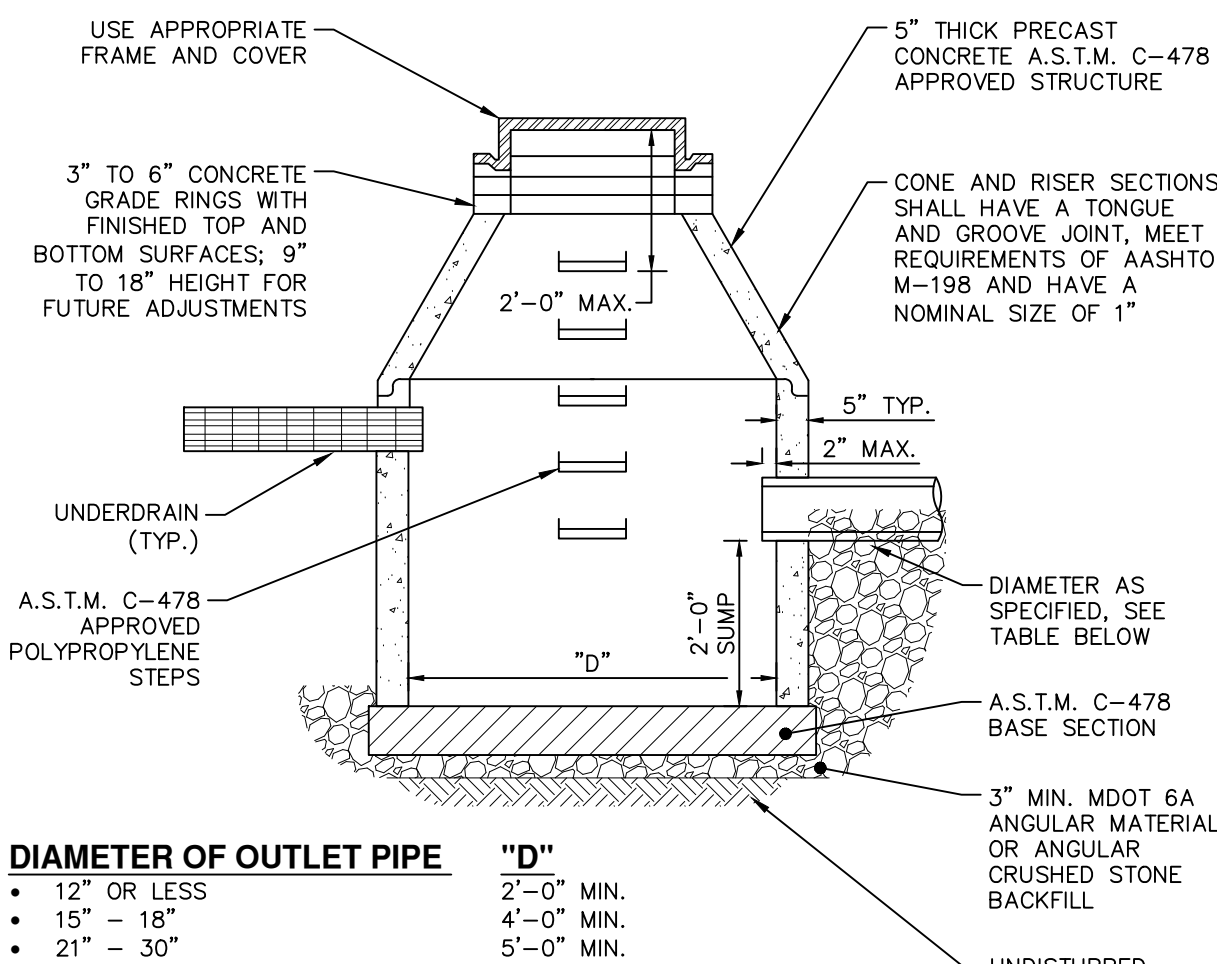


NOTES:
 CATALOG NO. 1040 A
 EST. WEIGHT COVER: 150 LBS.
 MAT'L SPEC.: COVER- GRAY IRON ASTM A48 CL35B
 LOAD RATING: HEAVY DUTY
 COATING: DIPPED

