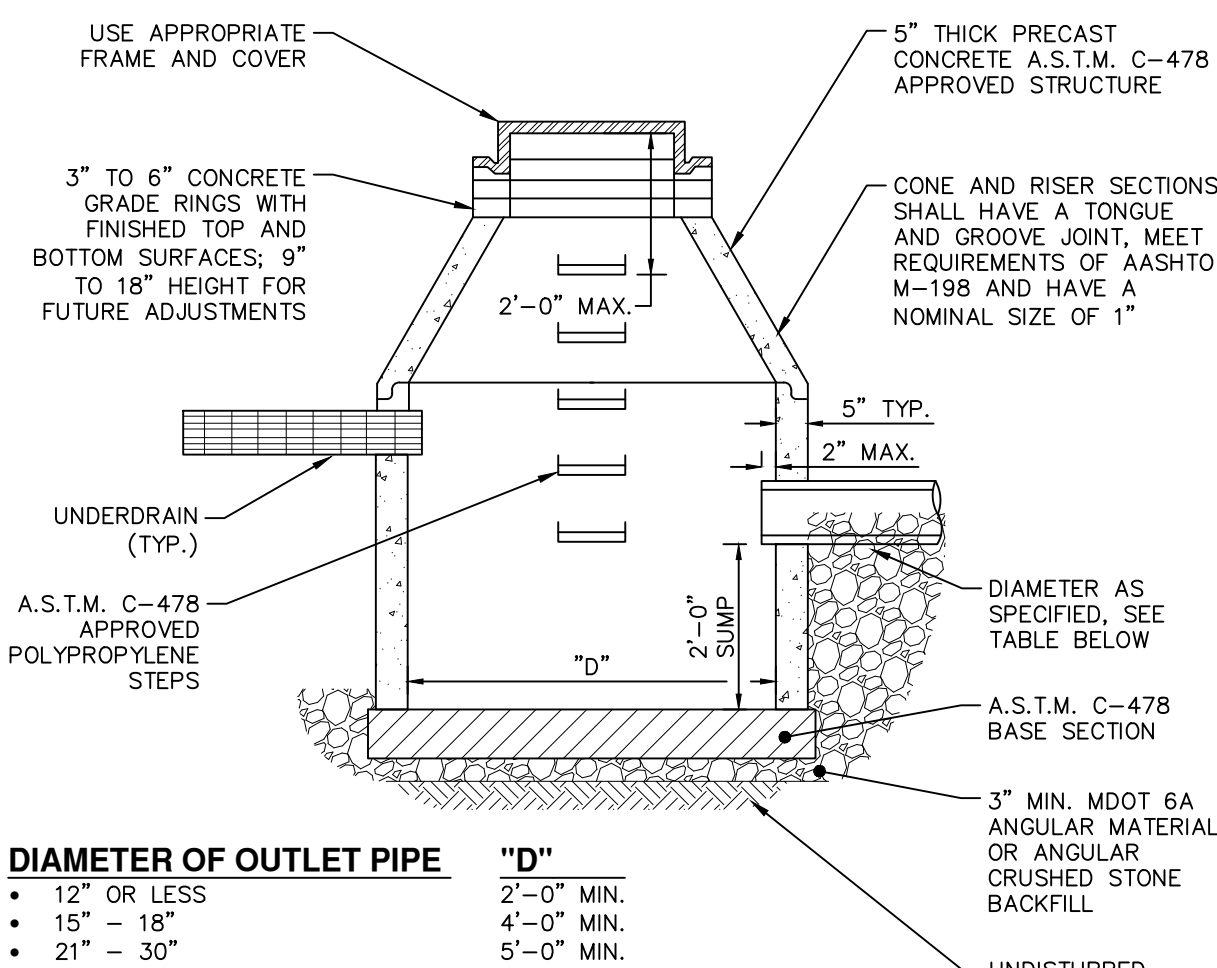


NOTES:
 CATALOG NO. 1040 A
 EST. WEIGHT COVER: 150 LBS.
 MAT'L SPEC.: COVER- GRAY IRON ASTM A48 CL35B
 LOAD RATING: HEAVY DUTY
 COATING: DIPPED

