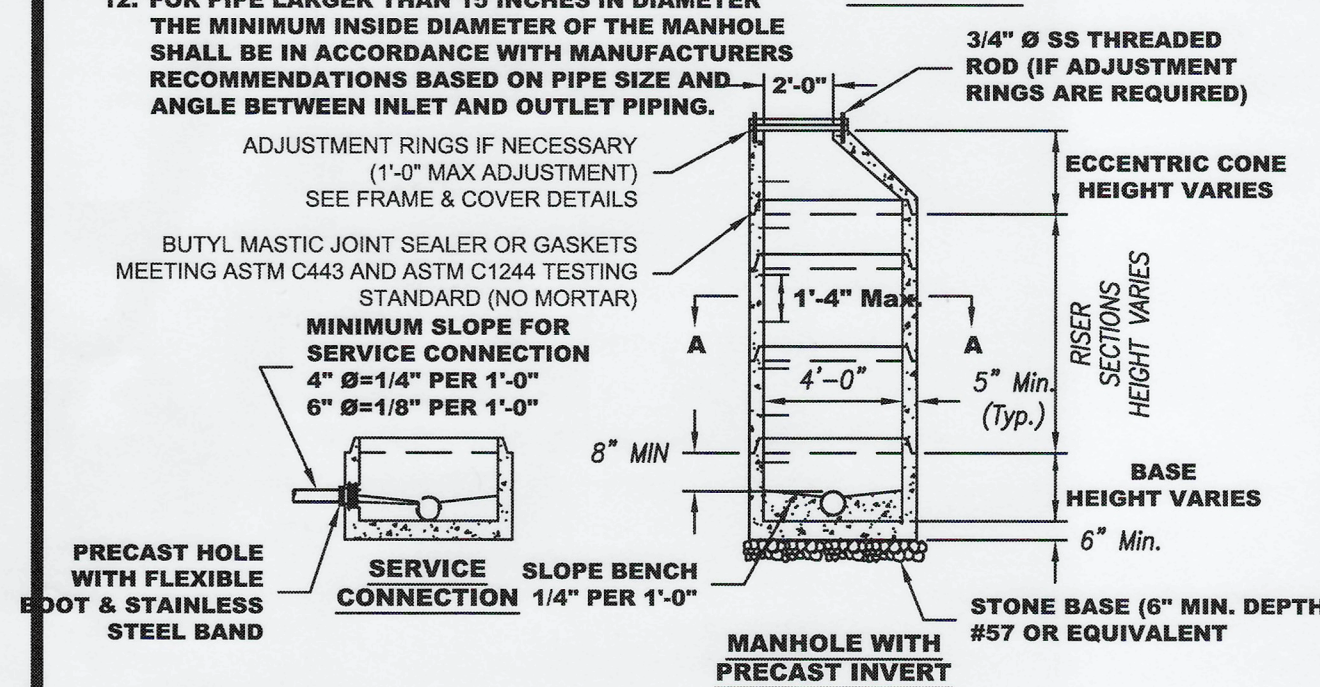
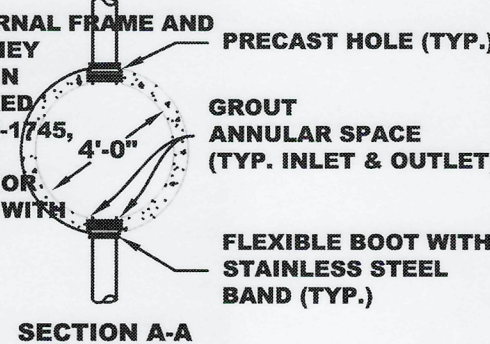
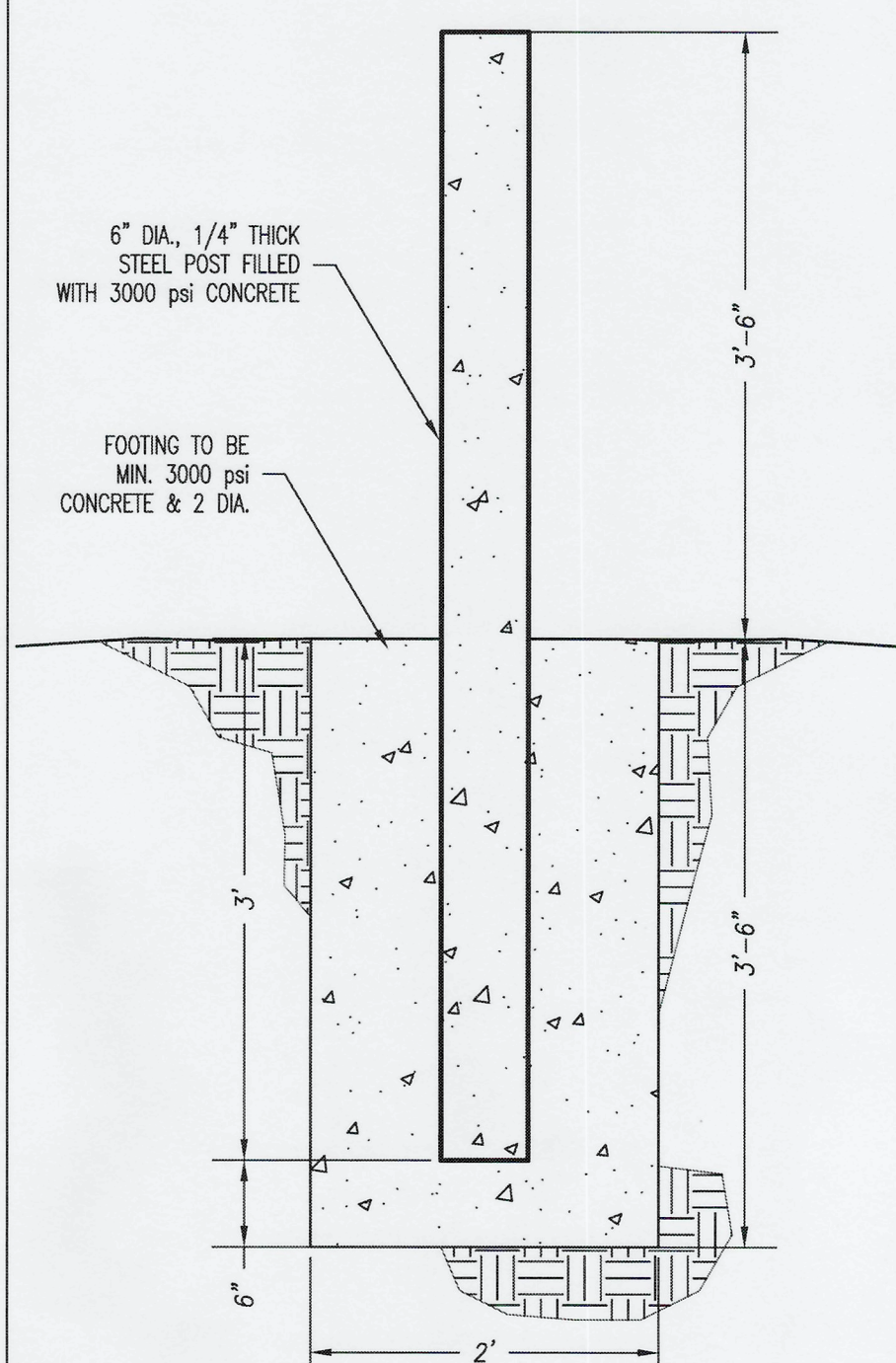
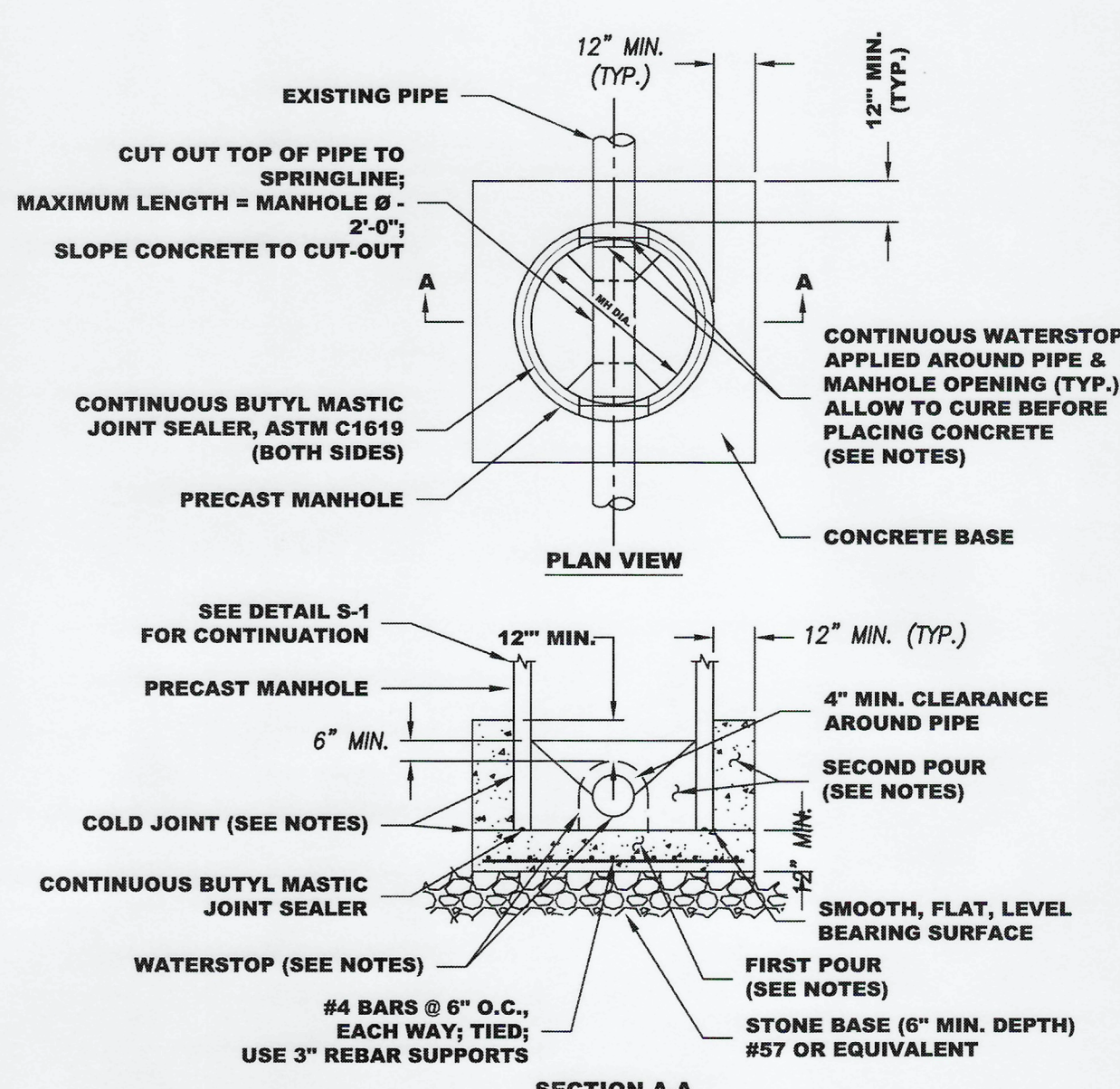


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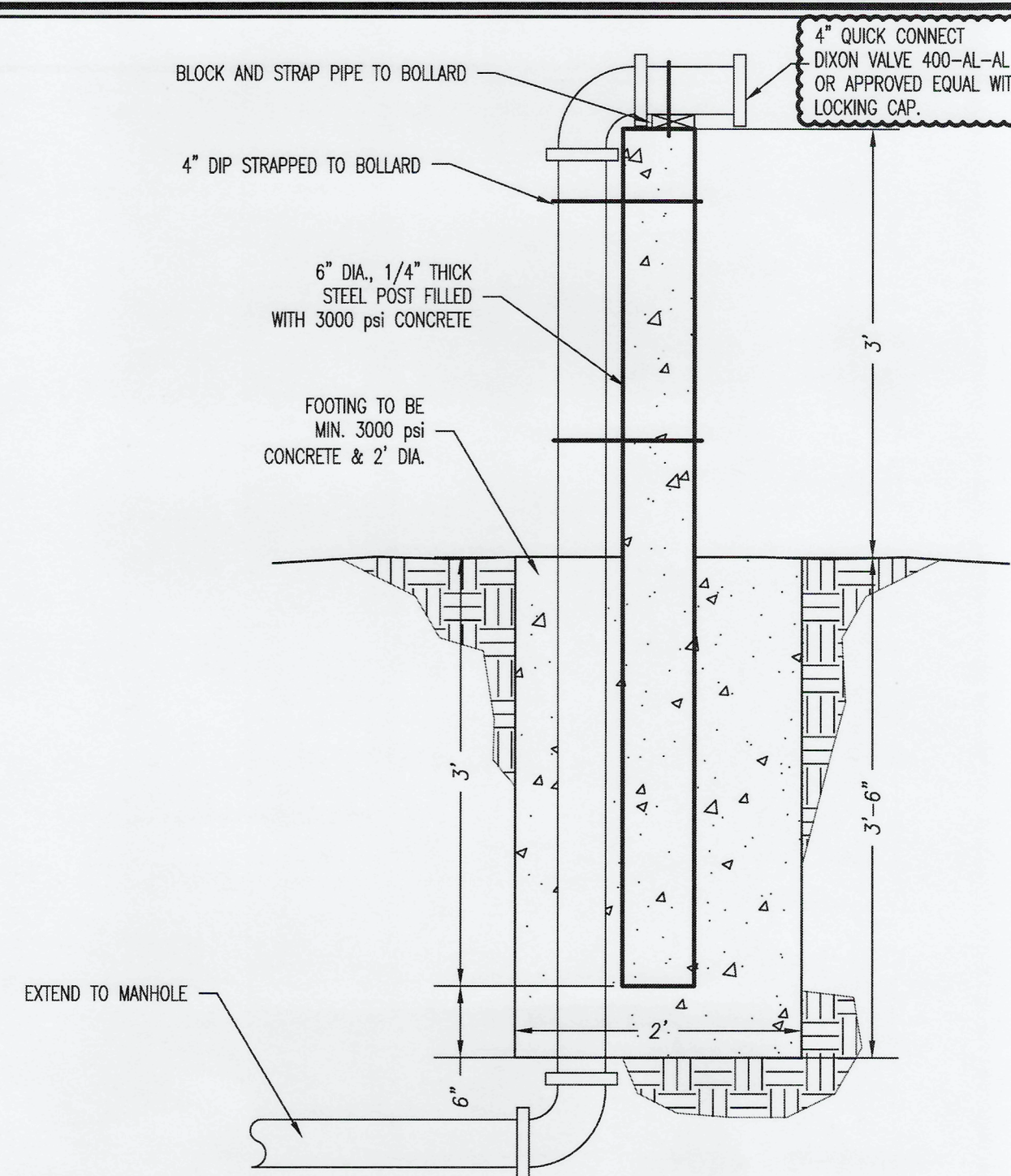
