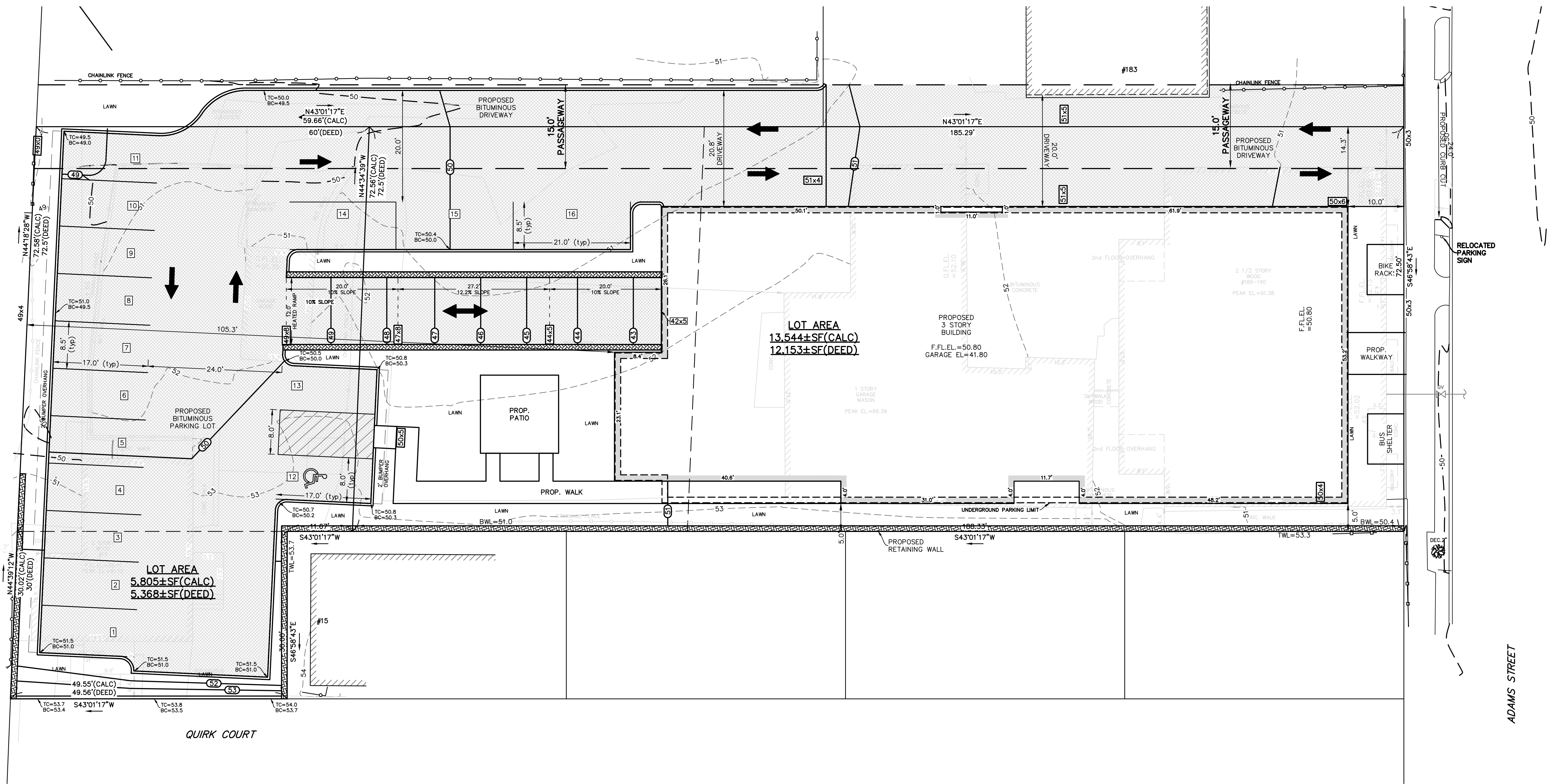
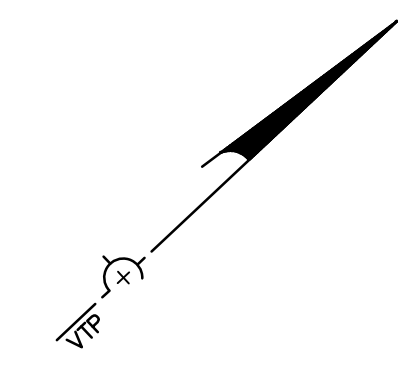


218100_193p6.dwg (2-2018)



LEGEND

BUILDING	
PROPERTY LINE W/ BEARING DISTANCE	S81°56'34"E 116.23'
CONTOUR	70
STOCKADE FENCE	
CHAINLINK FENCE	
PICKET FENCE	
SEWER LINE	S
DRAIN LINE	D
WATER LINE	W
GAS LINE	G
GAS VALVE	
WATER VALVE	
SEWER MANHOLE	
DRAIN MANHOLE	
CATCH BASIN	
UTILITY POLE	
LIGHT POLE	
DECIDUOUS TREE	DEC. 22'
CONIFEROUS TREE	CON. 12'
HYDRANT	



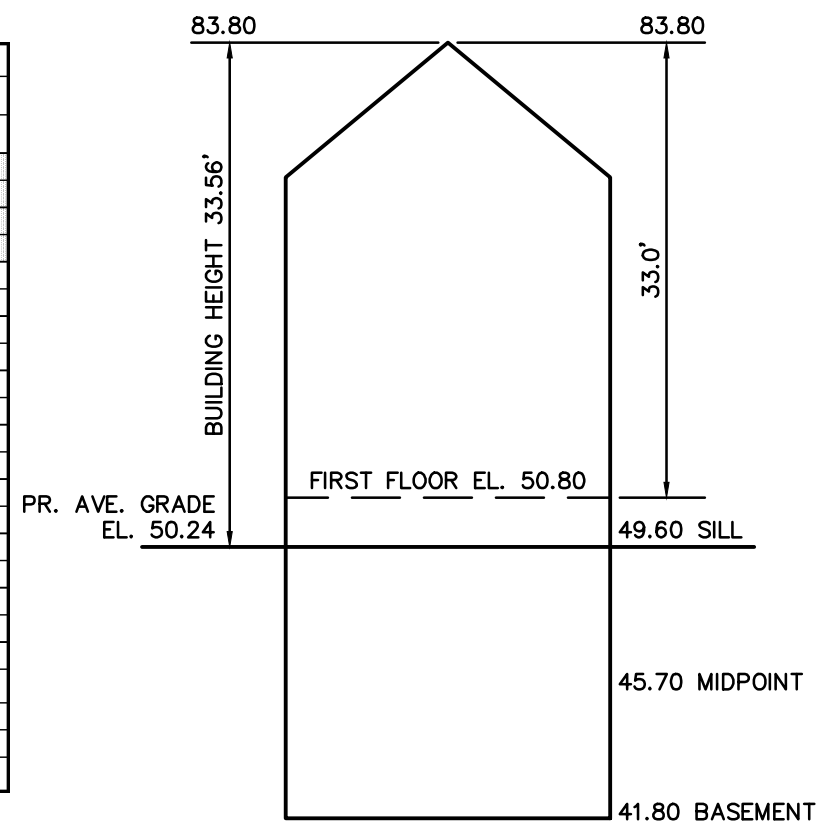
Address: 189-193 Adams Street, 19 Quirk Court

Length Weighted Mean

Proposed Conditions Average Grade Calculation

Segment	Length of Segment	Height of High Point	Height of Low Point	E=(C+D)/2	F=BxE
1	55.20	50.30	50.30	50.30	2875.98 Sq. Ft.
2	51.00	51.50	50.50	51.00	2601.00 Sq. Ft.
3	10.90	51.50	51.45	51.48	561.08 Sq. Ft.
4	11.00	51.45	51.20	51.33	564.58 Sq. Ft.
5	50.10	51.20	50.50	50.85	2547.59 Sq. Ft.
6	7.70	50.40	50.40	50.40	389.09 Sq. Ft.
7	5.00	51.00	51.00	51.00	255.00 Sq. Ft.
8	12.00	42.50	42.50	42.50	510.00 Sq. Ft.
9	8.50	43.45	42.50	42.98	365.29 Sq. Ft.
10	23.10	50.50	50.50	50.50	1168.55 Sq. Ft.
11	9.70	51.00	50.50	50.75	492.28 Sq. Ft.
12	31.00	50.80	50.50	50.65	1570.15 Sq. Ft.
13	31.00	50.80	50.60	50.70	1571.70 Sq. Ft.
14	11.70	50.60	50.60	50.60	592.02 Sq. Ft.
15	48.20	50.60	50.30	50.45	2431.89 Sq. Ft.
Total	364.10				18292.95 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 50.24'



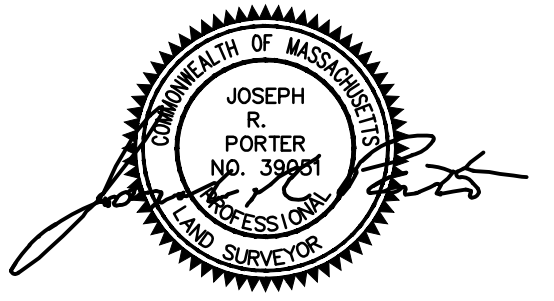
ZONING CHART

#189-193 ADAMS STREET, #19 QUIRK COURT

NEWTON, MASSACHUSETTS

ZONE: BU-2 SUBMISSION: SPECIAL PERMIT

REGULATION	REQUIRED	EXISTING	PROPOSED
Lot Area (min.)	10,000s.f.	13,544s.f.	19,349s.f.
Lot Area Per Unit (min.)	1,200s.f.	N/A	-s.f.
Front Setback (min.) 2 or 3 stories 4 Stories	Average Lesser of 1/2 bldg ht or Average	3.1'	10.0'
Side Setback	1/2 bldg ht or equal to abutting side yard setback	4.1'	5.0'
Rear Setback (min.)	Greater of 1/2 bldg ht or 15'	75.4'	105.3'
Building Height (max.) 3 stories 4 Stories	36' 48'	40.27'	33.56'
Average Grade	-	51.11	50.24
Lot Coverage	none	N/A	N/A
Open Space	none	N/A	N/A