MANHOLE FRAME & COVER
 NOT TO SCALE

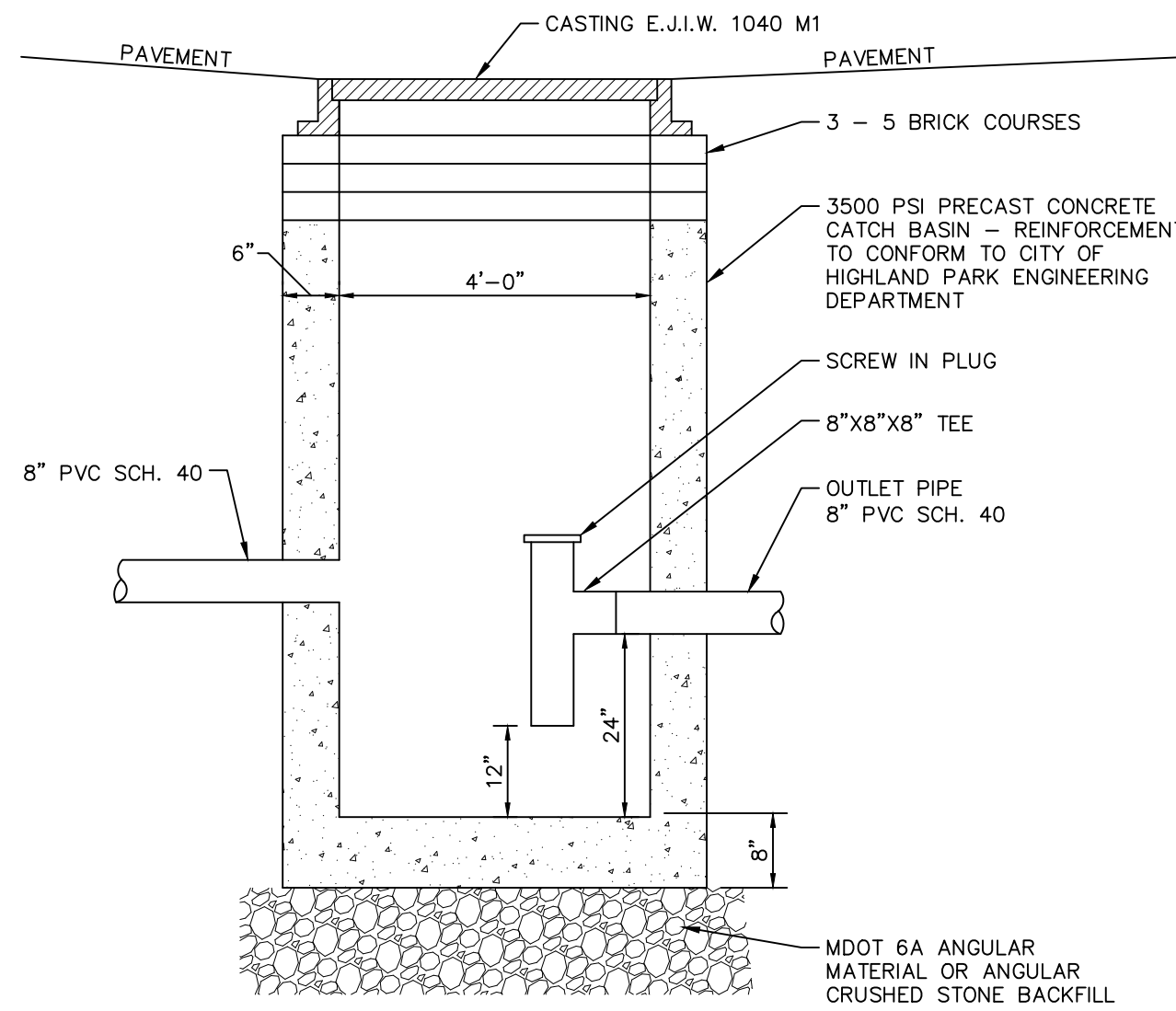


DIAMETER OF OUTLET PIPE "D"