MANHOLE FRAME & COVER
 NOT TO SCALE

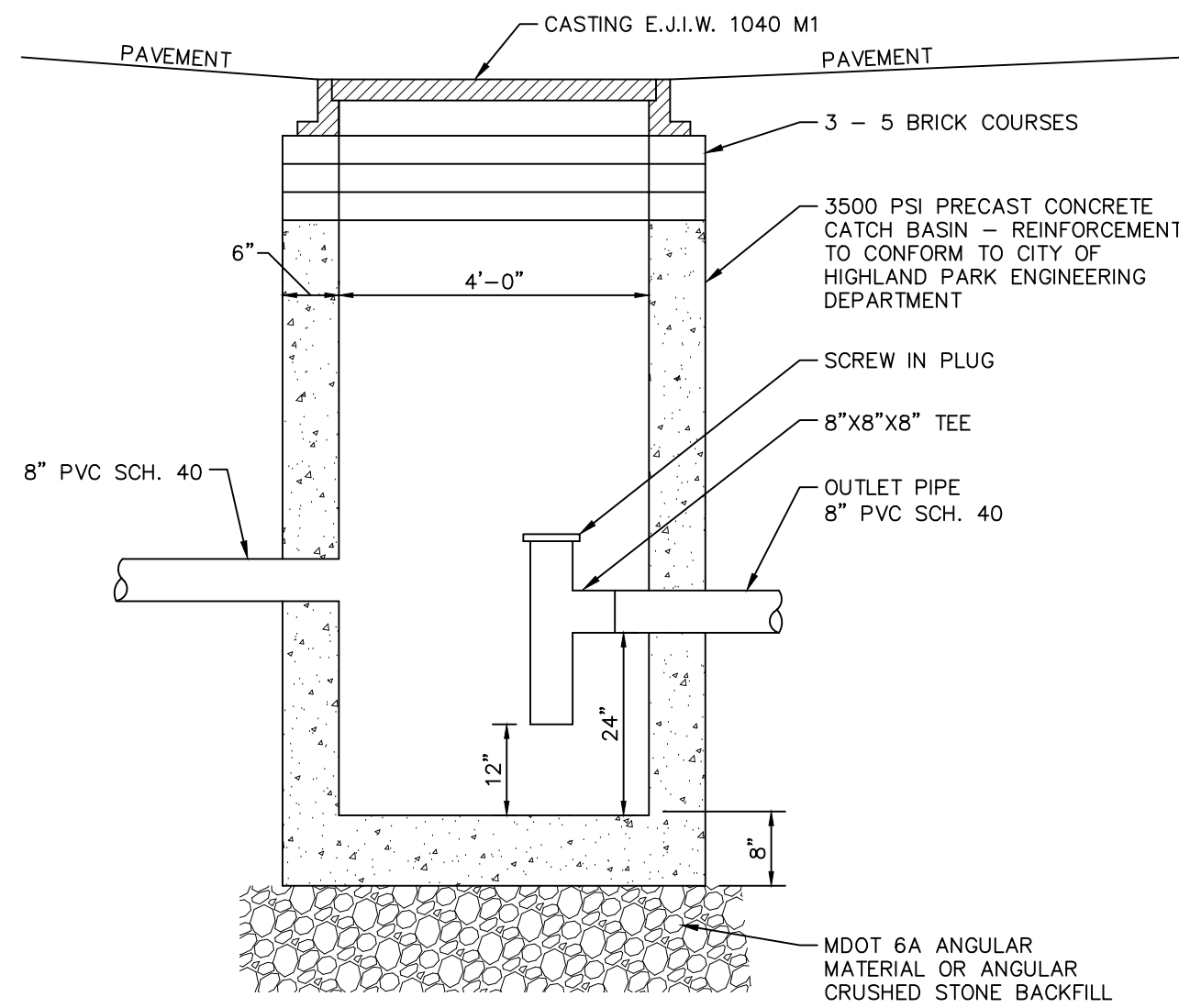


DIAMETER OF OUTLET PIPE "D"

