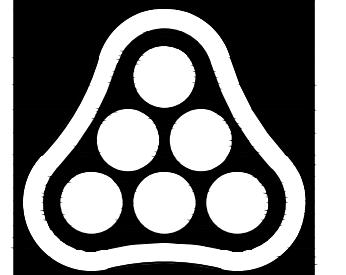


VALLEY CENTER STANDARD DETAILS

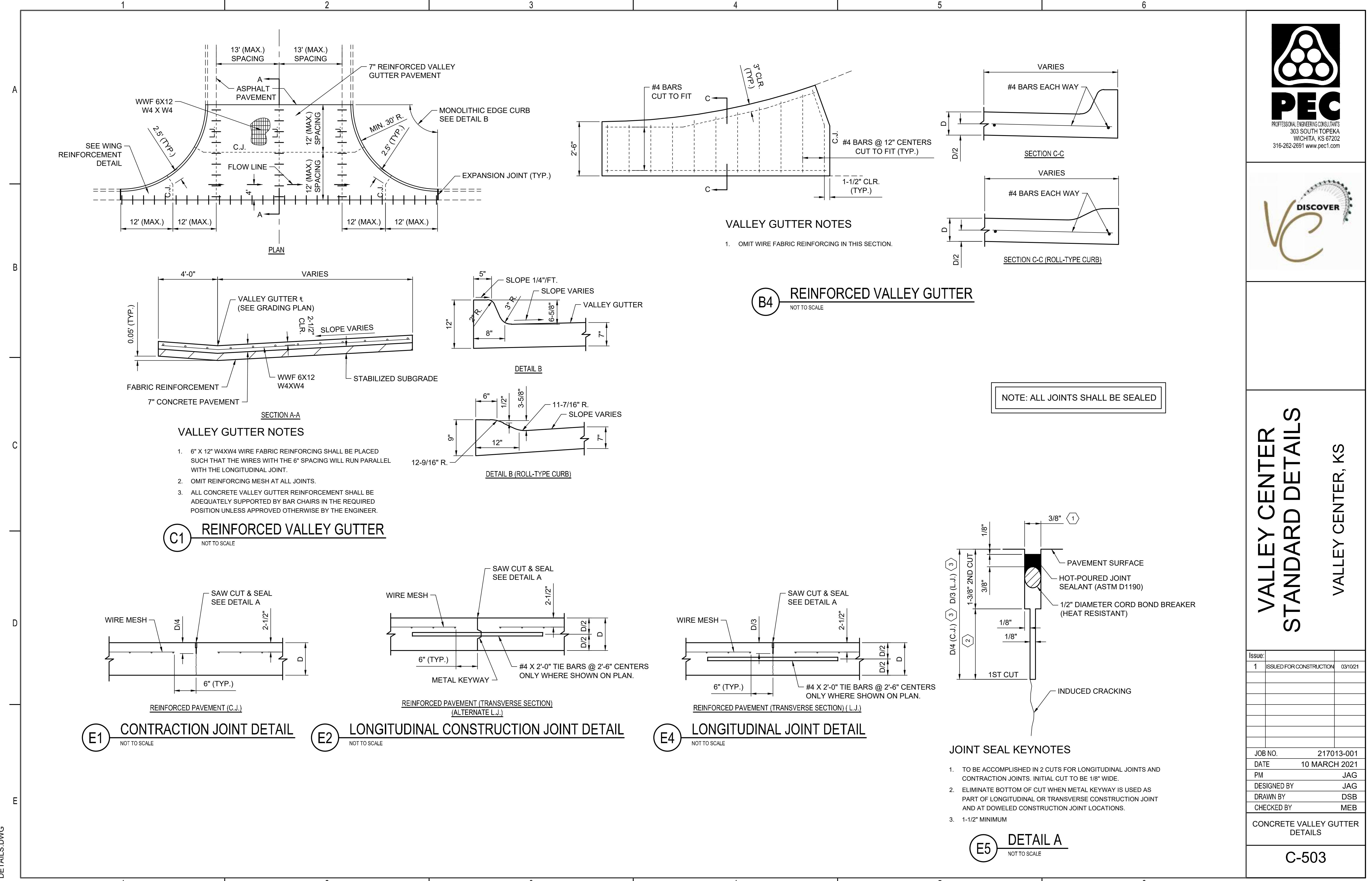


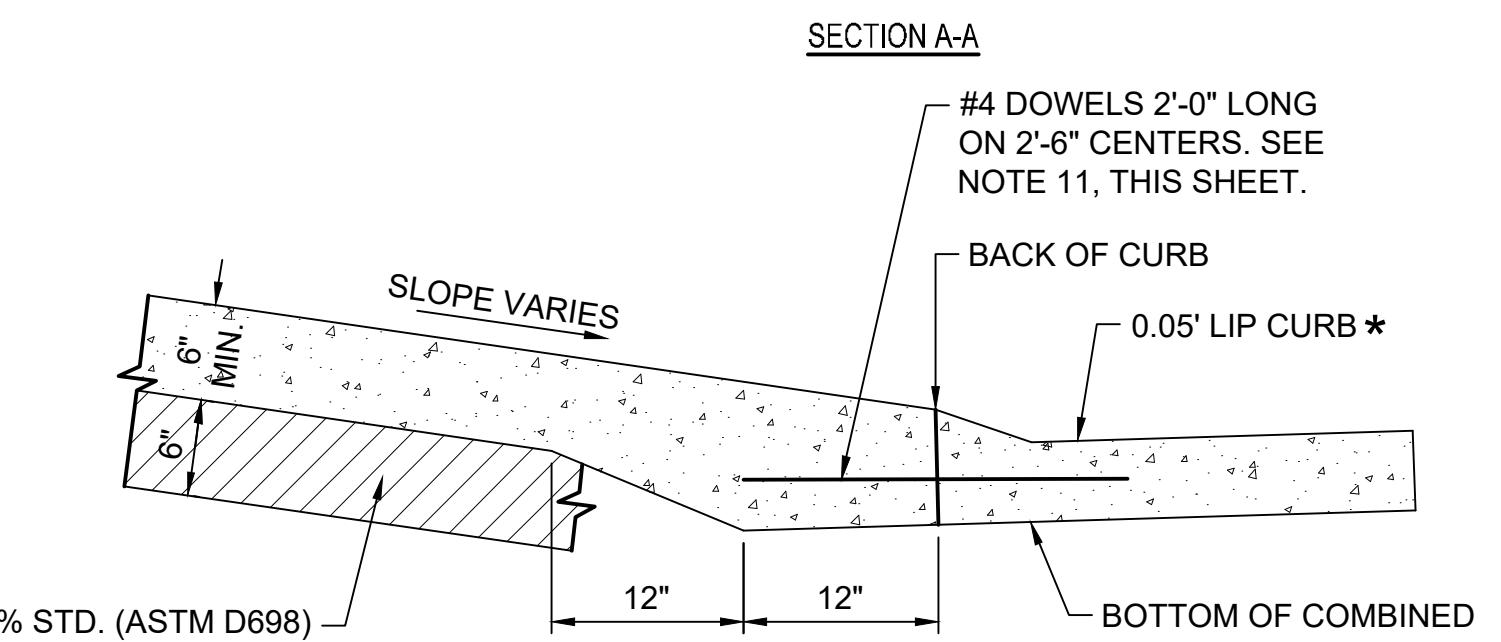
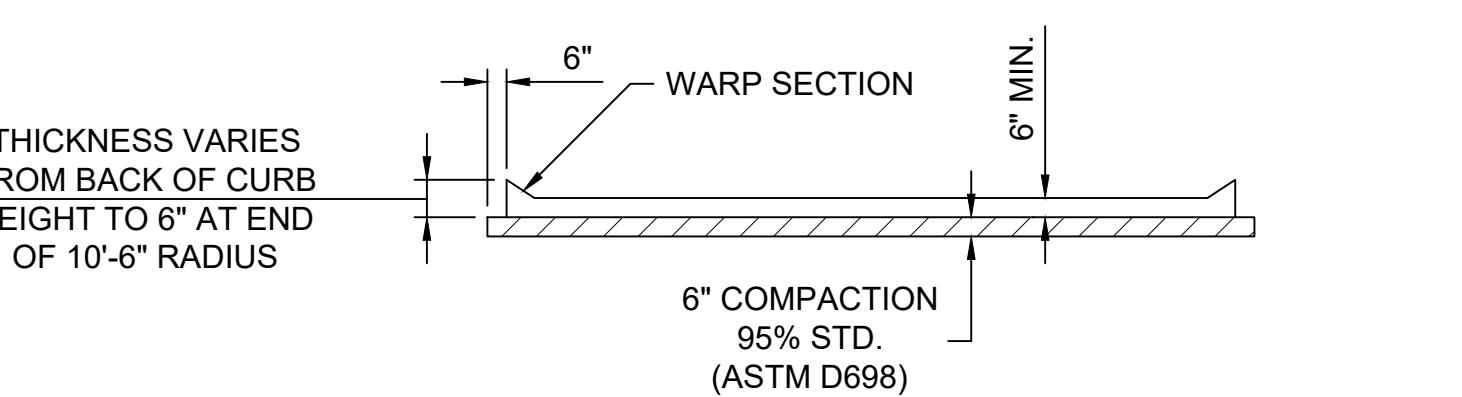
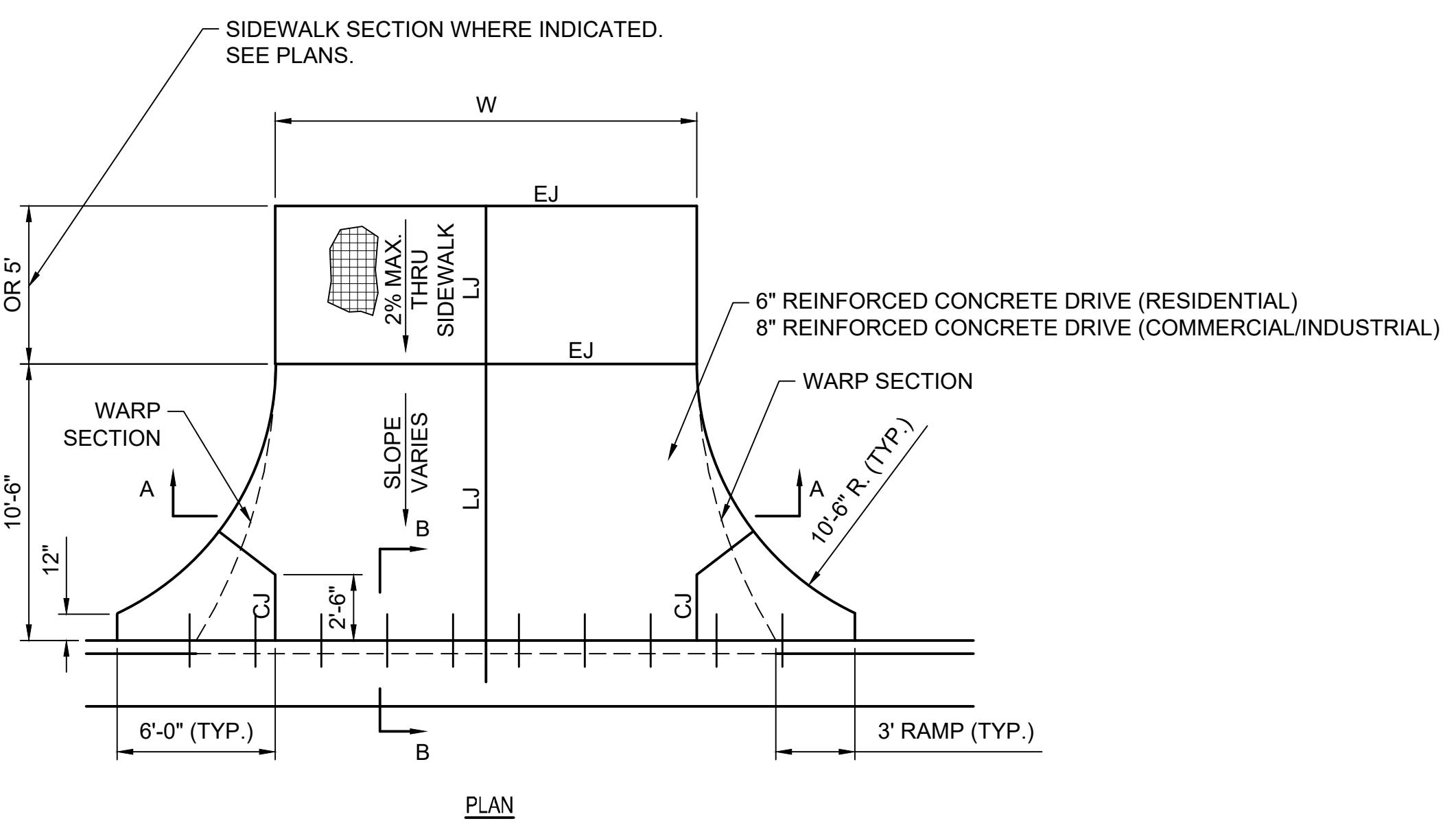
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 303 SOUTH TOPEKA
 WICHITA, KS 67202
 316-262-2691 www.pec1.com