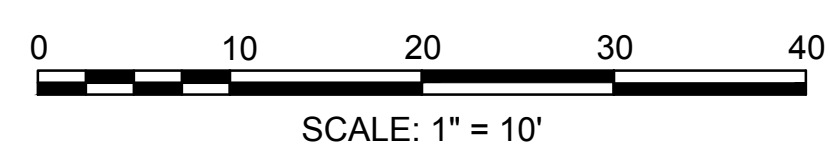
ZONING PLAN
NEWTON, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT
#189-193 ADAMS STREET & 19 QUIRK COURT

SCALE: 1in.=10ft. DATE: SEPTEMBER 7, 2018

DIG SAFE

EXCAVATORS
BEFORE YOU DIG CONTACT THE DIG SAFE CENTER TO PREVENT DAMAGE TO TELEPHONE, GAS OR ELECTRIC UNDERGROUND FACILITIES OF MEMBER UTILITIES. CALL TOLL FREE 1-888-322-4844. MASSACHUSETTS STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE YOU START DIGGING OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY



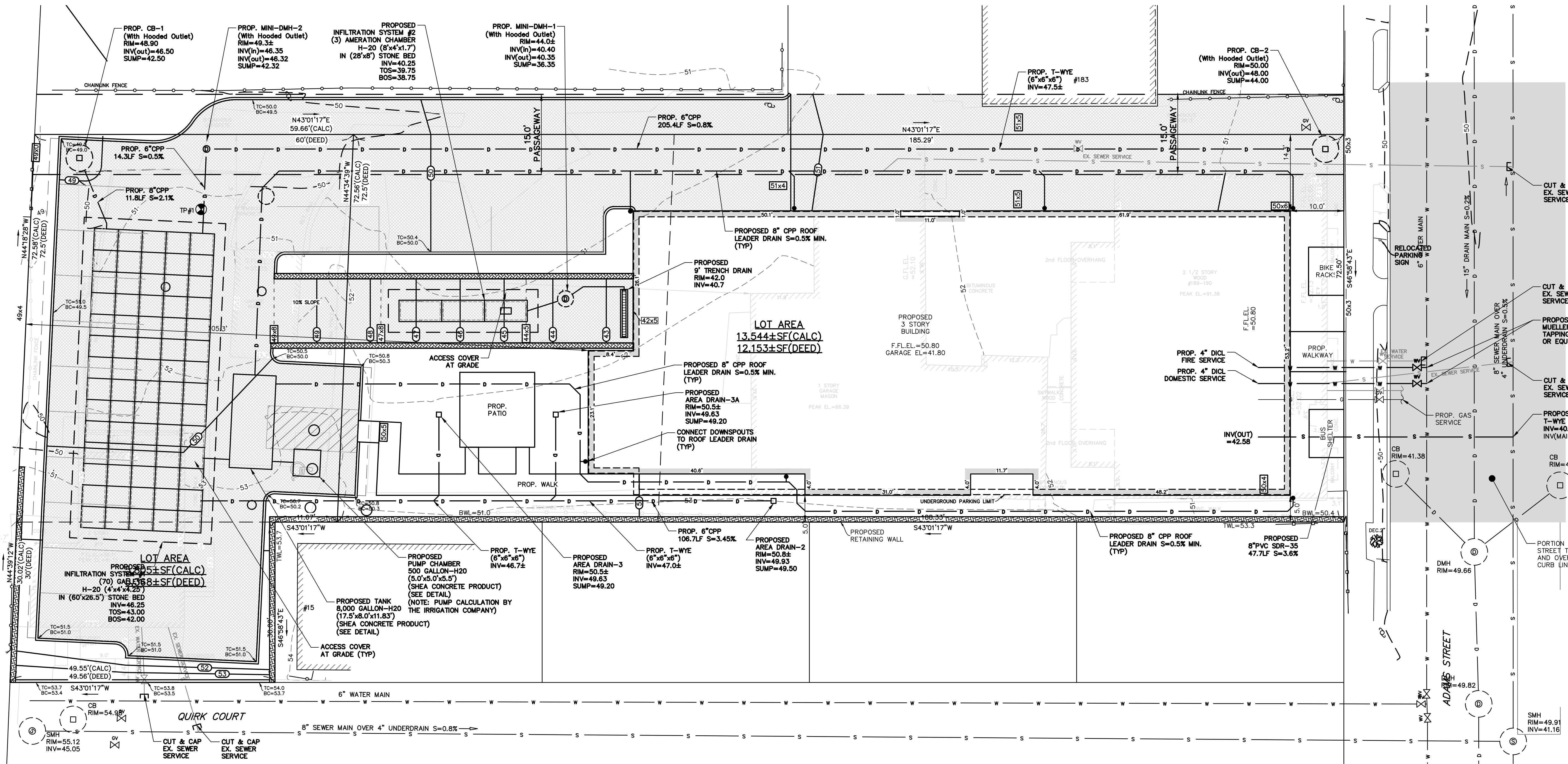
PROJECT: 218100

VTP ASSOCIATES INC.

LAND SURVEYORS - CIVIL ENGINEERS. 132 ADAMS STREET 2ND FLOOR SUITE 3 NEWTON, MA 02458 (617) 332-8271

SHEET 1 OF 3

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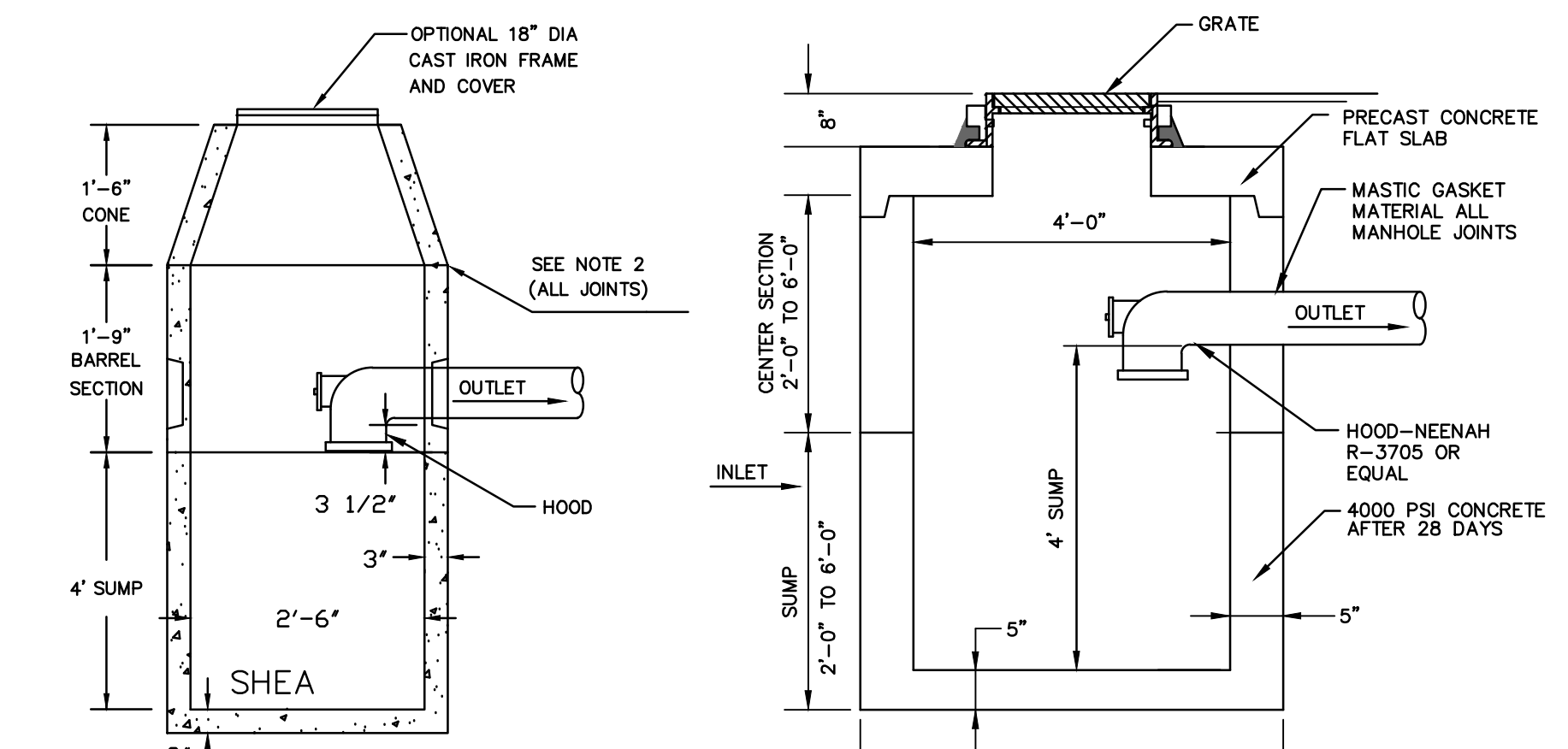
LEGEND

BUILDING	---
PROPERTY LINE W/ BEARING DISTANCE	S81°56'34"E 116.23'
CONTOUR	---
STOCKADE FENCE	---
CHAINLINK FENCE	---
PICKET FENCE	---
SEWER LINE	S
DRAIN LINE	D
WATER LINE	W
GAS LINE	G
GAS VALVE	⊗
WATER VALVE	⊗
DRAIN MANHOLE	⊗
SEWER MANHOLE	⊗
CATCH BASIN	⊗
UTILITY POLE	⊗
LIGHT POLE	⊗
DECIDUOUS TREE	⊗ DEC. 22'
CONIFEROUS TREE	⊗ CON. 12'
HYDRANT	⊗

