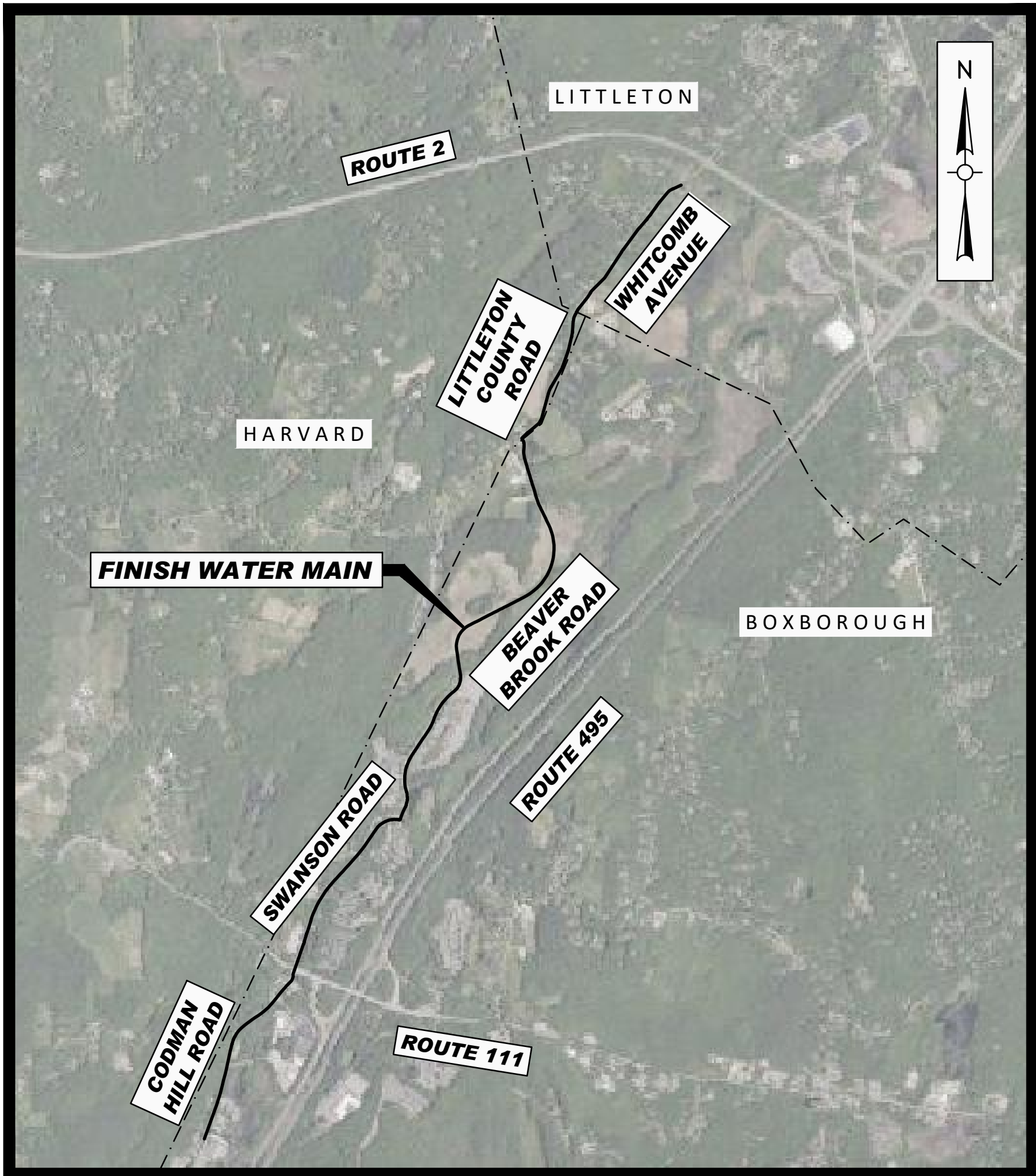


LITTLETON WATER DEPARTMENT



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



LOCUS MAP
SCALE : 1"=2000'

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

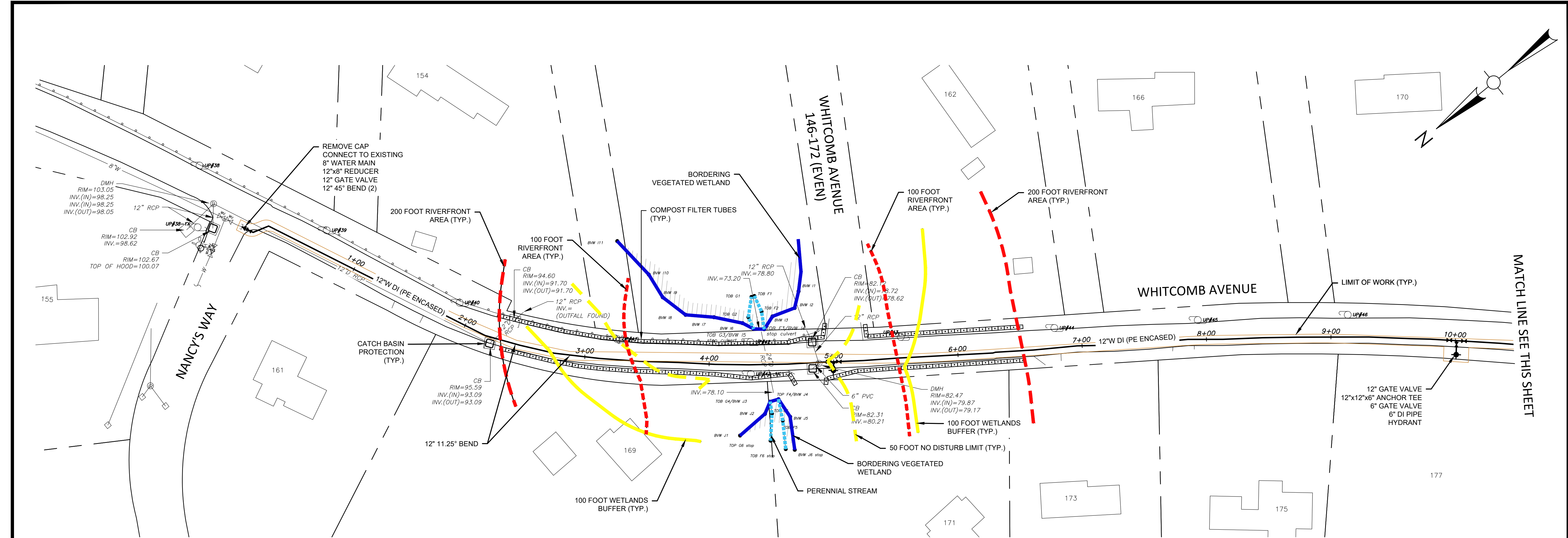
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811
Know what's below.
Call before you dig.



