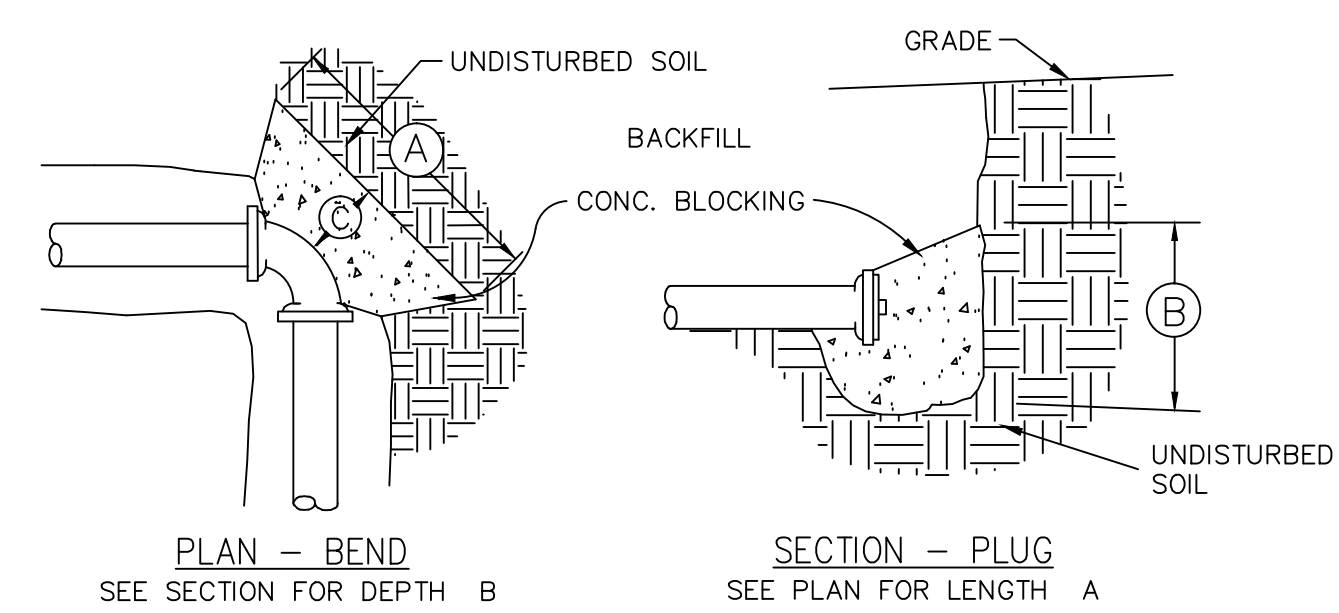


PROJECT TYPICAL DETAILS

UTILITY CONSTRUCTION

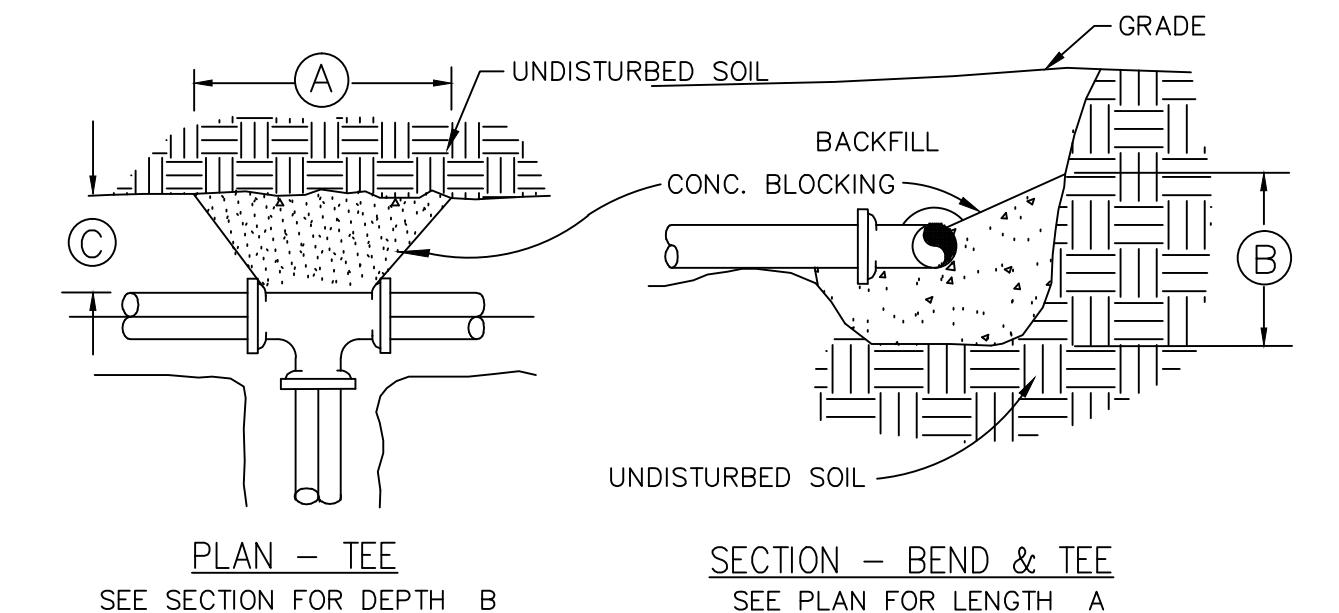
BLOCKING DIMENSIONS			
PIPE SIZE	(A)	(B)	(C)
UP TO 10"	4' - 0"	2' - 6"	1' - 6"
12" TO 16"	5' - 0"	4' - 0"	2' - 0"
18" TO 24"	8' - 0"	6' - 0"	3' - 0"



PLAN - BEND
SEE SECTION FOR DEPTH B

SECTION - PLUG
SEE PLAN FOR LENGTH A

- NOTES:
- 2500 P.S.I. CONC.
 - REMOVE LOOSE EARTH AND POUR AGAINST UNDISTURBED SOIL.
 - BACKFILL TO EXISTING/FINISH GRADE AFTER CONCRETE HAS CURED FOR 24 HOURS.
 - CONCRETE SHALL NOT COVER FLANGES, BOLTS, MEGA-LUGS, RODS, ETC.

