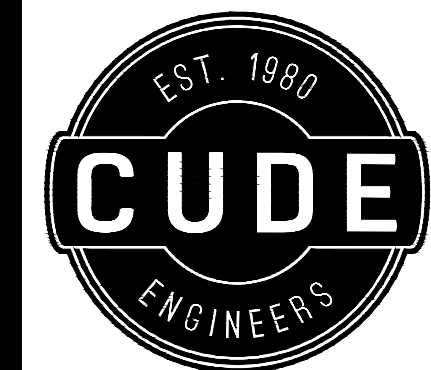




4122 Pond Hill Road, Suite 101
San Antonio, Texas 78231
P:(210) 681.2951 F:(210) 523.7112

GEORGE'S RANCH
UNIT 1

CURB INLET DETAILS - TYPE 'C'

DATE

04/22/2022

PROJECT NO.

03546.001

DRAWN BY

AB/RR

CHECKED BY

WPM

REVISIONS

- 2022-07-14 - REVISED DRAIN F & G
- 2022-09-26 - REVISED INLET 'I-1'
- 02/28/2023 - DRAINAGE REVISION
-
-
-
-
-
-
-



3/3/2023

CUDE ENGINEERS

TBPE No. 455

C39

39 OF 55

INLET SIZE	Bar	No.	Size	Spa.	Length	Weight (lbs.)
L = 25'-0" D = 6'-6" INLET(S): F-1	A	63	4	5" o.c.	17' - 9 1/2"	748.74
	B	63	4	5"	6' - 1 3/4"	258.64
	C	60	4	9"	4' - 6"	180.36
	D	27	4	10"	26' - 1"	470.44
	E	12	4	10 1/2"	8' - 4"	66.80
	F	27	5	12"	2' - 3"	63.36
	G	3	4	12"	30' - 8"	61.46
	H	6	5	12"	1' - 8"	10.43
*Concrete Total = 15.82 c.y. Manhole Casting = 260 lbs. Steel Total = 1860.23 lbs.						

INLET SIZE	Bar	No.	Size	Spa.	Length	Weight (lbs.)
L = 15'-0" D = 10'-0" INLET(S): G-1	A	39	4	5" o.c.	25' - 3 1/2"	671.93
	B	39	4	5"	7' - 1 3/4"	186.17
	C	55	4	9"	5' - 6"	201.41
	D	31	4	10"	16' - 1"	333.05
	E	12	4	10 1/2"	11' - 4"	94.86
	F	17	5	12"	2' - 3"	39.89
	G	3	4	12"	20' - 8"	41.42
	H	6	5	12"	1' - 8"	10.43
*Concrete Total = 14.44 c.y. Manhole Casting = 260 lbs. Steel Total = 1579.16 lbs.						

INLET SIZE	Bar	No.	Size	Spa.	Length	Weight (lbs.)
L = 30'-0" D = 7'-0" INLET(S): G-2	A	75	4	5" o.c.	19' - 3 1/2"	991.56
	B	75	4	5"	7' - 1 3/4"	358.01
	C	67	4	9"	5' - 6"	245.48
	D	28	4	10"	31' - 1"	560.62
	E	12	4	10 1/2"	8' - 4"	66.80
	F	32	5	12"	2' - 3"	75.10
	G	3	4	12"	35' - 8"	71.48
	H	6	5	12"	1' - 8"	10.43
*Concrete Total = 20.52 c.y. Manhole Casting = 260 lbs. Steel Total = 2379.48 lbs.						