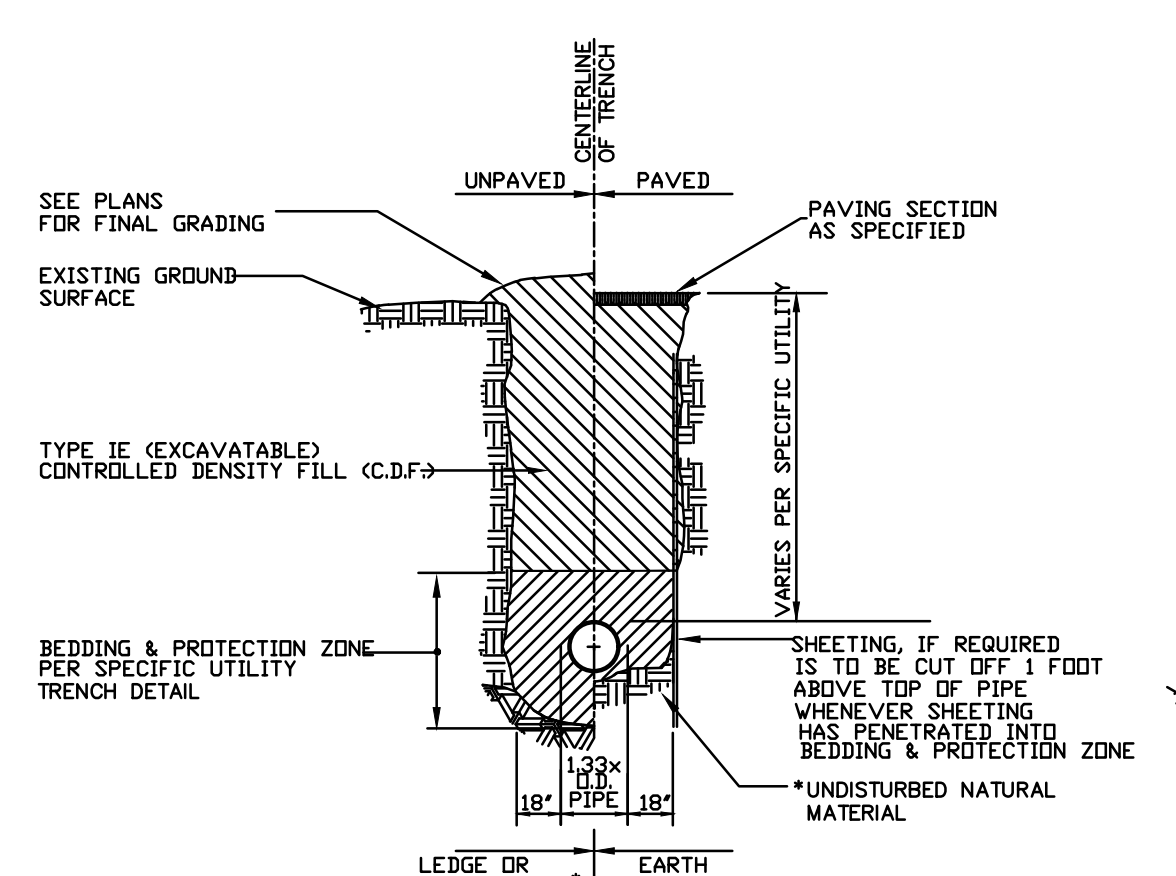
TESTPIT LOG

TESTPIT #1 (Feb. 21, 2018)
0'-18" TOPSOIL
18"-34" SUBSOIL
34"-118" LOAMY SAND TO SAND WITH GRAVEL & COBBLES
NO WATER
NO REFUSAL
PERC RATE <2MPI

- NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THIS PLAN. PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BEFORE PROCEEDING WITH THE WORK.
 2. THE LOCATION OF ALL UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER GATES, ETC. AND GOVERNMENT AGENCIES.
 3. ALL THE PROPOSED DOWNSPOUT TO CONNECT INTO INSIDE 8,000 GAL. TANK.

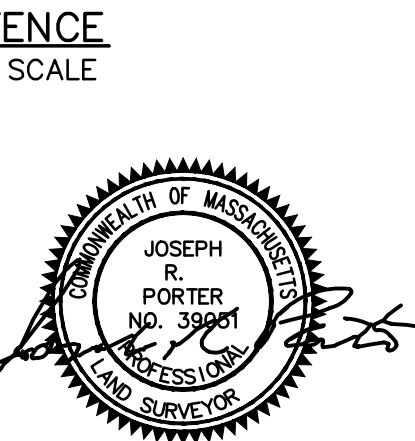
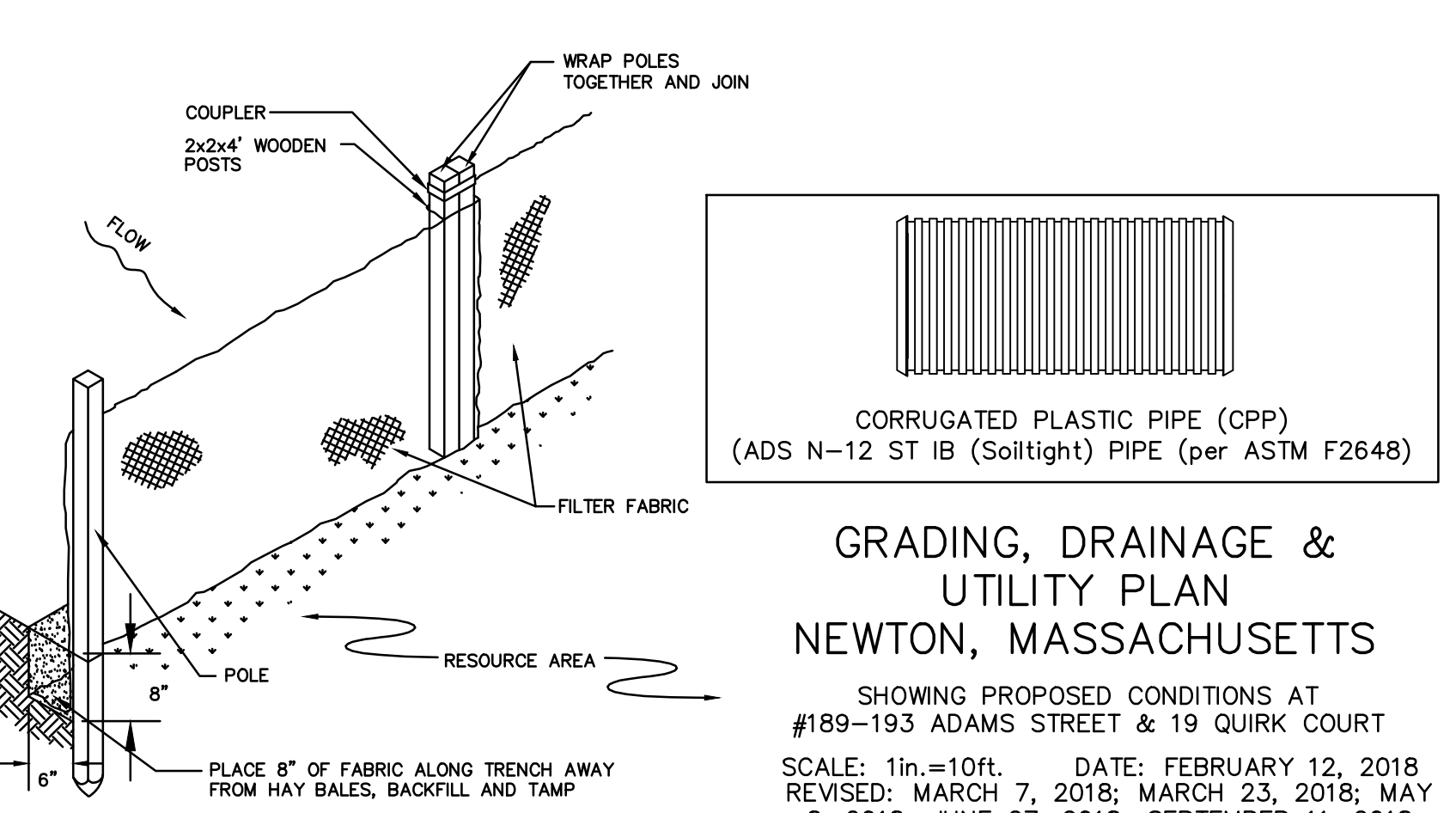


- NOTES:**
1. CONCRETE, 4000 PSI MINIMUM AFTER 28 DAYS.
 2. BUTYL RESIN SECTION JOINT CONFORMS TO LATEST ASTM C443 SPEC.
 3. FLAT COVER WITH CLEANOUT CAN BE USED IN PLACE OF CONE.
 4. OPTIONAL ROUND COVER CAN BE USED IN PLACE OF CAST IRON COVER AND FRAME.
- 30" MINI-DRAIN MANHOLE W/ HOOD**
NOT TO SCALE



* SUITABILITY OF MATERIAL IS TO BE DETERMINED BY THE CITY OF NEWTON.

TYPICAL C.D.F. TRENCH DETAIL
NOT TO SCALE



VTP ASSOCIATES INC.

LAND SURVEYORS - CIVIL ENGINEERS. 132 ADAMS STREET 2ND FLOOR SUITE 3 NEWTON, MA 02458 (617) 332-8271

SHEET 2 OF 3

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GENERAL & UTILITIES NOTES:

ALL NEW SEWER SERVICE AND/OR STRUCTURES SHALL BE PRESSURE TESTED OR VIDEOTAPED AFTER FINAL INSTALLATION IS COMPLETE. METHOD OF FINAL INSPECTION SHALL BE DETERMINED SOLELY BY THE CONSTRUCTION INSPECTOR FROM THE CITY ENGINEERING DIVISION...

THE SEWER SERVICES AND WATER SERVICES NEED TO BE COMPLETELY REMOVED FROM THE MAINS TO THE EXISTING DWELLING AND PROPERLY BACK-FILLED. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO HAVE THIS ABANDONMENT INSPECTED BY A REPRESENTATIVE OF THE ENGINEERING DIVISION...