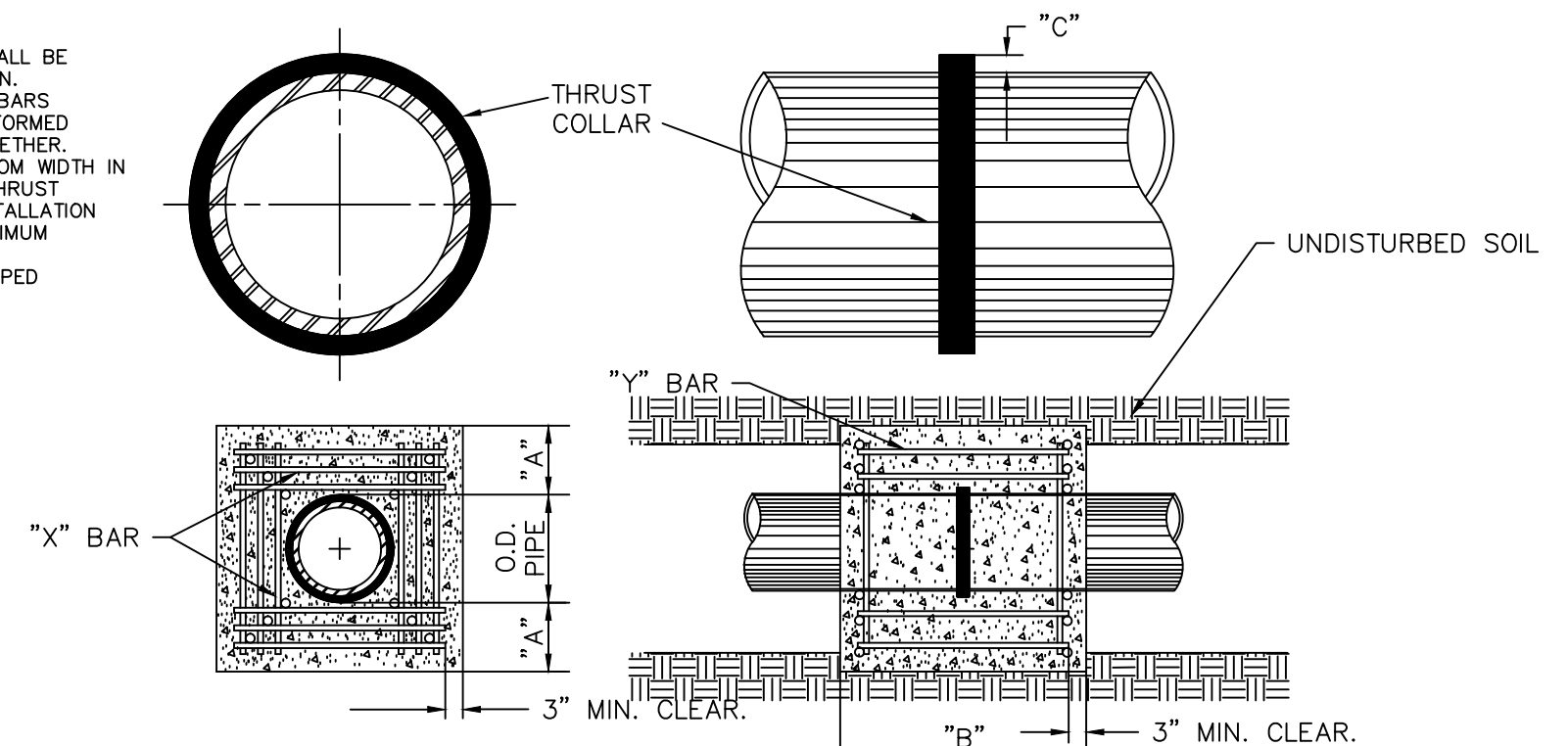


PLAN - TEE
SEE SECTION FOR DEPTH B

SECTION - BEND & TEE
SEE PLAN FOR LENGTH A

THRUST BLOCKS
DETAIL W-12

- NOTES:
- CONCRETE SHALL BE 2500 P.S.I. MIN.
 - REINFORCING BARS SHALL BE DEFORMED AND TIED TOGETHER.
 - TRENCH BOTTOM WIDTH IN VICINITY OF THRUST BLOCK(S) INSTALLATION SHALL BE MINIMUM WIDTH.
 - BACKFILL TAMPED IN 6" LAYERS.