JOB NO. 217013-001
 DATE 10 MARCH 2021
 PM JAG
 DESIGNED BY JAG
 DRAWN BY DSB
 CHECKED BY MEB
 CONCRETE PAVEMENT AND
 JOINTING DETAILS

C-502

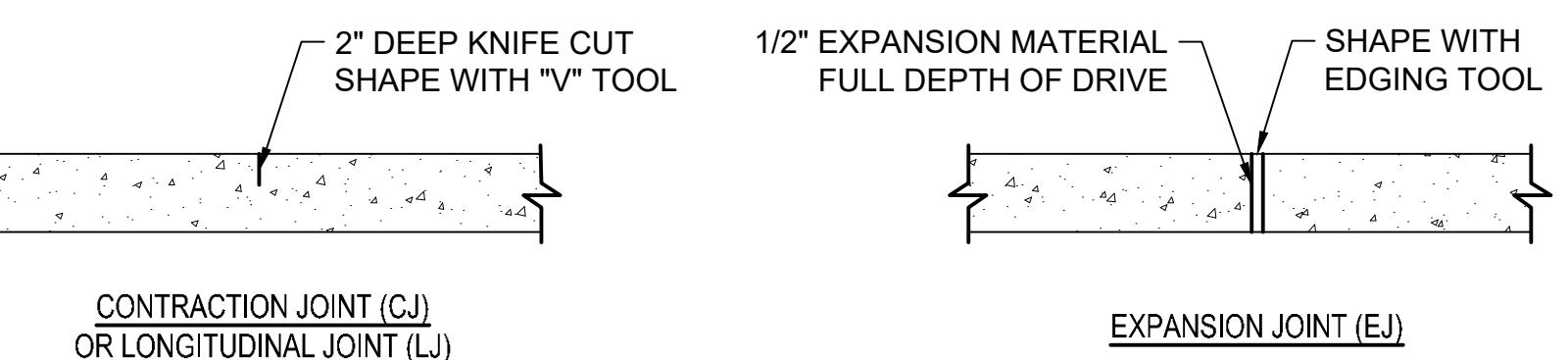




* PAID FOR AS COMBINED CURB & GUTTER

SECTION B-B

D3 CONCRETE DRIVE DETAILS



E3 JOINT DETAILS FOR CONCRETE DRIVES

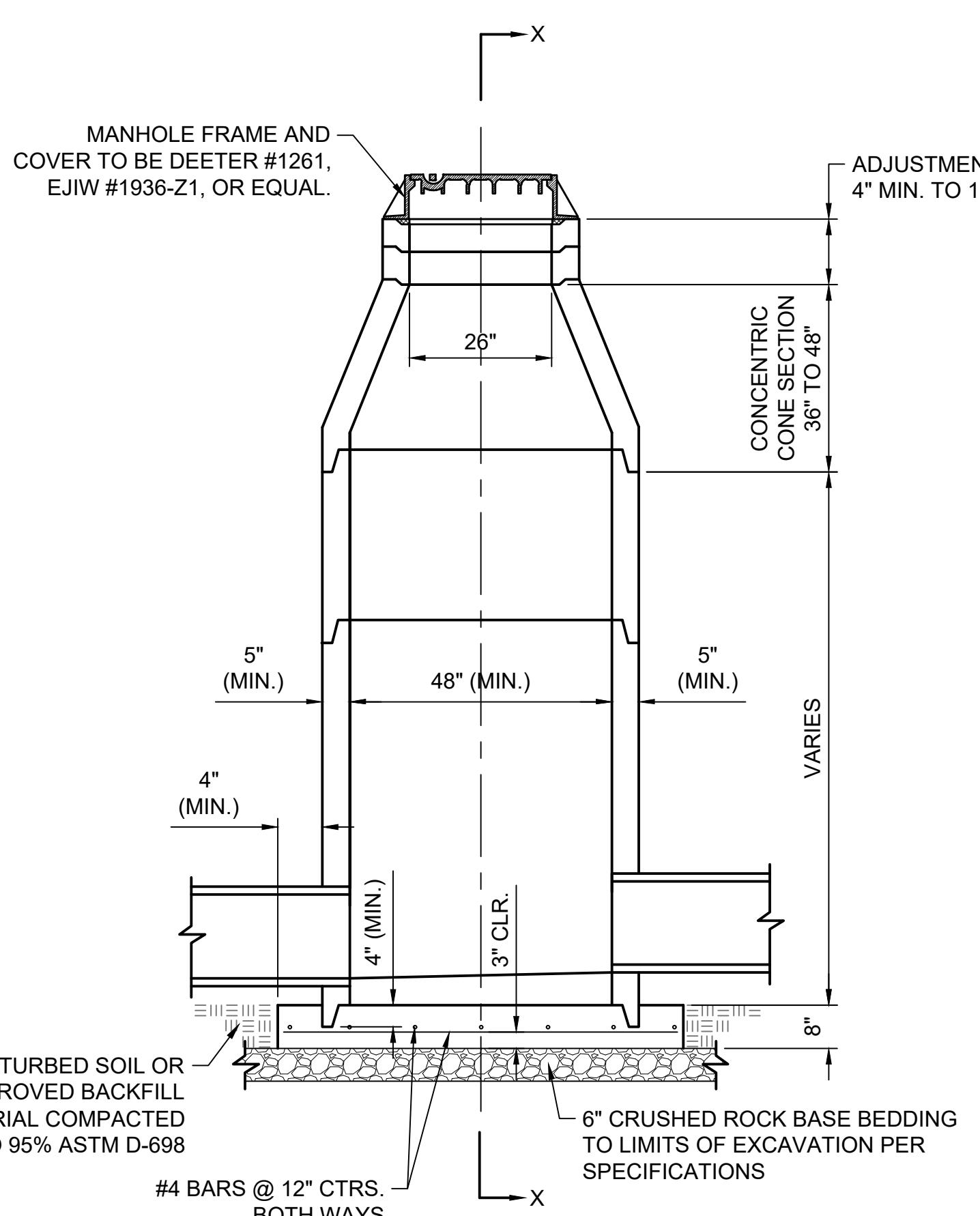
REINFORCED CONCRETE DRIVE NOTES

1. CONCRETE DRIVE ENTRANCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF VALLEY CENTER STANDARD SPECIFICATIONS, SECTION 32 13 13 "CONCRETE PAVING."
2. THE CONTRACTOR SHALL PROVIDE A FULL DEPTH SAW CUT AT THE LIMITS OF CONSTRUCTION. SAW CUTS AT THE FLOWLINE OF EXISTING CURB AND GUTTER WILL NOT BE ALLOWED.
3. ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "W" DIMENSION OF 20' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS OF 10' OR LESS FOR DRIVES WITH A "W" DIMENSION GREATER THAN 20'.
4. JOINT SPACING SHALL BE ADJUSTED TO ALIGN WITH OUTER EDGE OF SIDEWALK WHERE SIDEWALK ABUTS DRIVE CONSTRUCTION.
5. ADDITIONAL THICKNESS OF DRIVE PAVEMENT AS INDICATED IN SECTION B-B SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR DRIVEWAY PAVEMENT.
6. EXPANSION JOINTS ONE-HALF-INCH WIDE SHALL BE INSTALLED WHEN CONCRETE DRIVE ABUTS AN EXISTING CONCRETE DRIVE.
7. FOR BIDDING PURPOSES, ALL RESIDENTIAL DRIVEWAYS SHALL BE 6" IN THICKNESS AND SHALL BE REINFORCED. ALL COMMERCIAL/INDUSTRIAL DRIVEWAYS SHALL BE 8" IN THICKNESS AND SHALL BE REINFORCED. REINFORCEMENT SHALL BE 6" x 6" W2.9-W2.9 WELDED WIRE FABRIC. ALL REINFORCEMENT SHALL BE ADEQUATELY SUPPORTED BY BAR CHAIRS IN THE REQUIRED POSITION UNLESS APPROVED OTHERWISE BY THE ENGINEER.
8. DRIVE APPROACHES SHALL BE CONSTRUCTED TO THE STREET RIGHT-OF-WAY LINE OR AT THE LIMITS SHOWN ON THE PLANS AT A GRADE WHICH WILL ALLOW SMOOTH HOOKUP TO THE EXISTING DRIVEWAY. AT THE WRITTEN REQUEST OF THE PROPERTY OWNER, FURTHER GRADING, PAVEMENT REMOVAL, PAVING, ETC. ON PRIVATE PROPERTY MAY BE PERFORMED TO CONNECT TO EXISTING PAVEMENT, TO PROVIDE A FLATTER DRIVEWAY GRADE, OR TO OTHERWISE IMPROVE THE DRIVE. ALL ADDITIONAL COSTS FOR SUCH WORK SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND SHALL NOT BE A PART OF THIS PROJECT.
9. DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 12' (FEET) AND A MAXIMUM OF 50% OF PLATTED LOT WIDTH, UNLESS THE LOT IS ZONED AS MULTI-FAMILY.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR ADA COMPLIANCE FOR SIDEWALK SECTIONS THROUGH DRIVES. ANY SECTION FOUND TO BE NON-COMPLIANT AFTER CONSTRUCTION SHALL BE REMOVED AND REPLACED WITHIN ADA ALLOWANCES BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
11. SUBSTITUTE DOWELS WITH EXPANSION JOINT WHERE CONCRETE CURB AND GUTTER IS TIED TO MAIN LINE PAVING.