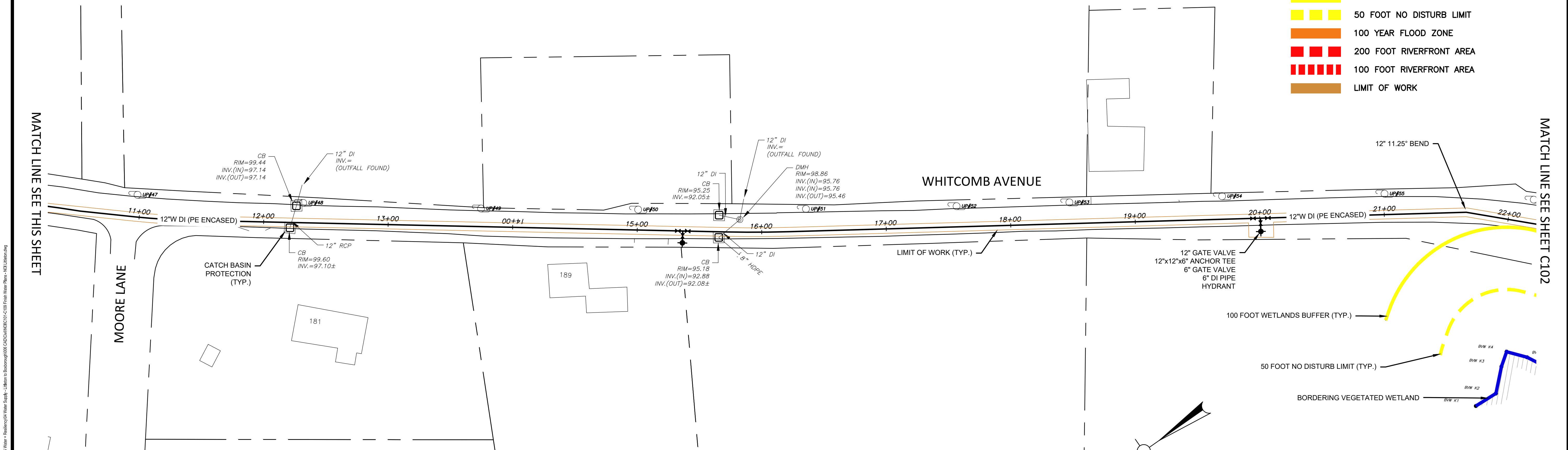
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- NOTES:
- WETLAND DELINEATION CONDUCTED ON DECEMBER 5, 6, AND 21, JANUARY 5 AND 18, 2023, AND AUGUST 17, 2023 BY DEVIN HERRICK, CWS.
 - ENTIRE PLAN VIEW IS WITHIN LITTLETON GIS AQUIFER ZONING OVERLAY DISTRICT.

PLAN
SCALE: 1" = 40'

- LEGEND:
- BORDERING VEGETATED WETLANDS
 - BANK/LAND UNDER WATER
 - 100 FOOT WETLANDS BUFFER
 - 50 FOOT NO DISTURB LIMIT
 - 100 YEAR FLOOD ZONE
 - 200 FOOT RIVERFRONT AREA
 - 100 FOOT RIVERFRONT AREA
 - LIMIT OF WORK



PLAN
SCALE: 1" = 40'

SCALE: 1" = 40'

Project:
LITTLETON WATER
DEPARTMENT
LITTLETON
LELWD
ELECTRIC, GAS & WATER ESTIMATIONS
WATER SUPPLY FROM
LITTLETON TO BOXBOROUGH
TOWN CONTRACT NO. IFB-2024
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No.	Date	Description

Revisions:

No.	Date	Description

COA:

Seal:

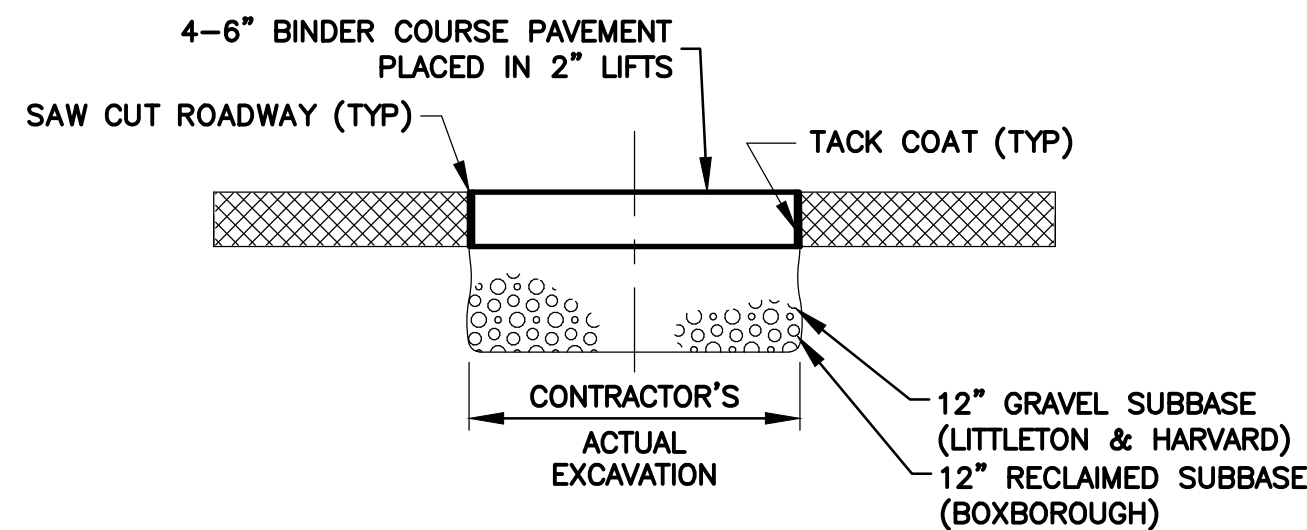
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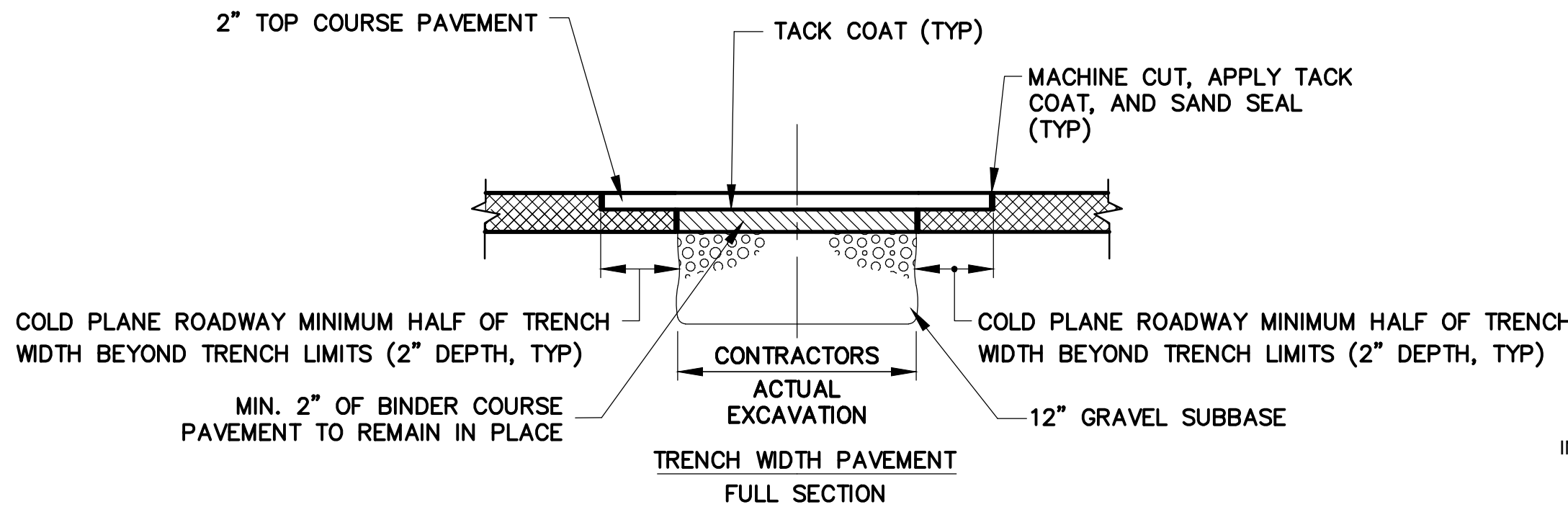
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Approved By: TEM
W&S Project No.: ENG23-0679
W&S File No.:

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

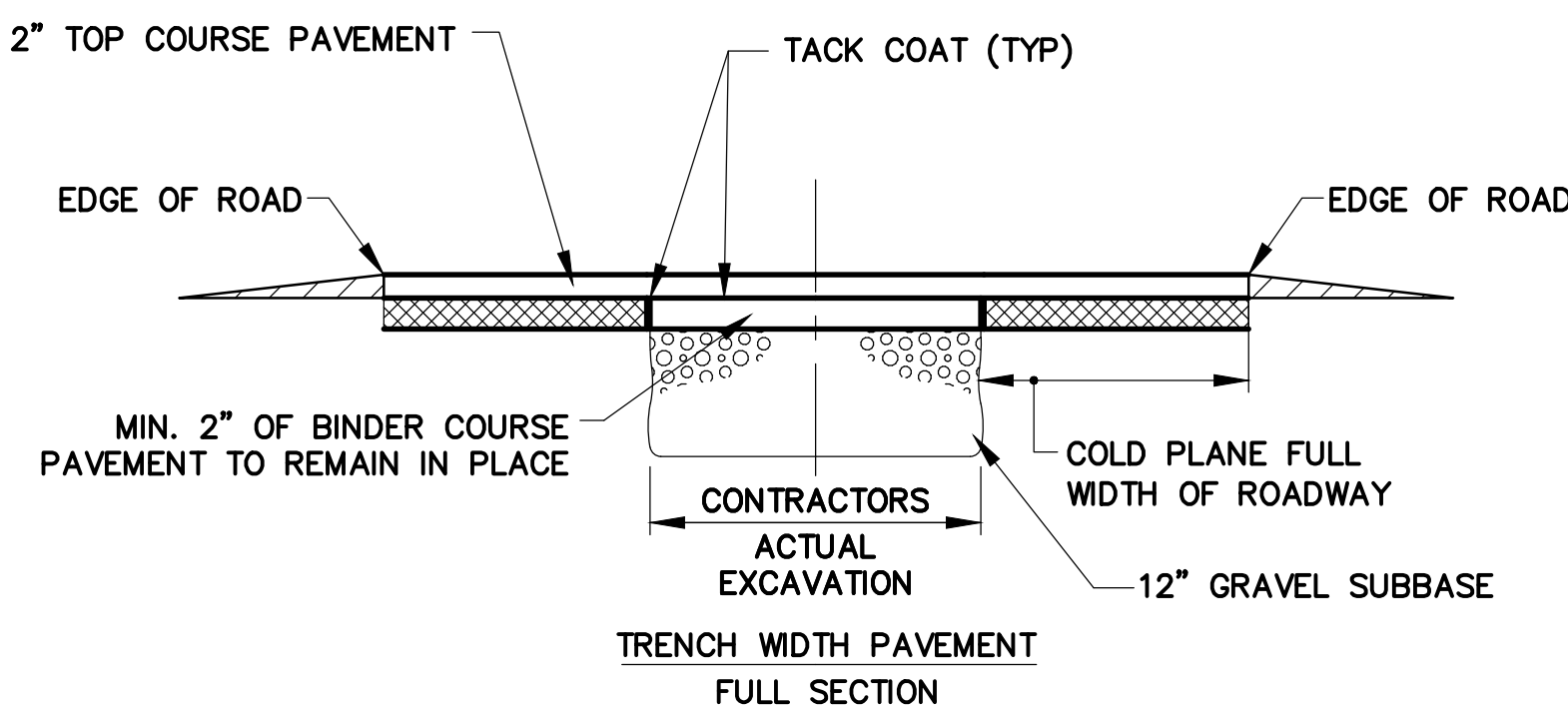
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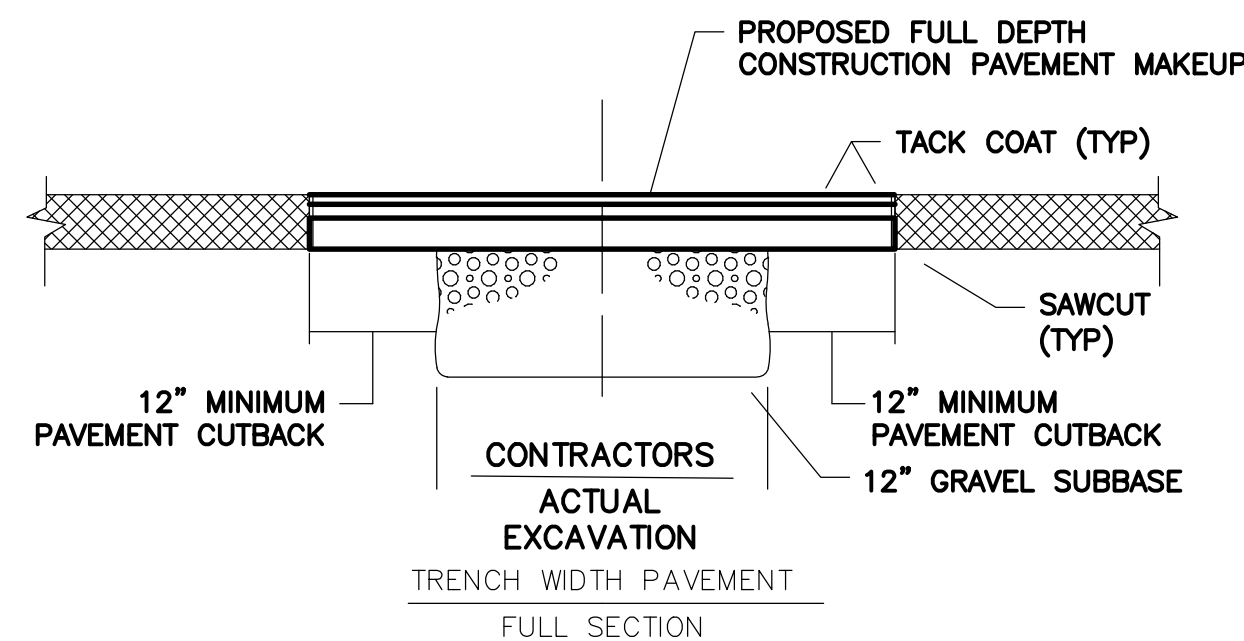
TEMPORARY TRENCH PAVEMENT DETAIL
N.T.S.



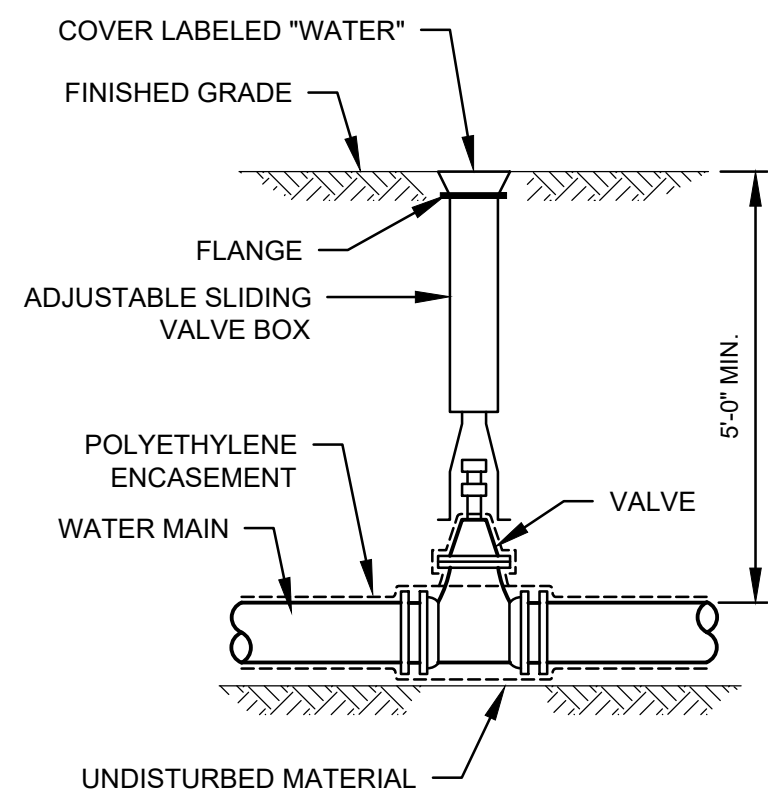
TYPE 1:
LOCAL ROAD PERMANENT
MILL AND OVERLAY PAVEMENT DETAIL
N.T.S.



