	0.8	0.35	N.T.	0.1	N.T.	0.5	0.25	N.T.	0.25	0.3	DRY	3.0	0.4	0.3	N.T.	0.0	0.0			
Surfactants	ppm	0.25			0.2	N.T	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T	0.1	N.T.	0.1	N.T.	N.T.	0.25	0.3	N.T.	N.T	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	DRY	N.T	N.T	N.T.	N.T.	N.T.	N.T.			
Enterococcus	/100mL				2600	N.T	N.T	N.T	N.T.	N.T.	N.T.	N.T.	N.T	N.T	N.T	N.T	N.T.	N.T.	N.T	N.T	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T	N.T	N.T	N.T.	N.T.	N.T.	N.T.			

ND
N.T.
NS
DRY

Most Recent Reporting Period
Sampled - None Detected
Not Tested
Not Sampled - Very little flow or wet but no flow
System was dry

Sub-catchment 8-6 - Tributary Sampling																																								
Sampling Parameter	Unit	Threshold Value	Sample No. Date	Sampling Location, Sampling Date, and Measured Value																																				
				OF 8-6					8-6-1			8-6-2	8-6-3	8-6-4	8-6-5		8-6-6		8-6-7	8-6-8	8-6-9	8-6-10	8-6-11		8-6-12		8-6-13	8-6-14	8-6-15	8-6-16	8-6-17	8-6-18	8-6-19	8-6-20	8-6-21	8-6-22		8-6-23	8-6-24	
				11/8/2016	7/27/2017	11/9/2018	11/9/2020	11/20/2020	7/27/2017	11/9/2018	3/23/2021	7/27/2017	7/27/2017	7/27/2017	10/5/2017	11/20/2020	10/5/2017	11/20/2020	10/5/2017	10/5/2017	10/5/2017	10/5/2017	10/17/2017	3/23/2021	11/10/2017	3/24/2021	11/10/2017	11/10/2017	11/10/2017	11/10/2017	11/10/2017	11/10/2017	11/10/2017	11/9/2018	11/9/2018	11/9/2018	11/20/2020	3/23/2021	3/23/2021	3/23/2021
			MH #	CB 30D067	CB 30D067	CB 30D067	CB 30D067	CB 30D067	14D026	14D026	14D026	14D061	14D003	14D003	26D025	26D025	26D025	26D025	14D068	12D004	16D003	14D054	14D064 Trapelo Rd from Upstream pipe parallel ro roadway (near Flett)	14D064 Trapelo Rd from Upstream pipe parallel to roadway (near Flett)	14D016	14D016	14D067	12D089	12D075	12D067	12D062	12D068	14D055	13D035	14D027	14D062	14D062	14D060	14D060	
			Location Description	Pearson and Gorden	Pearson and Gorden	Pearson and Gorden	Pearson and Gorden	Pearson and Gorden	Bartlett at 57-59 from Alma direction	Bartlett at 57-59 from Alma direction	Bartlett at 57-59 from Alma direction	Behind houses on Bartlett Ave in field	Wilson from 307 trapelo (near Flett)	From Wilson near Flett	Creeley @ Leslie flow from Creeley	Creeley @ Leslie flow from Creeley	Creeley @ Leslie flow from easement	Creeley @ Leslie flow from easement	Maple near Bartlett. Possible unknown underdrain	Creeley @ Gilbert from 78/80 Gilbert	Upstream pipe of CB on Gilbert	Trapelo Rd from Upstream pipe near Flett/CVS	14D064 Trapelo Rd from Upstream pipe parallel ro roadway (near Flett)	14D064 Trapelo Rd from Upstream pipe parallel to roadway (near Flett)	From Flett at Wilson	From Flett at Wilson	Flett near Trapelo from Trapelo	Trapelo at Slade. Upstream pipe	Trapelo near Williston. Upstream pipe	Trapelo at Williston from upstream pipe on Trapelo	Trapelo @ Common	Trapelo @ Common	Flow from Jeanette at Bartlett	22 Alma	flow from Vincent at Bartlett	Trapelo Rd from Downstream pipe near TD Bank	Trapelo Rd from Downstream pipe near TD Bank	Behind 61 Bartlett Ave from Bartlett	Behind 61 Bartlett Ave from Maple Ave	
E. Coli	MPN/100mL	235		1,550	14,400	1,200	10,600	1,300	12,750	<100	<100	800	300	16,800	ND	<100	>20,000	5,000	>20,000	100	ND	ND	350	<100	200	100	100	9,100	100	ND	ND	ND	<100	<100	<100	4,300	1,600	<100	<100	
Ammonia (NH ₃)	mg/L	0.5		0.1	0.2	N.T.	0.25	0	0	N.T.	0.25	0	0.5	0.35	0	2	0	0.6	0.15	0.1	0	0.1	0.25	N/A	N.T.	N/A	N/A	N/A	N/A	N/A	N/A	N.T.	N.T.	N.T.	N.T.	0	0	0.25	0.25	
Surfactants	ppm	0.25		0.25	N.M.	N.T.	N.T.	N.T.	N.M.	N.T.	N.T.	N.M.	N.M.	N.M.	N.T.	N.T.	N.T.	N.T.	0	N.T.	N.T.	N/A	0.25	N.T.	N/A	N.T.	N/A	N/A	N/A	N/A	N/A	N/A	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.
Enterococcus	/100mL			150	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.