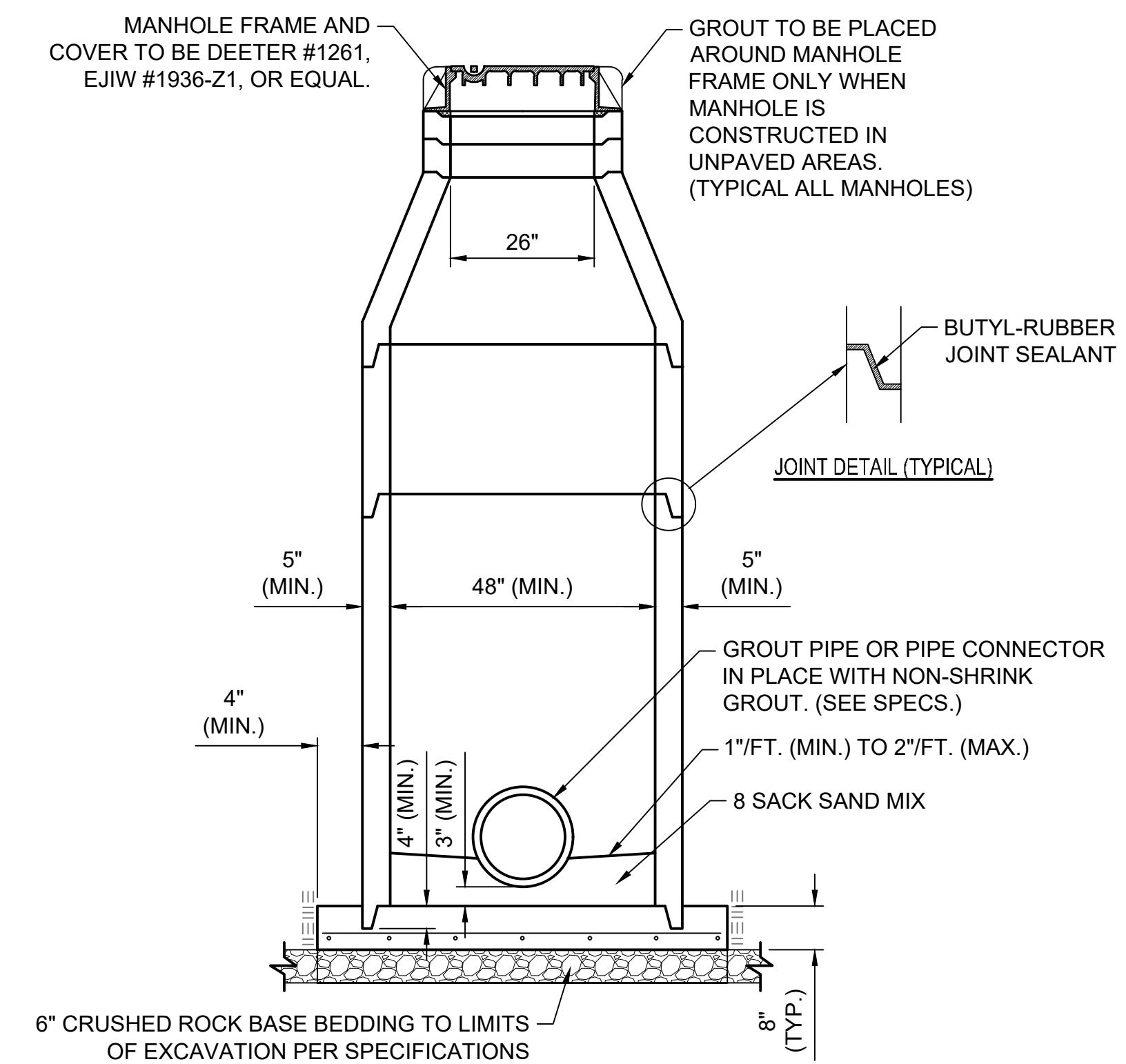


**VALLEY CENTER
 STANDARD DETAILS**

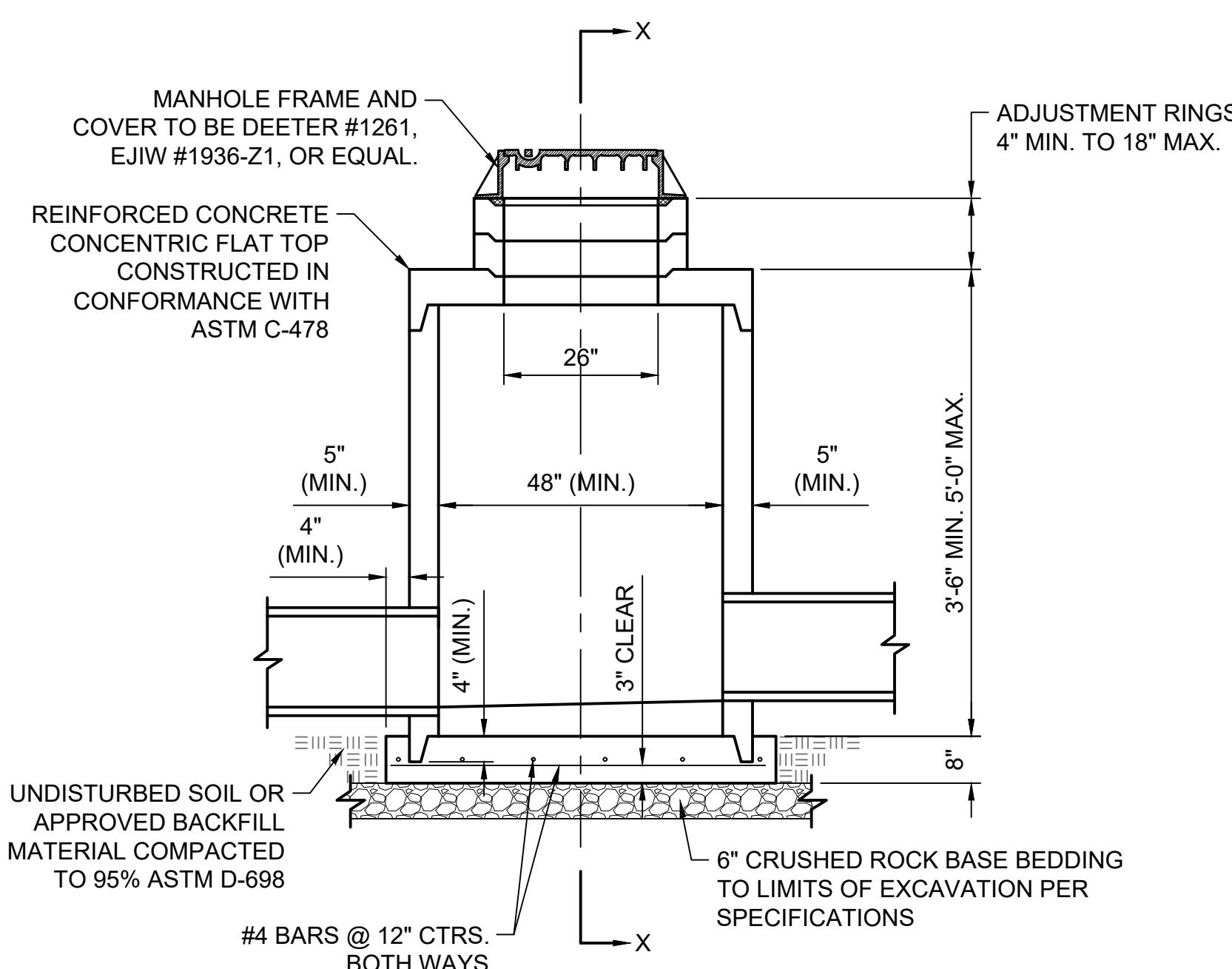
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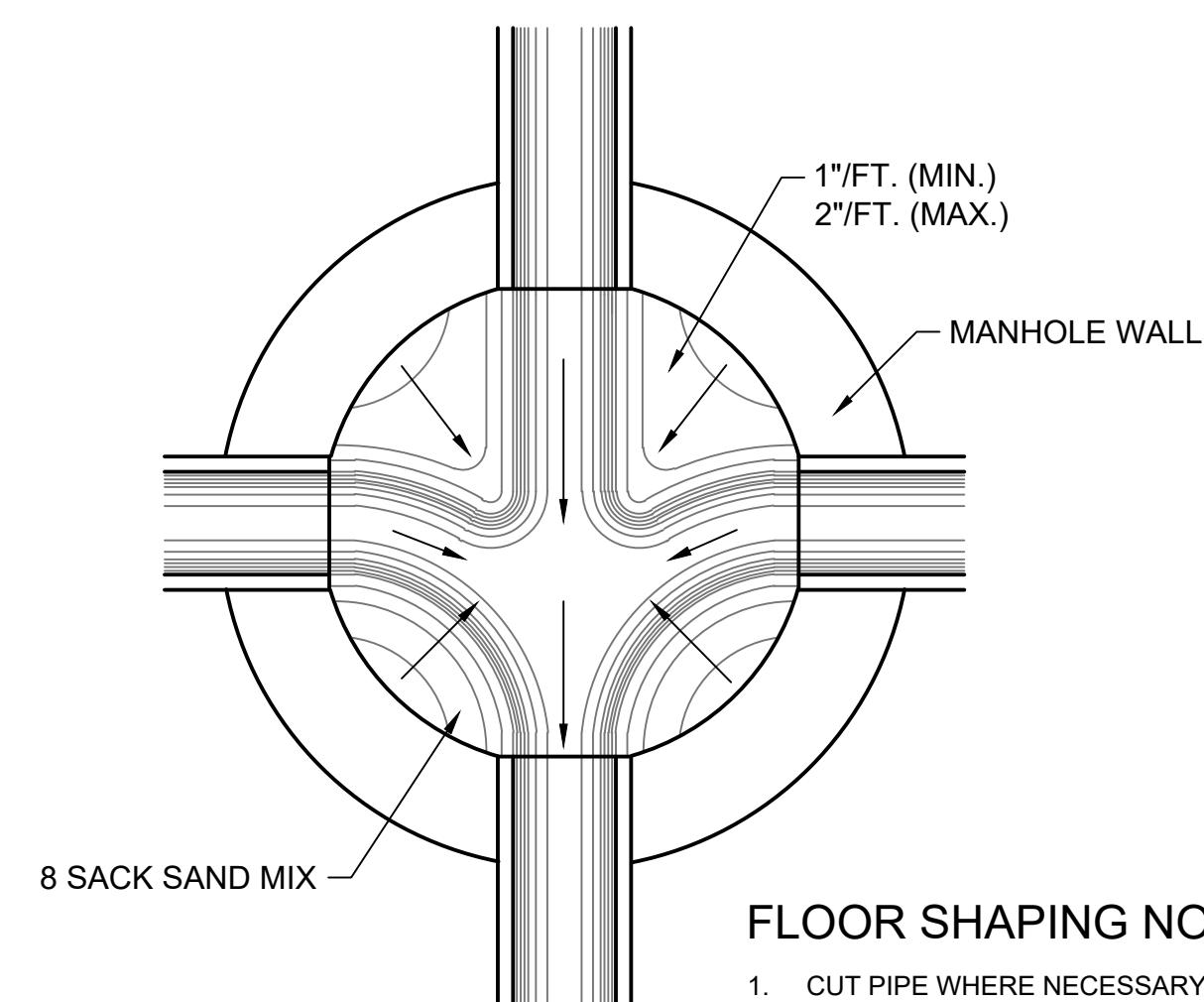
C1 PRECAST STANDARD MANHOLE TYPE "A"
 NOT TO SCALE