AS OF MARCH 1, 2009, ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82A, TRENCH EXCAVATION SAFETY REQUIREMENTS, TO PROTECT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNATTENDED TRENCHES...

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEERING DIVISION AND SCHEDULING AN APPOINTMENT 48 HOURS PRIOR TO THE DATE WHEN THE UTILITIES WILL BE MADE AVAILABLE FOR AN INSPECTION OF WATER SERVICES, SEWER SERVICES, AND DRAINAGE SYSTEM INSTALLATION...

THE APPLICANT WILL HAVE TO APPLY FOR STREET OPENING, SIDEWALK CROSSING, AND UTILITIES CONNECTING PERMITS WITH THE DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY CONSTRUCTION.

PRIOR TO OCCUPANCY PERMIT BEING ISSUED, AN AS-BUILT PLAN SHALL BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND HARD COPY. THE PLAN SHOULD SHOW ALL UTILITIES AND FINAL GRADES AND FINISH GRADING, IMPROVEMENTS AND LIMITS OF RESTORATION WORK...

IF A CERTIFICATE OF OCCUPANCY IS REQUESTED PRIOR TO ALL SITE WORK BEING COMPLETED, THE APPLICANT WILL BE REQUIRED TO POST A CERTIFIED BANK CHECK IN THE AMOUNT TO COVER THE REMAINING WORK. THE CITY ENGINEER SHALL DETERMINE THE VALUE OF THE UNCOMPLETED WORK.

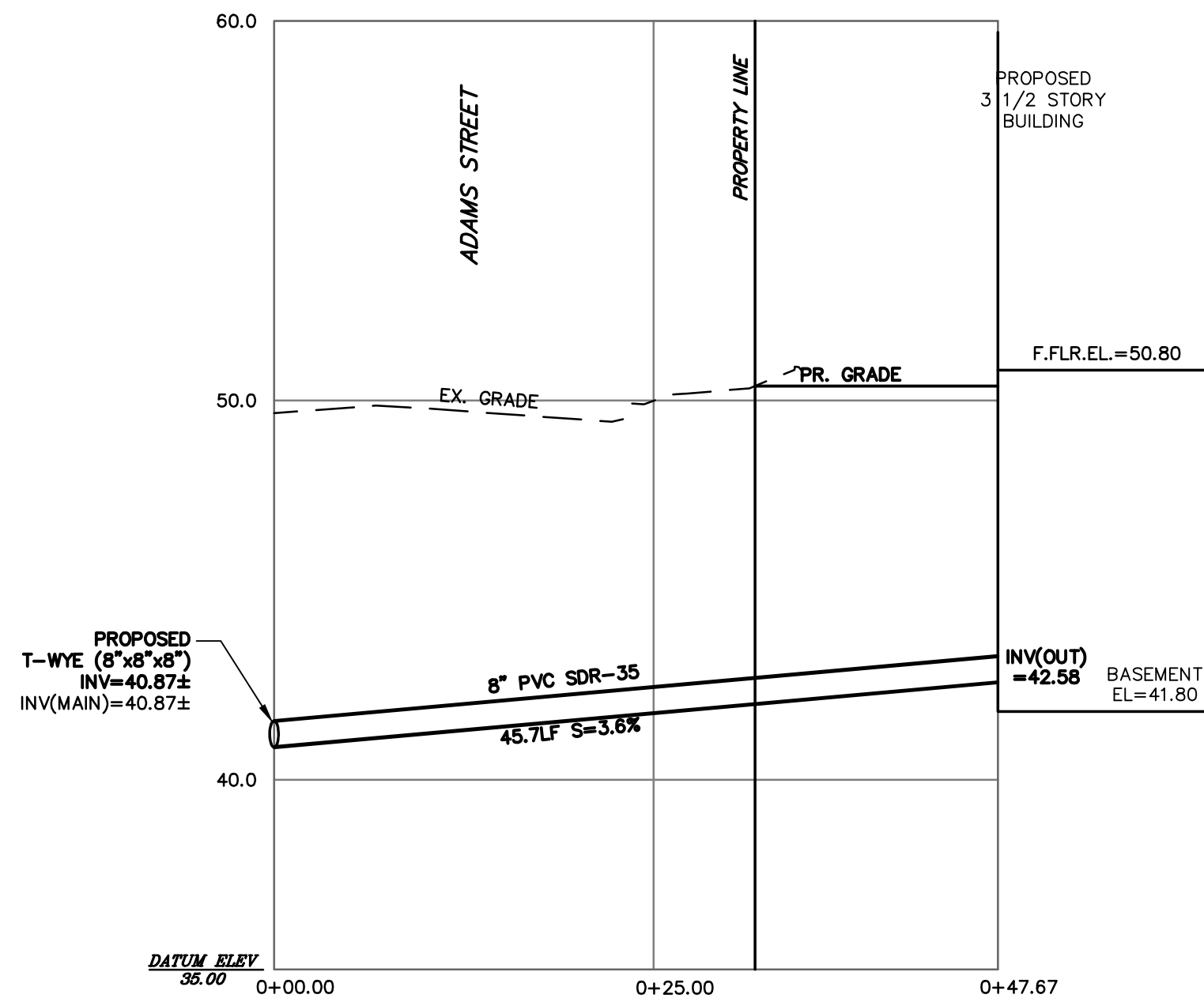
NO EXCAVATION IS ALLOWED WITHIN ANY CITY RIGHT-OF-WAY BETWEEN NOVEMBER 15TH AND APRIL 15TH, IF AN EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES. APPLICANT MAY SEEK PERMISSION FOR SUCH WORK FROM THE CITY DPW COMMISSIONER VIA THE CITY ENGINEER...

ALL SITE WORK INCLUDING TRENCH RESTORATION MUST BE COMPLETED BEFORE A CERTIFICATION OF OCCUPANCY IS ISSUED.

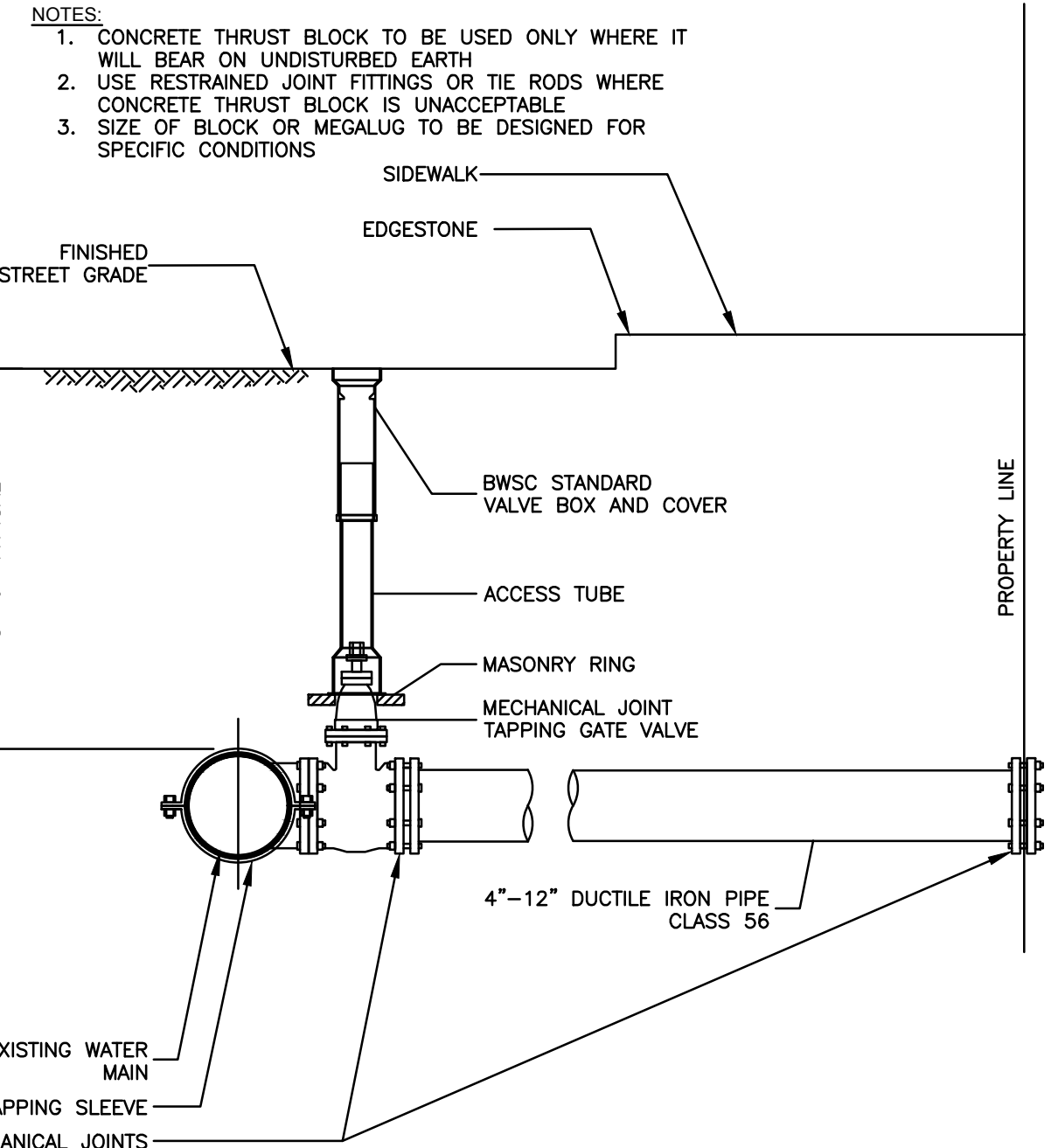
THE APPLICANT WILL HAVE TO APPLY FOR STREET OPENING, UTILITY CONNECTION AND TRENCH PERMITS AS WELL AS AN INSTALL CURB & SIDEWALK PERMIT WITH THE DPW PRIOR TO START OF WORK.