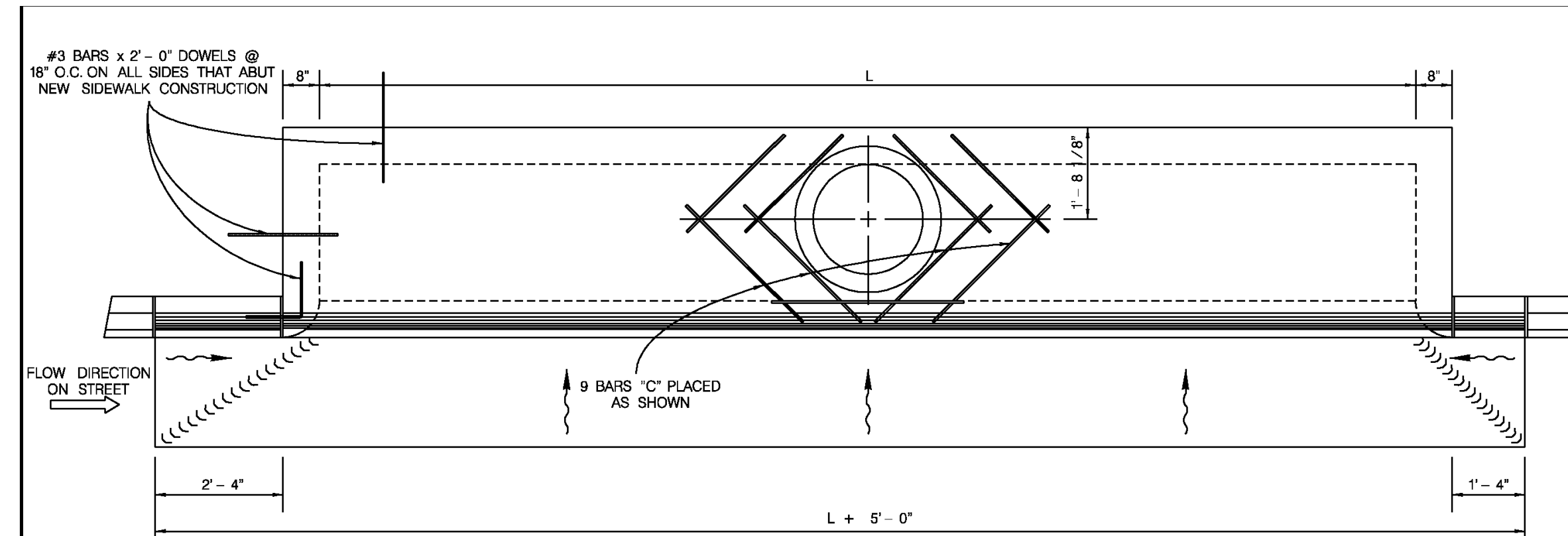
INLET SIZE	Bar	No.	Size	Spa.	Length	Weight (lbs.)
L = 15'-0" D = 6'-6" INLET(S): G-3	A	39	4	5" o.c.	17' - 9 1/2"	463.51
	B	39	4	5"	6' - 1 3/4"	160.11
	C	46	4	9"	4' - 6"	138.28
	D	27	4	10"	16' - 1"	290.08
	E	12	4	10 1/2"	8' - 4"	66.80
	F	17	5	12"	2' - 3"	39.89
	G	3	4	12"	19' - 8"	39.41
	H	5	5	12"	1' - 8"	8.69
*Concrete Total = 10.17 c.y. Manhole Casting = 260 lbs. Steel Total = 1206.77 lbs.						

INLET SIZE	Bar	No.	Size	Spa.	Length	Weight (lbs.)
L = 15'-0" D = 5'-0" INLET(S): G-4	A	39	4	5" o.c.	14' - 9 1/2"	385.35
	B	39	4	5"	6' - 1 3/4"	160.11
	C	43	4	9"	4' - 6"	129.26
	D	24	4	10"	16' - 1"	257.85
	E	12	4	10 1/2"	6' - 10"	54.78
	F	17	5	12"	2' - 3"	39.89
	G	3	4	12"	20' - 8"	41.42
	H	6	5	12"	1' - 8"	10.43
*Concrete Total = 8.70 c.y. Manhole Casting = 260 lbs. Steel Total = 1079.09 lbs.						