C3 SECTION X-X (TYPICAL)
 NOT TO SCALE



E1 PRECAST SHALLOW MANHOLE TYPE "B"
 NOT TO SCALE



E3 TYPICAL MANHOLE FLOOR SHAPING
 NOT TO SCALE

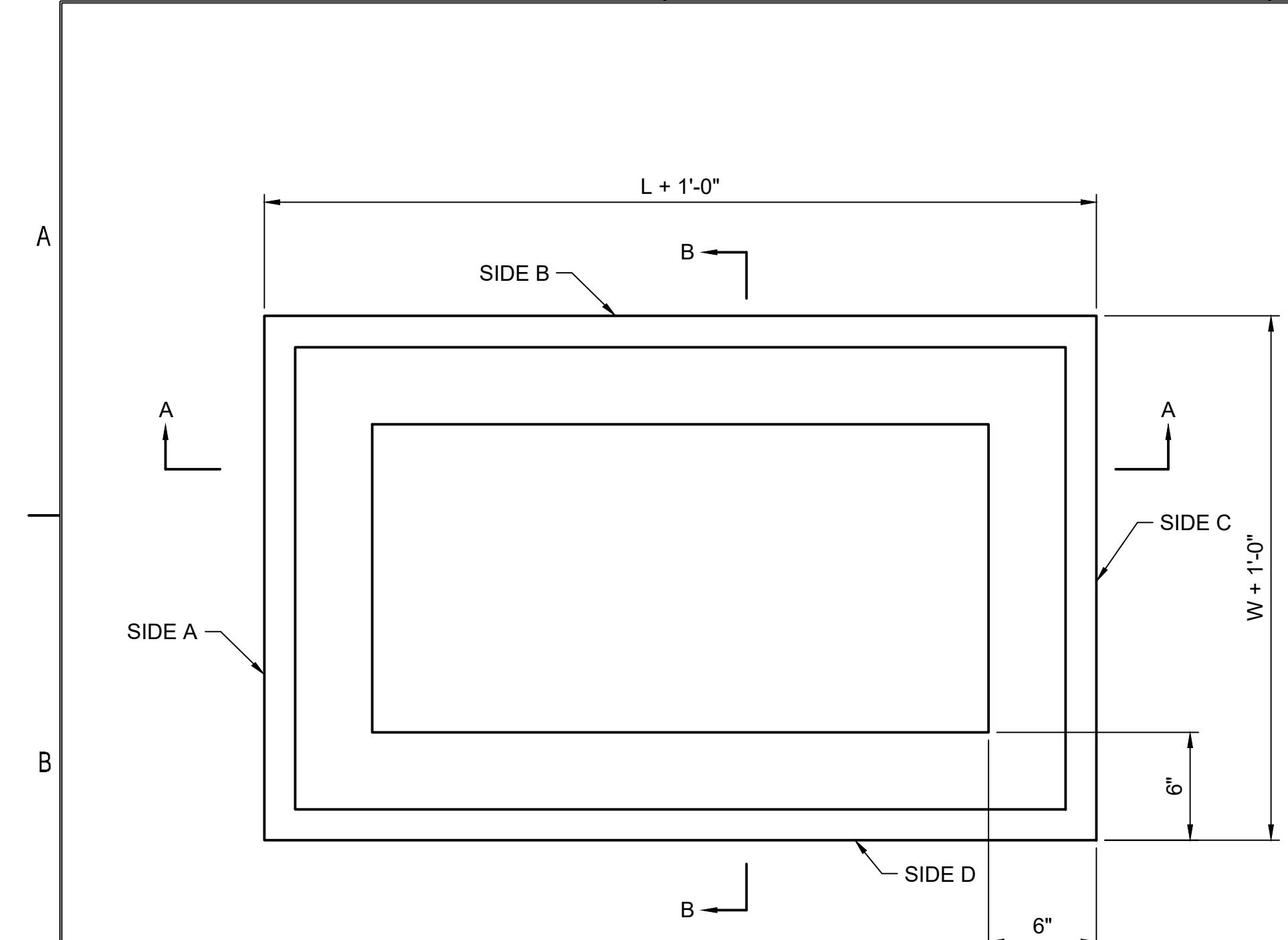
PRECAST MANHOLE NOTES

1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
2. STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
3. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
4. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
5. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478 AS MODIFIED BY THE SPECIFICATIONS.
6. CONCRETE USED FOR MANHOLE CONSTRUCTION SHALL CONFORM TO SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO MANHOLE BASE.
8. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5 FOOT INSIDE DIAMETER (MIN.)
9. MANHOLES WITH PRECAST BASES MAY BE USED AT THE CONTRACTOR'S OPTION. THESE MANHOLES SHALL HAVE AN 8" MINIMUM BASE THICKNESS AND SHALL BE PLACED ON AN 8" MIN. CRUSHED ROCK BASE. PIPES SHALL BE ENCASED WITH CRUSHED ROCK TO AT LEAST 3 FEET FROM THE MANHOLE WALL.
10. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
11. THE ENDS OF ALL PIPES IN MANHOLES SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE MANHOLE WALL.
12. MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE MANHOLE WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
13. MANHOLE FRAME AND COVER TO BE DEETER #1261, EJIW #1936-Z1, OR APPROVED EQUAL (NO LOGO).
14. FOR FLAT GRATED INLET APPLICATION, GRATE TO BE DEETER #1933, EJIW #1205 MDI, OR APPROVED EQUAL.
15. FOR BEEHIVE GRATE APPLICATION, GRATE TO BE DEETER #4495, EJIW #120545, OR APPROVED EQUAL.



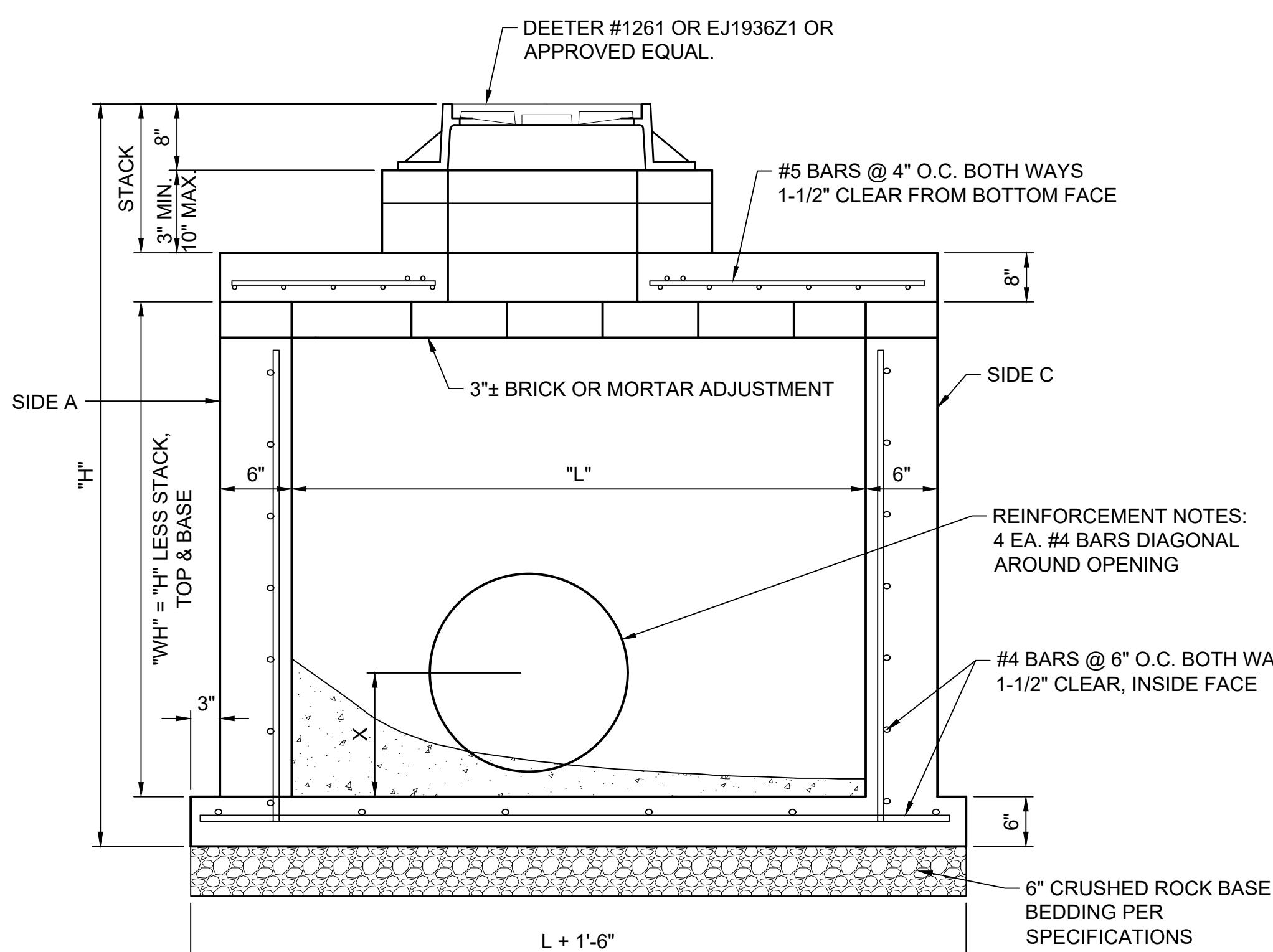
VALLEY CENTER STANDARD DETAILS

Issue:	
1	ISSUED FOR CONSTRUCTION 03/10/21
Job No.:	217013-001
Date:	10 MARCH 2021
PM:	JAG
Designed By:	JAG
Drawn By:	DSB
Checked By:	MEB
Storm Sewer PreCast Concrete Manhole (Circular)	
C-507	