WITH THE EXCEPTION OF GAS SERVICES, ALL UTILITY TRENCHES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE II (EXCAVATABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.

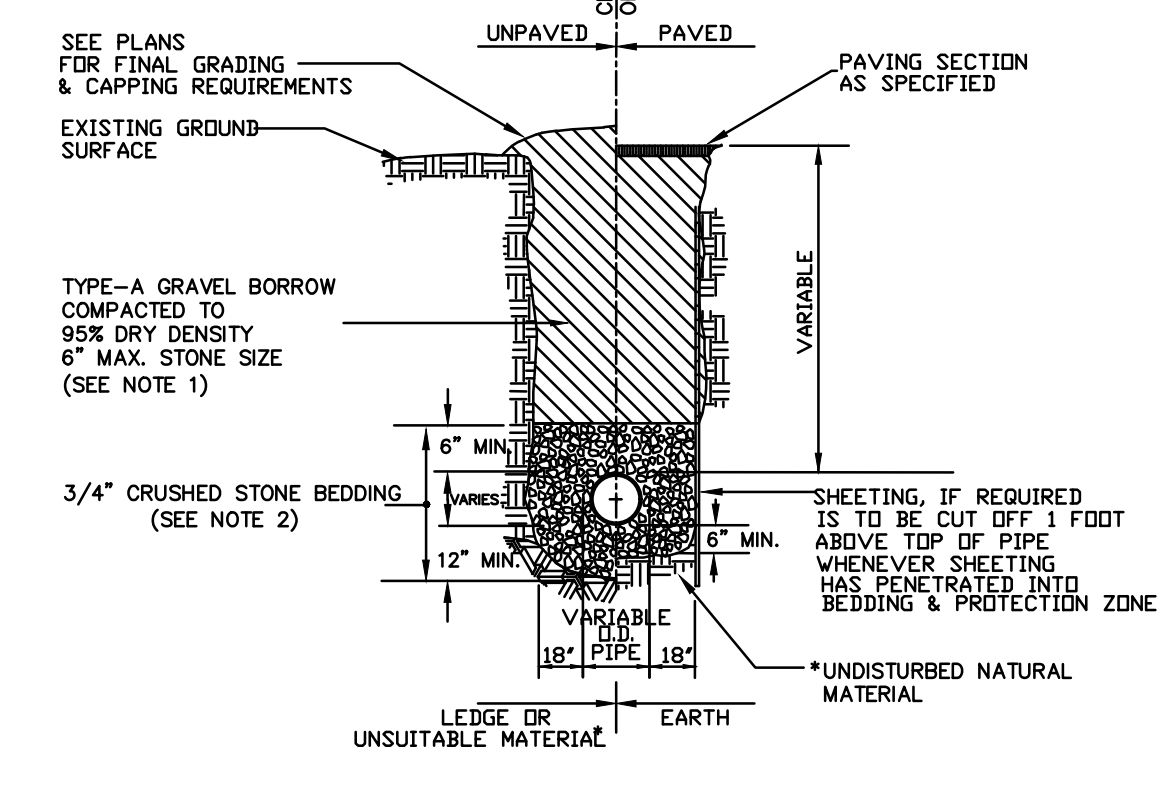
APPROVAL OF THIS PLAN BY THE CITY OF NEWTON ENGINEERING DIVISION IMPLIES THAT THE PLAN MEETS THE MINIMAL DESIGN STANDARDS OF THE CITY OF NEWTON. HOWEVER, THE ENGINEERING DIVISION MAKES NO REPRESENTATIONS AND ASSUMES NO RESPONSIBILITY FOR THE DESIGN(S) IN TERMS OF SUITABILITY FOR THE PARTICULAR SITE CONDITIONS OR OF THE FUNCTIONABILITY OR PERFORMANCE OF ANY ITEMS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN(S)...



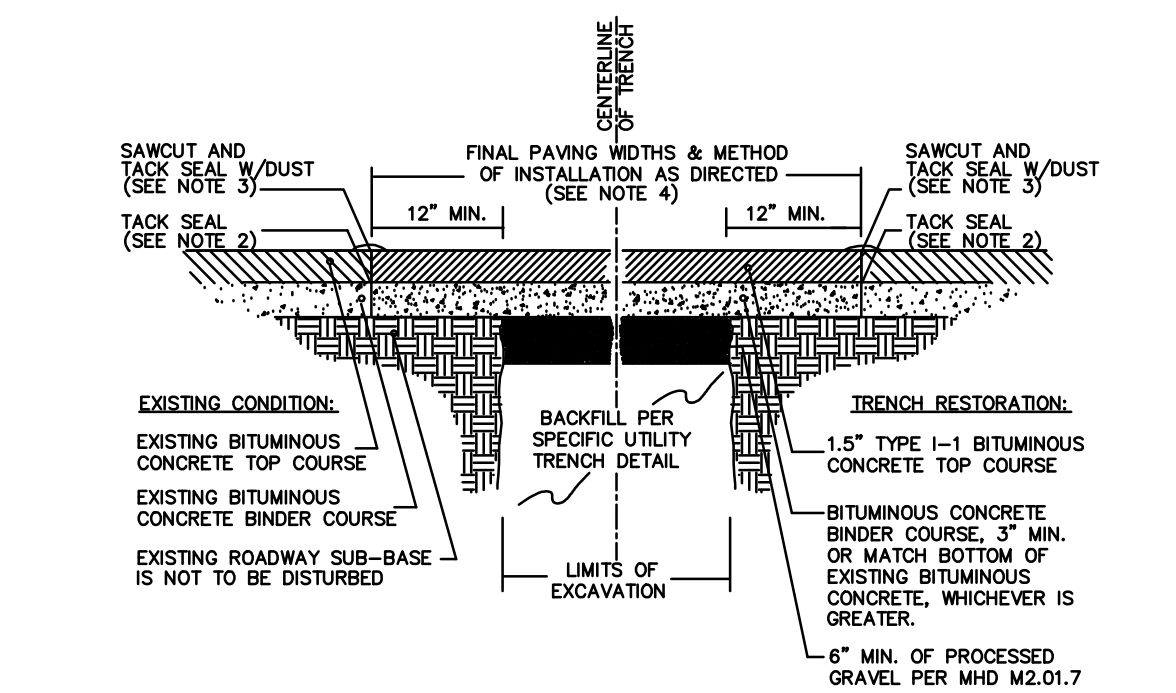
PROPOSED SEWER PROFILE SCALE: 1\"/>



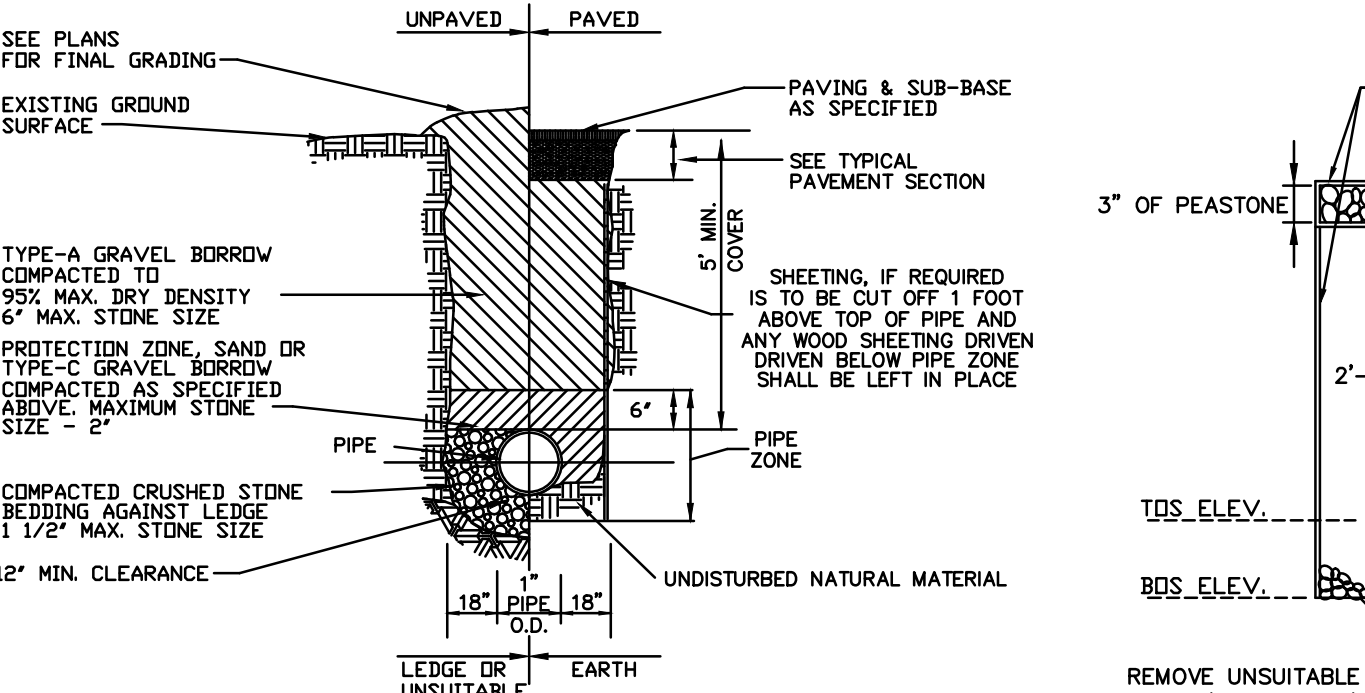
TYPICAL WATER PIPE CONNECTION WITH TAPPING SLEEVE AND GATE VALVE SCALE: NOT TO SCALE



