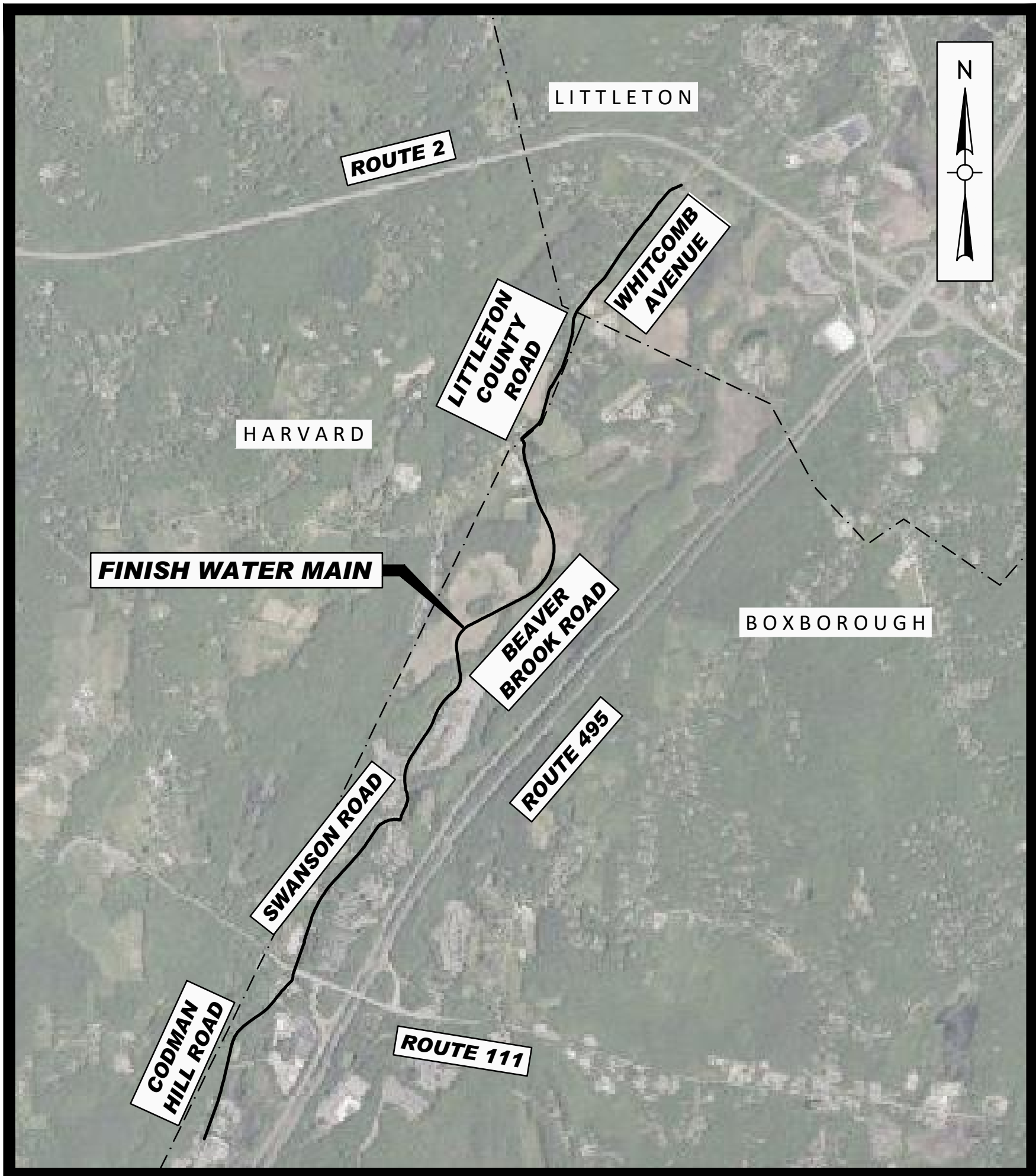


LITTLETON WATER DEPARTMENT



WATER SUPPLY FROM LITTLETON TO BOXBOROUGH TOWN CONTRACT NO. IFB-2024 DWSRF NO. 12397 - CONTRACT NO.2 NICK LAWLER - GENERAL MANAGER DAVE KETCHEN - ASSISTANT GENERAL MANAGER COREY GODFREY - WATER SUPERINTENDENT



DRAWING INDEX	
SHEET	TITLE
G000	COVER AND SHEET LIST
G001	ABBREVIATIONS, NOTES, AND LEGEND
C101	FINISH WATER PLAN WHITCOMB AVENUE
C102	FINISH WATER PLAN WHITCOMB AVENUE AND LITTLETON COUNTY ROAD
C501	DETAILS
C502	DETAILS

LOCUS MAP
SCALE : 1"=2000'

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

Issued Date:

OCTOBER 2023



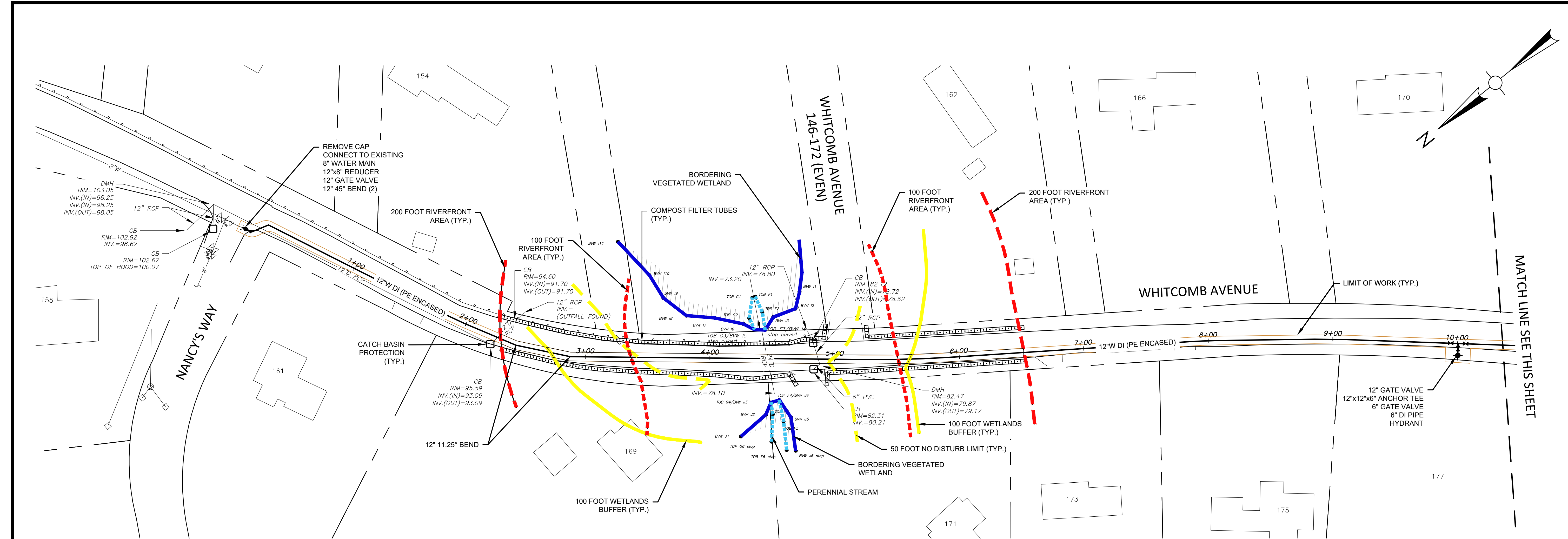
Know what's below.
Call before you dig.