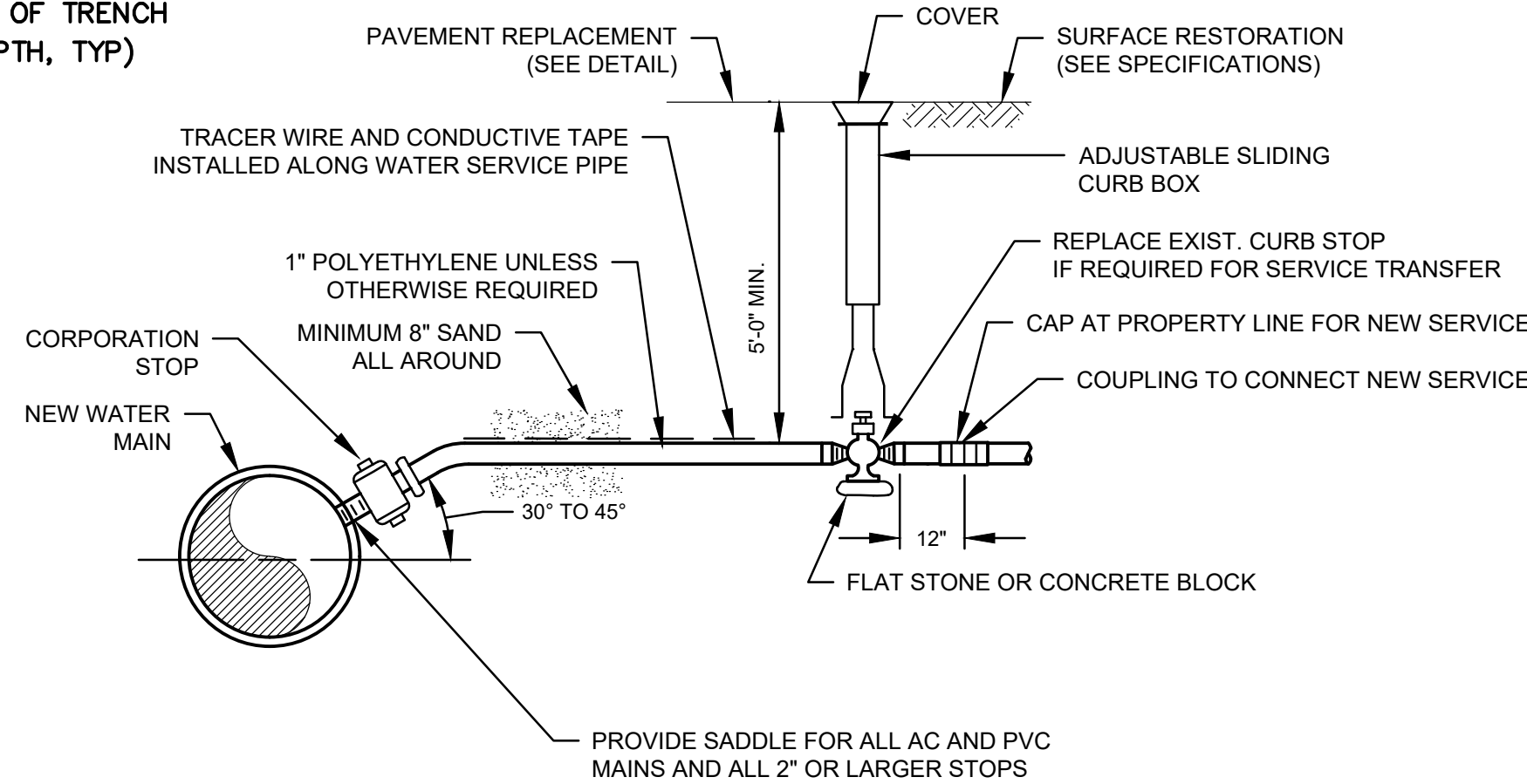
TYPE 2:
LITTLETON STA 0+00 TO 13+00 PERMANENT
FULL WIDTH AND OVERLAY PAVEMENT DETAIL
N.T.S.



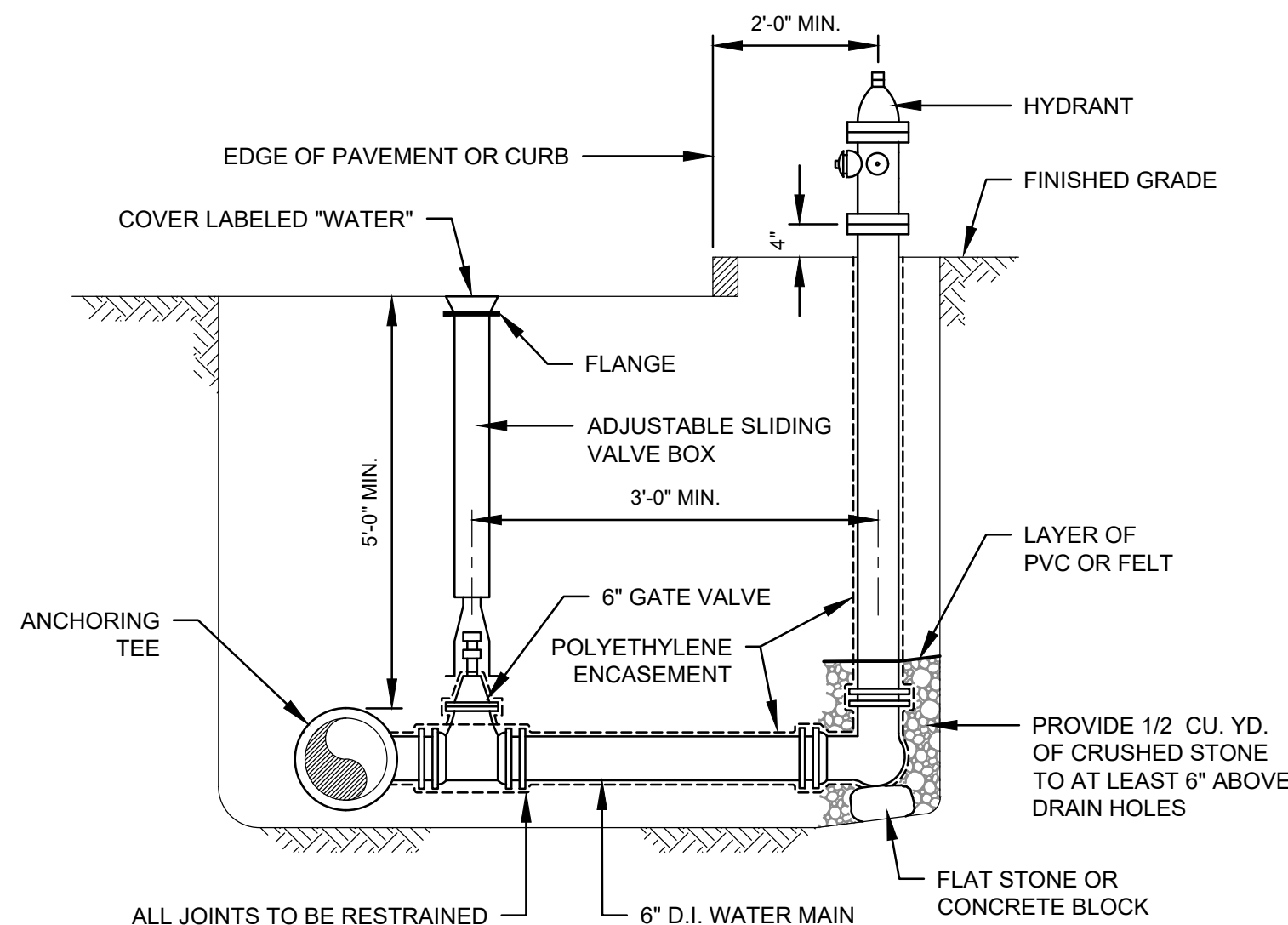
STATE HIGHWAY PERMANENT TRENCH
PAVEMENT DETAIL
N.T.S.



VALVE AND BOX DETAIL
N.T.S.



WATER SERVICE DETAIL
N.T.S.