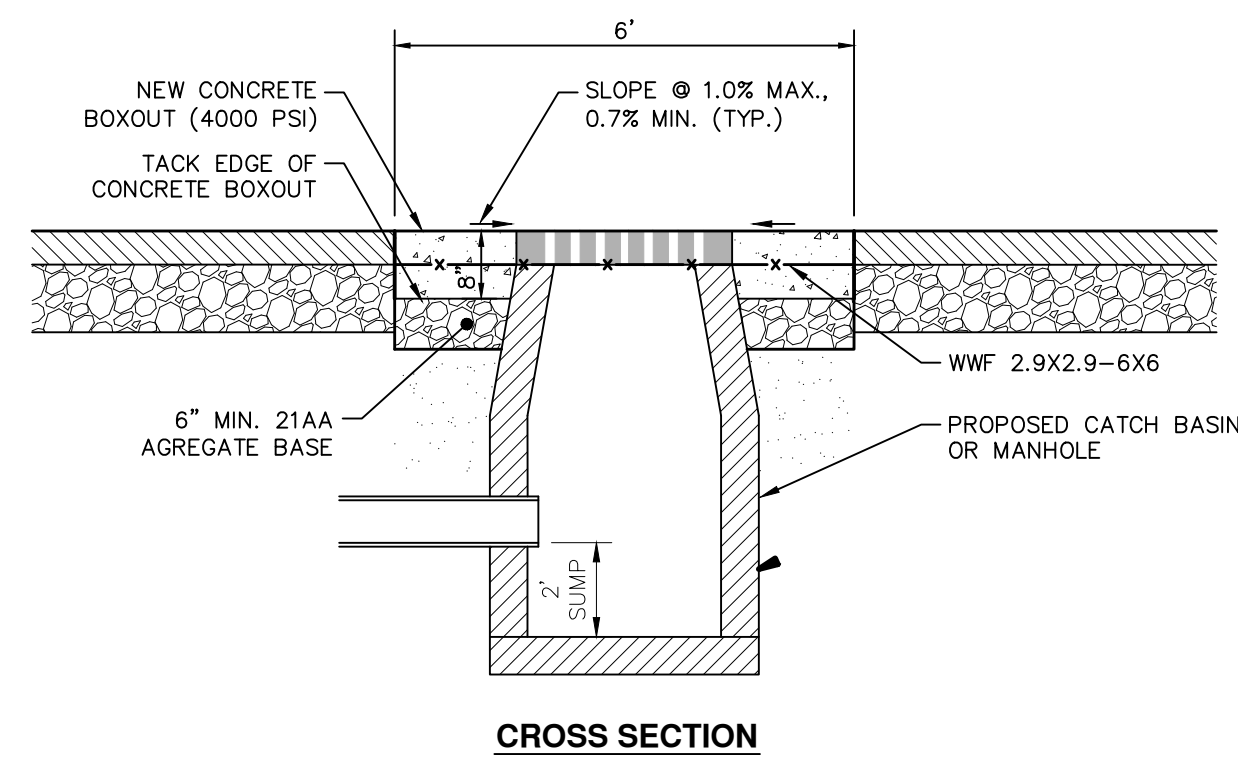
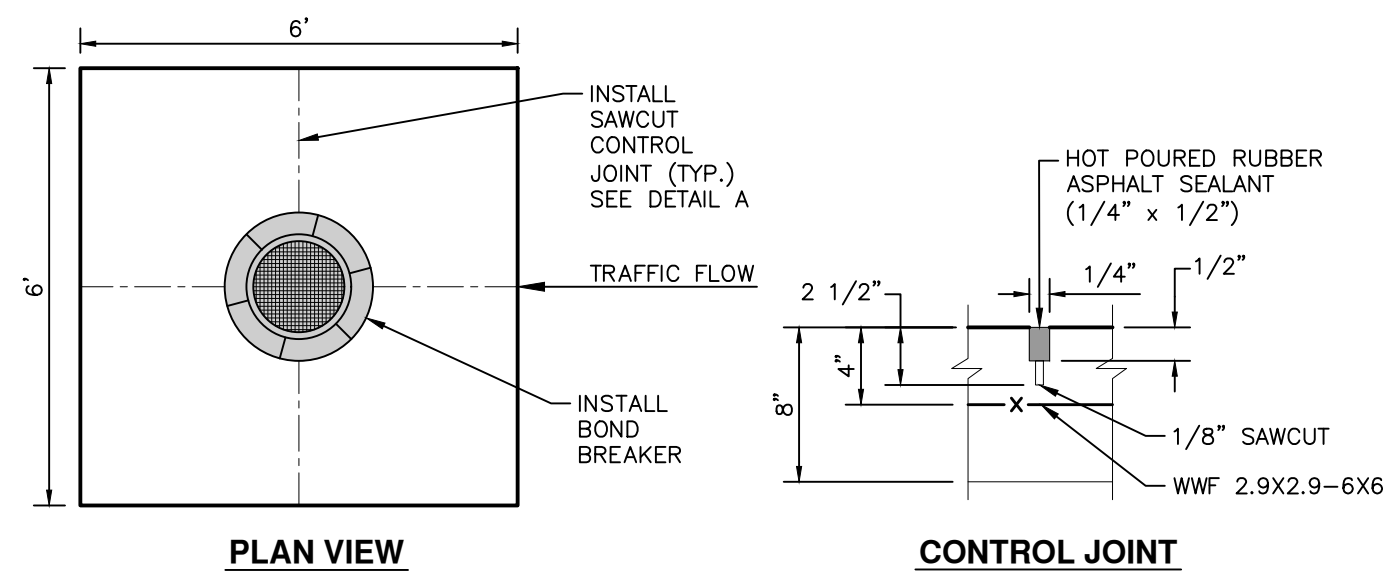
| | |
|-------------|------------|
| 12" OR LESS | 2'-0" MIN. |
| 15" - 18" | 4'-0" MIN. |
| 21" - 30" | 5'-0" MIN. |