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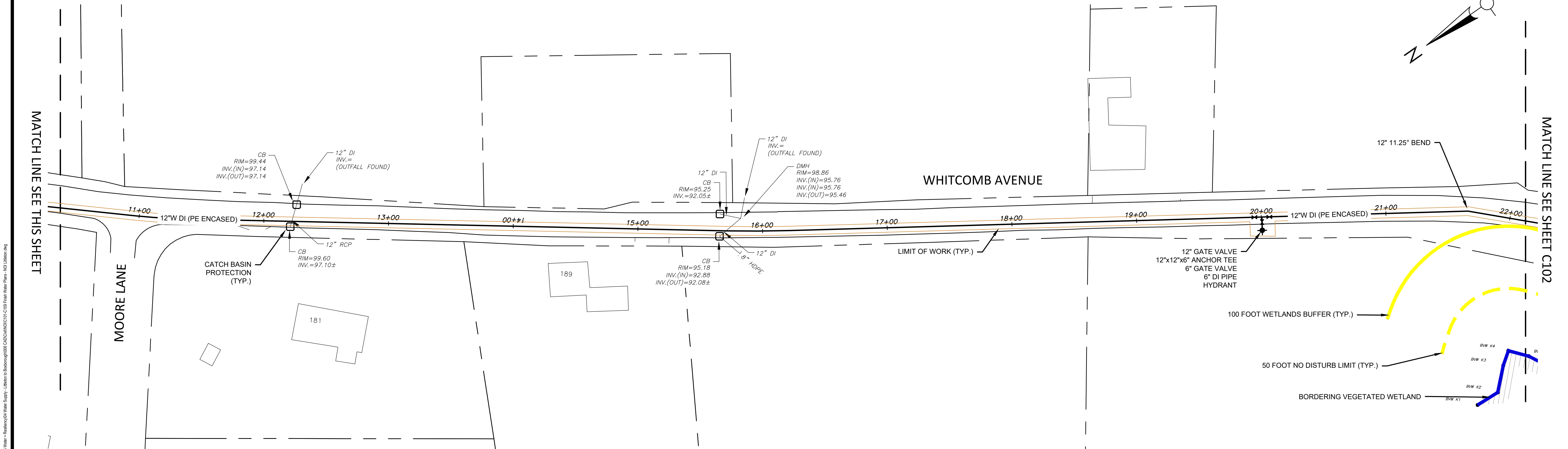
FOR PERMIT REVIEW

FILE NO.



- NOTES:
- WETLAND DELINEATION CONDUCTED ON DECEMBER 5, 6, AND 21, JANUARY 5 AND 18, 2023, AND AUGUST 17, 2023 BY DEVIN HERRICK, CWS.
 - ENTIRE PLAN VIEW IS WITHIN LITTLETON GIS AQUIFER ZONING OVERLAY DISTRICT.

PLAN
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'



Project:
LITTLETON WATER
DEPARTMENT
LITTLETON
LELWD
WATER SUPPLY FROM
LITTLETON TO BOXBOROUGH
TOWN CONTRACT NO. IFB-2024
DWSRF NO. 12397
CONTRACT NO. 2

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Consultants:

No.	Date	Description

Revisions:

No.	Date	Description

COA:

Seal:

COMMONWEALTH OF MASSACHUSETTS
TARA E. MC MANUS
No. 57127
REGISTERED
PROFESSIONAL ENGINEER

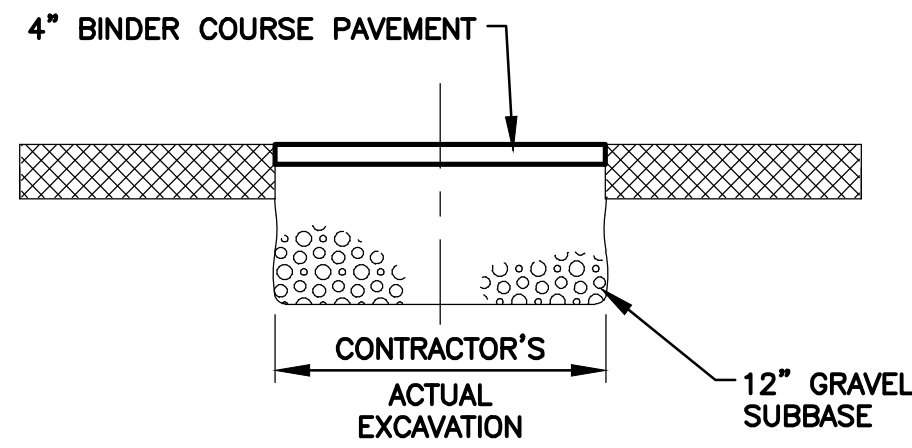
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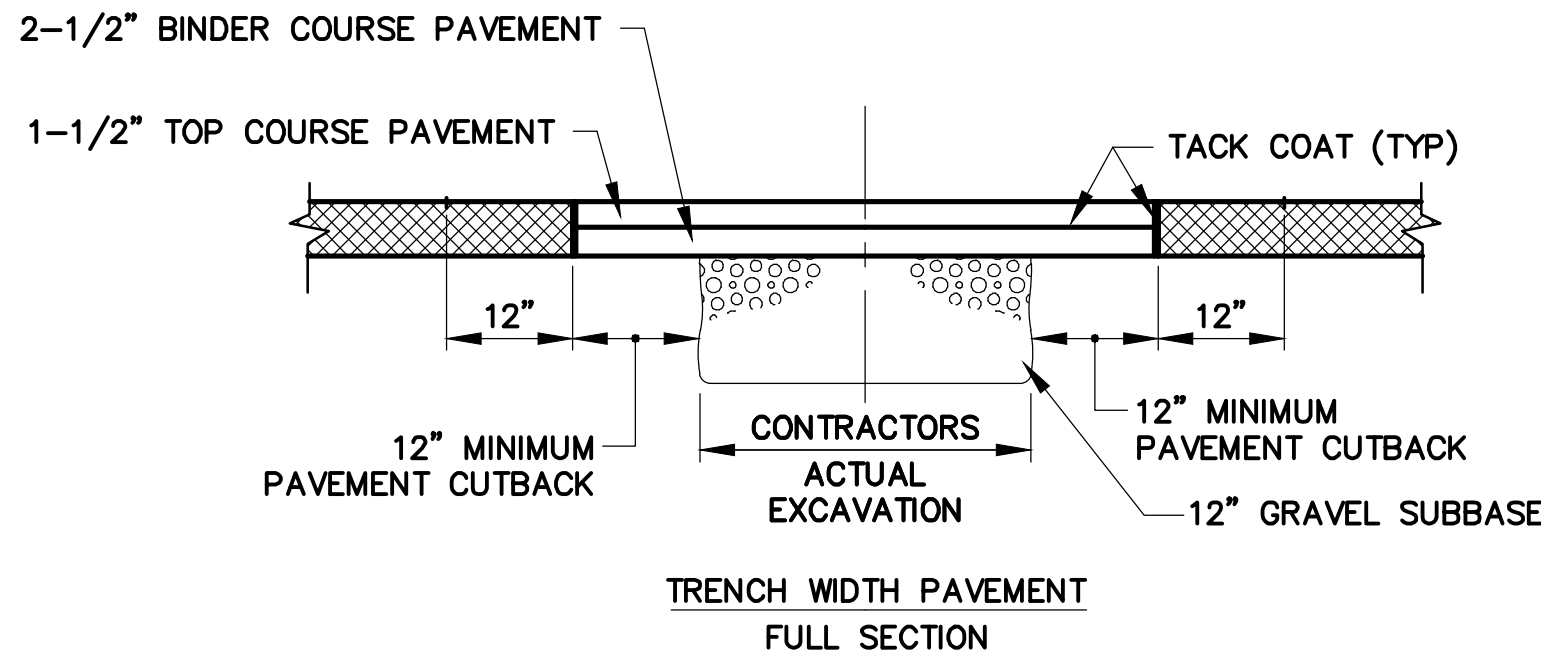
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Approved By: TEM
W&S Project No.: ENG23-0679
W&S File No.:

Drawing Title:
**FINISH WATER PLAN
WHITCOMB AVENUE**

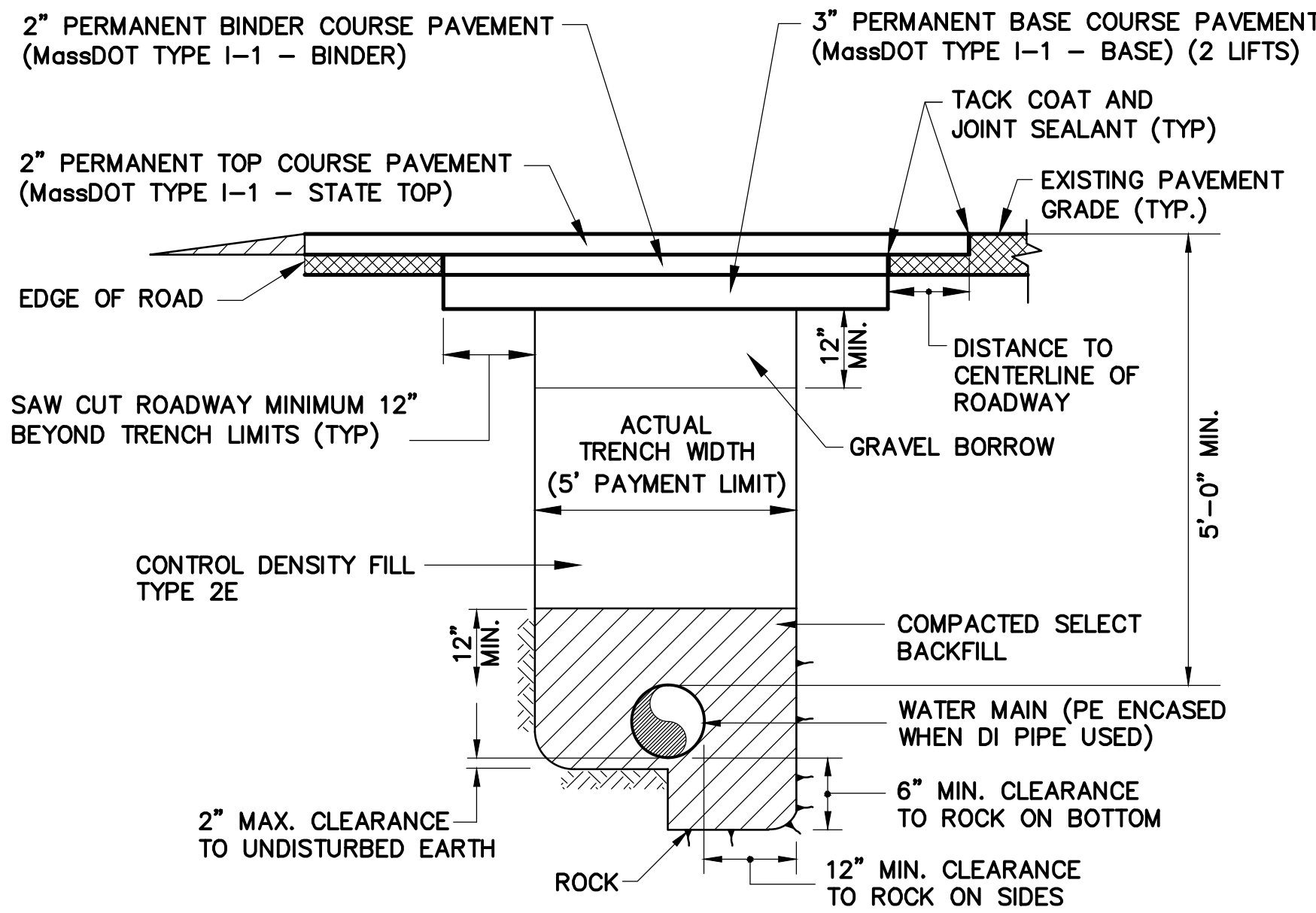
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C101



TEMPORARY TRENCH PAVEMENT
N.T.S.



PERMANENT PAVEMENT REPLACEMENT DETAIL
N.T.S.

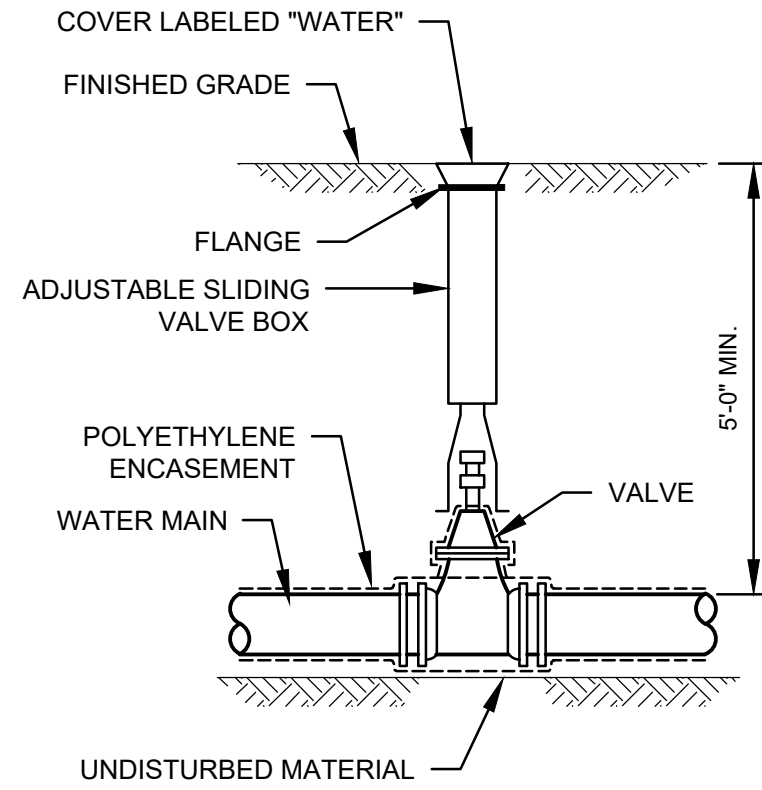


TYPE 3 AND TYPE 4
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT)
PERMANENT TRENCH PAVEMENT AND WATER MAIN TRENCH
N.T.S.

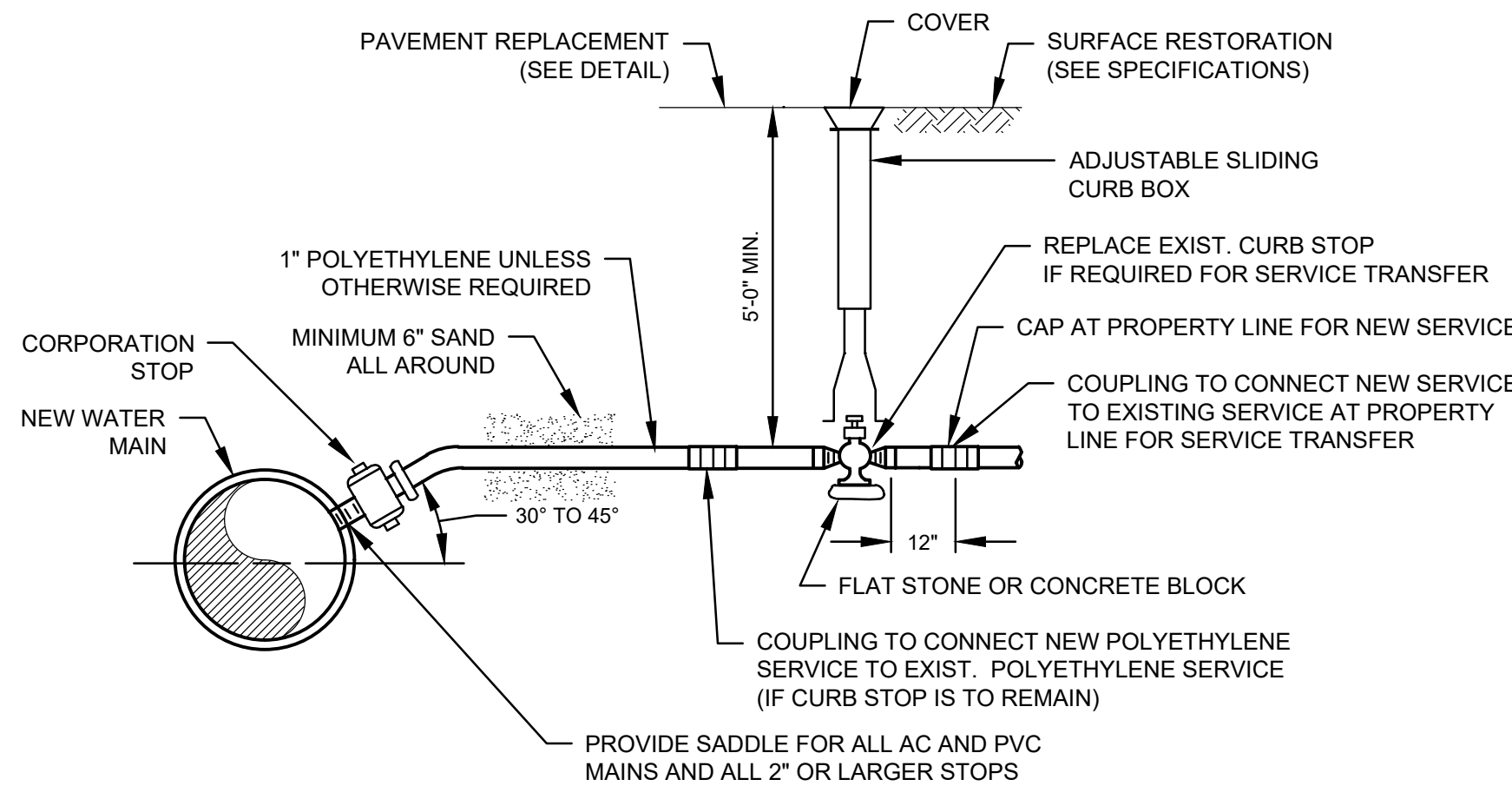
NOTES:

- SEE SECTION 32 11 00, PAVING FOR PAVEMENT SCHEDULE.
- FOR ALL TRENCH PAVEMENTS, CONTRACTOR SHALL INSTALL ASPHALT EMULSION TACK COAT TO ALL SUBSURFACES AND VERTICAL SAW CUTS PRIOR TO INSTALLATION OF PERMANENT PAVEMENT.
- PAVEMENT SHALL BE INSTALLED FLUSH WITH EXISTING GRADE BEFORE WINTER SHUTDOWN.
- TOP LAYER OF PAVEMENT SHALL BE INSTALLED BY MECHANICAL MEANS.

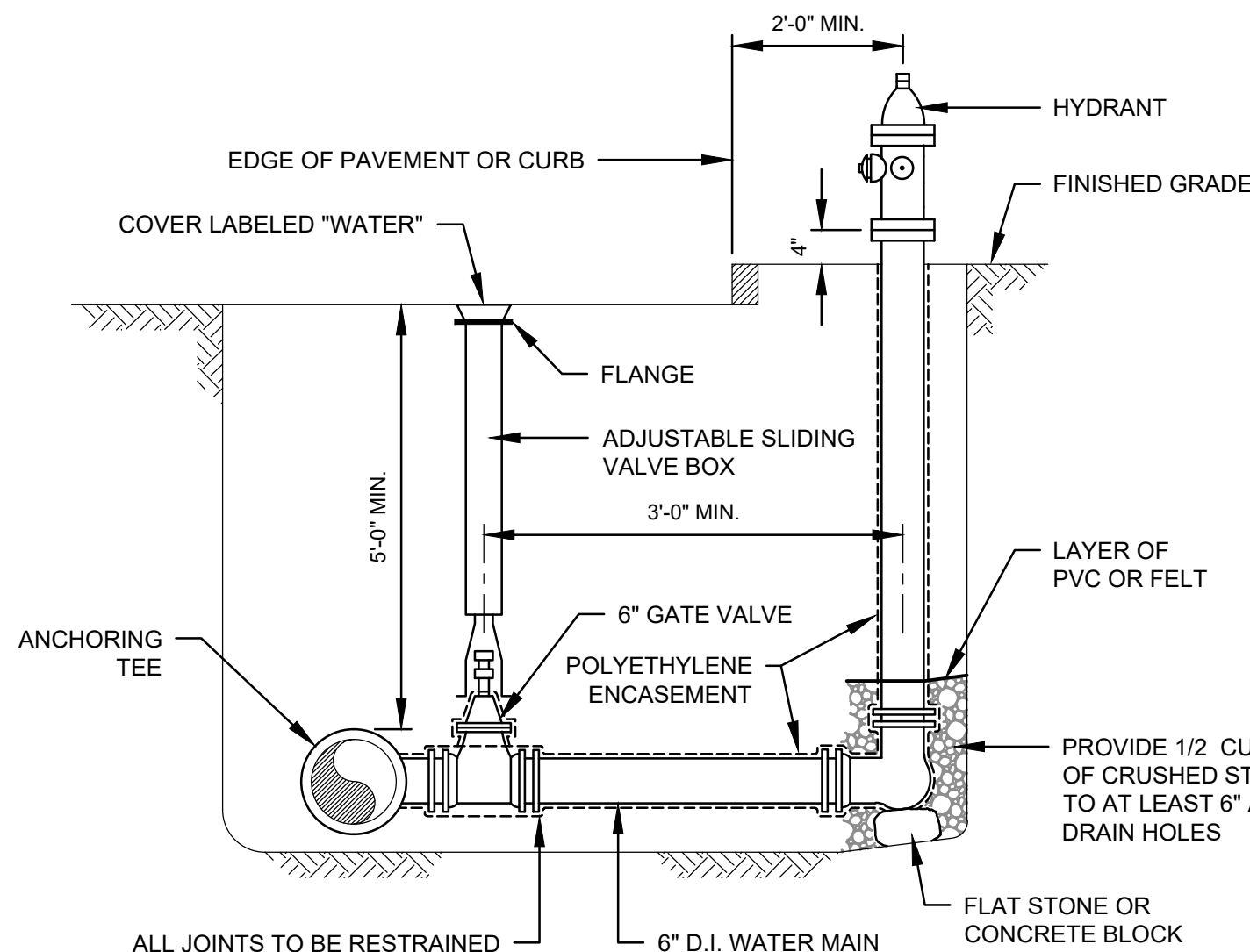
PAVEMENT REPLACEMENT DETAILS
N.T.S.



VALVE AND BOX DETAIL
N.T.S.



WATER SERVICE DETAIL
N.T.S.