1. MATERIALS AND FABRICATION IN ACCORDANCE WITH ASTM C478-09.
 WHEN USED AS SAMPLING MANHOLE FLOW SHALL PASS STRAIGHT THROUGH, I.E., 180° STEPS SHALL BE VERTICALLY ALIGNED. FIRST STEP SHALL BE WITHIN 12" OF COVER, SUBSEQUENT STEPS SHALL BE WITHIN 12" OF PREVIOUS STEP.
 2. FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE 2 FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
 3. FLAT TOP MANHOLES MAY NOT BE SUBSTITUTED WITH THE PERMISSION OF THE PARTICIPATING UTILITY.
 4. FLEXIBLE JOINT MANHOLE CONNECTION SHALL BE AS MANUFACTURED BY PRES-SEAL GASKET CORPORATION OR EQUAL.
 5. PRECAST MANHOLE PIPE AND PRECAST MANHOLE ON INSIDE OF MANHOLE.
 6. WHEN REPLACING AN EXISTING MANHOLE OR INSTALLING A NEW PRECAST MANHOLE ON AN EXISTING SEWER, A MINIMUM OF SIX FEET (6') OF EXISTING PIPE SHALL BE REMOVED AND REPLACED WITH NEW MATERIAL ON INLET AND OUTLET OF MANHOLE.