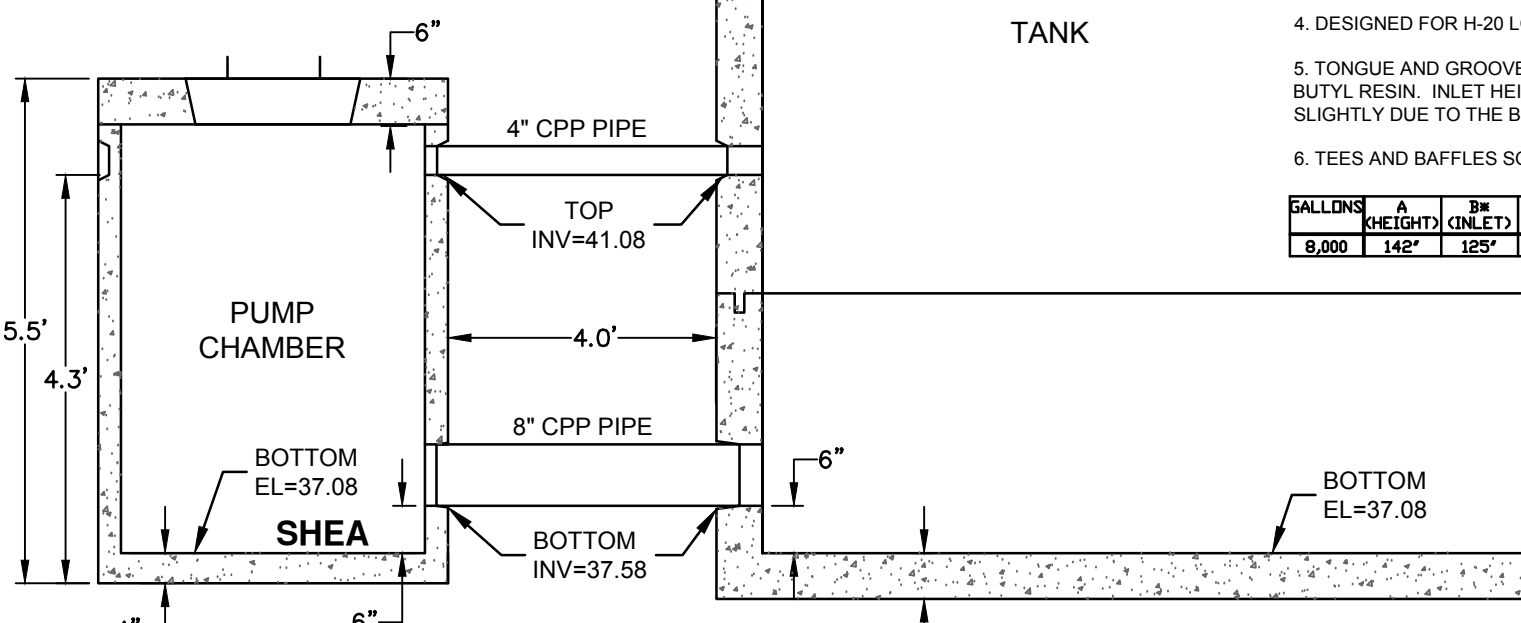
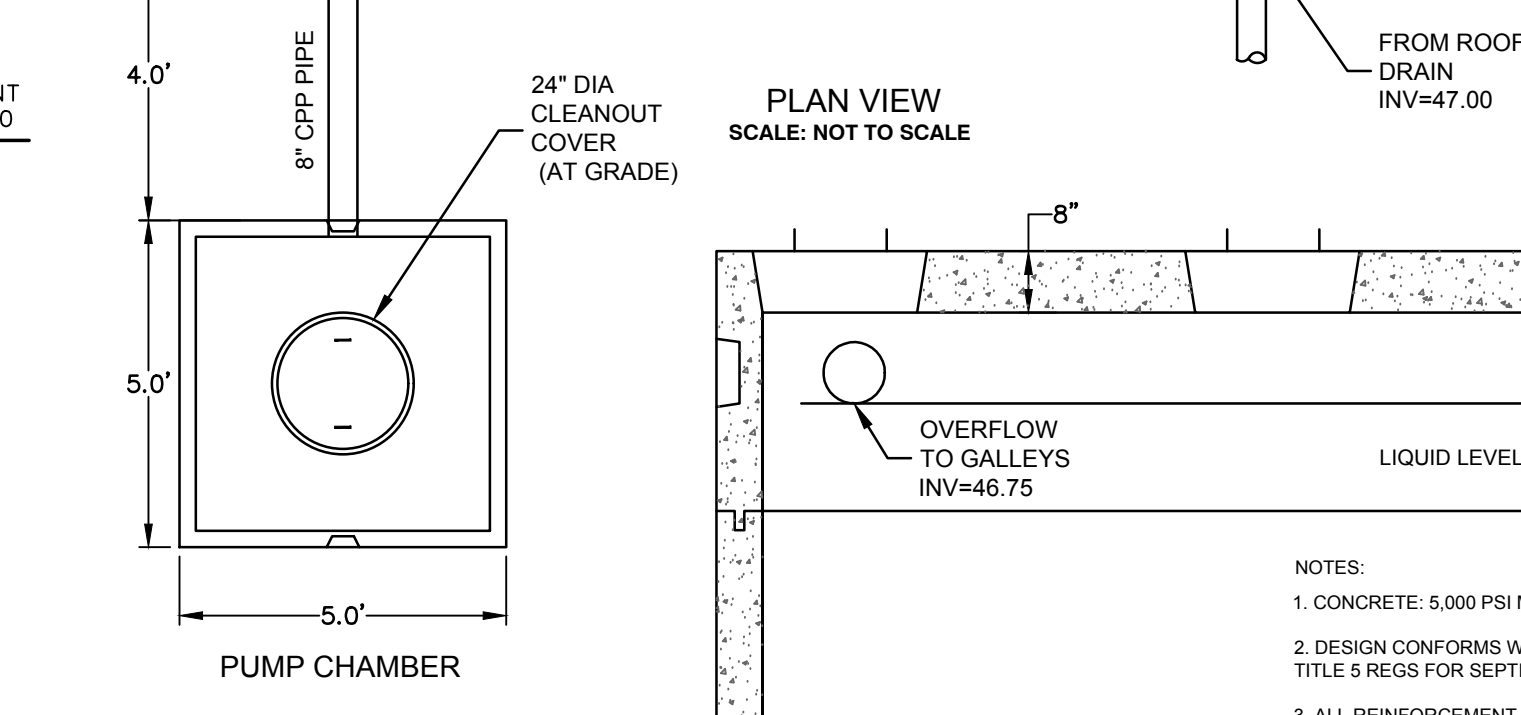
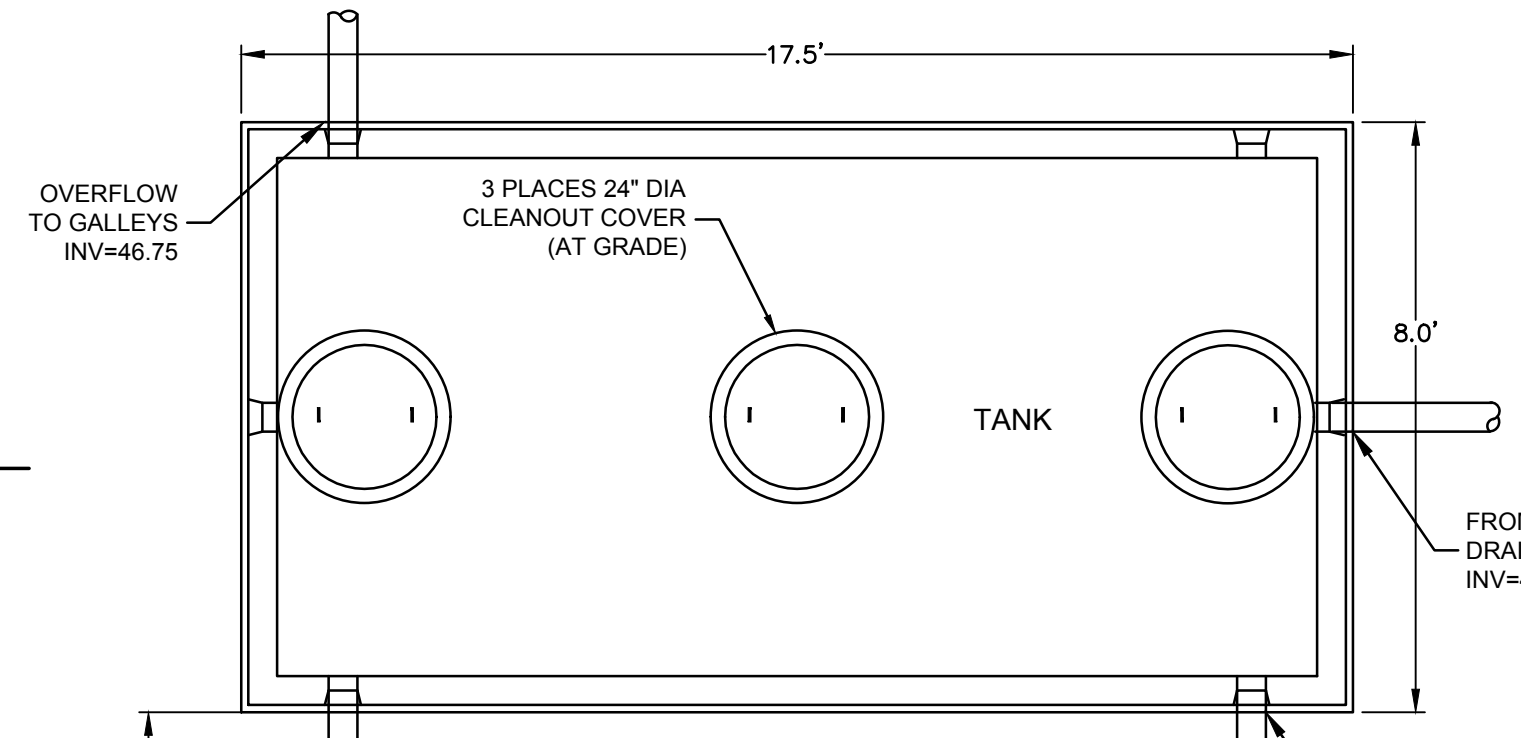
GRAVITY SEWER TRENCH DETAIL NOT TO SCALE