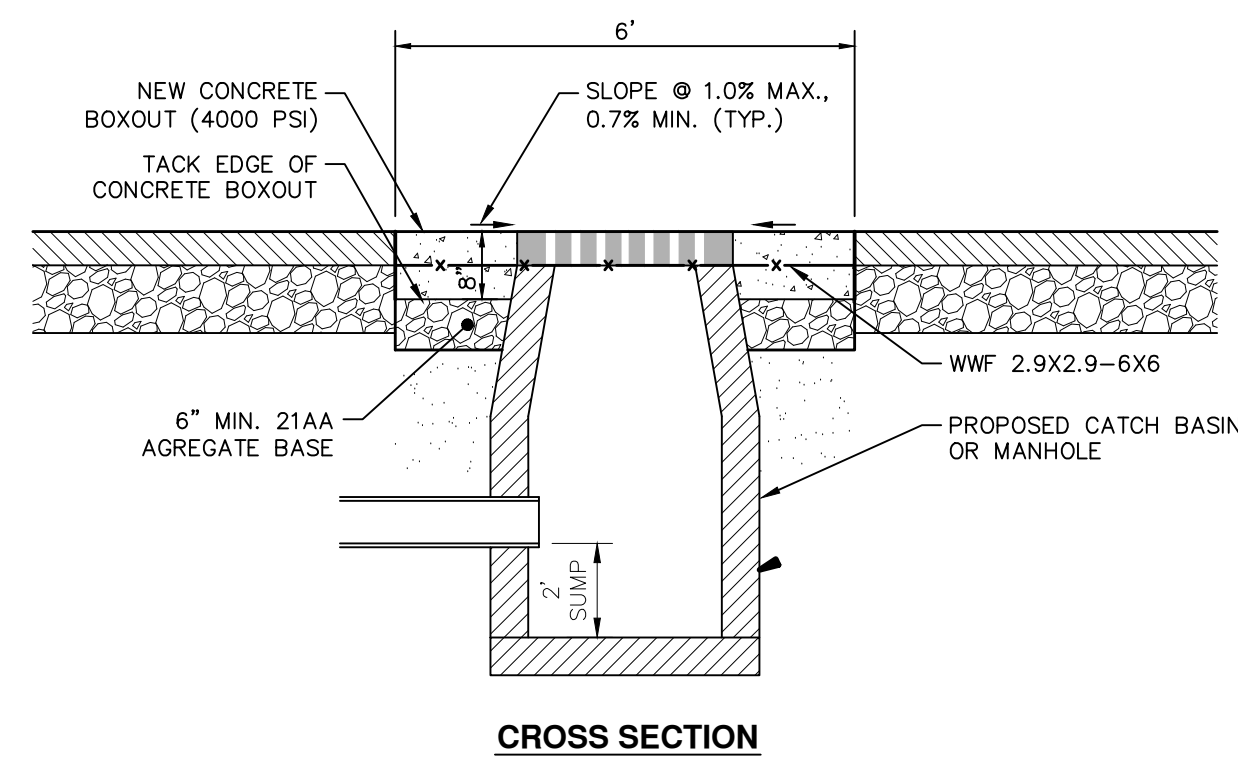
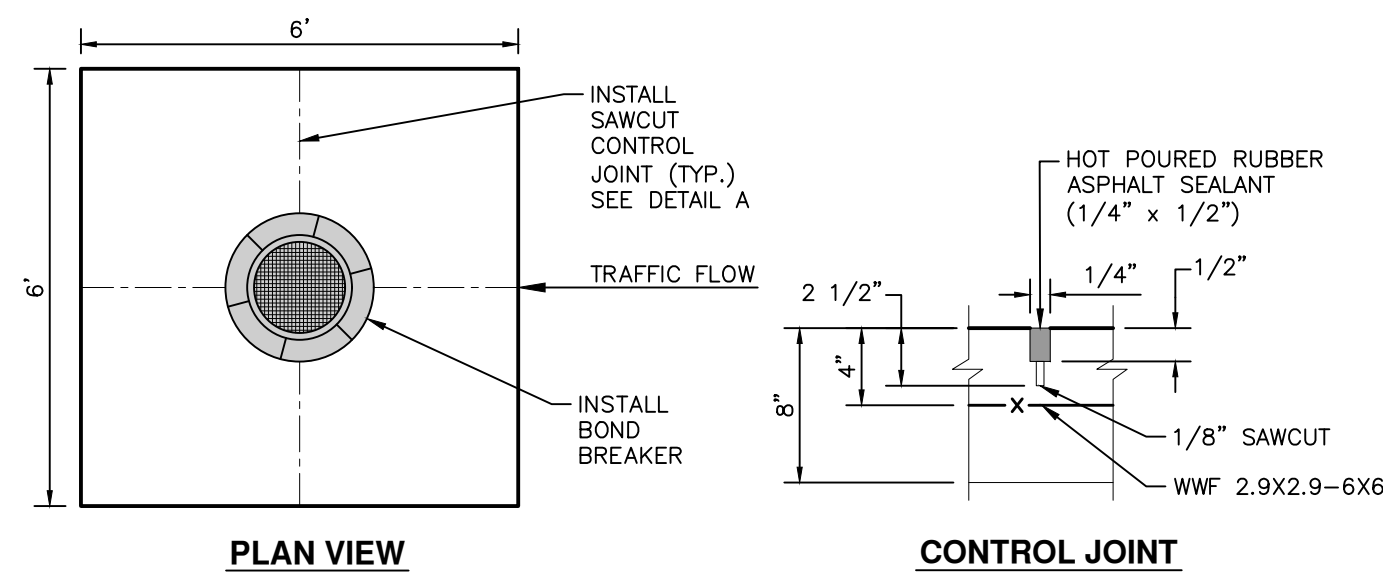
12" OR LESS	2'-0" MIN.	5'-0" MIN.
15" - 18"	4'-0" MIN.	
21" - 30"	5'-0" MIN.	

NOTES:
 1. UNDERDRAIN PIPE INSTALLATION REQUIRED WITH CATCH BASIN. SEE UNDERDRAIN DETAIL FOR INSTALLATION AND MATERIAL REQUIREMENTS