INLET SIZE	Bar	No.	Size	Spa.	Length	Weight (lbs.)
L = 10'-0" D = 7'-0" INLET(S): I-1	A	27	4	5" o.c.	18' - 9 1/2"	338.93
	B	27	4	5"	6' - 1 3/4"	110.85
	C	44	4	9"	4' - 6"	123.25
	D	28	4	10"	11' - 1"	207.30
	E	12	4	10 1/2"	8' - 10"	70.81
	F	12	5	12"	2' - 3"	28.16
	G	3	4	12"	15' - 8"	31.40
	H	6	5	12"	1' - 8"	10.43
*Concrete Total = 7.72 c.y. Manhole Casting = 260 lbs. Steel Total = 921.12 lbs.						

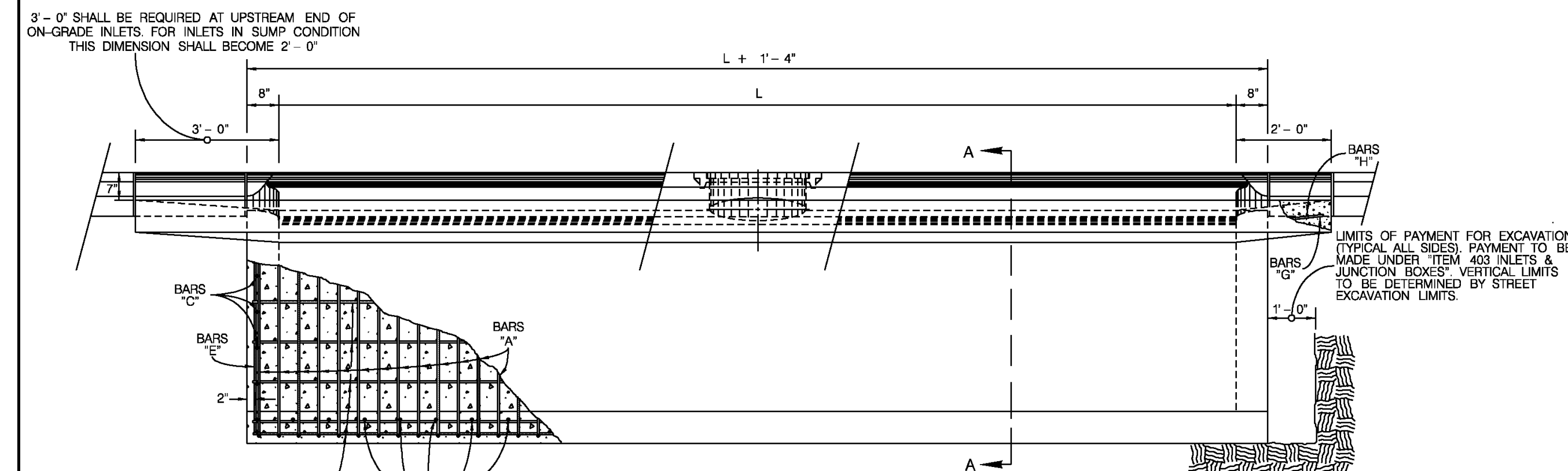
GENERAL NOTES

- ALL BARS INTERCEPTING MANHOLE RING & REINFORCING CONCRETE PIPE SHALL BE FIELD CUT.
- CONCRETE FOR STRUCTURES SHALL BE CLASS 'A', 3000 PSI IN 28 DAYS.
- ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER BARS.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED TO 3/4"
- CONSTRUCTION JOINT SHOWN AT FLOWLINE MAY BE RAISED A MAXIMUM OF 6" AT THE CONTRACTOR'S DISCRETION. ADJUST LENGTH OF VERTICAL STEEL AS REQUIRED.
- ALL REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615, GRADE 60 REQUIREMENTS.
- INVERT OF DROP INLET TO BE SHAPED WITH CONCRETE FILL TO AFFECT DRAINAGE TO OUTLET PIPE.
- DELETE 4 "C" BARS FROM SCHEDULE QUANTITIES IF MANHOLE RING AND COVER ARE PLACED AT END OF INLET.
- CAST IRON MANHOLE RING AND COVER TO BE PLACED NEXT TO OUTLET PIPE, EXCEPT FOR VERTICAL OUTLET PIPE IN WHICH CASE MANHOLE RING AND COVER WILL BE OFFSET.
- PAYMENT FOR ALL EXCAVATION, BACK FILLING, CONCRETE, REINFORCING STEEL RING AND COVER SHALL BE INCLUDED IN THE UNIT COST OF ITEM 403 "STORM SEWER JUNCTION BOXES AND INLETS".