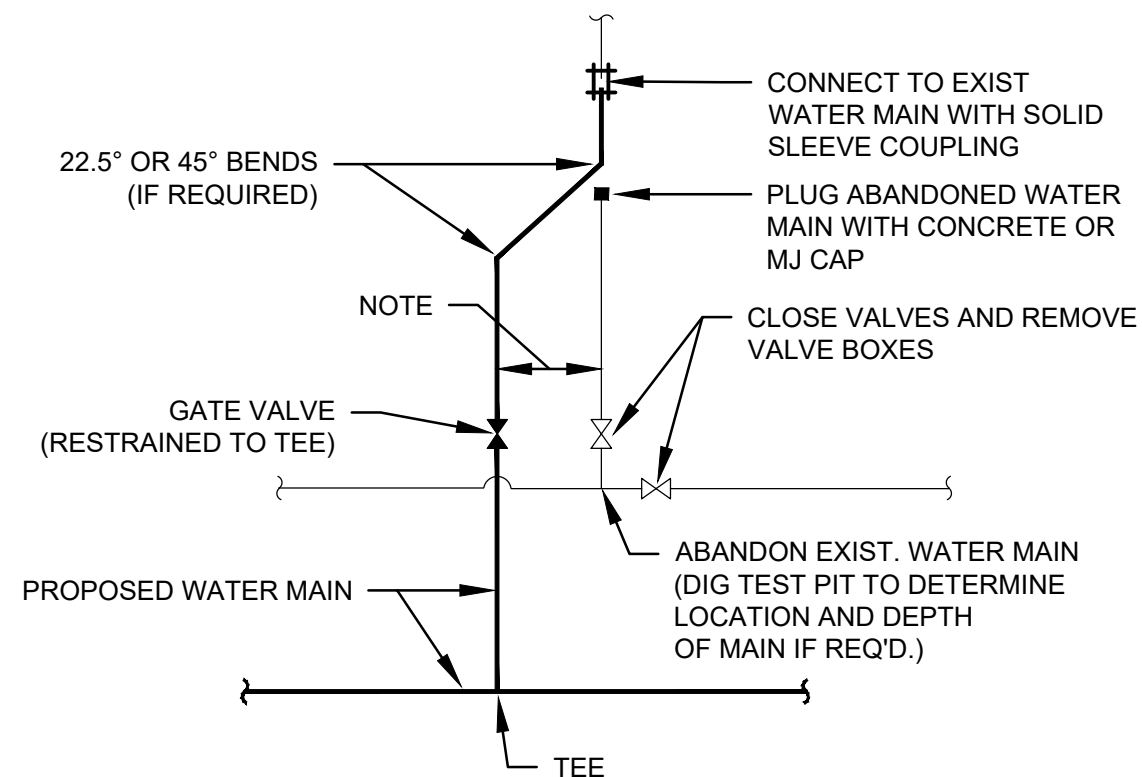
HYDRANT AND VALVE DETAIL
N.T.S.

REQUIRED LENGTH OF RESTRAINED JOINTS FROM FITTINGS (FEET)						
PIPE SIZE	90° BEND	45° BEND OR WYE BRANCH	22 1/2° BEND	11 1/4° BEND	PLUG, CAP OR IN-LINE VALVE	TEE (BRANCH)
6"	25 (30.5)	10.5 (12.5)	5 (6)	2.5 (3)	43 (64)	34 (51)
8"	33 (40)	13.5 (16.5)	6.5 (8)	3 (4)	55 (82)	47 (70)
10"	40 (48.5)	16.5 (20)	8 (9.5)	4 (5)	67 (100)	58 (87)
12"	47 (56.5)	19.5 (23.5)	9.5 (11.5)	4.5 (5.5)	79 (118)	70 (105)
16"	59.5 (72)	24.5 (30)	12 (14.5)	6 (7)	101 (152)	92 (139)
20"	72 (86.5)	30 (36)	14.5 (17)	7 (8.5)	123 (184)	114 (171)
24"	84 (100)	35 (41)	16.5 (20)	8 (10)	144 (216)	134 (202)
30"	100 (120)	41 (50)	20 (24)	10 (12)	174 (261)	165 (247)

NOTES:

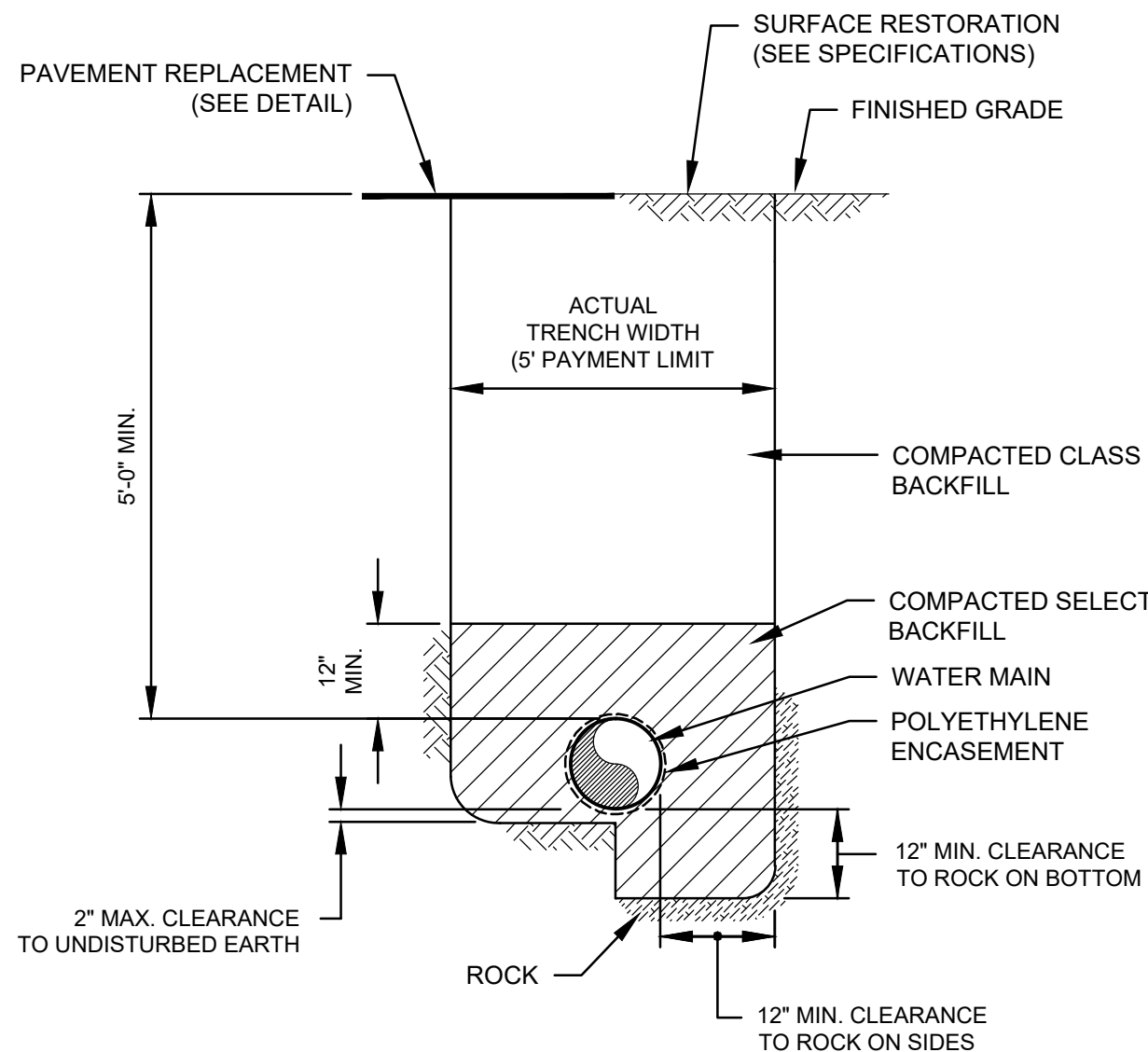
- RESTRAINED LENGTHS LISTED IN PARENTHESES ARE FOR PIPE WRAPPED IN POLYETHYLENE. THE OTHER ASSOCIATED LENGTHS ARE FOR PLAIN UNWRAPPED DUCTILE IRON PIPE.
- THE CONTRACTOR SHALL USE THIS TABLE IN CONJUNCTION WITH THE APPROPRIATE PIPE SPECIFICATION SECTION.

RESTRAINED JOINT TABLE



NOTE:
MINIMUM PRACTICAL DISTANCE - GENERALLY NO MORE THAN 2 FT.

WATER MAIN LATERAL CONNECTION
N.T.S.



WATER MAIN TRENCH DETAIL
N.T.S.