ND
N.T.
NS
DRY

Most Recent Reporting Period
Sampled - None Detected
Not Tested
Not Sampled - Very little flow or wet but no flow
System was dry

Sub-catchment 10-1 - Tributary Sampling																		
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value														
			Sample No.	10-1				10-1-1		10-1-2			10-1-3	10-1-4	10-1-5	10-1-6	10-1-7	10-1-8
			Date	11/8/2016	7/27/2017	11/10/2020	3/23/2021	7/27/2017	12/16/2020	7/27/2017	12/16/2020	3/23/2021	12/16/2020	12/16/2020	12/16/2020	3/23/2021	3/23/2021	3/23/2021
			MH #	Open Culvert	Open Culvert	Open Culvert	Open Culvert	48D036	48D036	34D087	34D087	34D087	54D025	48D024	Open Culvert	N/A	N/A	Open Culvert
			Location Description	Clafin St north of Alexander Ave	Clafin St north of Alexander Ave	Clafin St north of Alexander Ave	Clafin St north of Alexander Ave	Clifton and Pleasant	Clifton and Pleasant	Clafin St and Alexander Ave from Clafin (South)	Clafin St and Alexander Ave from Clafin (South)	Clafin St and Alexander Ave from Clafin (South)	Belmont Hill School Athletic Center Parking Lot from Marsh St	85 Clifton St from East (Garfield Rd)	Winn's Brook at Hickory Ln and Clifton St	Hickory Lane at Clifton St from Clifton	Flectcher Rd at Clifton St from Clifton	Winn's Brook at Flectcher Rd and Clifton St
E. Coli	MPN/100mL	235		1,250	ND	7,900	<100	500	2,100	100	10,600	<100	<100	2,600	1,500	500	<100	<100
Ammonia (NH ₃)	mg/L	0.5		0	0	0.25	0.3	0.5	0	N.T.	2	0.1	0	0	0	0.25	0	0
Surfactants	ppm	0.25		0.25	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.
Enterococcus	/100mL			450	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.

Most Recent Reporting Period

ND

Sampled - None Detected

N.T.

Not Tested

NS

Not Sampled - Very little flow or wet but no flow

DRY

System was dry

				Outfall 10 Tributary Sampling																													
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value																													
				Sample No.	OF-10-2			10-2-1	10-2-2	10-2-3		10-2-3A		10-2-4	10-2-5	10-2-6			10-2-7				N/A	N/A	N/A	10-2-8	10-2-9	10-2-10	N/A	N/A			
				Date	9/1/2017	11/8/2018	7/26/2019	9/1/2017	9/1/2017	7/26/2019	3/23/2021	7/26/2019	3/23/2021	9/1/2017	9/1/2017	9/27/2017	11/9/2018	3/23/2021	9/27/2017	11/9/2018	7/26/2019	3/23/2021	9/27/2017	9/27/2017	9/27/2017	9/27/2017	9/27/2017	9/28/2017	9/28/2017	9/28/2017	9/28/2017		
			Location Description	MH #	Culvert	Culvert	Culvert	37D036	44D046	37D055	37D055	37D055	37D055	37D055	43D014	43D034	37D042	37D042	37D042	37D042	37D042	37D042	37D042	37D042	37D042	45D011	45D015	44D024	44D011	38D006	44D021	44D005	
				Winn Brook Outfall (called OF 10-2	Winn Brook Outfall (called OF 10-2	Winn Brook Outfall (called OF 10-2	Brighton at Larch from Brighton	Brighton at Albert from Albert	Waterhouse at Westlund from Waterhouse	Waterhouse at Westlund from Waterhouse	Waterhouse at Westlund from Waterhouse	Waterhouse at Westlund from Westlund	Waterhouse at Westlund from Westlund	Munroe near Cross from between 86 and 93 Munroe	Chilton at Dean from Dean	Waterhouse from Holitt (#37 direction)	Waterhouse from Holitt (#37 direction)	Waterhouse from Holitt (#37 direction)	Waterhouse and Holitt from Waterhouse	Waterhouse and Holitt from Waterhouse	Waterhouse and Holitt from Waterhouse	Waterhouse and Holitt from Waterhouse	Waterhouse and Holitt from Waterhouse	Waterhouse and Holitt - Flow from CB	Albert Ave from Pilgrim Ave	Plymouth Ave from direction of 25 Pilgrim Rd	Hurley @ Middlecot from Middlecot	from between 11 & 17 Cowdin	Slater @ Newcastle Rd from Newcastle	from between 29 & 25 Hurley	15 Chilton Street upstream pipe		
E. Coli	MPN/100mL	235		200	1,000	100	ND	800	>20,000	>30,000	2,600	>30,000	8,700	500	ND	>20,000	2,700	11,400	1,300	<100	>30,000	<100	N.T.	N.T.	N.T.	100	200	150	N.T.	N.T.	N.T.	N.T.	N.T.
Ammonia (NH ₃)	mg/L	0.5		0	0.5	N.T.	0	0	4	N.T.	3	N.T.	6	0.25	N.T.	4	0.4	6	0.35	0	N.T.	0.25	0.3	0.1	0.15	0	0.35	0.65	0.35	0.1	N.T.	N.T.	
Surfactants	ppm	0.25		0.25	N.T.	N.T.	0.1	0.25	0.25	N.T.	N.T.	N.T.	N.T.	0.1	0.1	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.