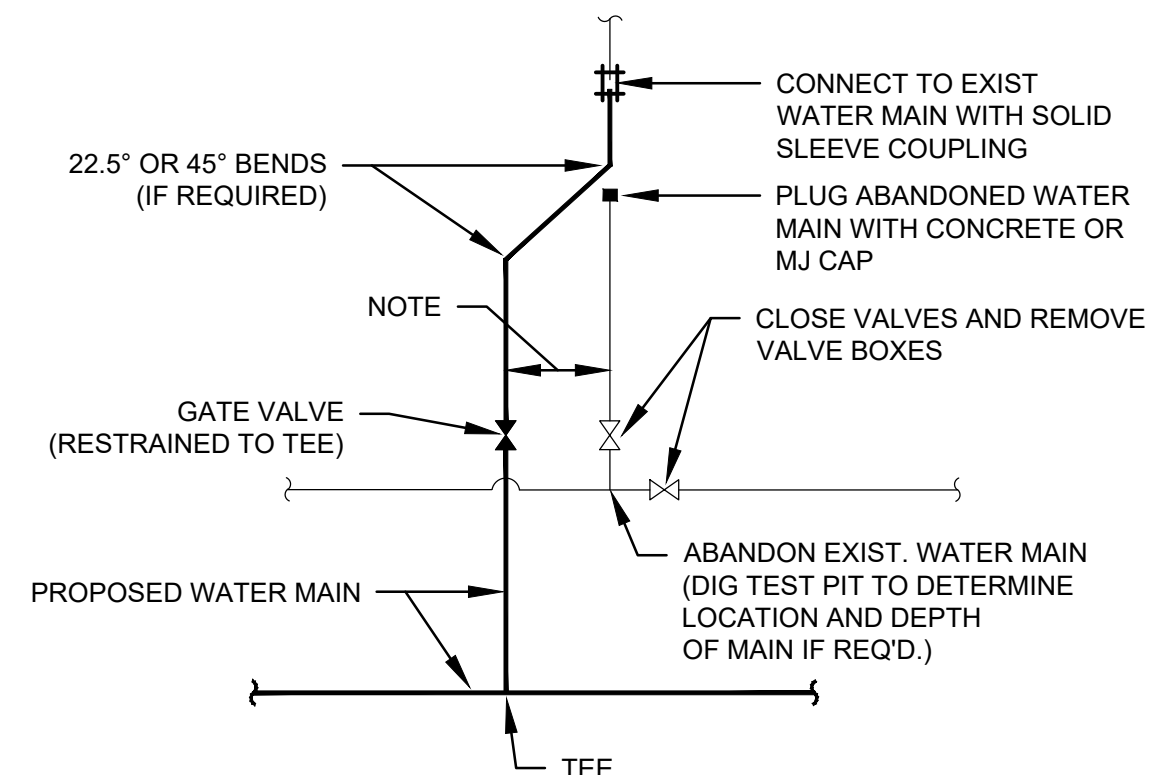
NOTE:
USE TWO 6" BENDS OR OFFSET ON LATERAL TO ACHIEVE
REQUIRED HYDRANT ELEVATION IF NECESSARY.

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)

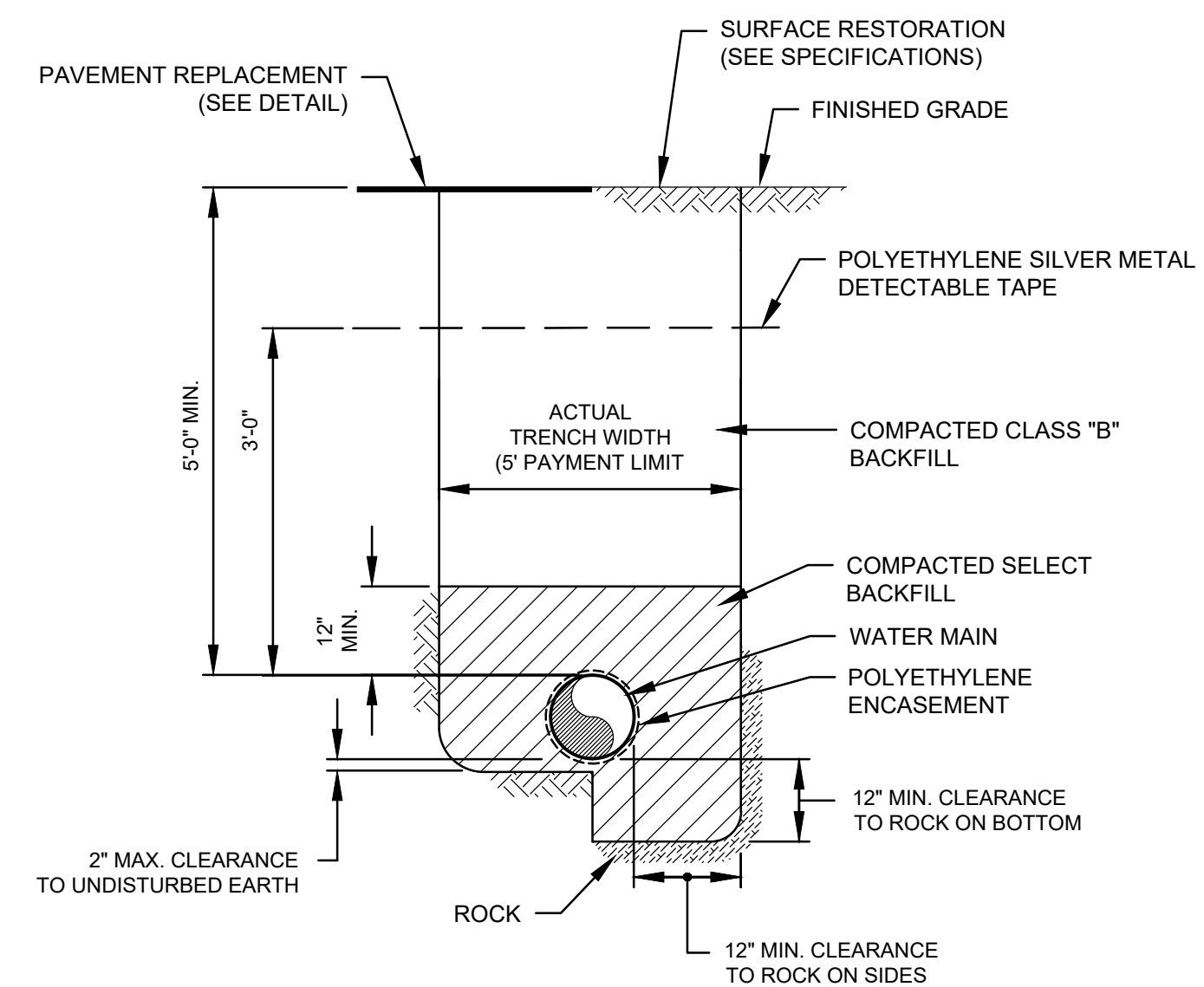
- NOTES:
- RESTRAINED LENGTHS LISTED IN PARENTHESES ARE FOR PIPE WRAPPED IN POLYETHYLENE. THE OTHER ASSOCIATED LENGTHS ARE FOR PLAIN UNWRAPPED DUCTILE IRON PIPE.
 - THE CONTRACTOR SHALL USE THIS TABLE IN CONJUNCTION WITH THE APPROPRIATE PIPE SPECIFICATION SECTION.

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.