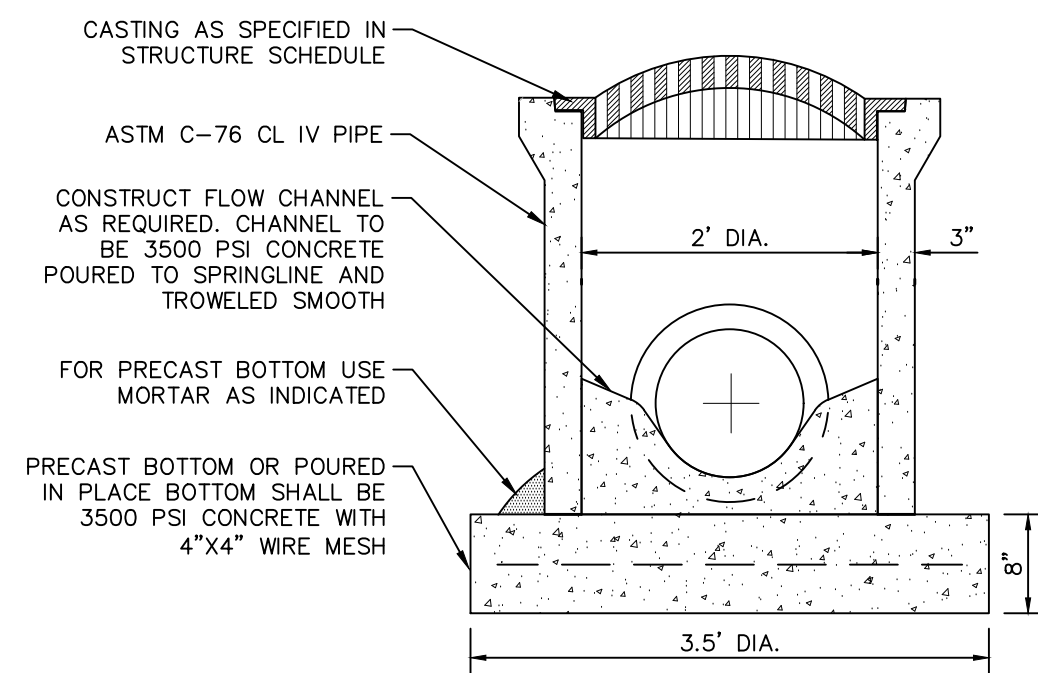
STANDARD CATCH BASIN
 NOT TO SCALE



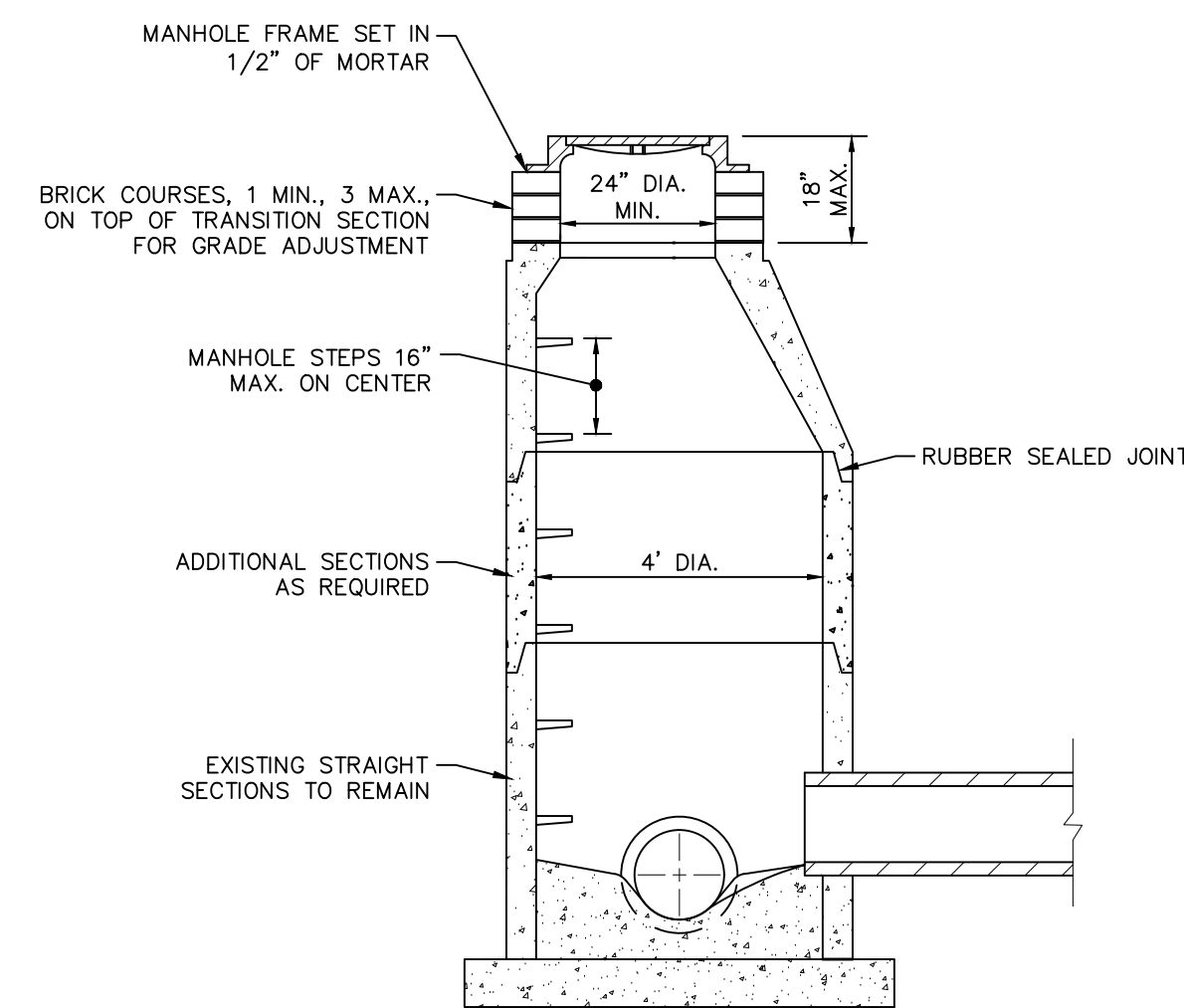
OIL - WATER SEPARATOR SYSTEM
 NOT TO SCALE