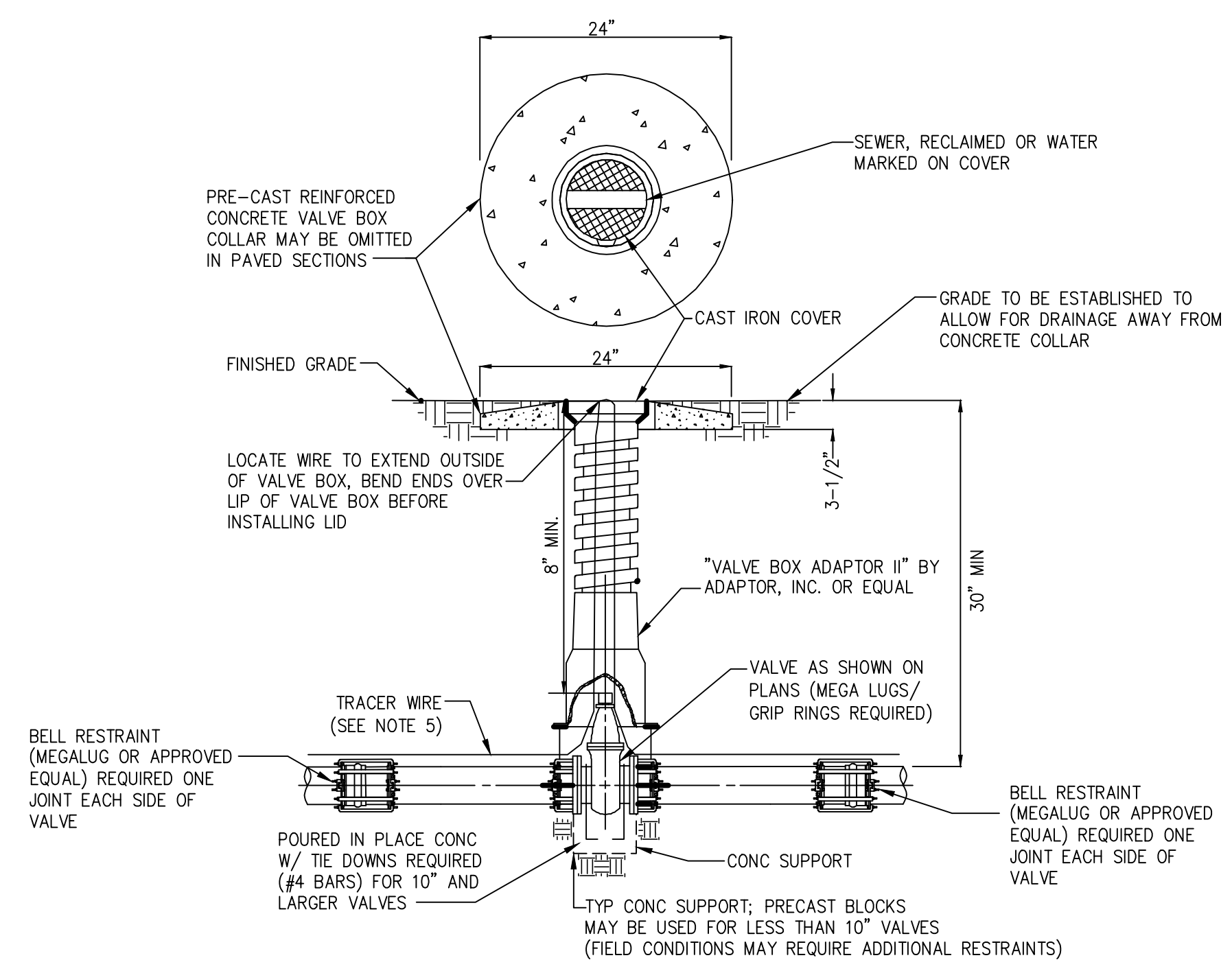


REINFORCING REQUIREMENTS

REINFORCING BAR SCHEDULE						
I.D. PIPE	REBAR SIZE	"X" BAR LENGTH	"X" BAR WGT.	"Y" BAR LENGTH	"Y" BAR WGT.	NO. REQD.
6"-36"	#5	2'-2"+O.D. PIPE	1.043 LBS./FT	1'-1"	1.1 LBS. EA.	X-24,Y-12
48"	#6	3'-0"+O.D. PIPE	1.502 LBS./FT	1'-3"	1.9 LBS. EA.	X-24,Y-12