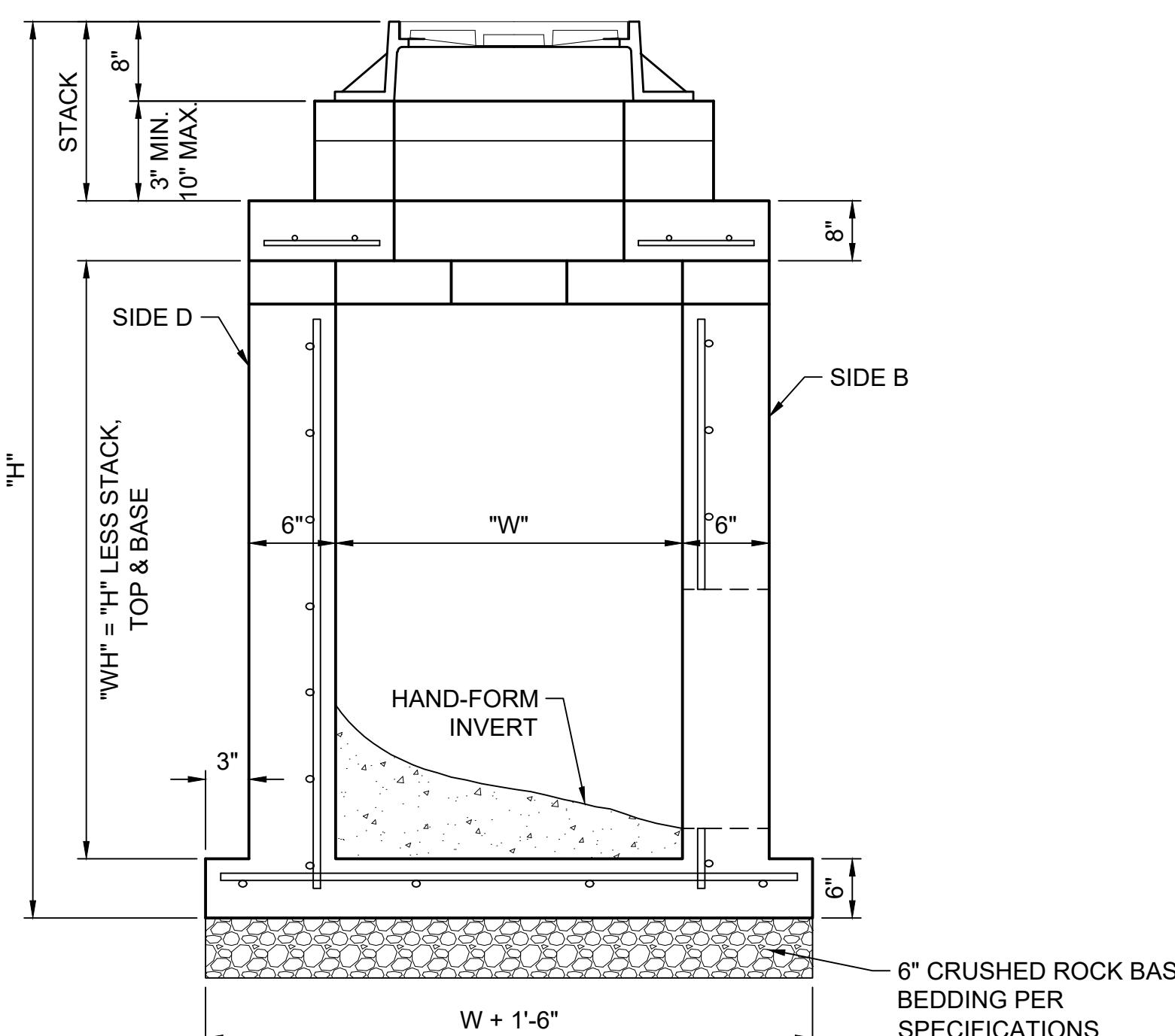
C1 **TOP VIEW**
NOT TO SCALE

NOT TO SCALE



E1 SECTION A-A
NOT TO SCALE

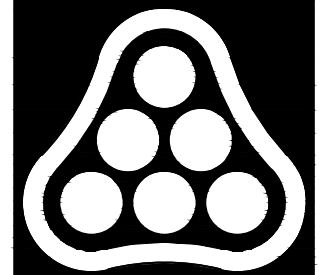
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NOT TC



E4 SECTION B-B
NOT TO SCALE

E4) NC

VALLEY CENTER STANDARD DETAILS



PEC

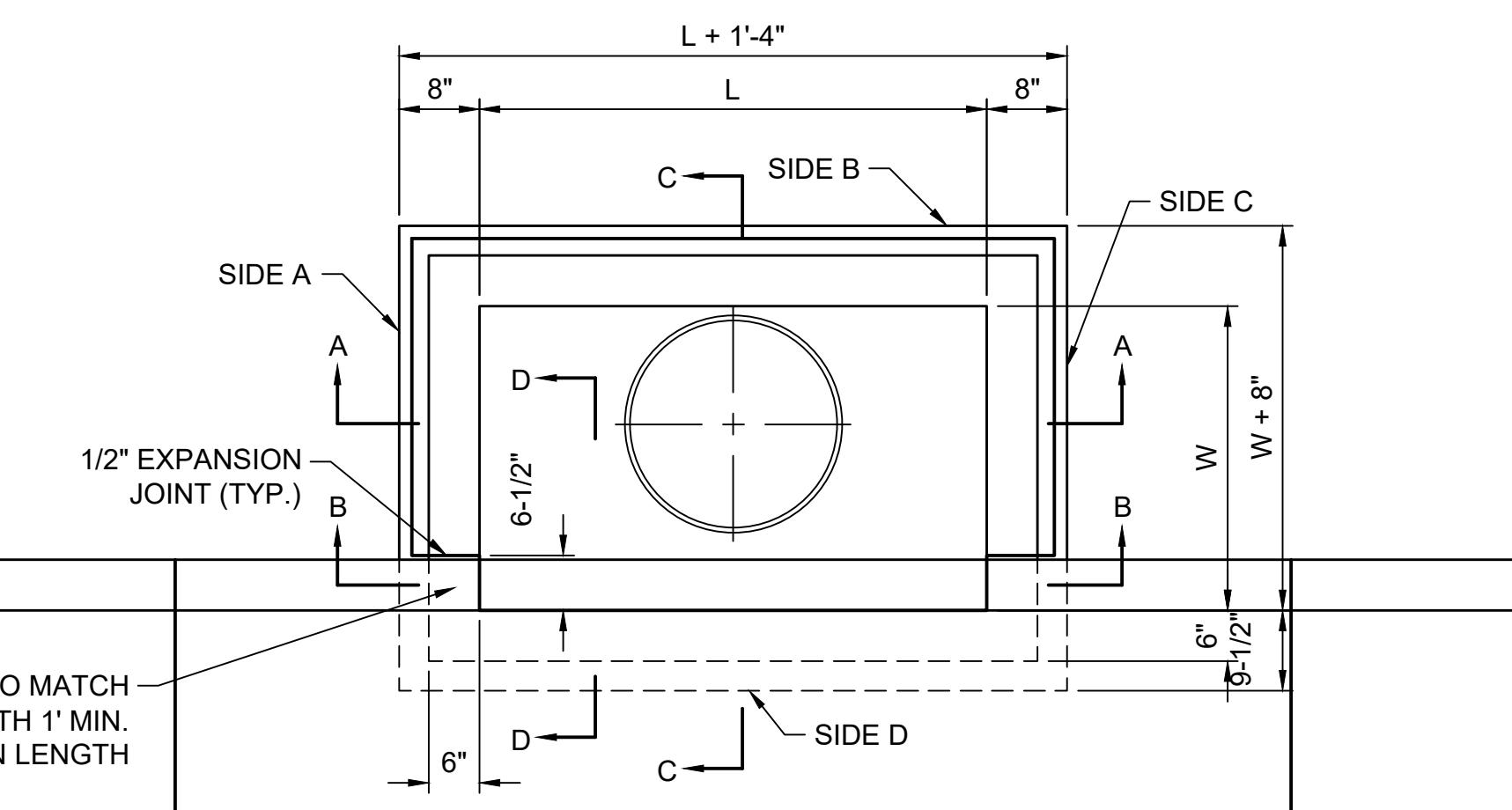
PROFESSIONAL ENGINEERING CONSULTANTS
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REINFORCED MANHOLE NOTES

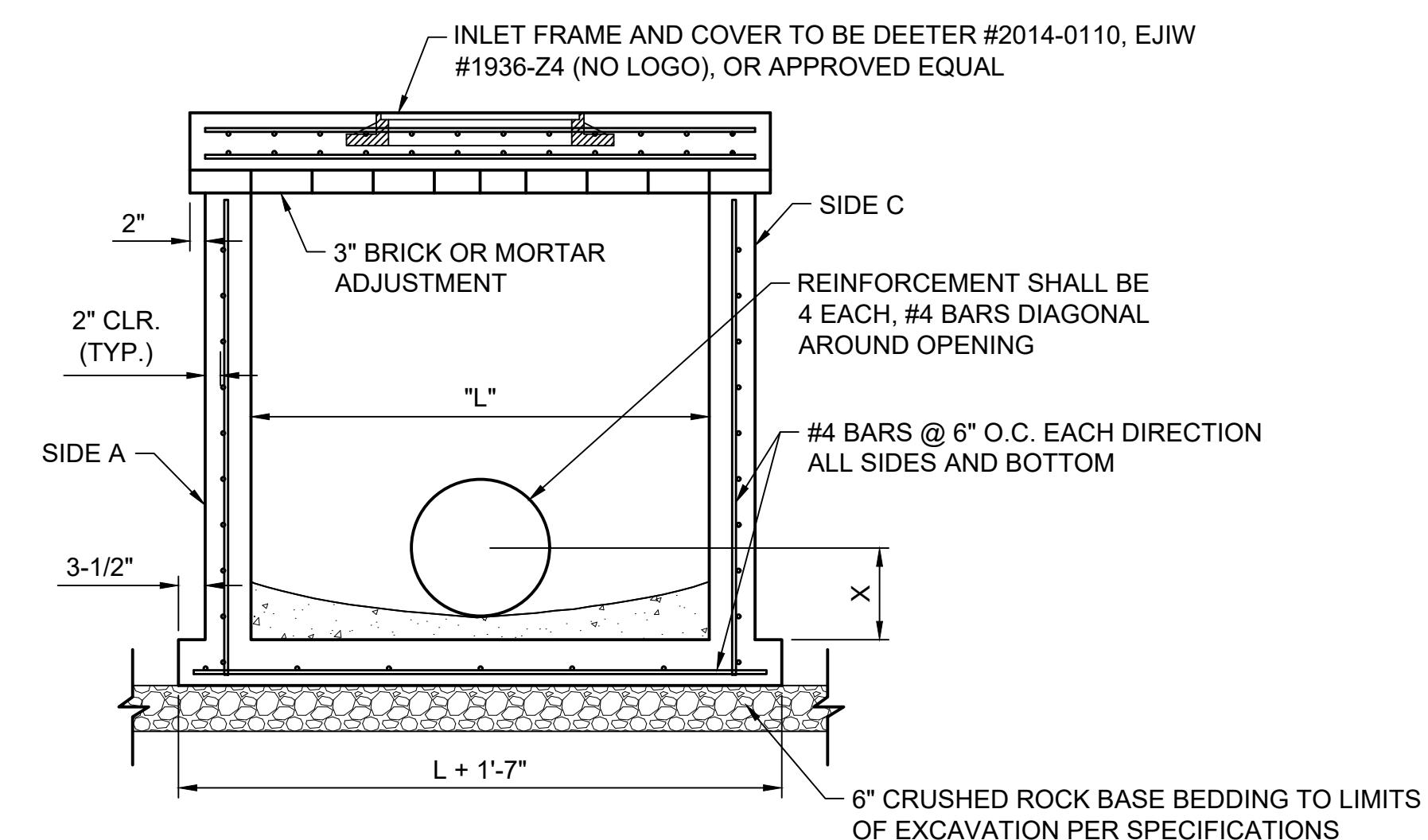
1. GRATE FRAME TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
4. INLET FRAME AND GRATE TO BE DEETER #1261 OR EJ1936Z1 OR APPROVED EQUAL.
5. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.