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

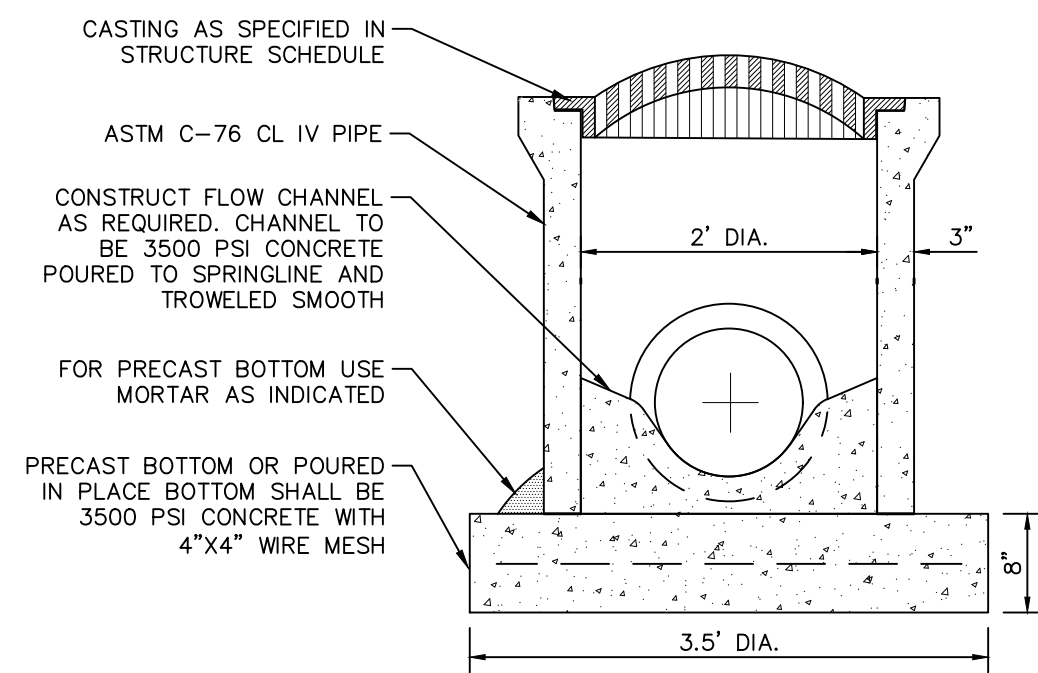
STANDARD CATCH BASIN
 NOT TO SCALE



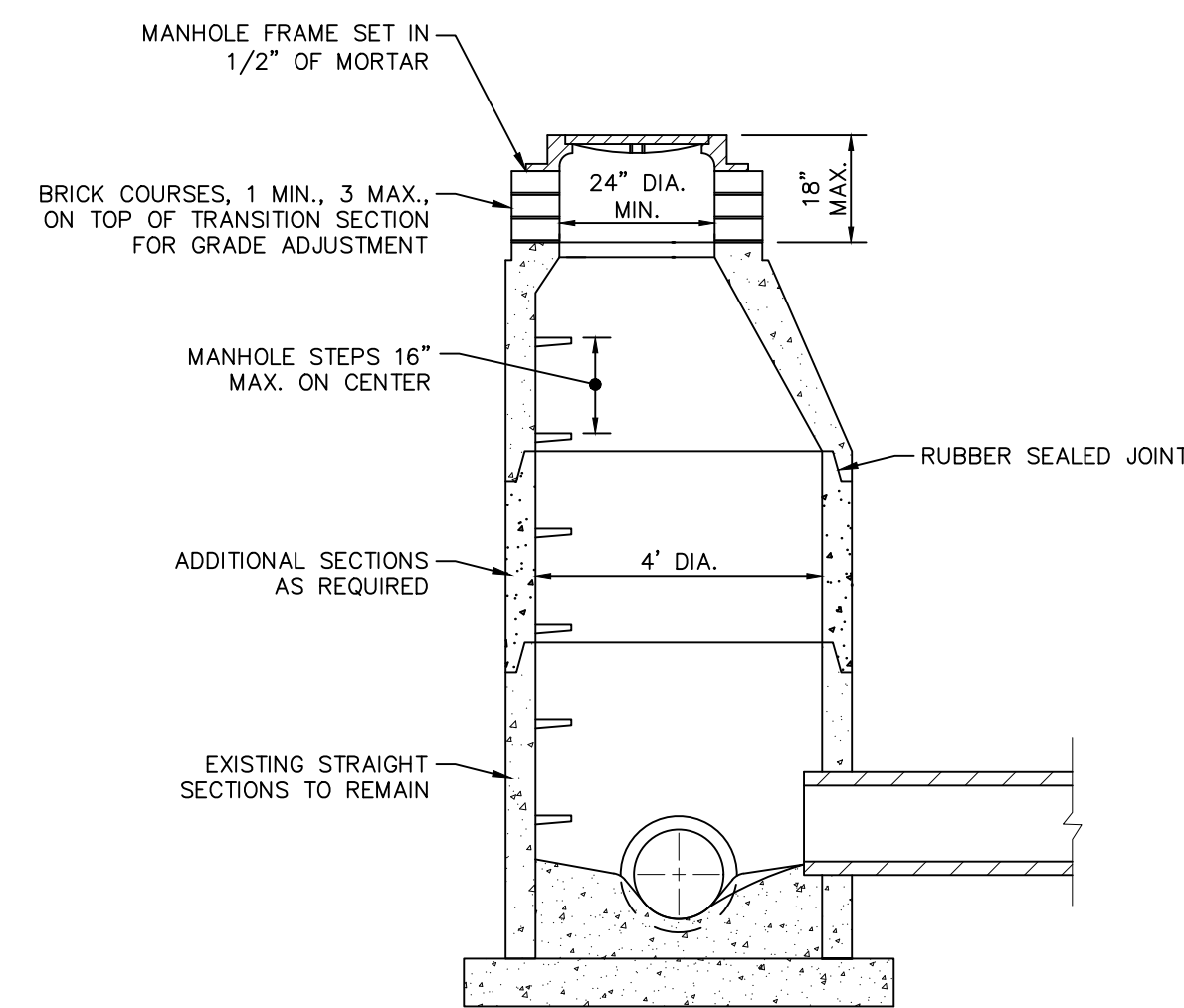
OIL - WATER SEPARATOR SYSTEM
 NOT TO SCALE