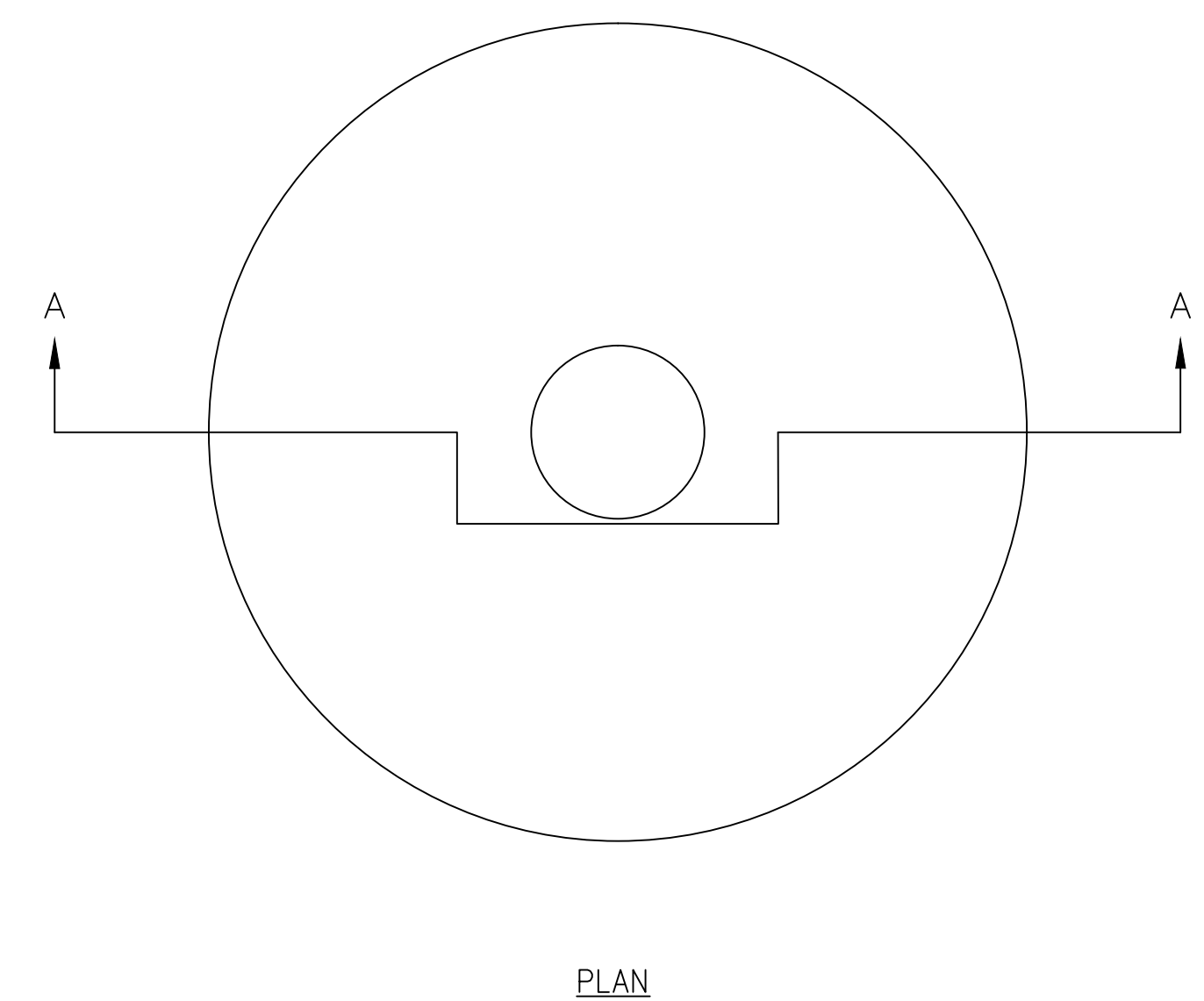
REINFORCING BAR SCHEDULE						
I.D. PIPE	"A"	"B"	"C" - 6"-16", 20"-24", 30"-36", 48"			
6"-36"	1'-4"	1'-7"	2"	3"	4"	6"
48"	1'-8"	1'-9"				