 7. ANYWHERE WHEN THE EXISTING GROUND SURFACE IS BELOW THE GROUNDWATER ELEVATION (I.E., ALONG CREEKS, RIVERS, LOW-LYING AREAS, ETC.), SHALL HAVE A FULL EXTERIOR COATING AND JOINT WRAP APPLIED IN ADDITION TO JOINT SEALANT. SEE NOTES 10 & 11.
 8. IF REQUIRED EXTERIOR VERTICAL WALL SURFACES SHALL BE FACTORY COATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. IF THE HIGH BUILD COAT TAR EPOXY MEETING ASTM D1227. COATING SHALL BE APPLIED IN TWO COATS TO A MINIMUM TOTAL THICKNESS OF 16 MILS.
 9. ALL MANHOLES SHALL UTILIZE AN EXTERNAL FRAME AND JOINT SEAL AT ALL JOINTS AND AT THE FRAME/CHIMNEY INTERFAC. SEAL SHALL BE MADE OF EPDM RUBBER IN ACCORDANCE WITH ASTM D412 OR POLYOLEFIN BACKED EXTERIOR JOINT WRAP IN ACCORDANCE WITH ASTM D412. JOINT WRAP SHALL HAVE A MINIMUM THICKNESS OF 4 MILS. FOR C-677, AND C-990. EDM SEAL SHALL HAVE A MINIMUM THICKNESS OF 60 MILS. POLYOLEFIN BACKED EXTERIOR JOINT WRAP SHALL HAVE A BACKING BACK ELEMENT WITH A MINIMUM THICKNESS OF 4 MILS. JOINT WRAP SHALL BE ADHESIVE WITH MINIMUM THICKNESS OF 60 MILS. SEAL SHALL AGGRESSIVELY BOND TO CONCRETE AND METAL STRUCTURES.
 10. FOR PIPE LARGER THAN 15 INCHES IN DIAMETER THE MINIMUM INSIDE DIAMETER OF THE MANHOLE SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION. MINIMUM INSIDE DIAMETER SHALL BE 12" OR ANGLE BETWEEN INLET AND OUTLET PIPING.
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- The diagram illustrates a cross-section of a manhole assembly. At the top, a 'PRECAST HOLE (TYP.)' is shown with a height dimension of '4'-0"'. Below the hole, there is a 'GROUT' area and an 'ANNULAR SPACE' (labeled 'TYP. INLET & OUTLET'). A 'FLEXIBLE BOOT WITH STAINLESS STEEL BAND (TYP.)' is shown at the bottom of the hole. A 'SECTION A-A' line is drawn through the assembly. At the bottom of the section, a dimension of '3/4" Ø SS THREADED ROD (IF ADJUSTMENT RINGS ARE REQUIRED)' is indicated. The diagram also shows the 'EXTERNAL FRAME AND JOINT SEAL' at the bottom of the hole.