CONCRETE BOXOUT PLAN - SECTION
 NOT TO SCALE

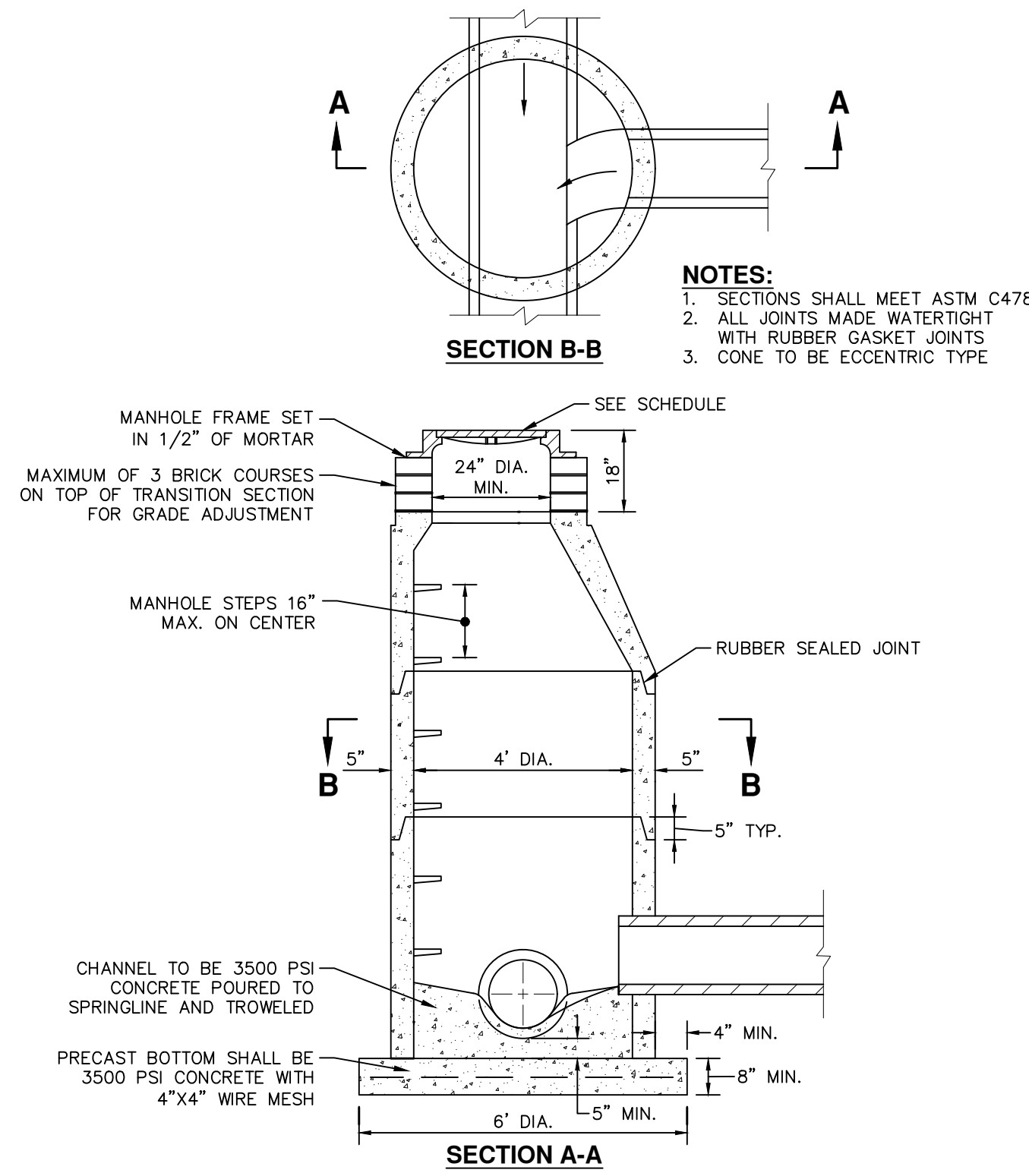


INLET - 2 FT. DIA.
 NOT TO SCALE

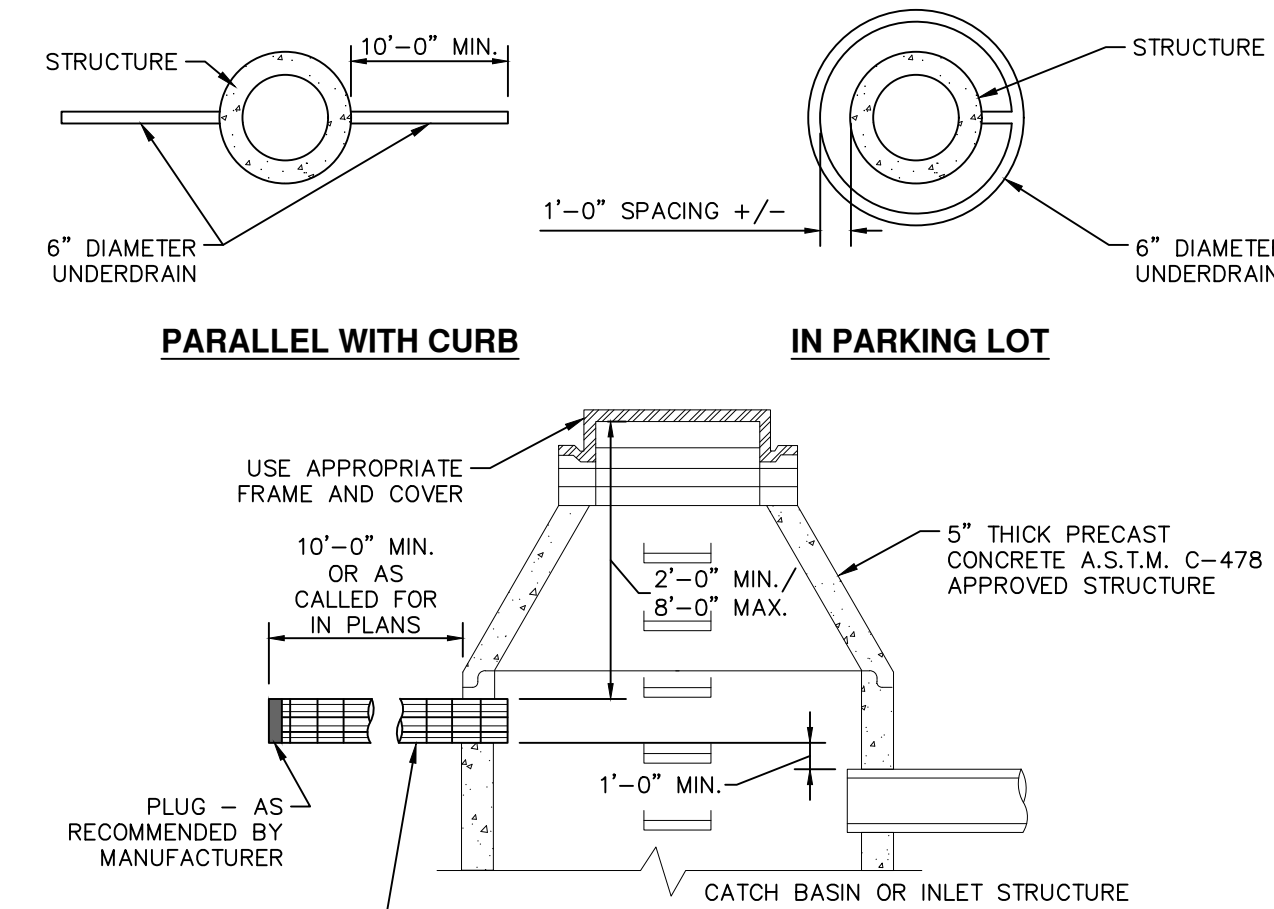


NOTES:
 1. SECTIONS SHALL MEET ASTM C478