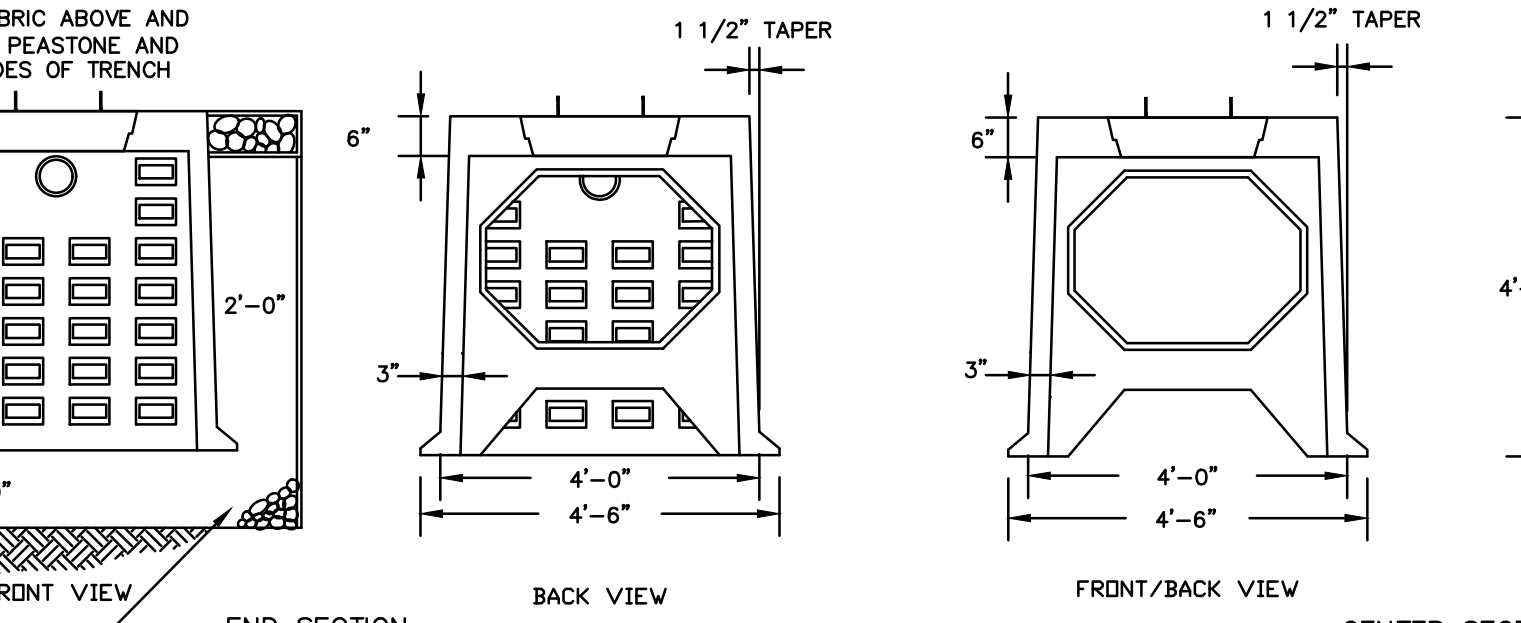
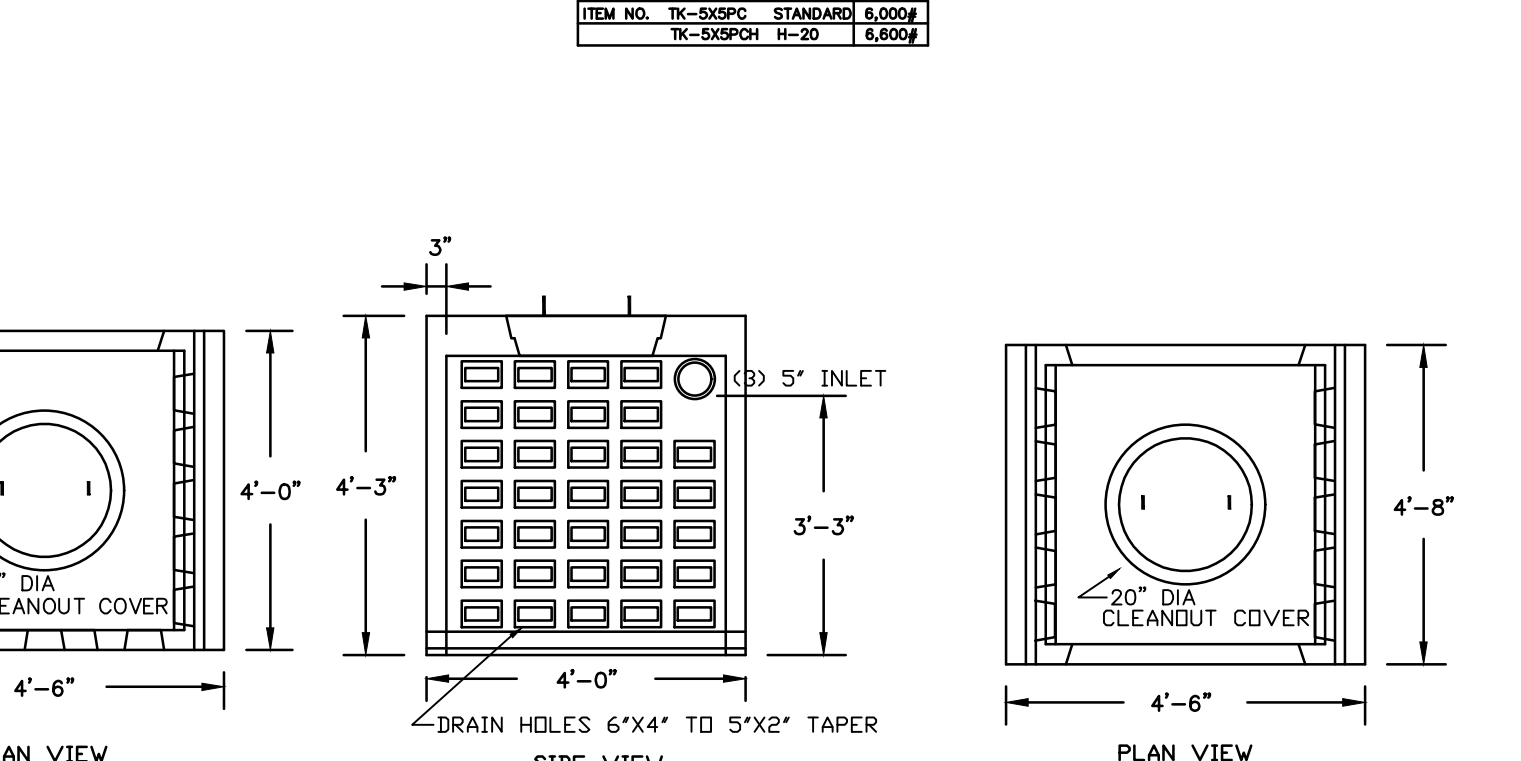
TYPICAL TRENCH REPAIR & PAVEMENT SECTION DETAIL (1/2) NOT TO SCALE



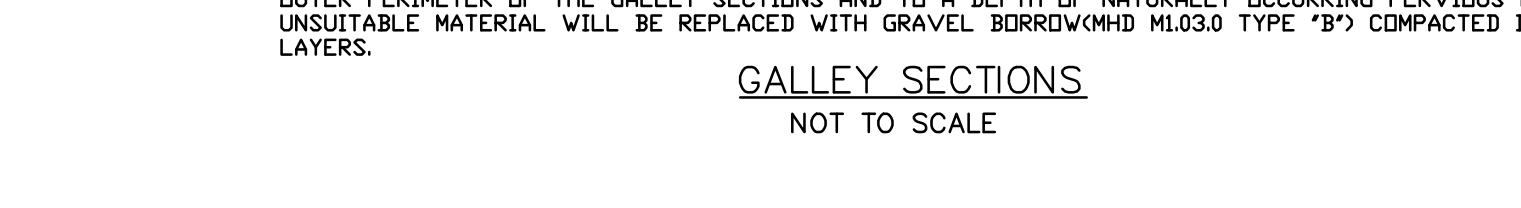
TYPICAL WATER TRENCH DETAIL NOT TO SCALE



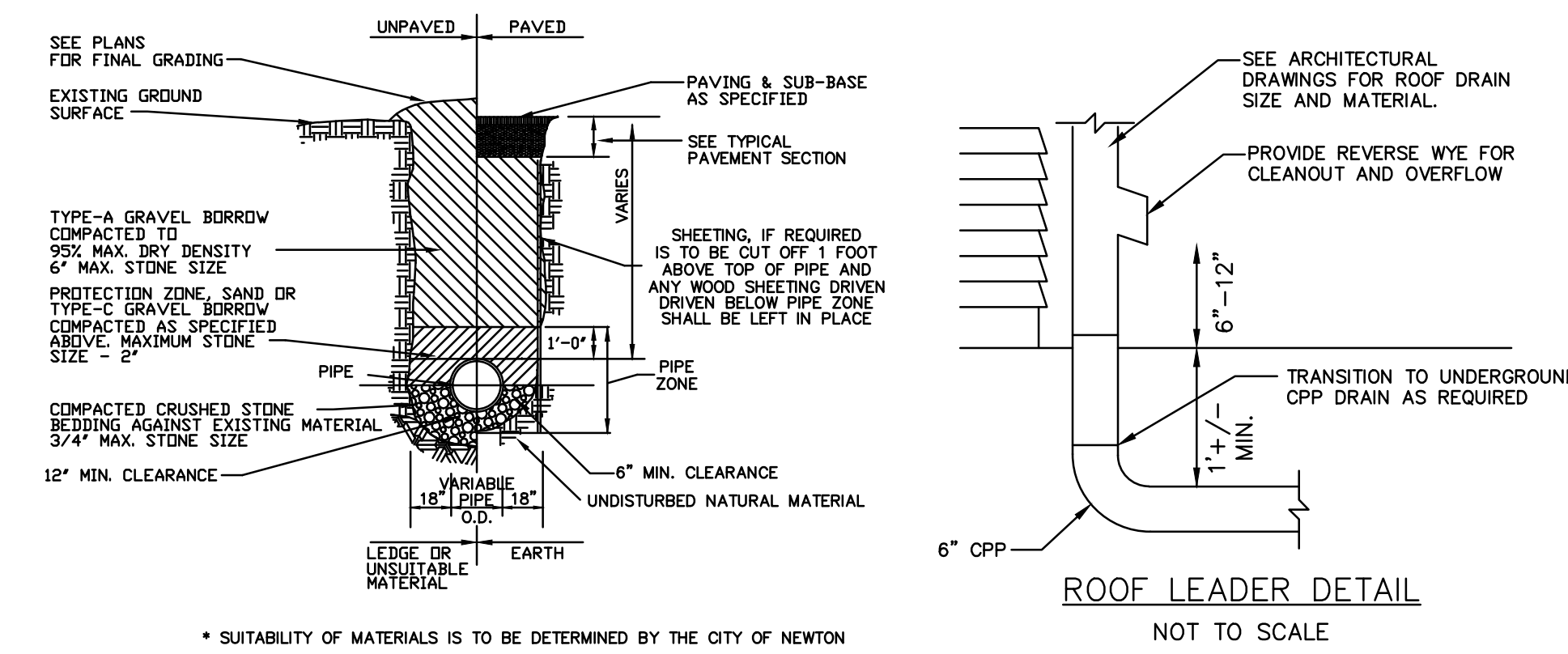
SECTION VIEW 8,000 GALLON TANK SCALE: NOT TO SCALE