CONCRETE BOXOUT PLAN - SECTION
 NOT TO SCALE

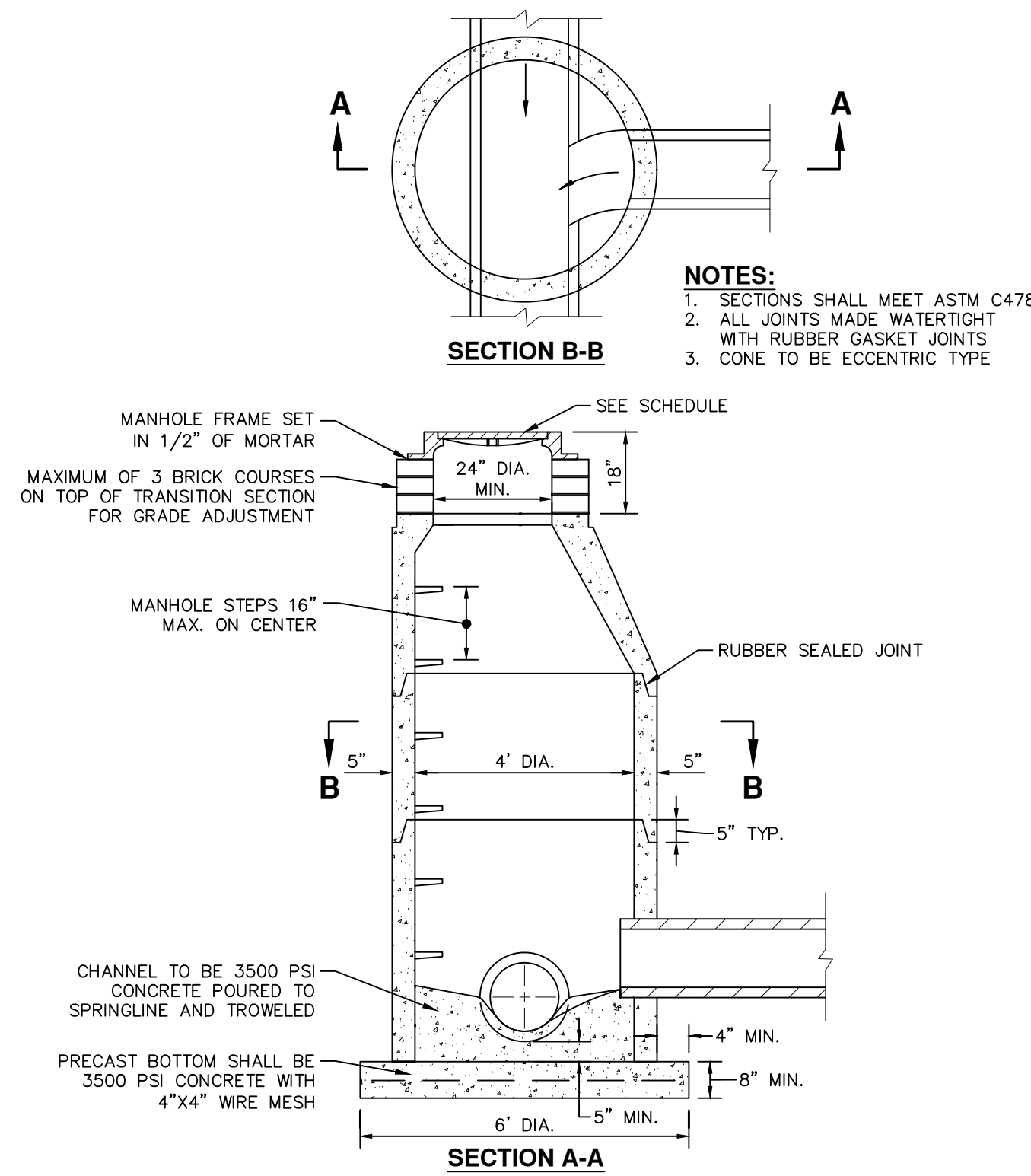


INLET - 2 FT. DIA.
 NOT TO SCALE

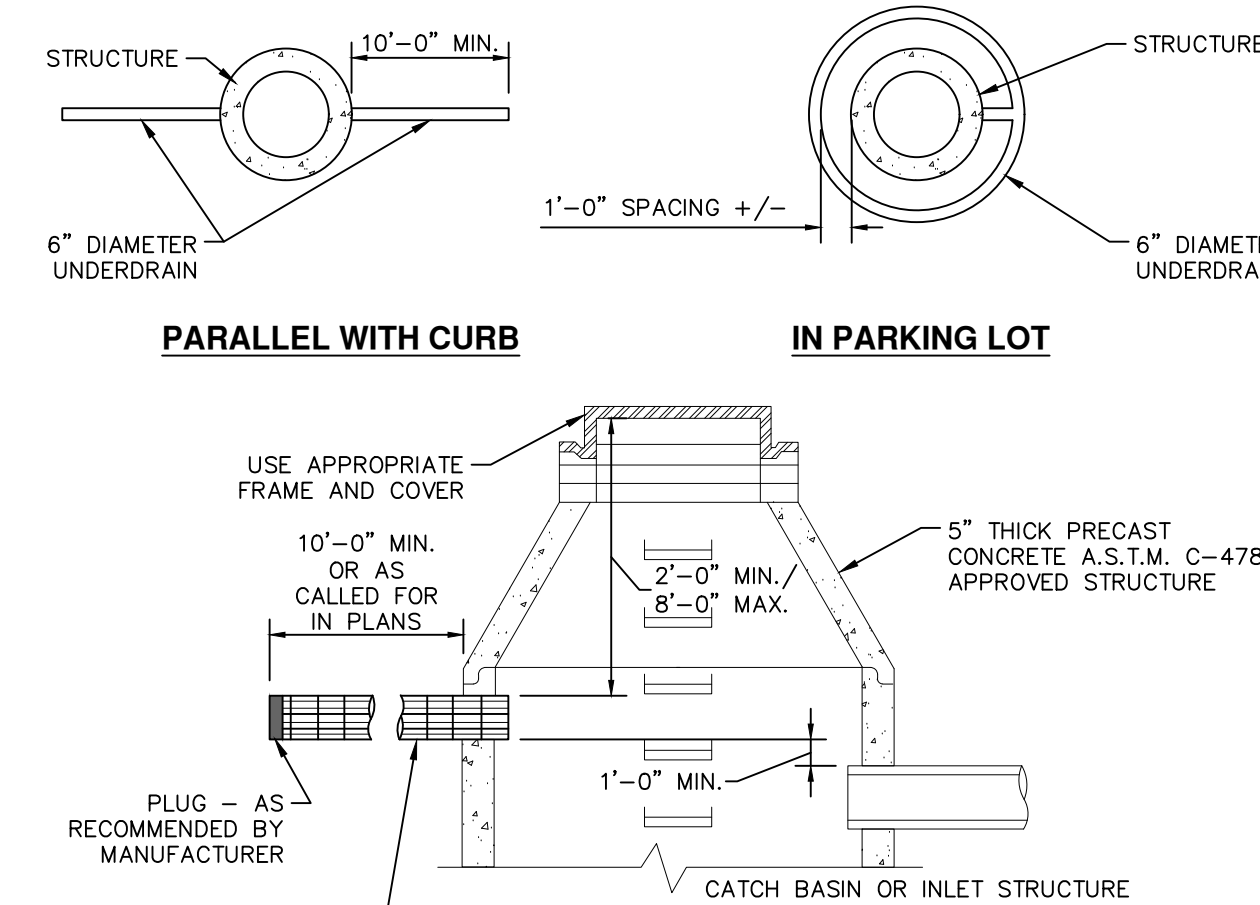


NOTES:
 1. SECTIONS SHALL MEET ASTM C478
 2. ALL JOINTS MADE WATERTIGHT WITH RUBBER GASKET JOINTS