 2. ALL JOINTS MADE WATERTIGHT WITH RUBBER GASKET JOINTS
 3. REMOVE CONE, ADD STRAIGHT SECTIONS AS REQUIRED AND REPLACE CONE
 4. ADD BRICK COURSES FOR RIM GRADE ADJUSTMENT

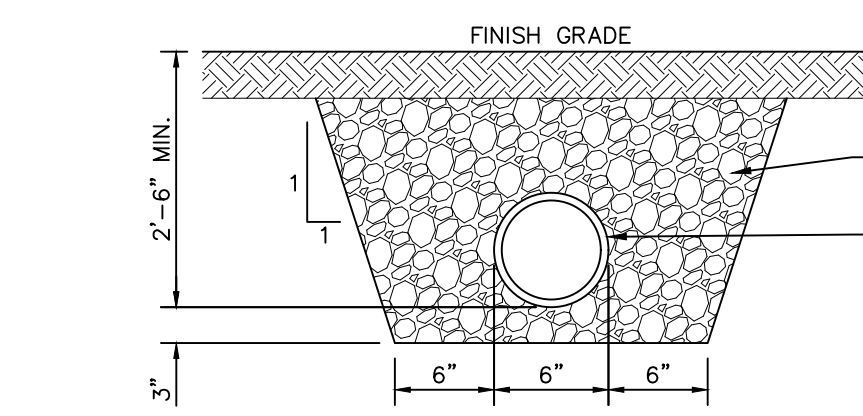
MANHOLE RECONSTRUCTION DIAGRAM
 NOT TO SCALE