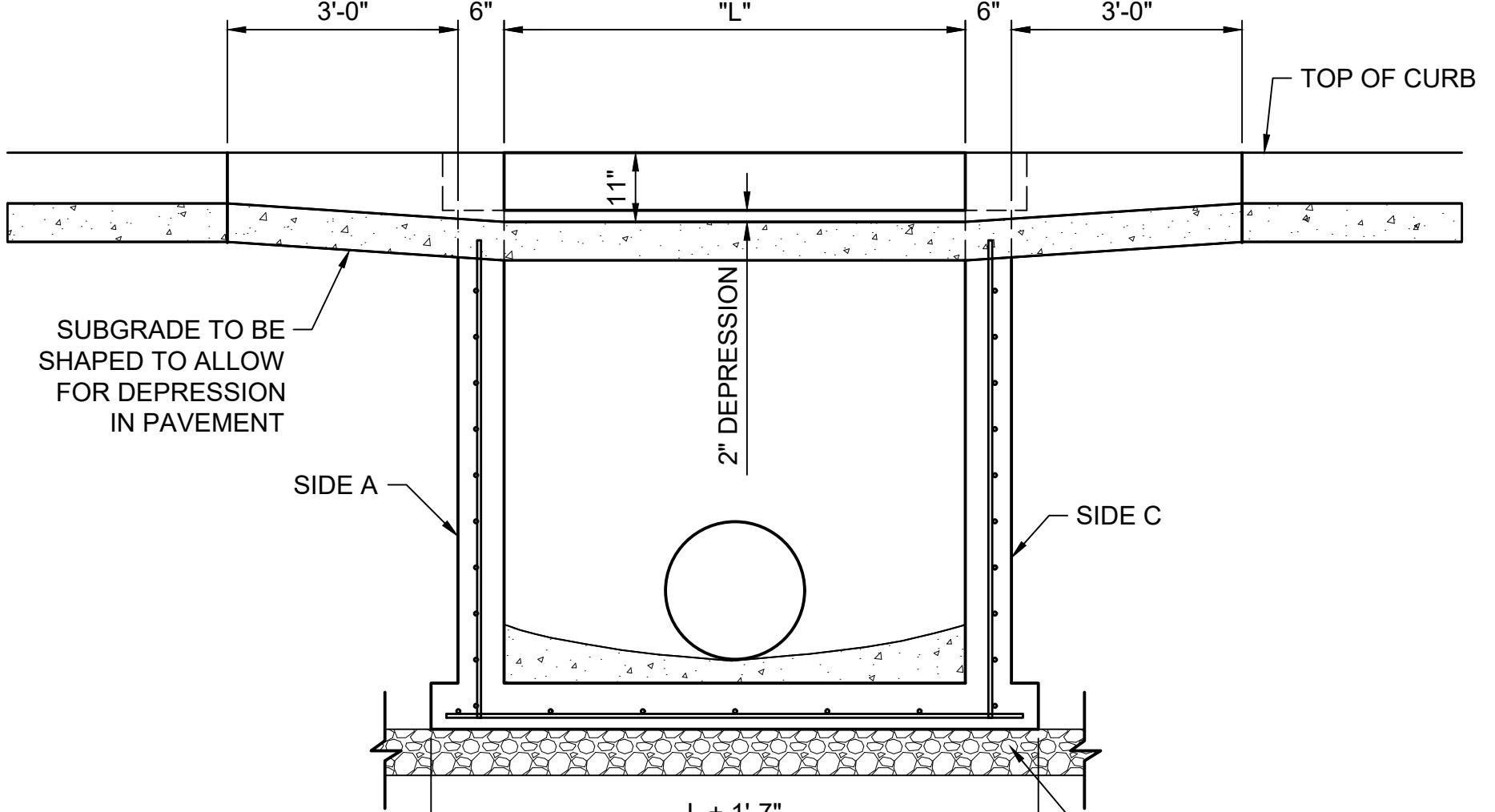
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1	ISSUED FOR CONSTRUCTION	03/10/21
JOB NO.		217013-001
DATE		10 MARCH 2021
PM		JAG
DESIGNED BY		JAG
DRAWN BY		DSB
CHECKED BY		MEB
STORM SEWER REINFORCED CONCRETE MANHOLE (RECTANGULAR)		
C-508		



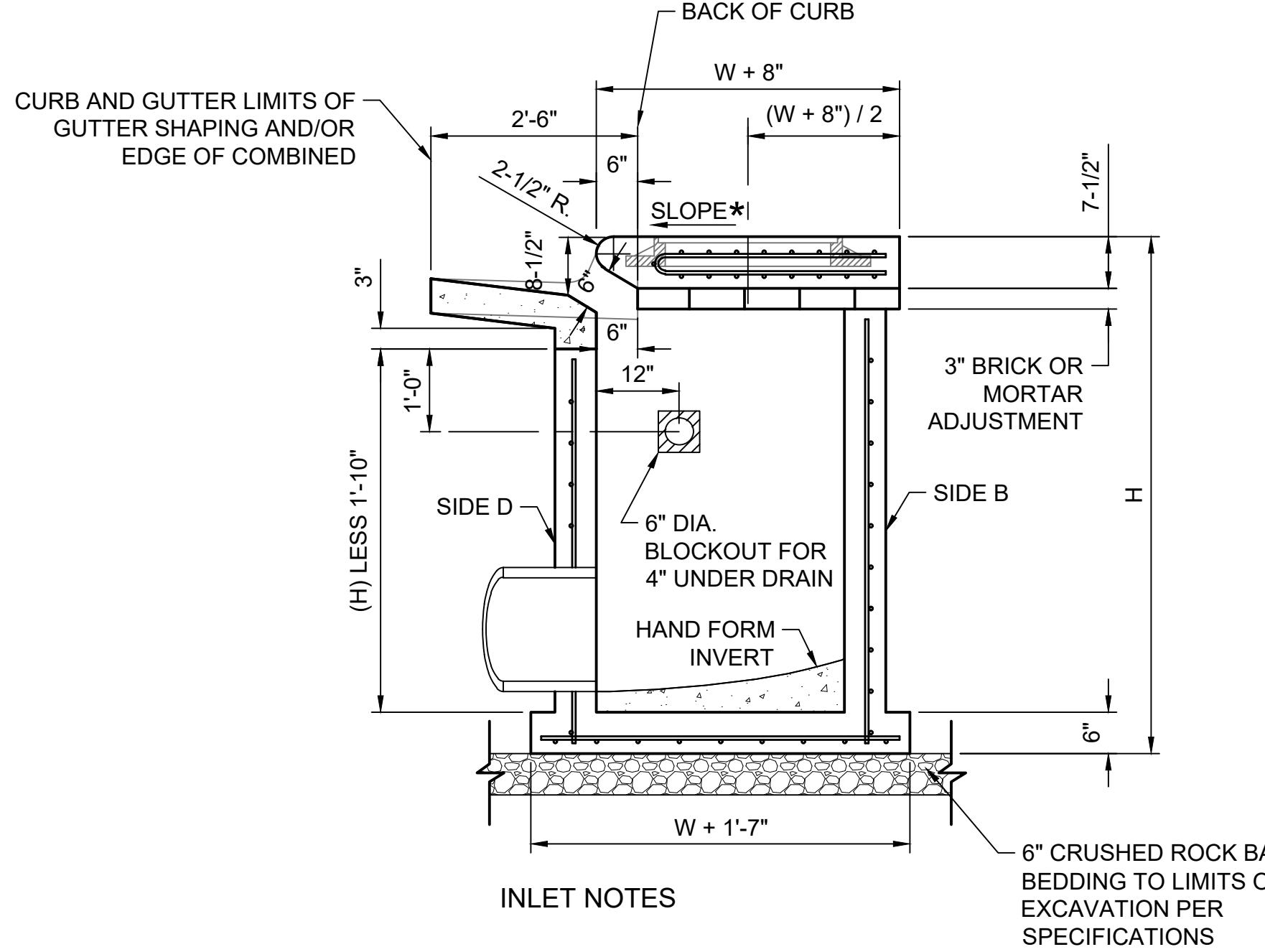
B2 TOP VIEW
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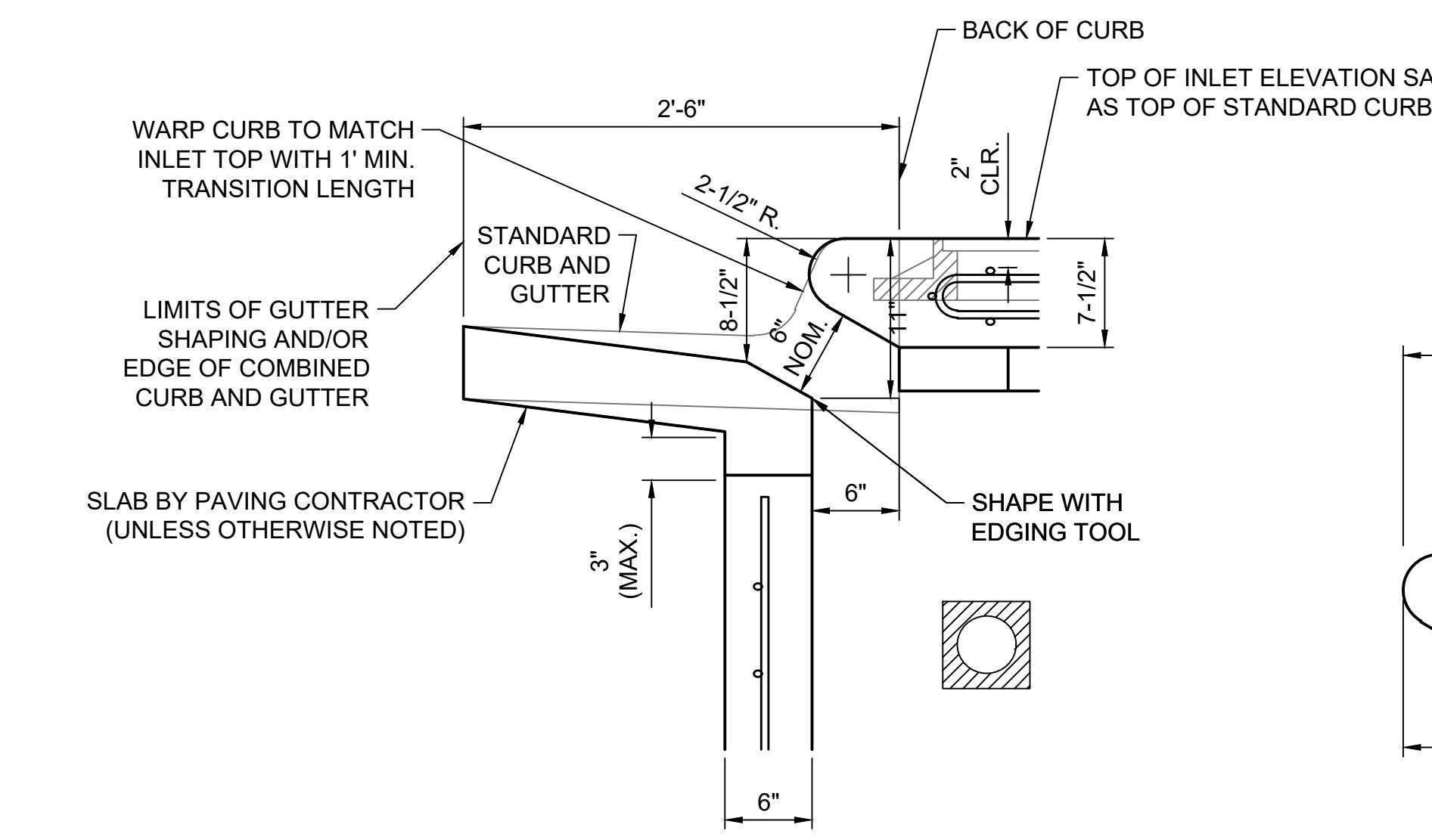
D2 SECTION A-A
NOT TO SCALE