THRUST COLLAR FOR WATER MAINS
DETAIL W-13



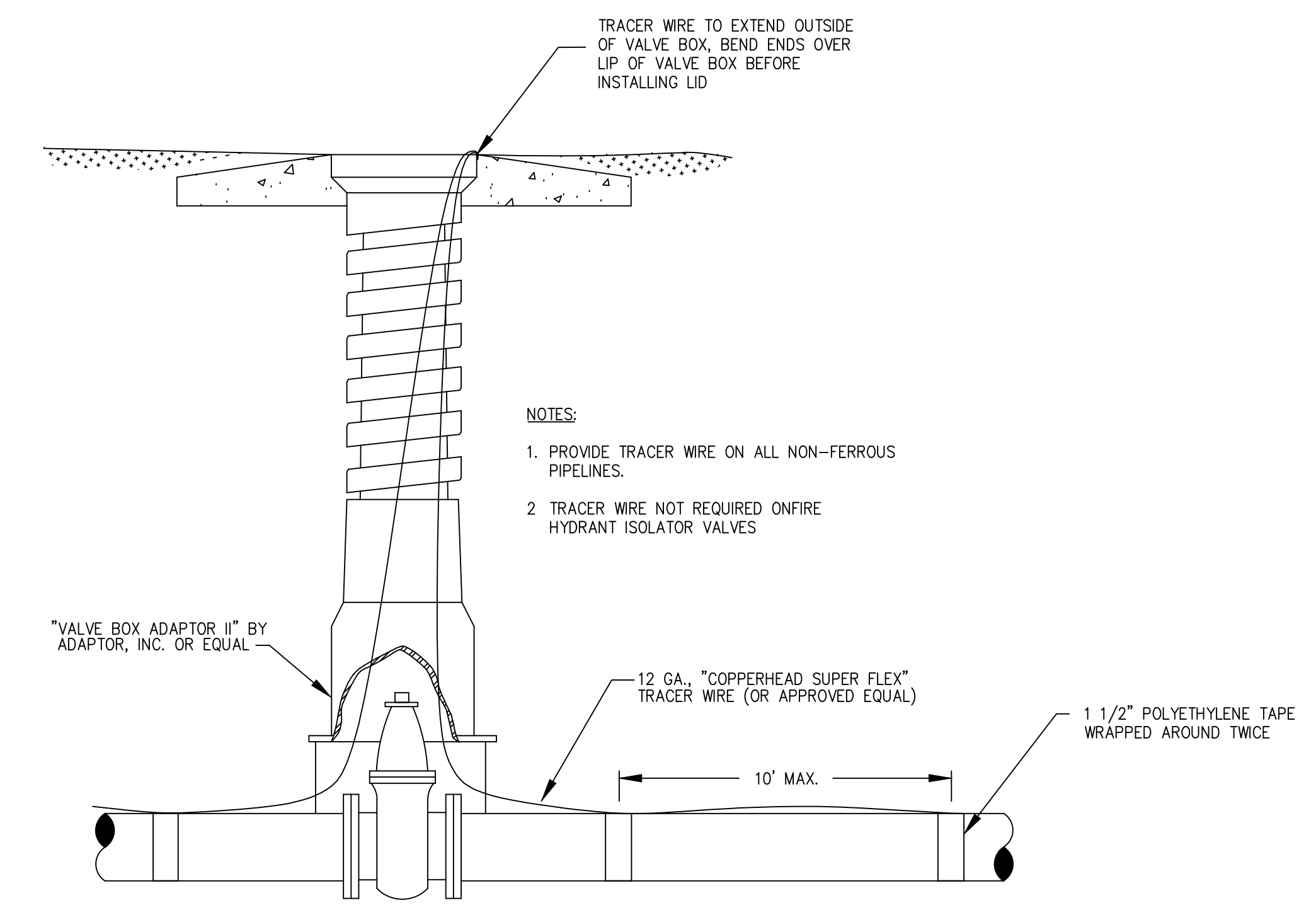
- NOTES:
- TOP OF VALVE BOX AND COLLAR SHALL BE PAINTED GREEN FOR SEWER FM, PURPLE FOR RECLAIMED WATER, AND BLUE FOR WATER.
 - EXTENSION STEM WILL BE REQUIRED TO BE WITHIN 2 FEET OF THE SURFACE IF OPERATING NUT WOULD OTHERWISE BE OVER 5 FEET BELOW GRADE. EXTENSIONS SHALL BE PERMANENTLY ATTACHED TO VALVE NUT AND SHALL BE PROVIDED WITH HORIZONTAL SPACERS FOR VERTICAL ALIGNMENT WITHIN THE VALVE BOX.
 - MINIMUM CLEARANCE TO EXTENSION IS 8".
 - WIRE COLORS REQUIRED: SEWER-GREEN/WATER-BLUE/RECLAIMED WATER-PURPLE OR GREEN WITH PURPLE STRIPE
 - 12 GA. COPPERHEAD SUPER FLEX TRACER WIRE OR APPROVED EQUAL.