Revisions:		
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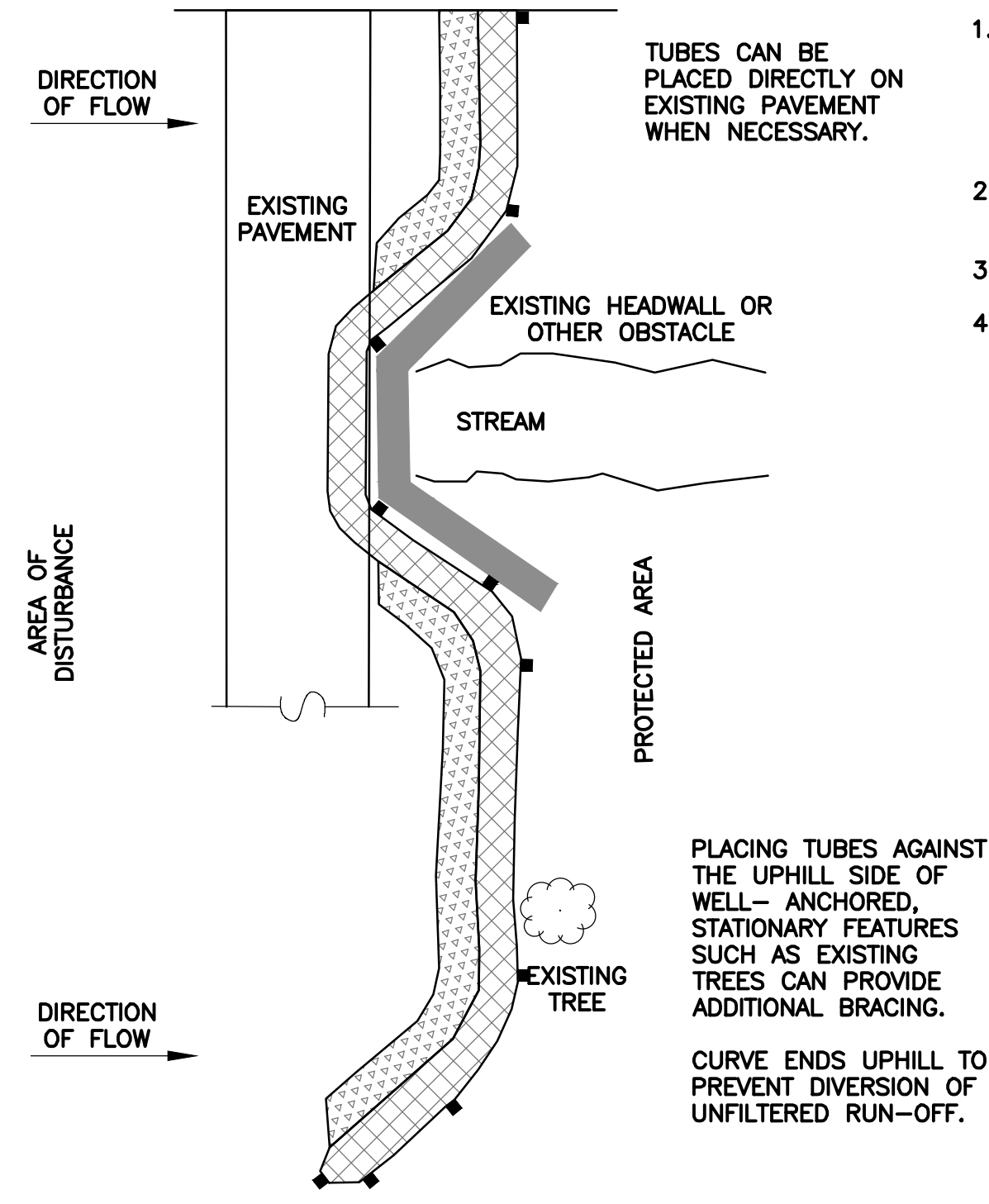
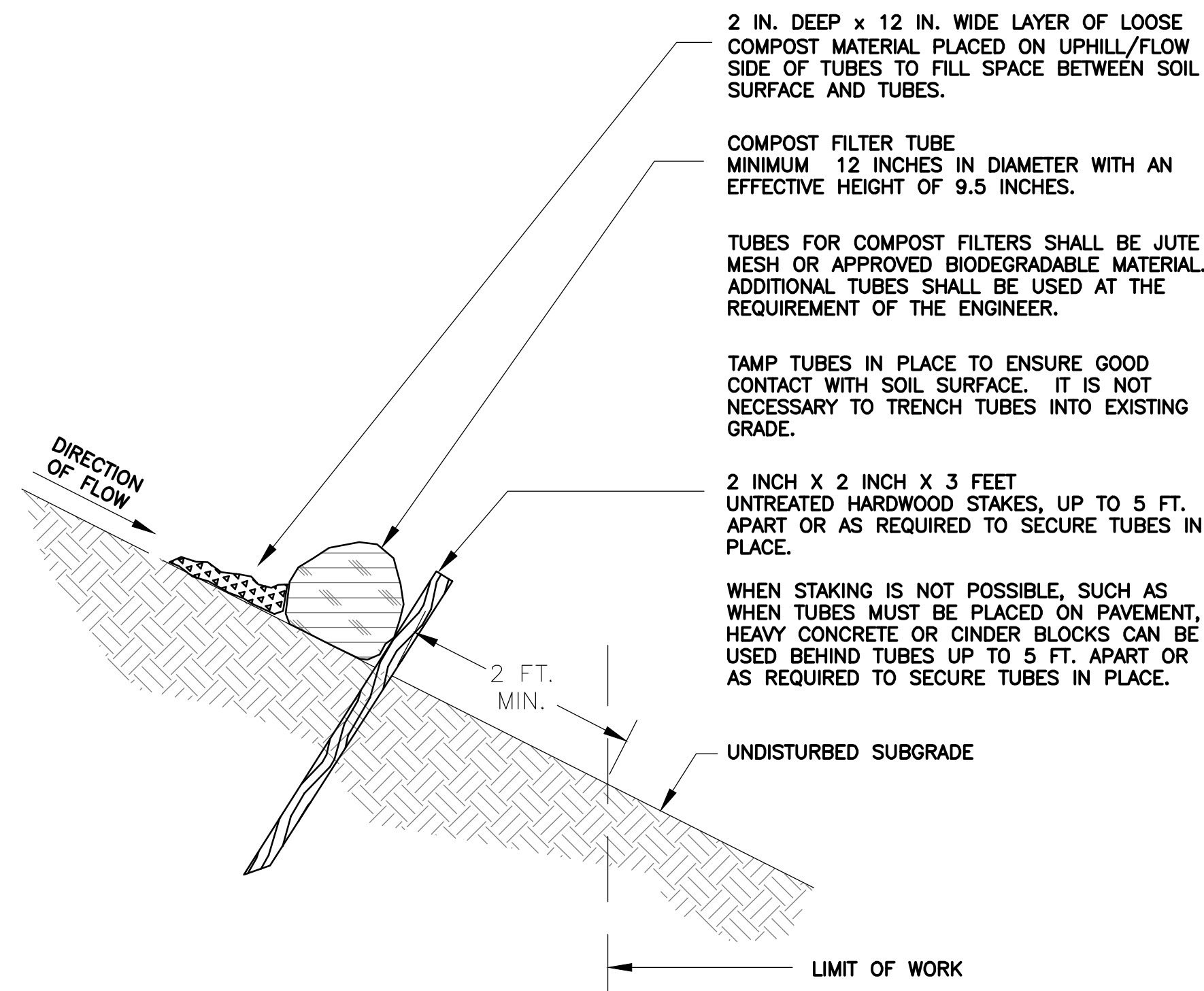
Date: OCTOBER 2023
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W&S Project No.: ENG23-0679
W&S File No.:

Drawing Title:

DETAILS I

Sheet Number:

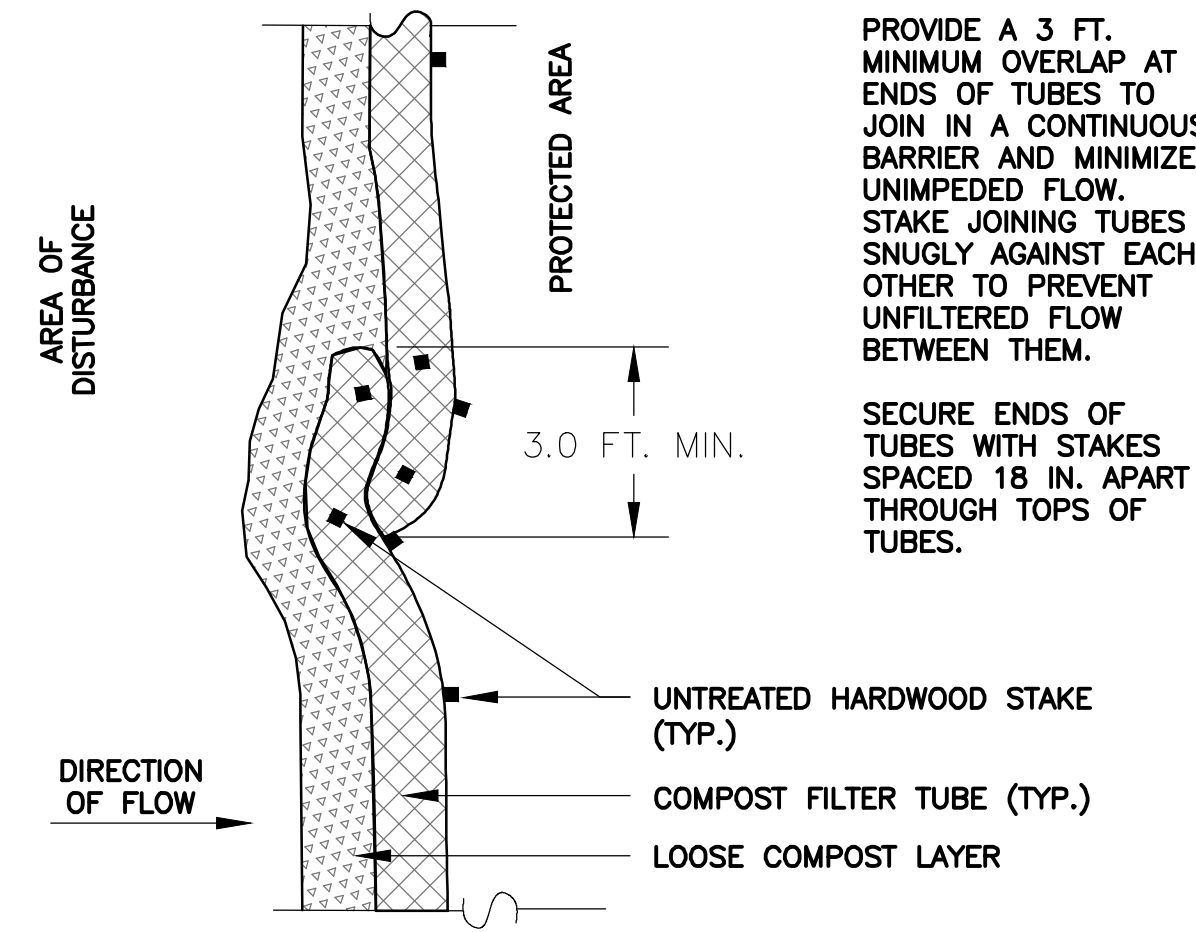
C501



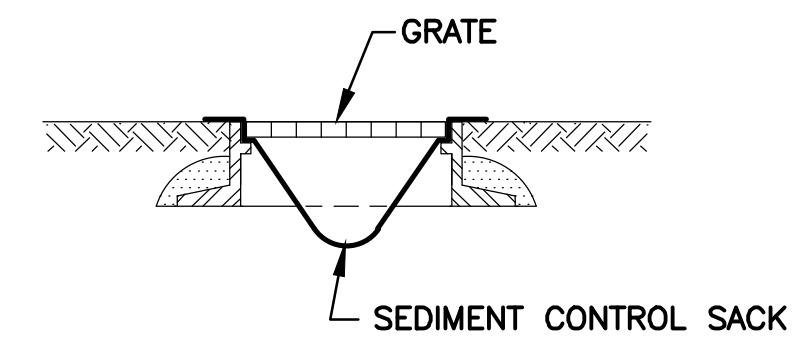
PLAN VIEW
SINGLE COMPOST FILTER TUBE DETAIL
NOT TO SCALE

GENERAL NOTES:

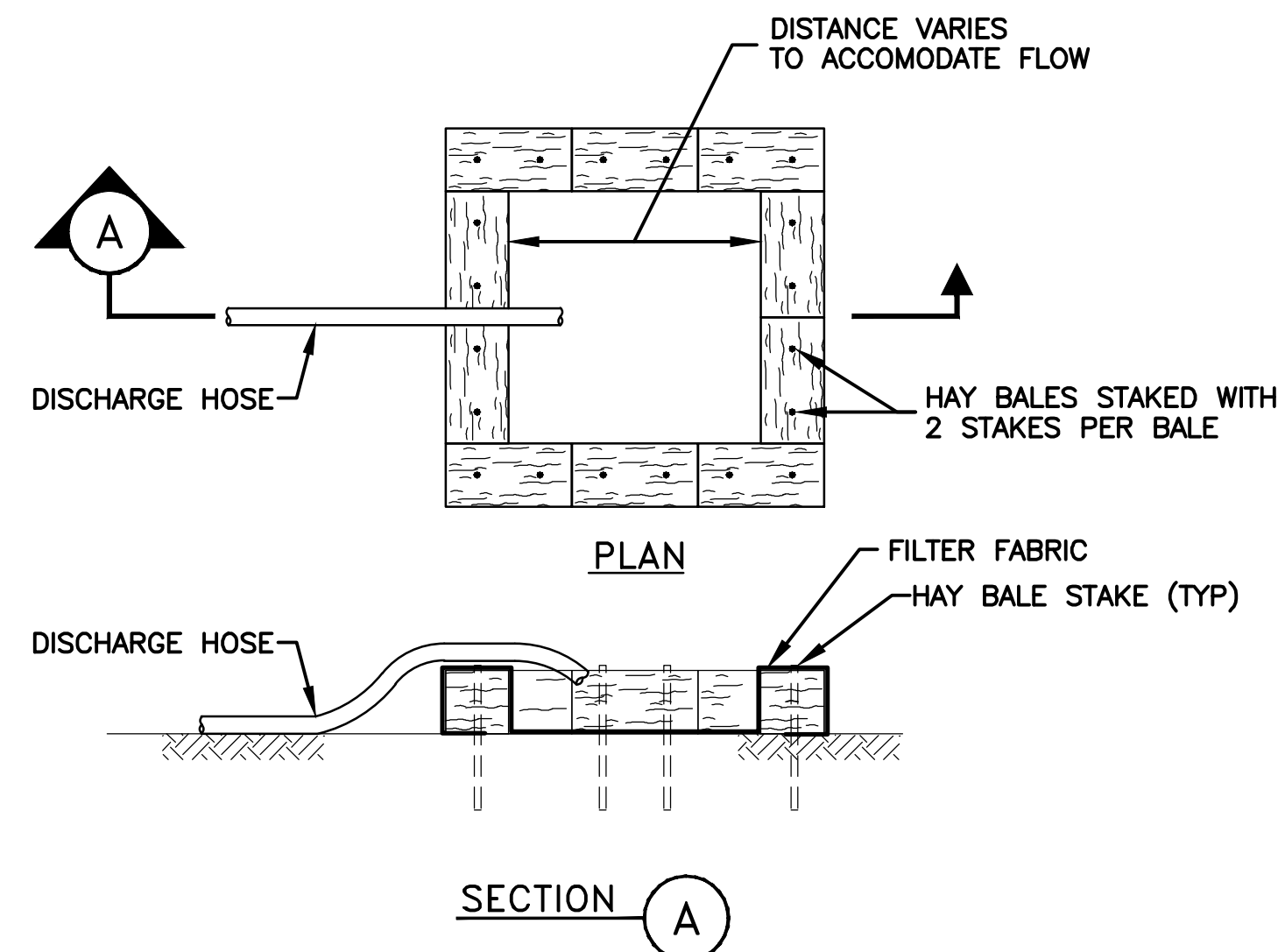
1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.