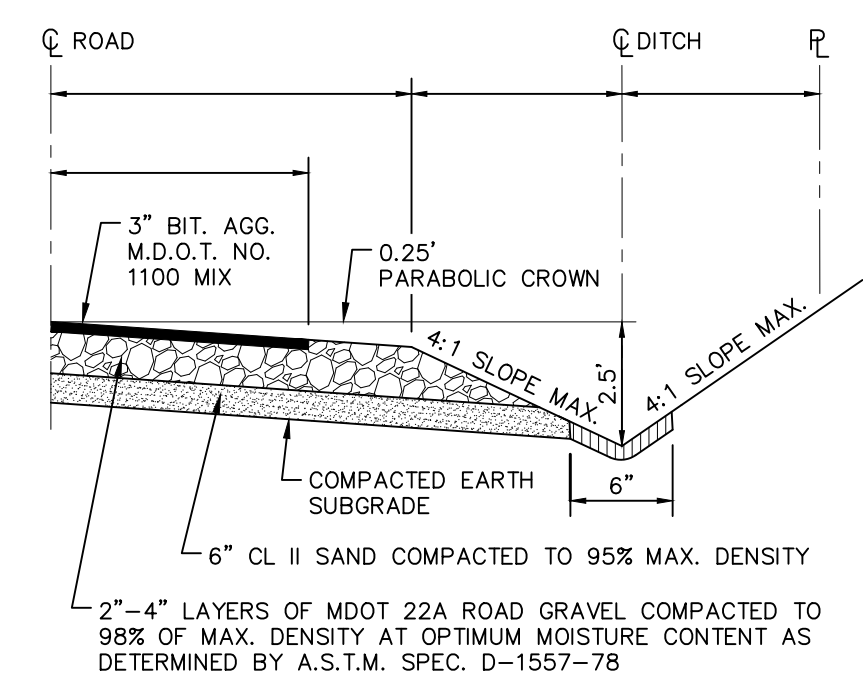
PRECAST CONCRETE STORM MANHOLE
 NOT TO SCALE



NOTES:
 1. UNDERDRAIN BACKFILL SHALL MEET MDT REQUIREMENTS FOR 80 OPEN GRADED DRAINAGE COURSE AGGREGATES. THIS BACKFILL SHALL EXTEND 4\"/>

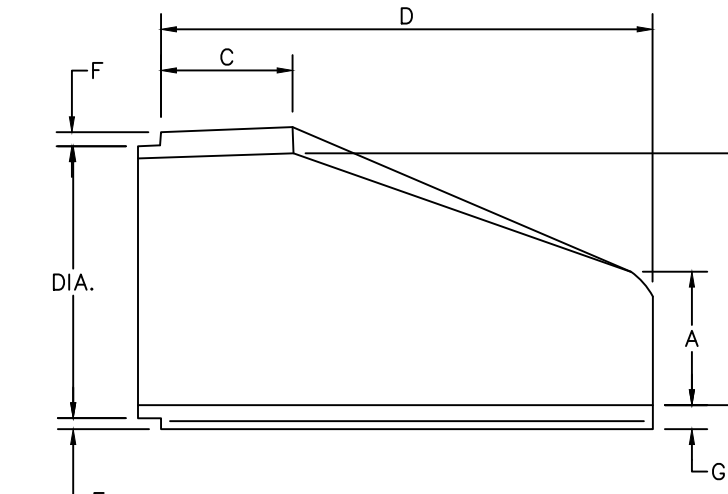
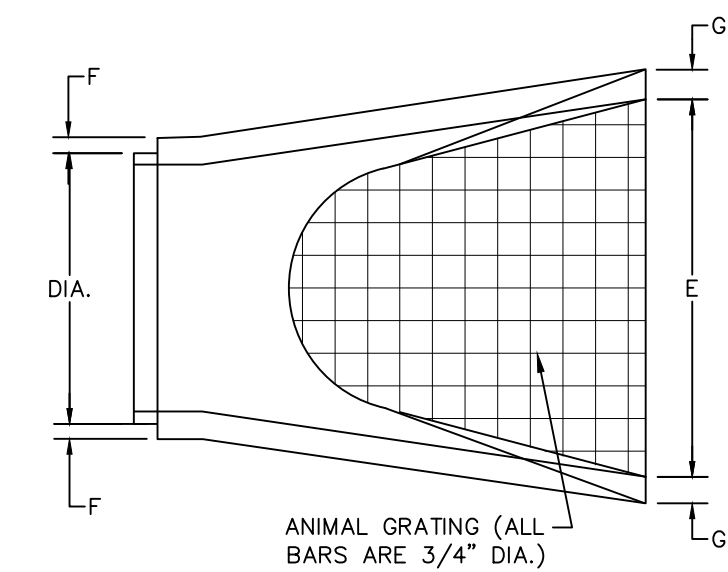