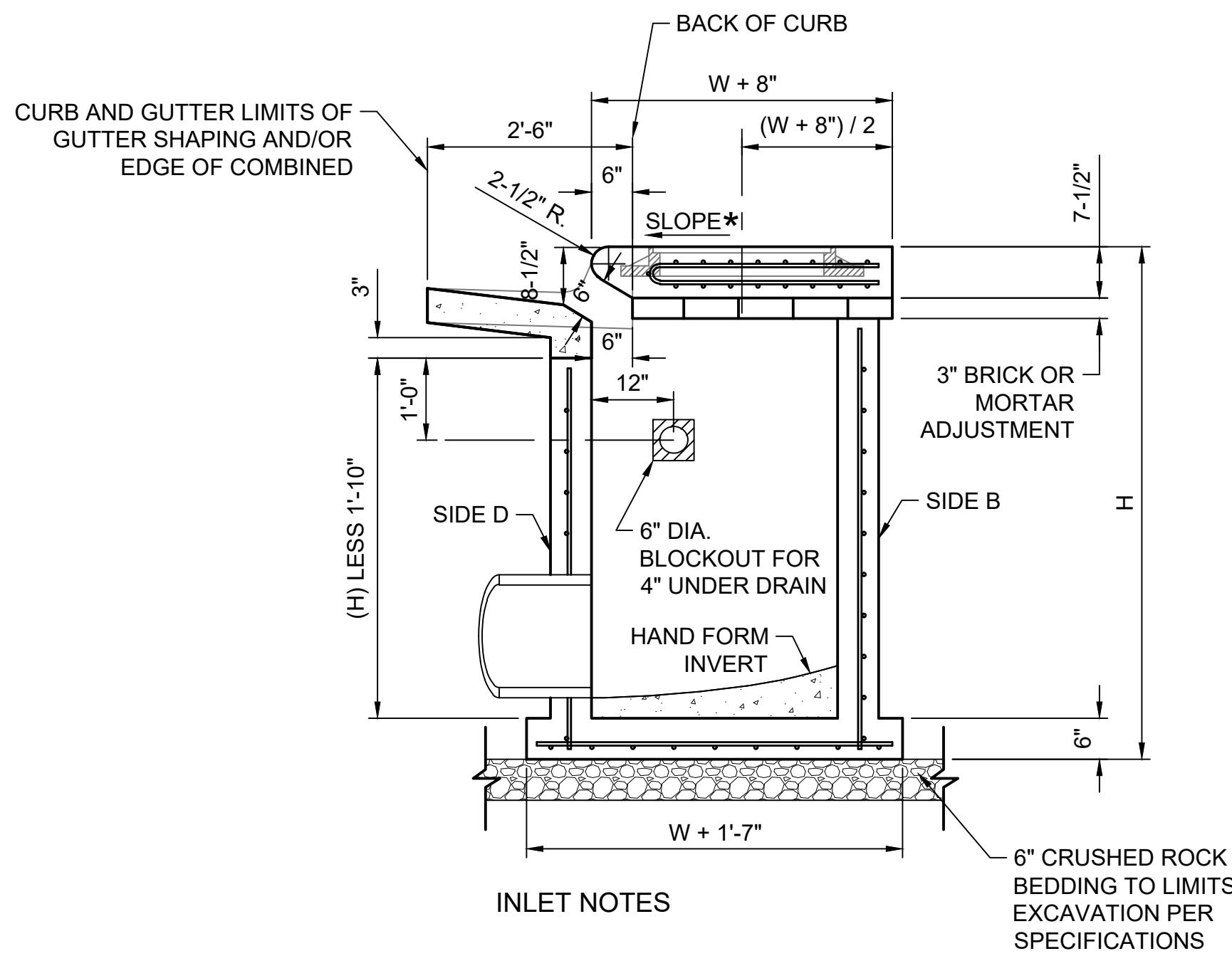
E2 SECTION B-B
NOT TO SCALE



C4 SECTION C-C
NOT TO SCALE



E4 SECTION D-D
NOT TO SCALE



E5 TOP DETAIL
NOT TO SCALE

GENERAL NOTES

1. CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN $W=5'$ AND $H=7'$ OR LESS.
3. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
5. INLET FRAME AND COVER TO BE DEETER #2014-0110 OR EJ1936Z4 (NO LOGO) OR APPROVED EQUAL.
6. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

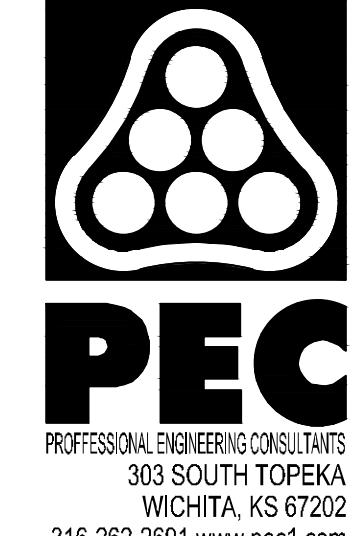
PRECAST CURB INLET WIDTHS				
W	TOP WIDTH	TOP LENGTH	TOP THICKNESS	PIPE DIAMETER
3'-0"	W + 8"	L + 1'-4"	7-1/2"	21" & SMALLER
4'-0"	W + 8"	L + 1'-4"	7-1/2"	24" & 30"
5'-0"	W + 8"	L + 1'-4"	7-1/2"	36" & 42"
6'-0"	W + 8"	L + 1'-4"	7-1/2"	48" & 54"
7'-0"	W + 8"	L + 1'-4"	7-1/2"	60" & 66"

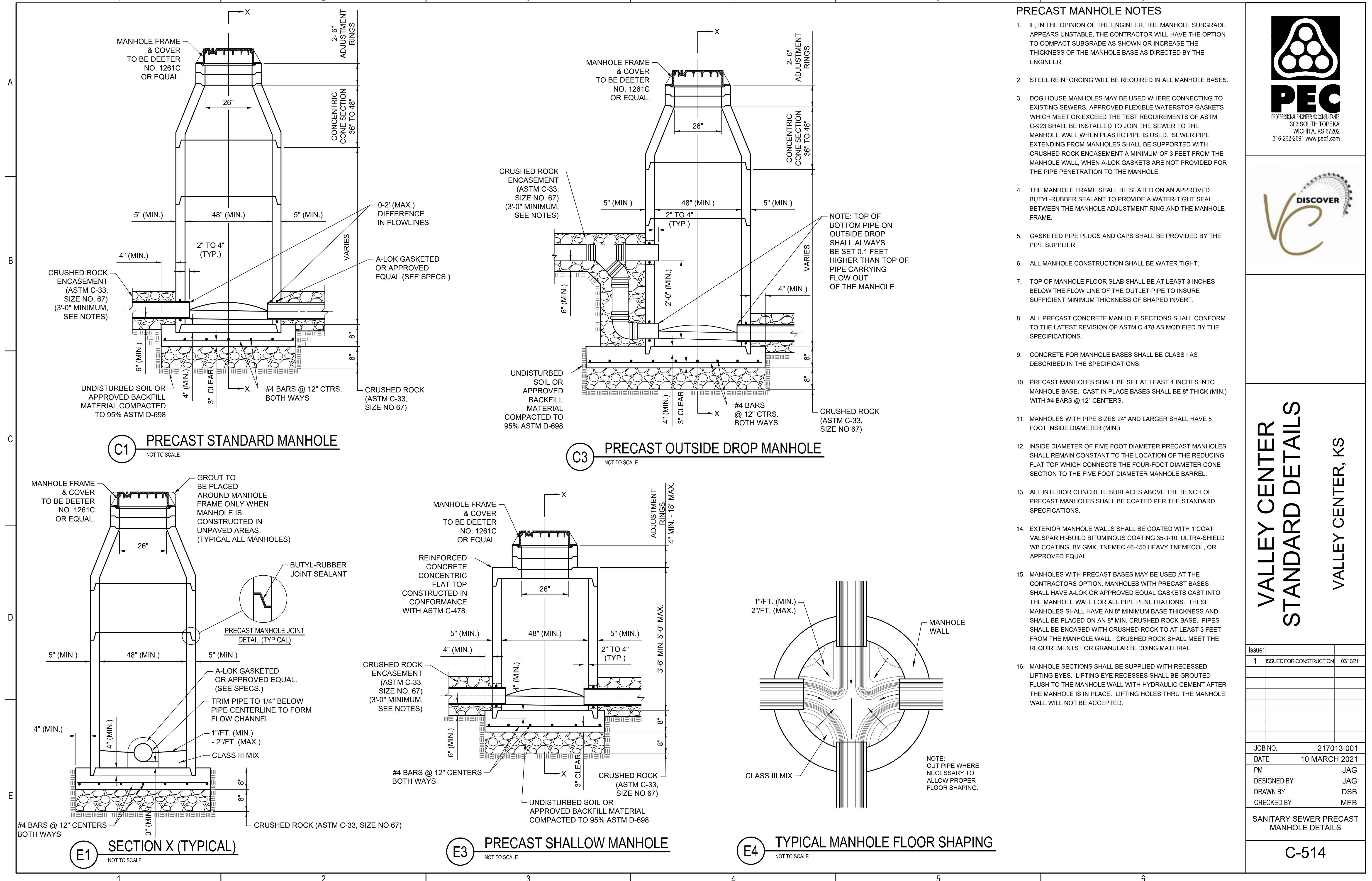
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