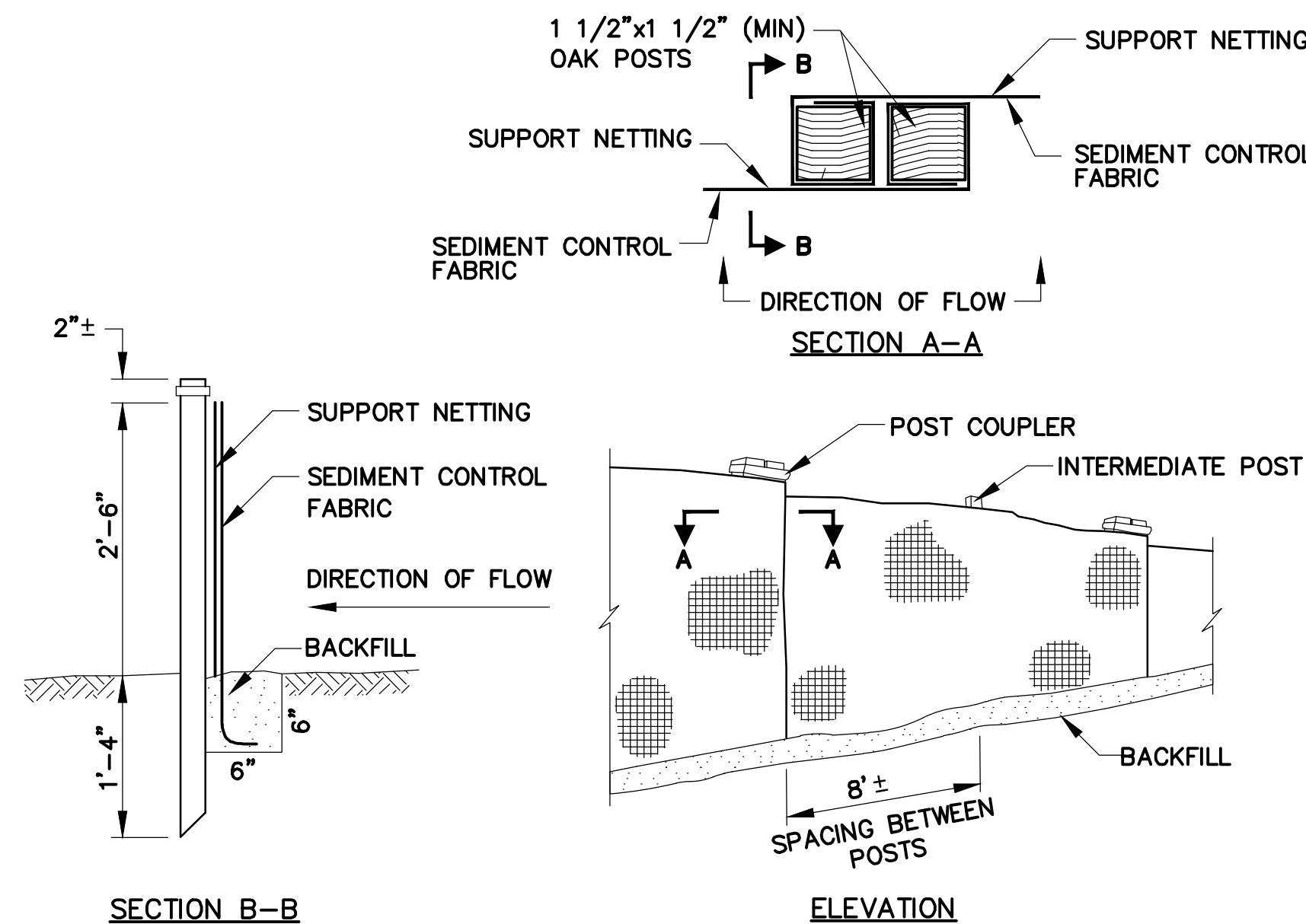
PLAN VIEW - JOIN DETAIL



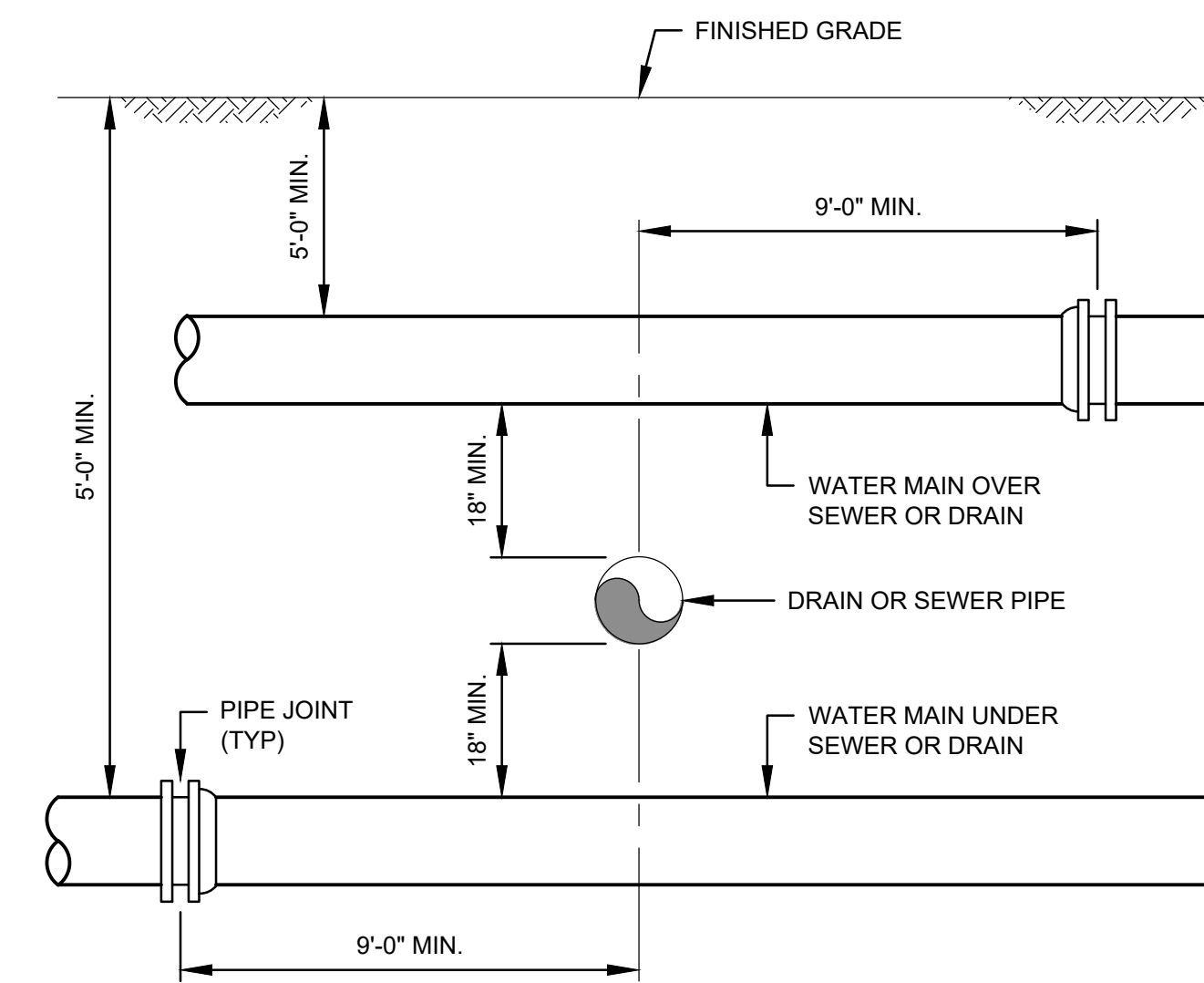
CATCH BASIN PROTECTION DETAIL
N.T.S.



DEWATERING DISCHARGE DISPOSAL DETAIL
N.T.S.



SILT FENCE DETAIL
N.T.S.



SEWER OR DRAIN CROSSING DETAIL
N.T.S.

No.	Date	Description

COA:



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DETAILS II

Sheet Number:

C502