SECTION VIEW 500 GALLON TANK SCALE: NOT TO SCALE

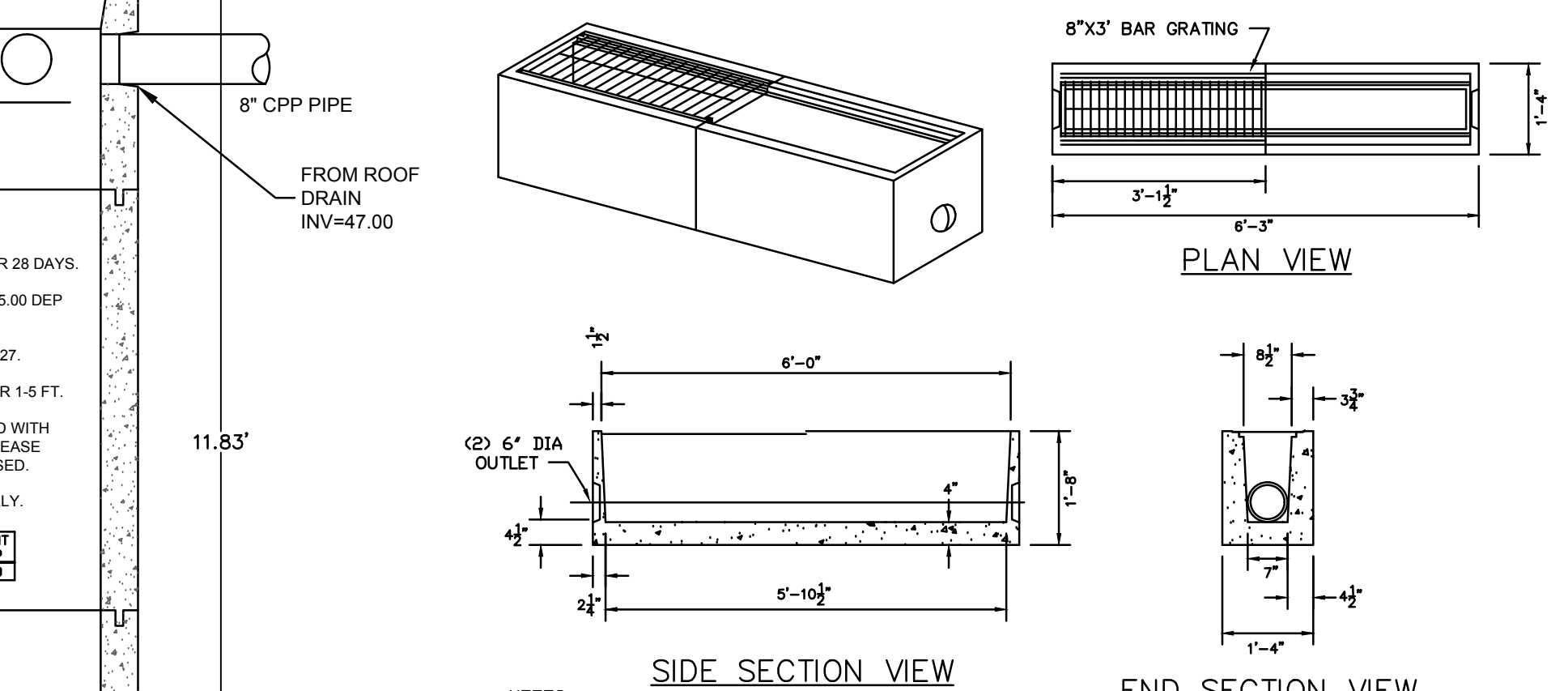


GALLEY SECTIONS NOT TO SCALE



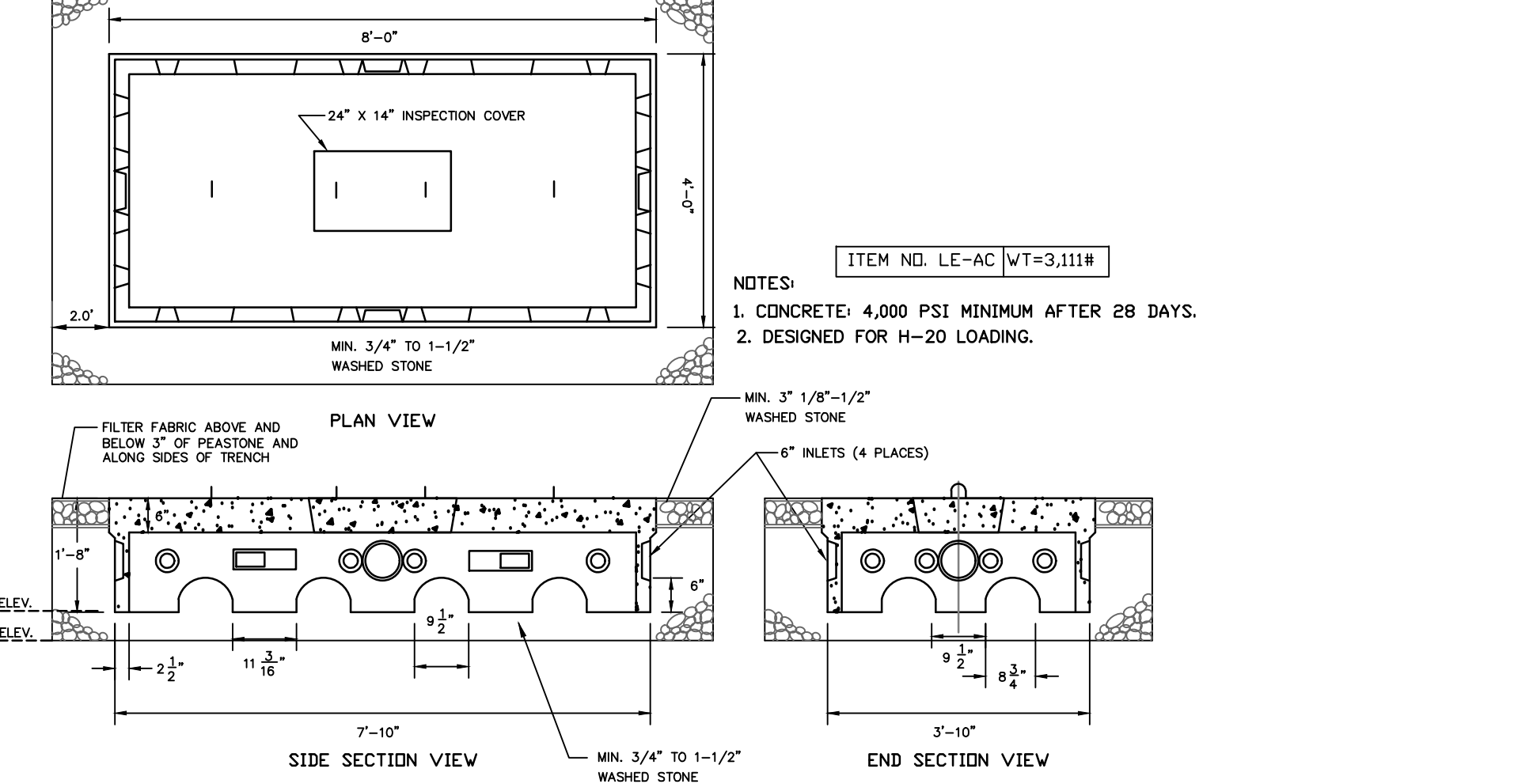
TYPICAL P.V.C. DRAIN TRENCH DETAIL NOT TO SCALE

- 1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0
2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.01.1



TRENCH DRAIN DETAIL NOT TO SCALE

- 1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. AVAILABLE IN 3\"/>



AMERATION CHAMBER (H-20) NOT TO SCALE

- 1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGNED FOR H-20 LOADING.

DETAIL SHEET NEWTON, MASSACHUSETTS SHOWING PROPOSED CONDITIONS AT #189-193 ADAMS STREET & 19 QUIRK COURT SCALE: AS-SHOWN DATE: FEBRUARY 12, 2018 REVISED: MARCH 8, 2018; MAY 8, 2018; JUNE 27, 2018 PROJECT: 218100 VTP ASSOCIATES INC. LAND SURVEYORS - CIVIL ENGINEERS. 132 ADAMS STREET 2ND FLOOR SUITE 3 NEWTON, MA 02458 (617) 332-8271 SHEET 3 OF 3