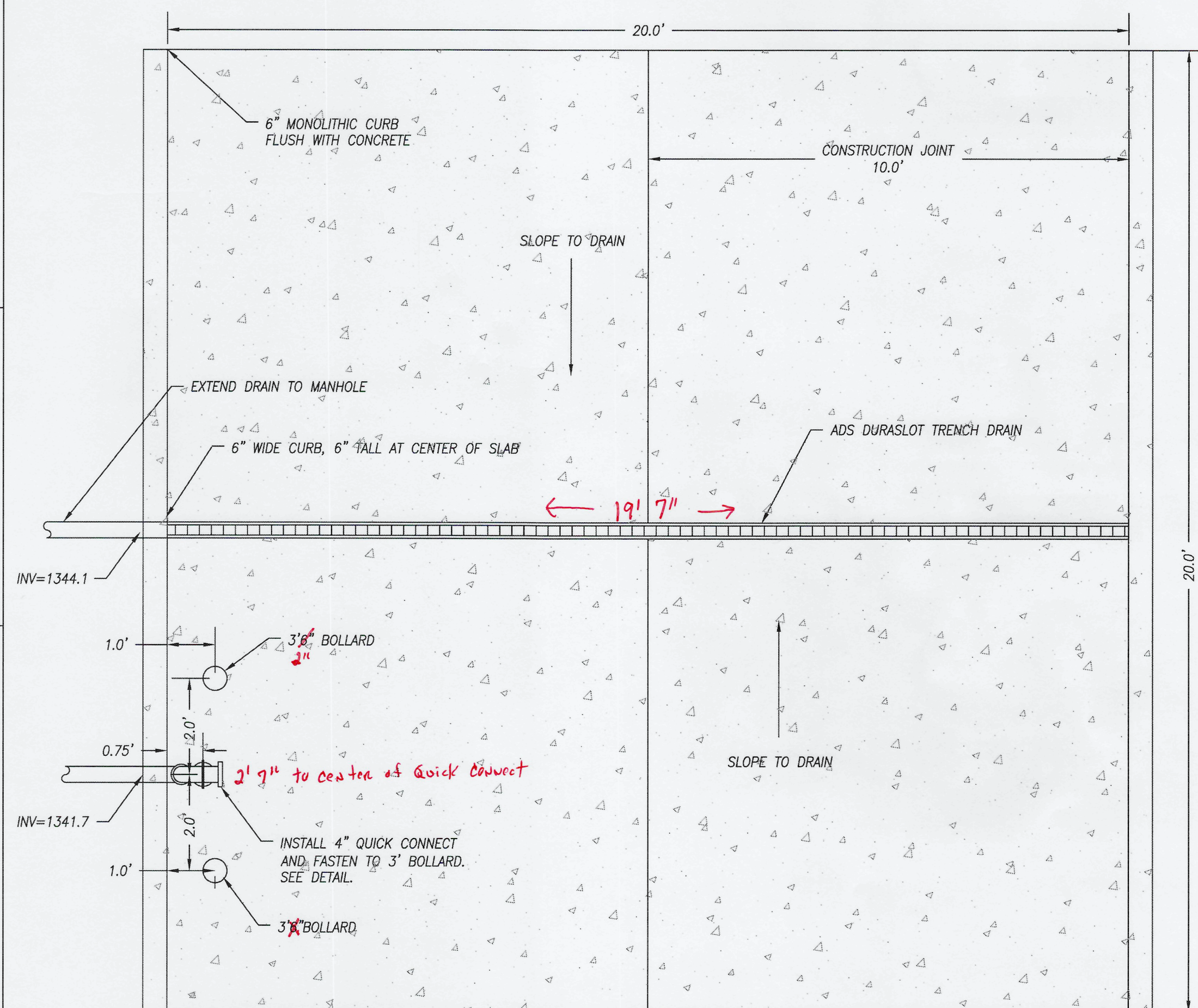
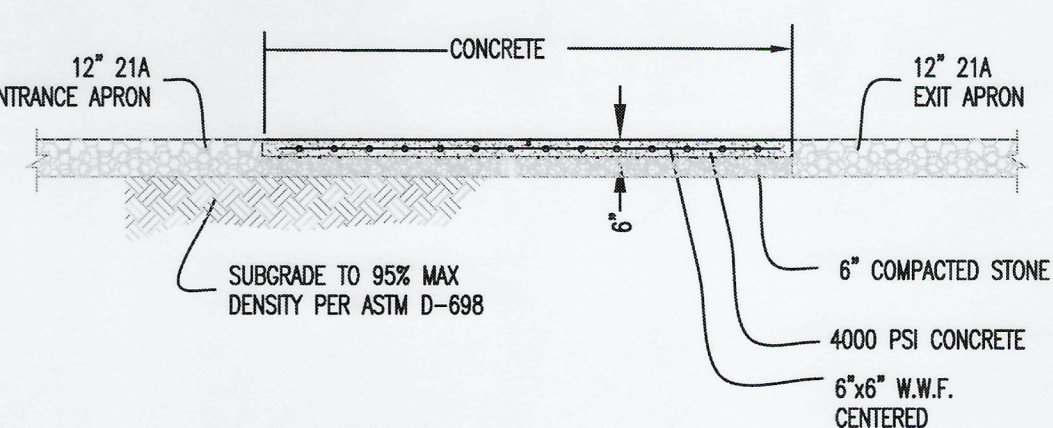
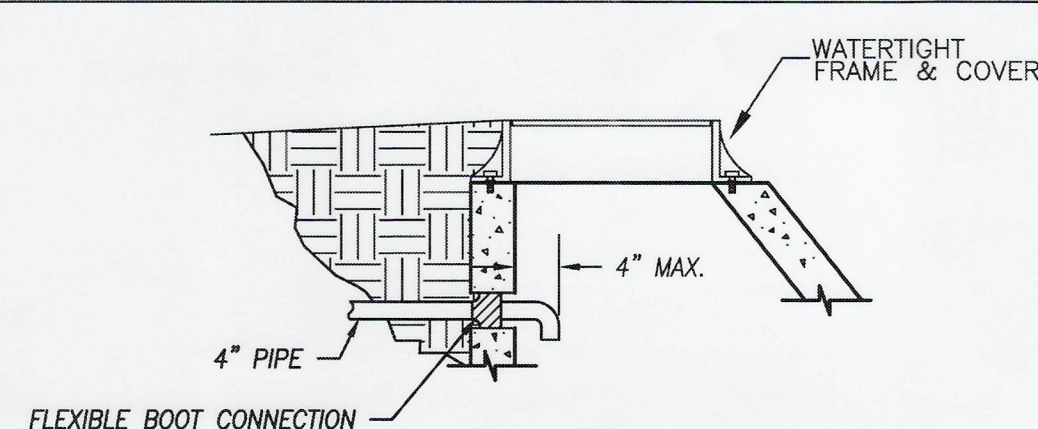
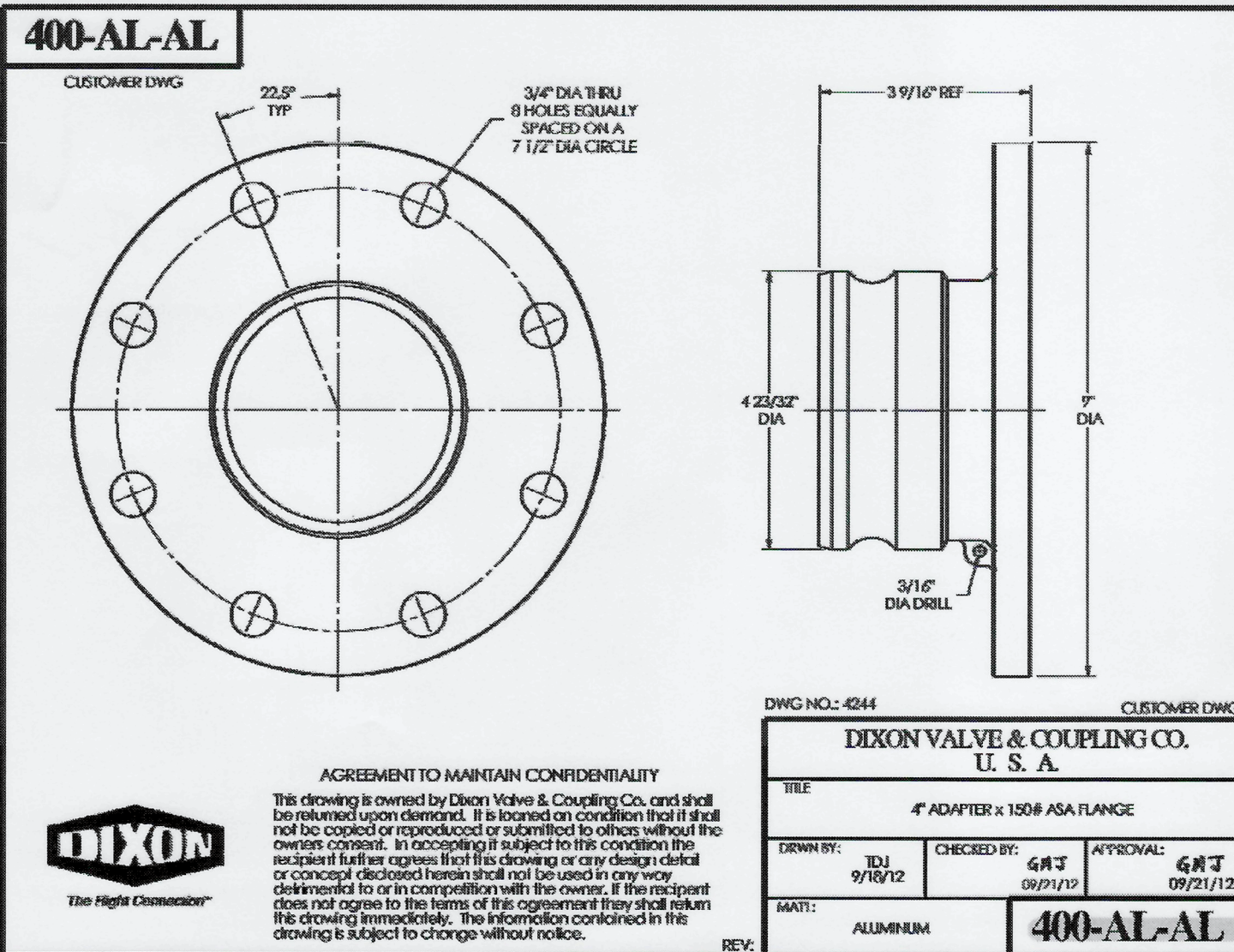
1. STRADDLE MANHOLE/LOT ACCEPTABLE UNLESS APPROVED BY PARTICIPATING UTILITY.
2. MATERIALS AND FABRICATION IN ACCORDANCE WITH ASTM C478-09, AND ASTM C1619.
3. SEE DETAIL S-4 FOR ADDITIONAL MANHOLE REQUIREMENTS.
4. FIRST POUR: 4" TO 6" HYDROPHOBIC WATER STOP, WATER STOP MUST BE ALLOWED TO FULLY CURE BEFORE CONTACT WITH WET CONCRETE IS ALLOWED.
5. FIRST POUR: TOP SURFACE OF FIRST POUR SHALL CREATE A SMOOTH, FLAT, LEVEL SURFACE. SECOND POUR: TOP SURFACE OF SECOND