UNDERDRAIN DETAIL
 NOT TO SCALE



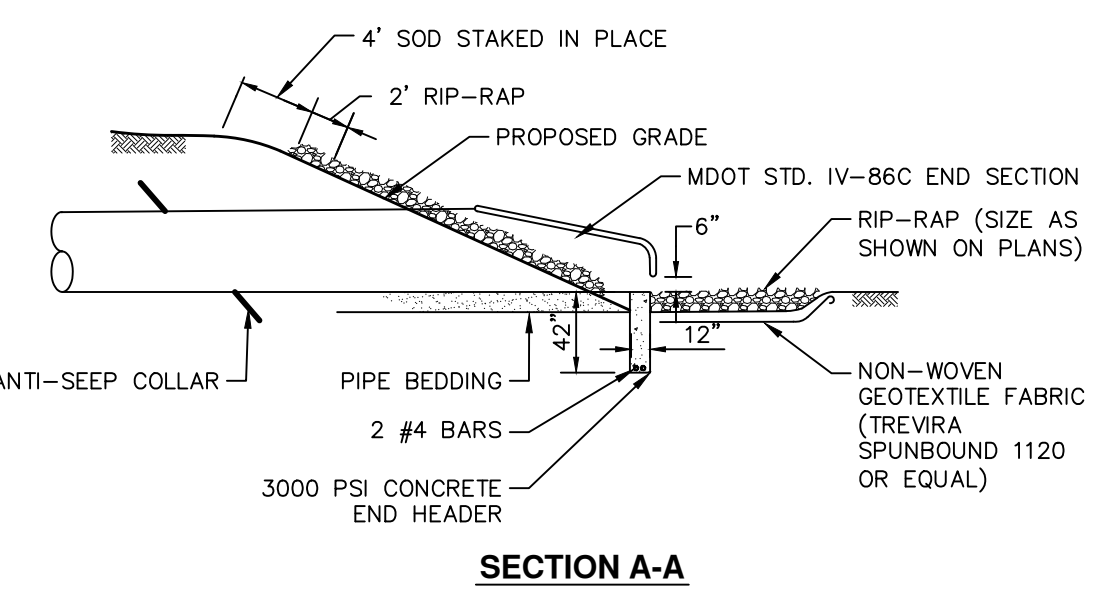
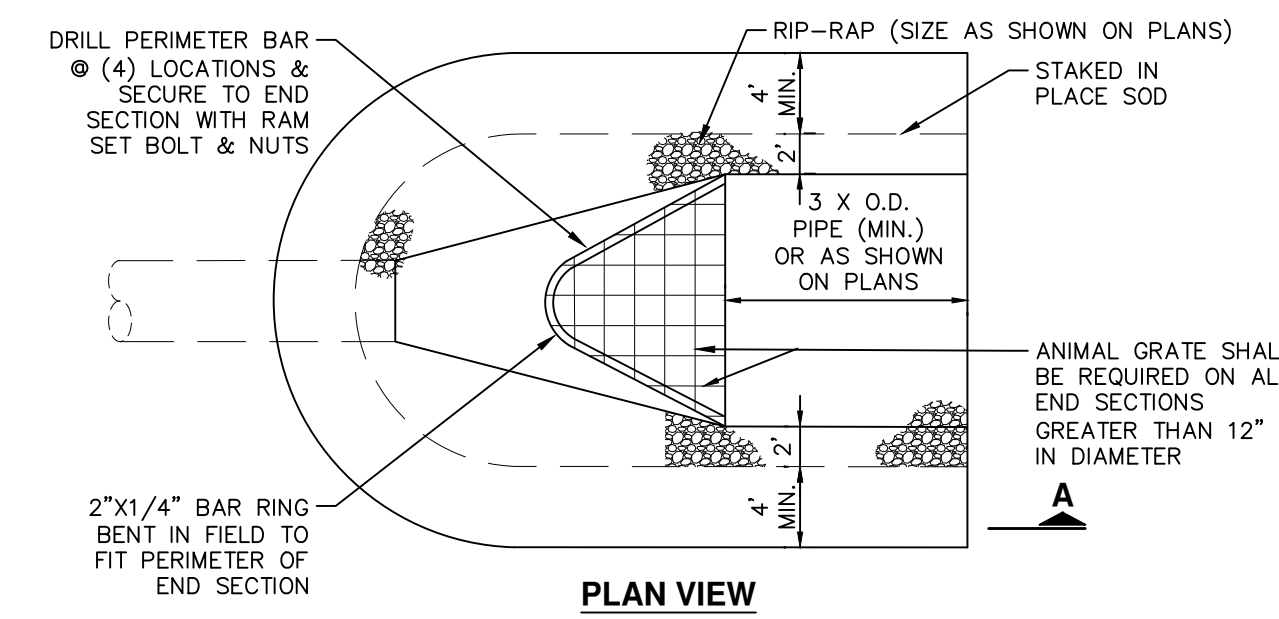
ROAD - DITCH SECTION
 NOT TO SCALE

NOTES:
 1. ALL ROAD SIDE SLOPES TO BE SEEDED, FERTILIZED AND MULCHED PER MDT SPEC. 6.53
 2. ALL ROAD SIDE DITCHES TO BE SODDED 6 FT WIDE PER MDT. SPEC. 6.53 CLASS "B" SOD UNLESS OTHERWISE NOTED
 3. SLOPES SHALL BE GRADED BEYOND PROPERTY LINES IF NECESSARY TO MAINTAIN A MAXIMUM 4:1 SLOPE



NOTE:
 FLARED END SECTIONS SHALL BE MANUFACTURED TO THE CLASS SPECIFICATIONS AS THE PIPE ITSELF.

STANDARD PRECAST CONCRETE END SECTION
 NOT TO SCALE



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

| 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 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.