ND

Most Recent Reporting Period

Sampled - None Detected

N.T.

Not Tested

NS

Not Sampled - Very little flow or wet but no flow

DRY

System was dry

				Outfall 11 Tributary Sampling			
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value			
			Sample No.	OF-11			
			Date	11/8/2016	6/23/2017	11/9/2020	3/23/2021
			MH #	41D045	41D045	41D045	41D045
			Location Description	42 Oliver Rd from Staunton	43 Oliver Rd from Staunton	44 Oliver Rd from Staunton	44 Oliver Rd from Staunton
E. Coli	MPN/100mL	235		>10,000	13,800	1,200	4,900
Ammonia (NH ₃)	mg/L	0.5		0.35	0.6	0.25	1
Surfactants	ppm	0.25		0.3	0.5	N.T.	N.T.
Enterococcus	/100mL			2700	N.T.	N.T.	N.T.

Most Recent Reporting Period

ND Sampled - None Detected
 N.T. Not Tested
 NS Not Sampled - Very little flow or wet but no flow
 DRY System was dry

				Outfall 11A Tributary Sampling				
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value				
			Sample No.	OF-11A				11A-1
			Date	11/8/2016	6/23/2017	11/10/2020	3/23/2021	3/23/2021
			MH #	41D045	41D045	41D045	41D045	41D045
			Location Description	42 Oliver Street	42 Oliver Street	42 Oliver Street	42 Oliver Street	42 Oliver Street
E. Coli	MPN/100mL	235		8,600	>20,000	2,600	<100	300
Ammonia (NH ₃)	mg/L	0.5		3	>6	0.6	1	1
Surfactants	ppm	0.25		0.5	0.6	N.T.	N.T.	N.T.
Enterococcus	/100mL			3200	N.T.	N.T.	N.T.	N.T.

Most Recent Reporting Period

ND Sampled - None Detected
 N.T. Not Tested
 NS Not Sampled - Very little flow or wet but no flow
 DRY System was dry

				Outfall 12 Tributary Sampling										
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value										
			Sample No.	OF-12					12-1			12-2		12-3
			Date	11/8/2016	6/23/2017	11/10/2020	12/16/2020	3/24/2021	6/23/2017	11/10/2020	3/24/2021	6/23/2017	3/24/2021	6/23/2017
			MH #	41D037	41D037	41D037	41D037	41D037	41D019	41D019	41D019	41D017	41D017	41D011
			Location Description	115 Oliver Rd	115 Oliver Rd	115 Oliver Rd	115 Oliver Rd	115 Oliver Rd	Gilmore and Oliver from Oliver	99 Oliver Rd	Gilmore and Oliver from Oliver	Oliver and Little Pond Rd from Little Pond Rd	Oliver and Little Pond Rd from Little Pond Rd	Little Pond Road from 321 Cross St
E. Coli	MPN/100mL	235		>10,000	16,000	200	700	100	1,300	200	100	3,000	200	ND
Ammonia (NH ₃)	mg/L	0.5		0.35	4	0.25	0	0	0	0.25	0	0.3	0	0
Surfactants	ppm	0.25		0.25	0.4	N.T.	N.T.	N.T.	0.4	N.T.	N.T.	0.4	N.T.	0.75
Enterococcus	/100mL			300	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.	N.T.

Most Recent Reporting Period

ND

Sampled - None Detected

N.T.

Not Tested

NS

Not Sampled - Very little flow or wet but no flow

DRY

System was dry

				Outfall 13 Tributary Sampling				
Sampling Parameter	Unit	Threshold Value		Sampling Location, Sampling Date, and Measured Value				
			Sample No.	OF-13				
			Date	11/8/2016	11/10/2020	3/24/2021		
			MH #	41D057	41D057	41D057		
			Location Description	Garrison Rd @ Oliver Rd	Garrison Rd @ Oliver Rd	Garrison Rd @ Oliver Rd		
E. Coli	MPN/100mL	235		50	100	<100		
Ammonia (NH ₃)	mg/L	0.5		0.4	1	0		
Surfactants	ppm	0.25		0.25	N.T.	N.T.		
Enterococcus	/100mL			50	N.T.	N.T.		

Most Recent Reporting Period

ND Sampled - None Detected

N.T. Not Tested

NS Not Sampled - Very little flow or wet but no flow

DRY System was dry