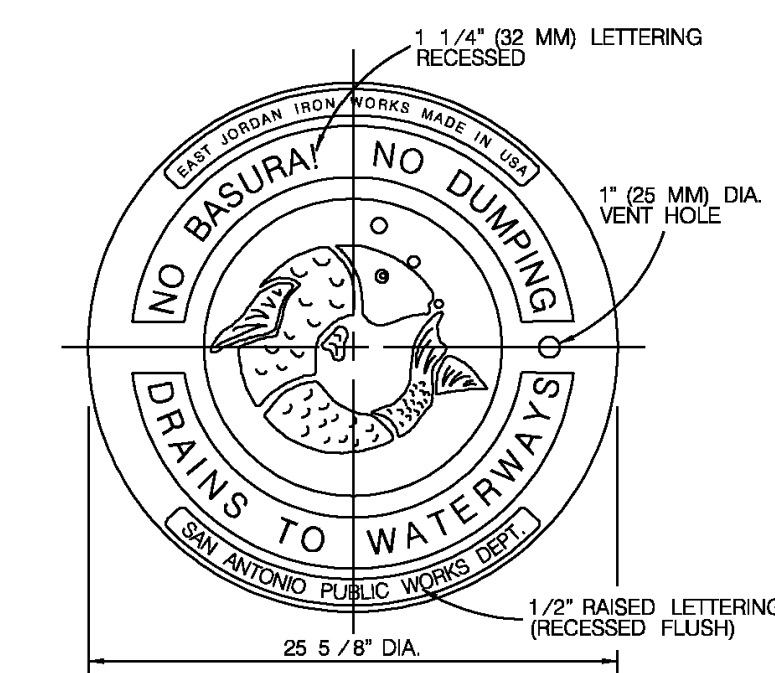
PLAN VIEW

SCALE : 1" = 2'



FRONT VIEW

SCALE : 1" = 2'