Project:
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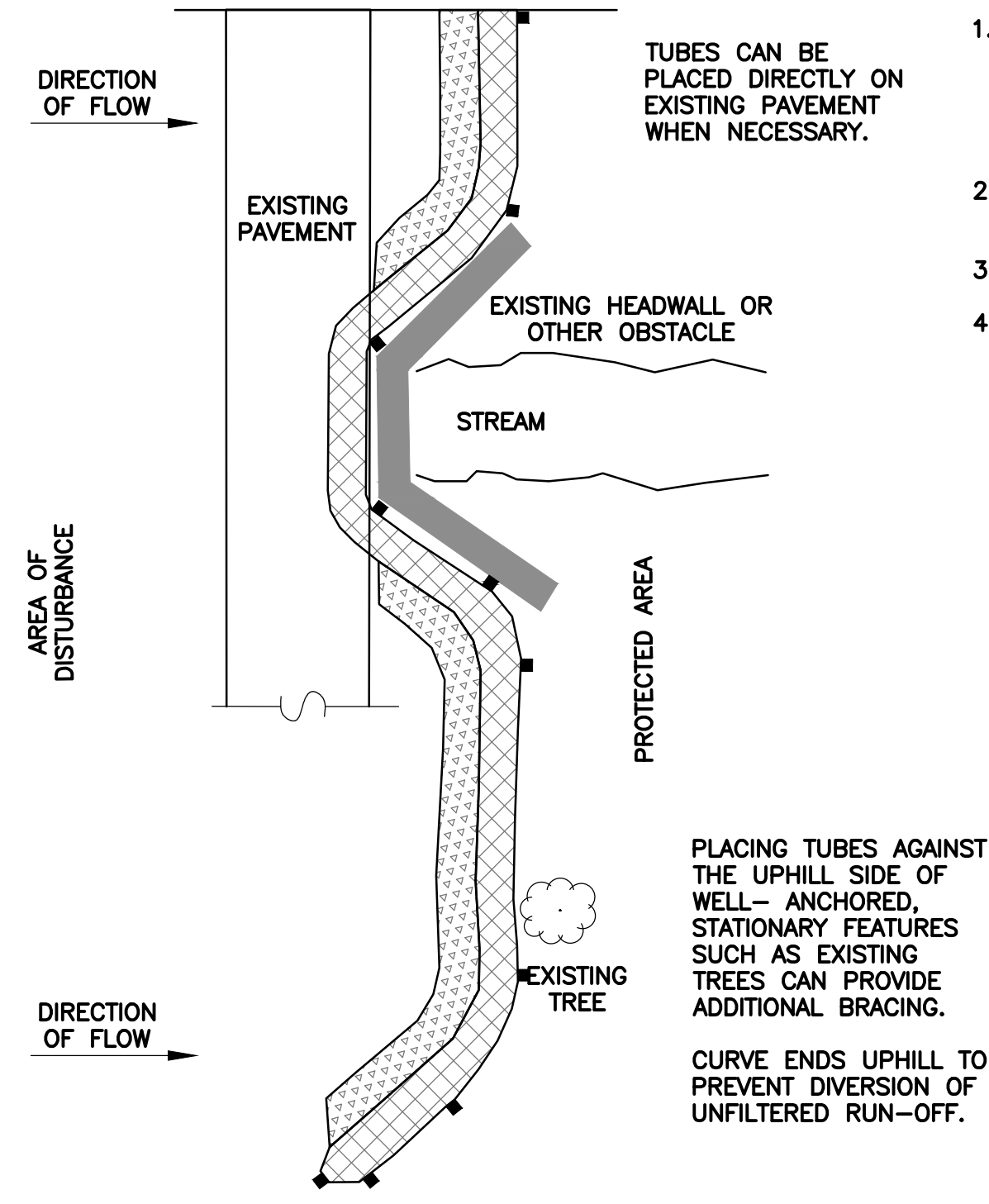
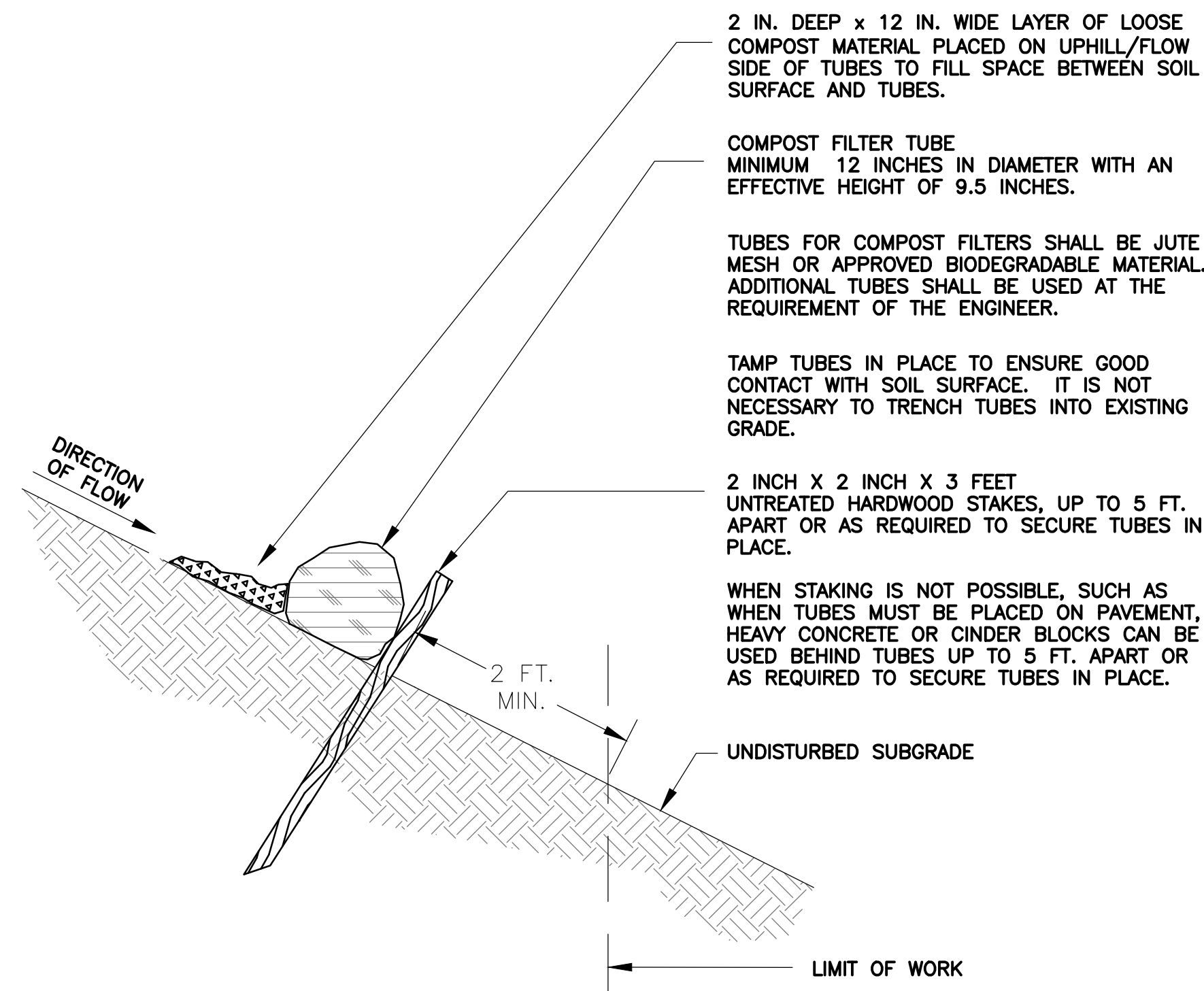
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DETAILS I