VALLEY CENTER STANDARD DETAILS

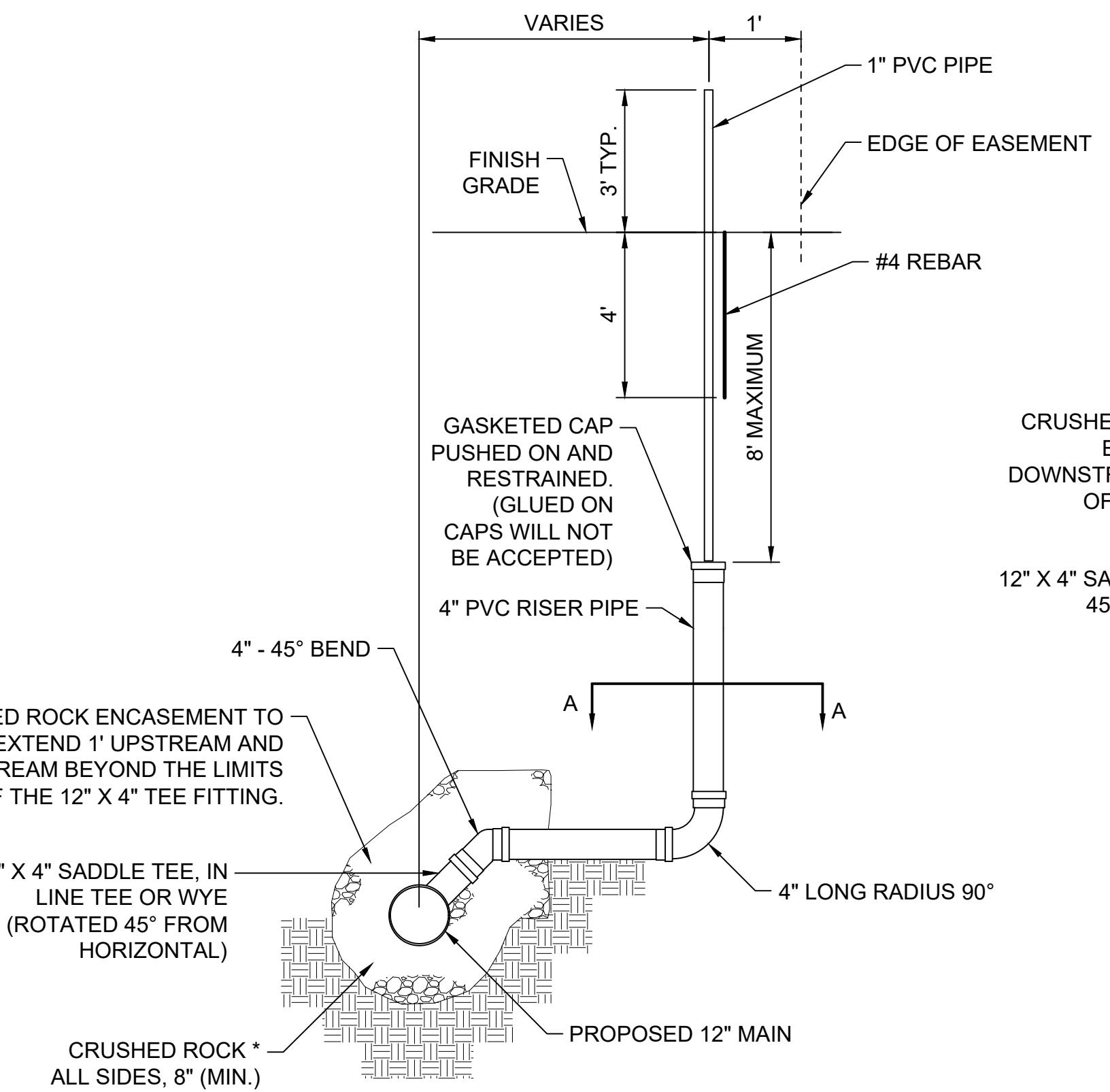
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DATE	10 MARCH 2021
PM	JAG
DESIGNED BY	JAG
DRAWN BY	DSB
CHECKED BY	MEB
TYPE 1 CURB INLET DETAILS	

C-510





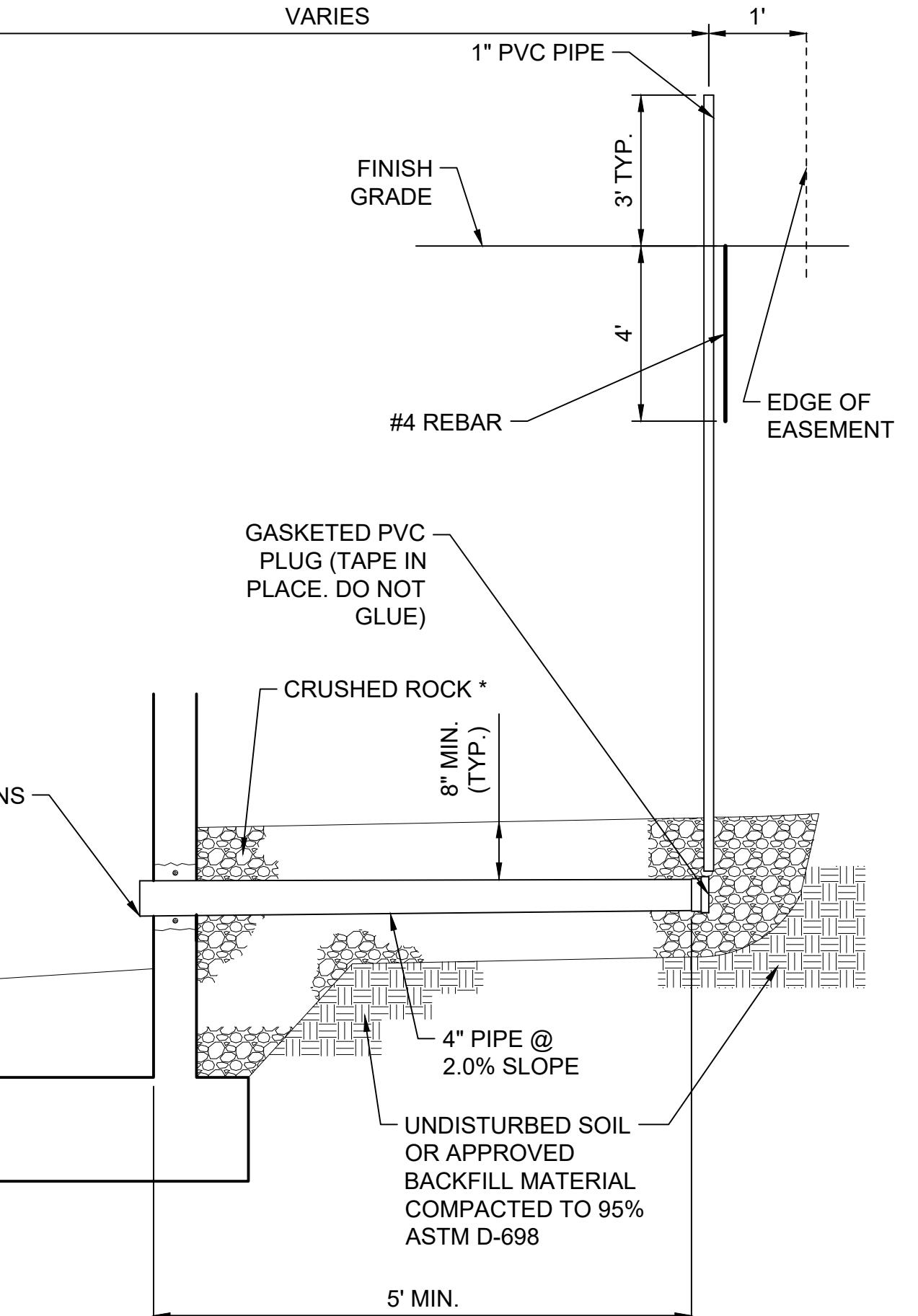
C1 TEE SERVICE CONNECTION TYPE 1
 NOT TO SCALE



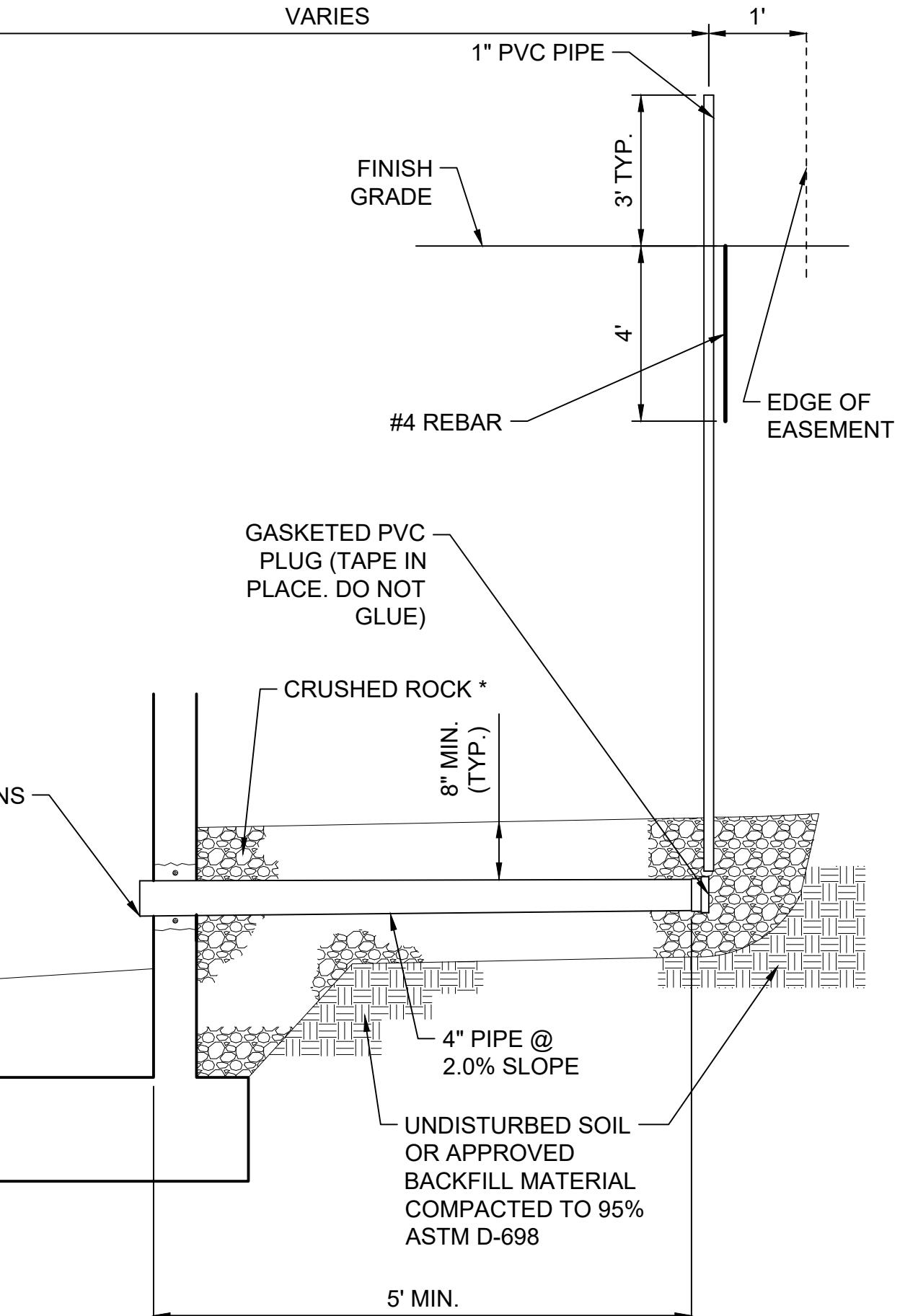
B3 TEE SERVICE CONNECTION TYPE 2
 NOT TO SCALE

NOTE

1. CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.
2. SERVICE CONNECTIONS ARE TO BE INSTALLED WHERE PROPOSED SEWER MAIN IS 10' OR MORE BELOW PROPOSED GROUND OR AS SHOWN IN THE PLANS.



E1 MANHOLE SERVICE CONNECTION TYPE 1
 NOT TO SCALE



E3 MANHOLE SERVICE CONNECTION TYPE 2
 NOT TO SCALE

NO.	TYPE	LOCATION			APPROXIMATE LENGTH 4" PIPE	RECORD INFORMATION (TO BE COMPLETED BY PROJECT INSPECTOR)			
		LOT	BLOCK	LINE		STATION/ DIRECTION	UPSTREAM	DOWNSTREAM	NO.
1	TEE SERVICE CONNECTION	#	#	#	#+## / RT.				
2	MH SERVICE CONNECTION	#	#	#	#+## / LT.				
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**VALLEY CENTER
STANDARD DETAILS**

Issue:	
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JOB NO.	217013-001
DATE	10 MARCH 2021
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DESIGNED BY	JAG
DRAWN BY	DSB
CHECKED BY	MEB
SANITARY SEWER SERVICE CONNECTION DETAILS	
C-515	