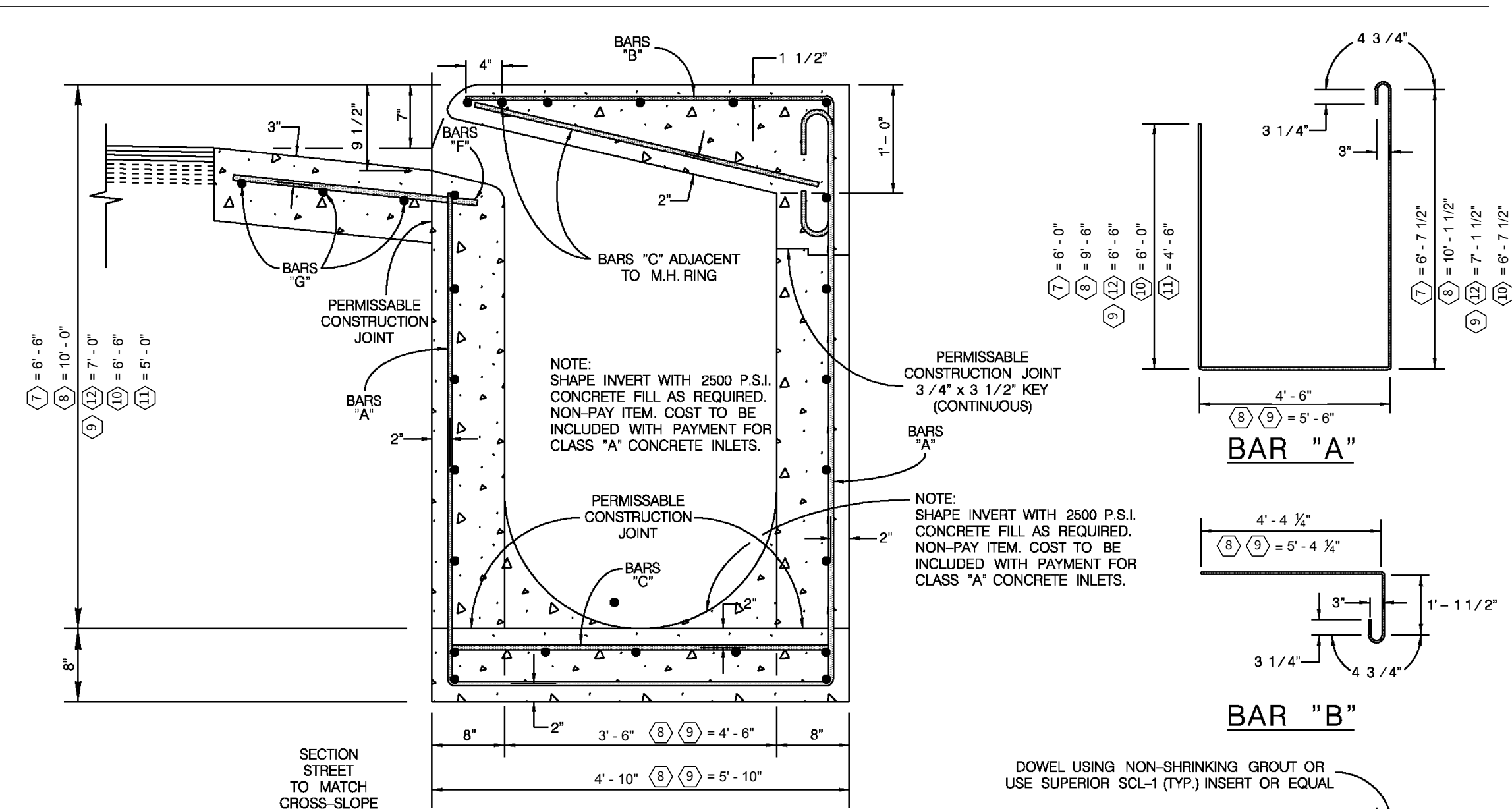


MANHOLE LID & RING DETAIL
(ITEM 409)

SCALE : 1" = 8'