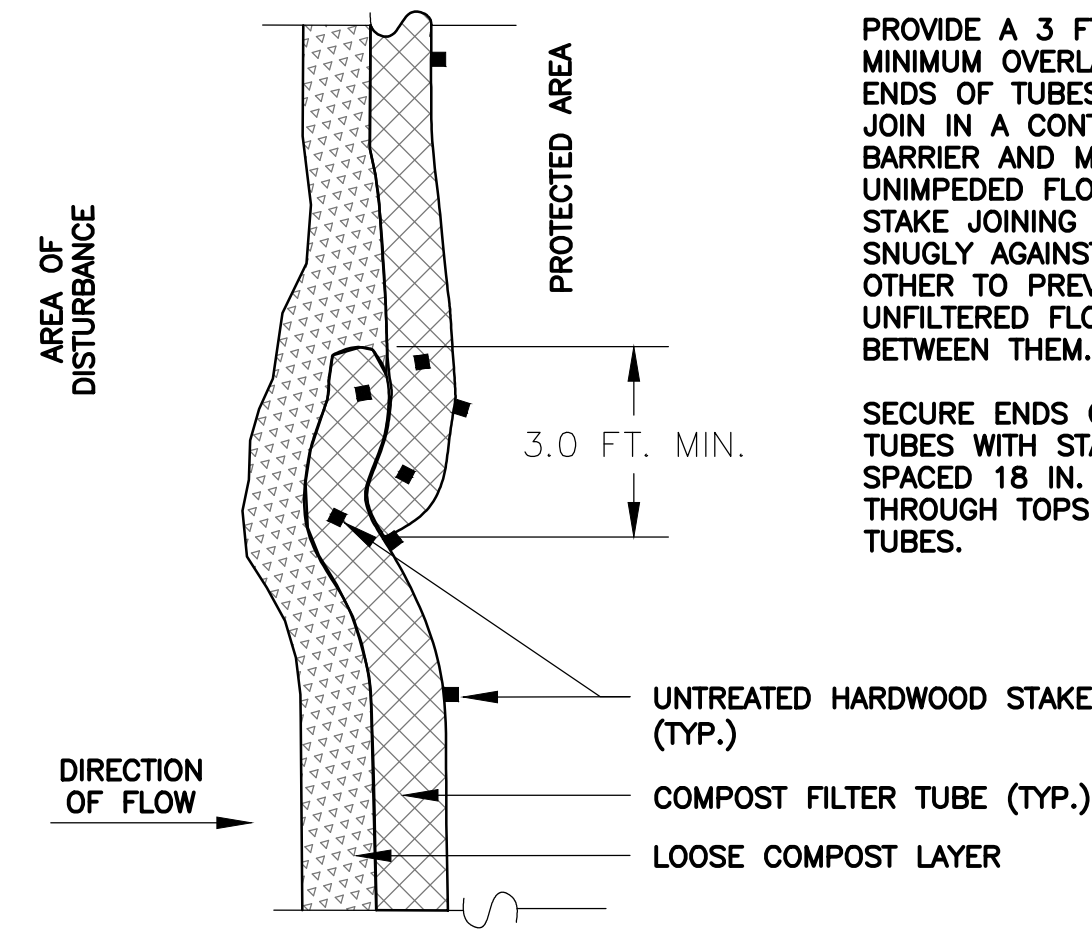
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C501



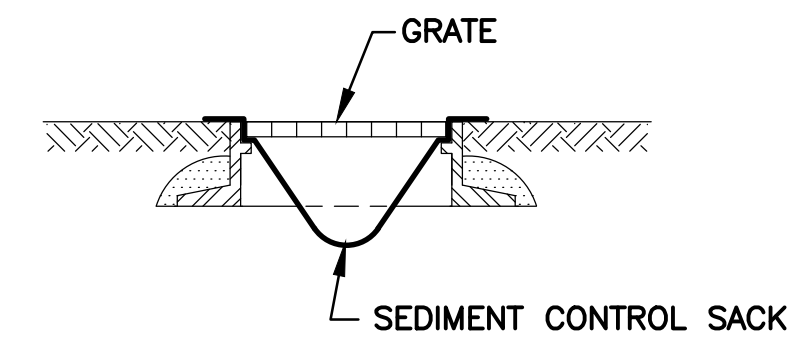
PLAN VIEW
SINGLE COMPOST FILTER TUBE DETAIL
NOT TO SCALE

GENERAL NOTES:

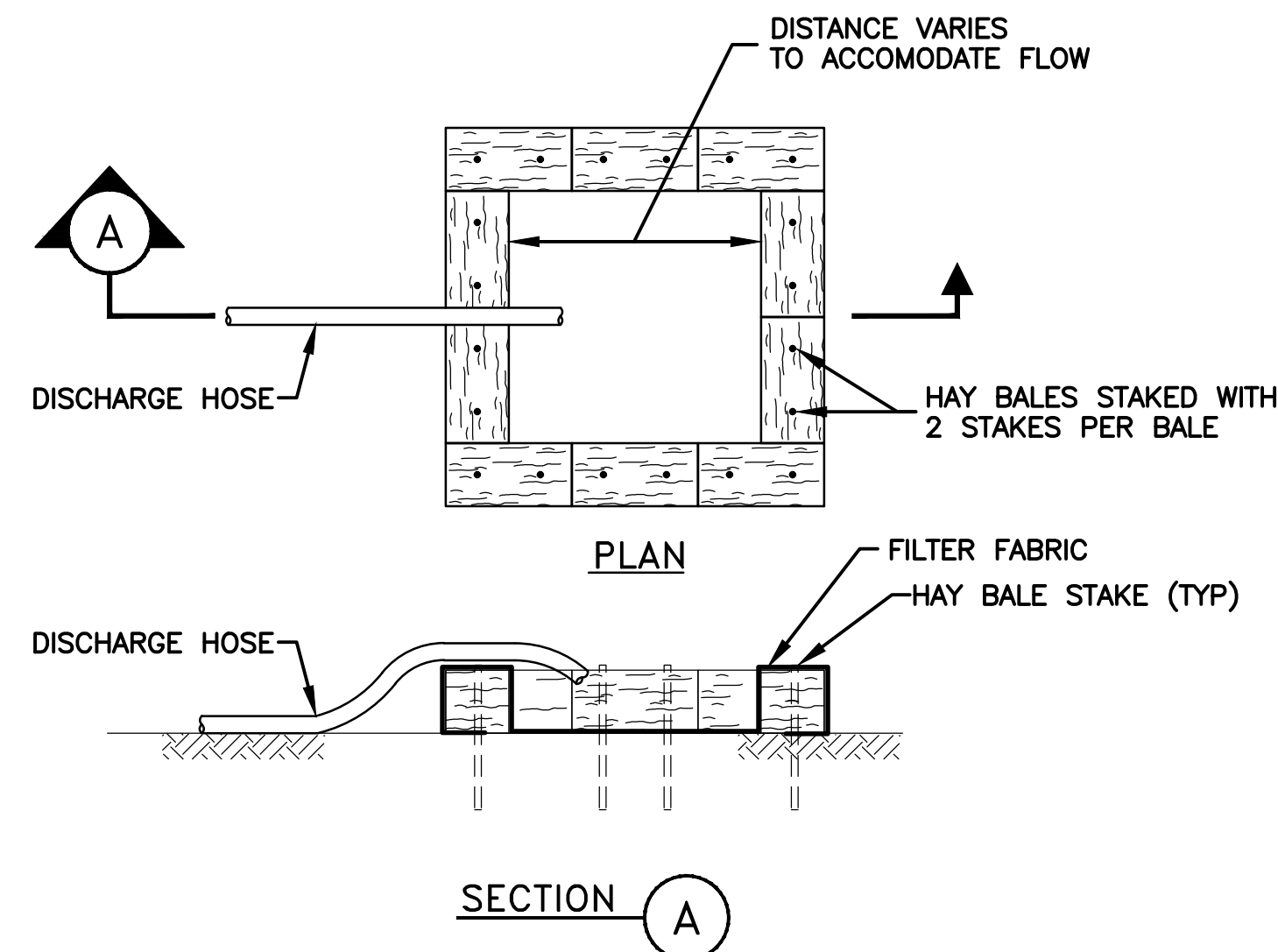
1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSEING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH 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.