 3. REMOVE CONE, ADD STRAIGHT SECTIONS AS REQUIRED AND REPLACE CONE
 4. ADD BRICK COURSES FOR RIM GRADE ADJUSTMENT

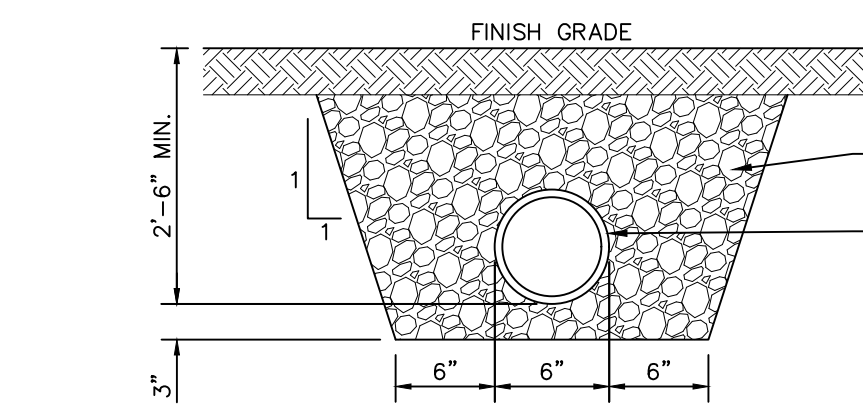
MANHOLE RECONSTRUCTION DIAGRAM
 NOT TO SCALE



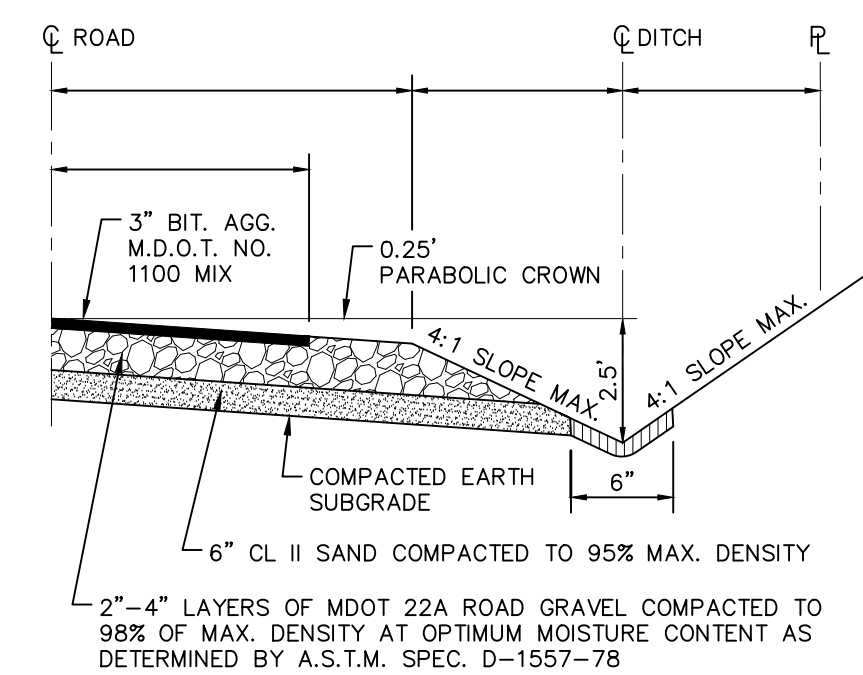
PRECAST CONCRETE STORM MANHOLE
 NOT TO SCALE