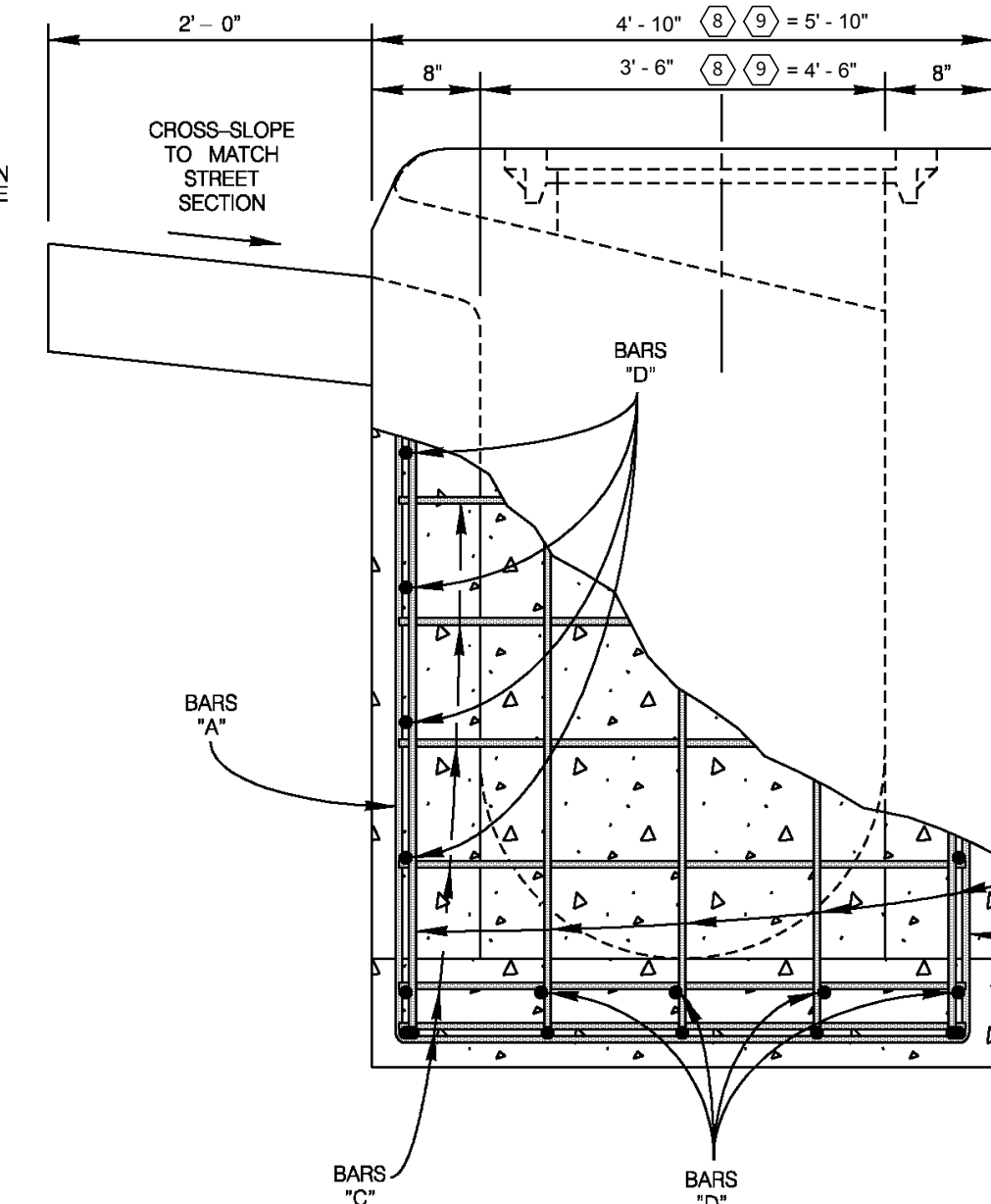
NOTES FOR MANHOLE LID AND RING

- FOR LID DESIGN OUTSIDE OF CITY OF SAN ANTONIO, DELETE "SAN ANTONIO PUBLIC WORKS DEPT.".
- CASTING NUMBER AND MANUFACTURER'S I.D. ON LID AND RING.
- LOAD BEARING CAPABILITY OF HS-20 MINIMUM.
- THE LOAD BEARING SURFACES SHALL BE MACHINE GROUND.
- THE COMBINED WEIGHT OF THE MANHOLE RING AND COVER MUST BE AT LEAST 260 LBS.



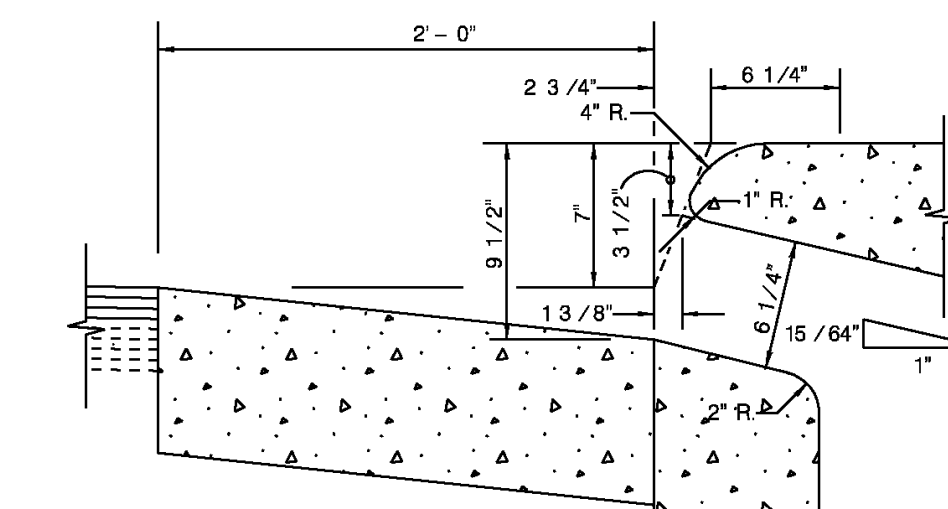
SECTION "A-A"