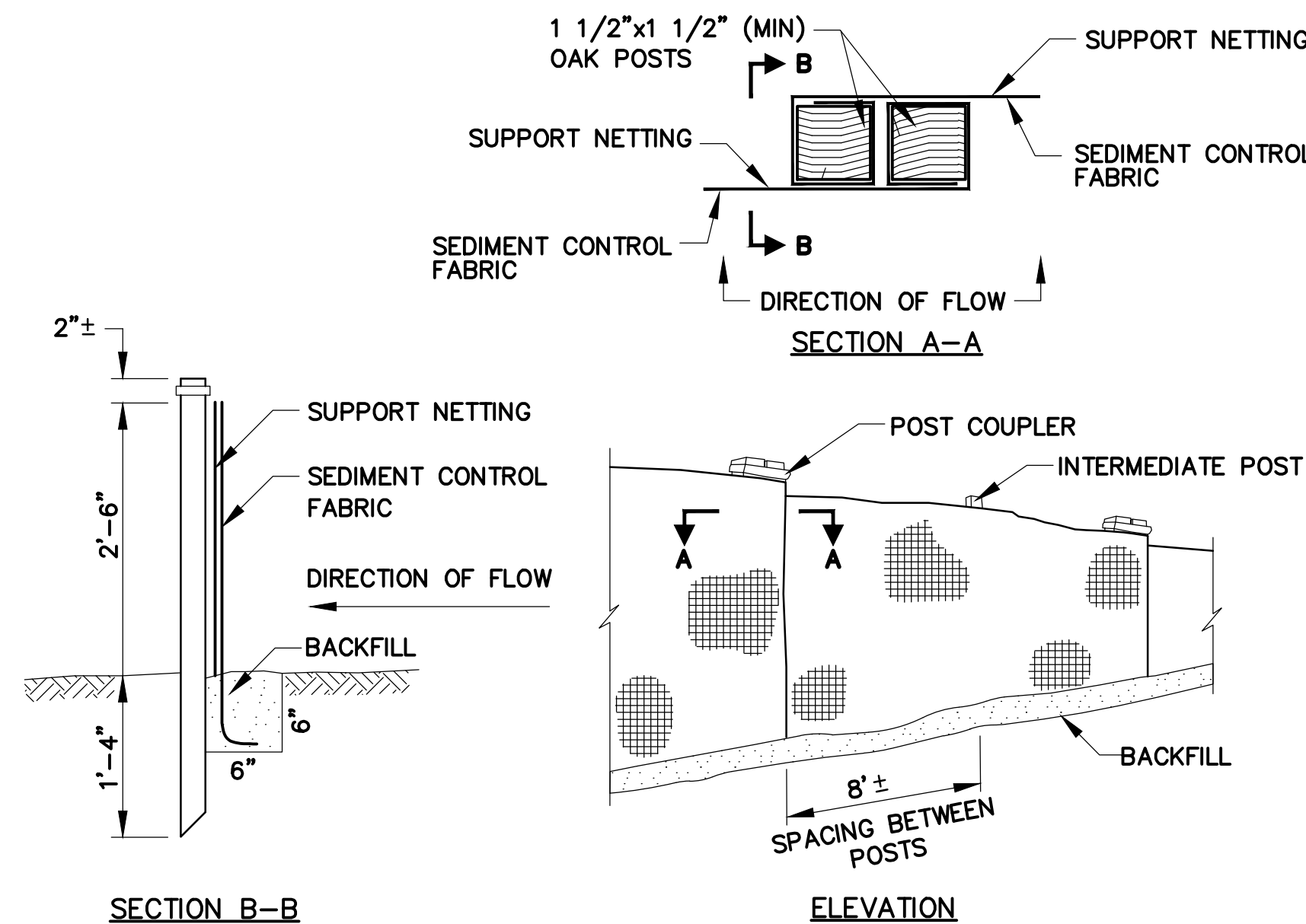
PLAN VIEW -- JOIN DETAIL



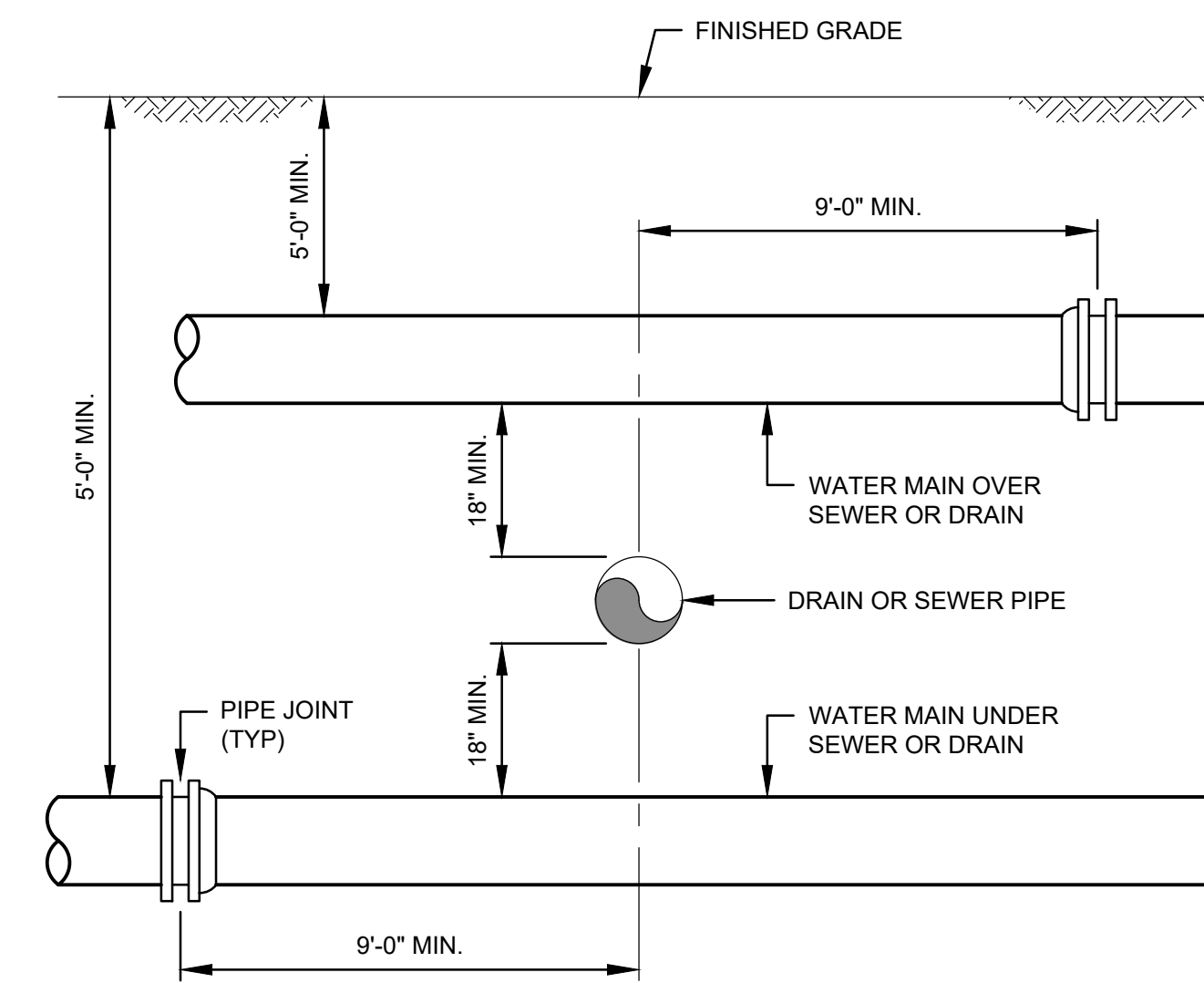
CATCH BASIN PROTECTION DETAIL
N.T.S.



DEWATERING DISCHARGE DISPOSAL DETAIL
N.T.S.

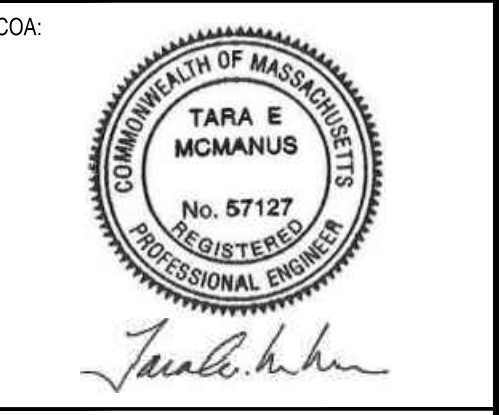


SILT FENCE DETAIL
N.T.S.



SEWER OR DRAIN CROSSING DETAIL
N.T.S.

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DETAILS II

Sheet Number:
C502