NOTES:
 1. UNDERDRAIN BACKFILL SHALL MEET MDO REQUIREMENTS FOR 80 OPEN GRADED DRAINAGE COURSE AGGREGATES. THIS BACKFILL SHALL EXTEND 4" BELOW PIPE, 1" ABOVE, AND FOR FULL WIDTH OF TRENCH

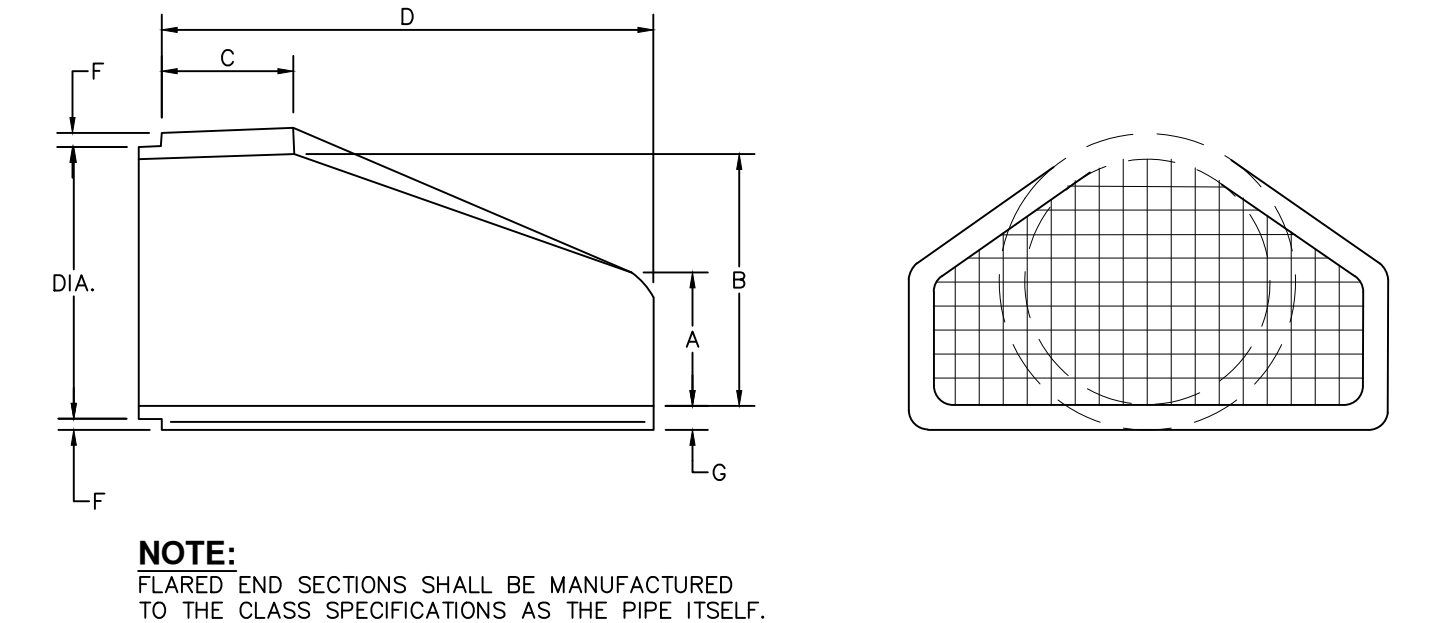


UNDERDRAIN DETAIL
 NOT TO SCALE

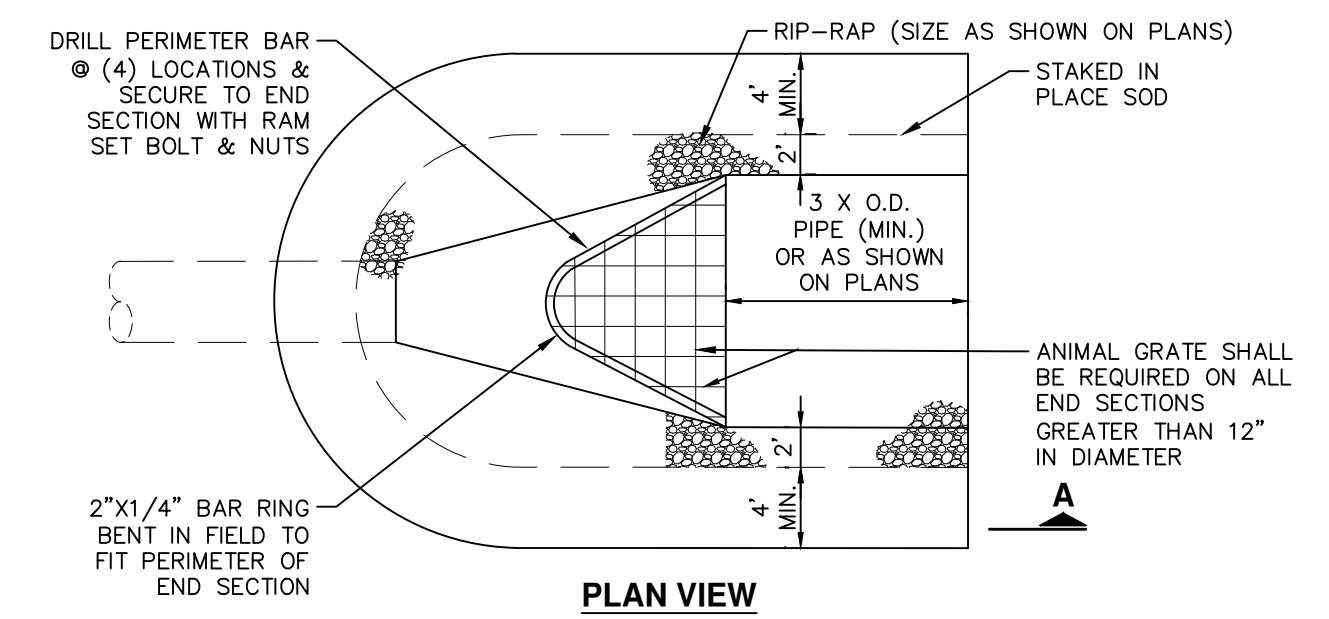


ROAD - DITCH SECTION
 NOT TO SCALE

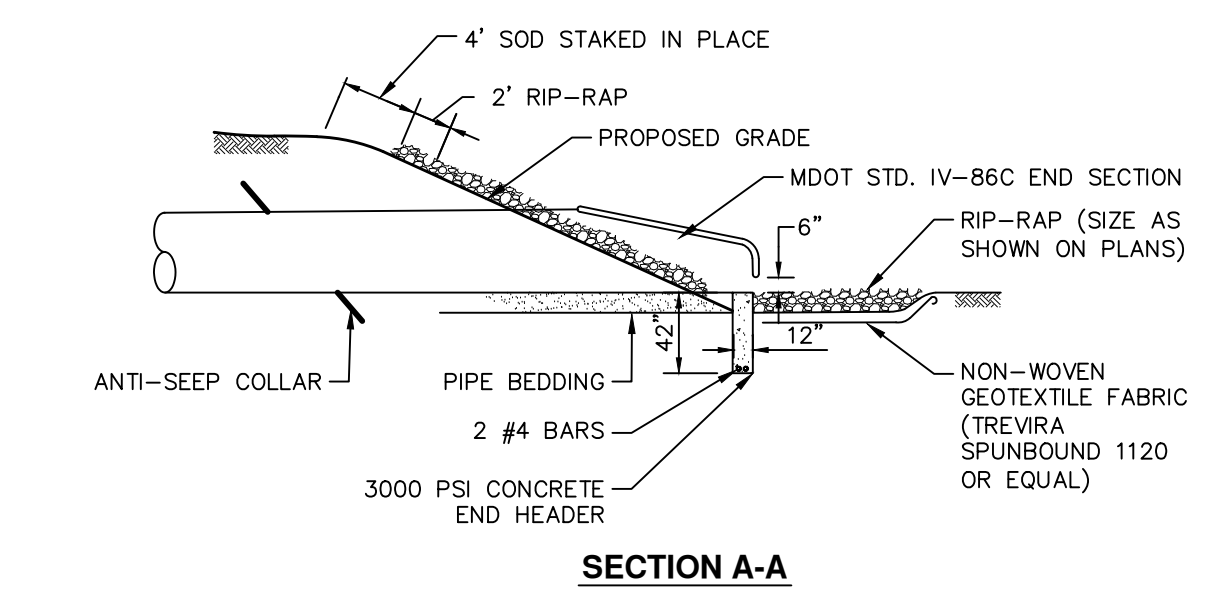
DIA	A	B	C	D	E	F	G
12"	5"	13"	45.5"	72"	24"	2"	2"
15"	7"	16"	43.5"	72"	30"	2.25"	2.25"
18"	11"	19"	41.5"	72"	36"	2.5"	2.5"
24"	12"	25"	29"	72"	48"	3"	2"
30"	14"	31"	19"	72"	48"	3"	2"
36"	17"	37"	34.5"	96"	72"	4"	4"
42"	22"	43"	32.5"	96"	78"	4.5"	4.5"
48"	24"	49"	23.5"	96"	84"	5"	5"



STANDARD PRECAST CONCRETE END SECTION
 NOT TO SCALE



PLAN VIEW



NOTES:
 1. EXTENT OF RIP-RAP SHALL BE AS SHOWN HERE OR AS SHOWN ON PLANS, WHICHEVER IS GREATEST
 2. RIP-RAP THICKNESS AS SHOWN ON PLANS

END SECTION AND RIP-RAP
 NOT TO SCALE

STANDARD STORM SEWER STRUCTURE STEPS:
 STEPS ARE TO BE INSTALLED AT THE PLANT BY THE MANUFACTURER OF THE STRUCTURE. THE STEPS ARE TO BE 16 INCHES ON CENTER, MADE OF POLYPROPYLENE, AND A.S.T.M. C-478 APPROVED. STEPS ARE TO BE LOCATED AT 90 DEGREES TO THE CENTERLINE OF THE MAIN SEWER LINE. THE BOTTOM STEP SHOULD BE LOCATED A MAXIMUM OF 24 INCHES ABOVE THE FLOOR.