POUR SHALL BE SMOOTH AND BE PRECAST MANHOLE SECTION. CONCRETE SHALL BE 3,000 PSI CONCRETE AND MUST CURE 7-DAYS BEFORE SETTING MANHOLE SECTION.
6. SECOND POUR: SECOND POUR SHALL FULLY SET INCLUDING FRAME AND COVER BEFORE PLACING SECOND POUR. CONCRETE BONDING AGENT SHALL BE APPLIED TO ALL SURFACES/COLD JOINTS WHERE NEW CONCRETE IS TO BE POURED AGAINST EXISTING. CONCRETE SHALL BE 3,000 PSI AND SHALL BE ALLOWED TO CURE FOR 3-DAYS PRIOR TO PLACING BACKFILL.



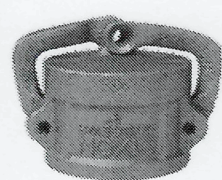
BOLLARD DETAIL
NOT TO SCALE



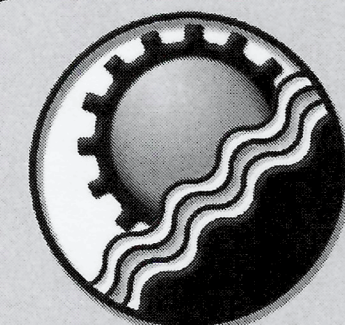
PIPE DETAIL
NOT TO SCALE

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Dust Caps and Dust Plugs			
Dixon® Lockable Dust Caps			
Features:			
• Buna-N gasket standard, other gaskets available on pages 167 - 170.			
• Dust caps and dust plugs are not to be used in pressure applications for safety and environmental reasons.			
Size	3061B Aluminum	Part #	Brass
1½"	1500C-LAL		1500C-LBR
2"	2000C-LAL		2000C-LBR
3"	3000C-LAL		3000C-LBR
4"	4000C-LAL		—
6"	6000C-LAL		—

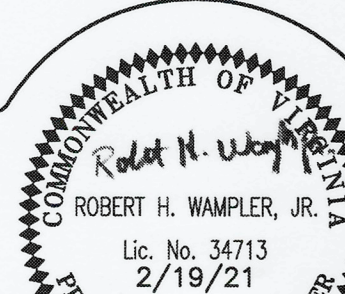


Cam & Groove



**WVWA DUMP STATION
GREENFIELD PARK**

SITE DETAILS



0 1 2
GRAPHIC SCALE

PROJECT:	20038
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