VALVE BOX
DETAIL WS-9



PLAN

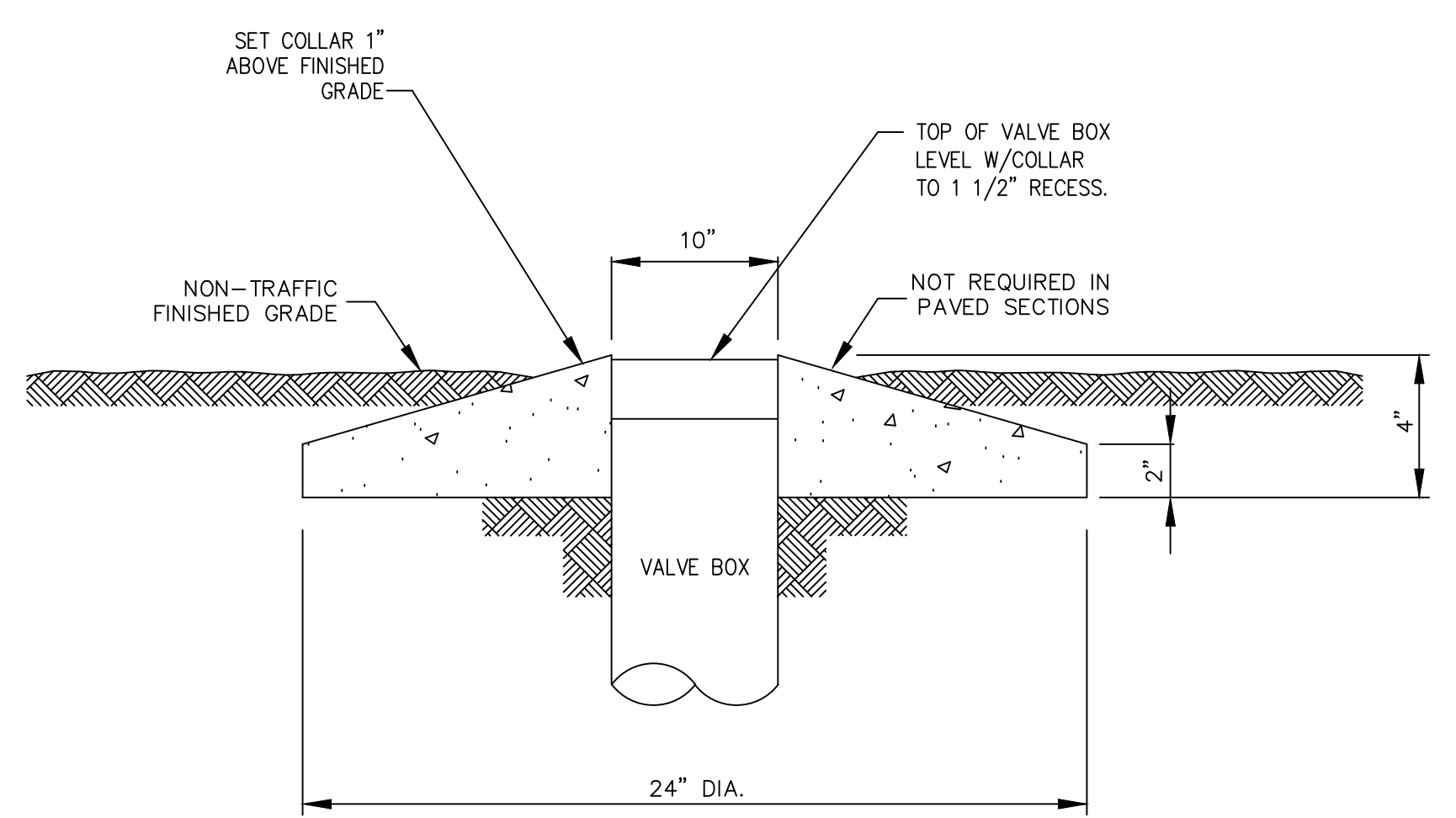
PRECAST CONCRETE VALVE BOX COLLAR
DETAIL WS-16



- NOTES:
- PROVIDE TRACER WIRE ON ALL NON-FERROUS PIPELINES.
 - TRACER WIRE NOT REQUIRED ON FIRE HYDRANT ISOLATOR VALVES

TRACER WIRE AT VALVES
DETAIL WS-13

- NOTE:
- WIRE COLOR REQUIRED
 - SEWER-GREEN
 - WATER-BLUE
 - RECLAIMED WATER-PURPLE OR GREEN WITH PURPLE STRIPE



SECTION A-A

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