SCALE : 1" = 1'



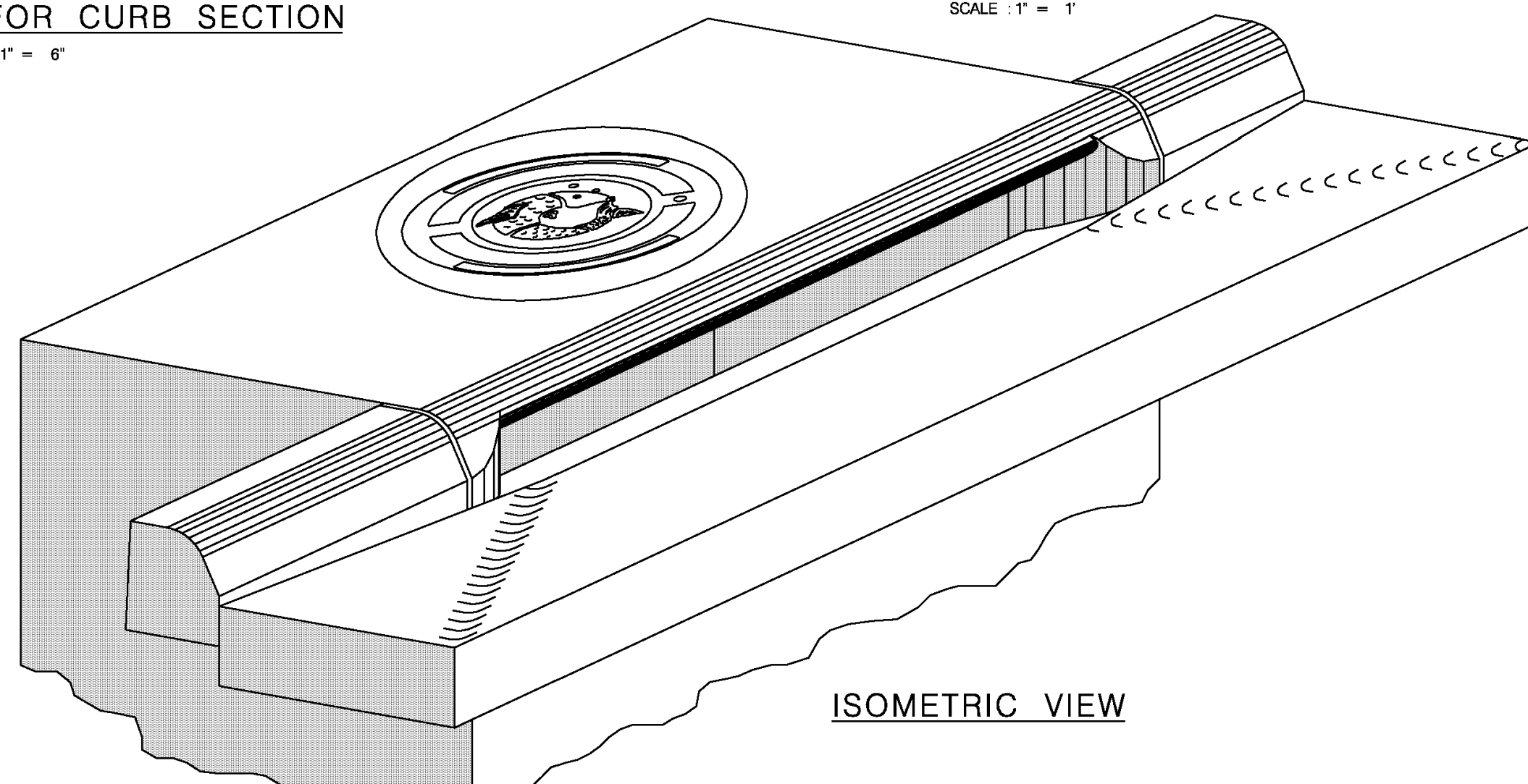
SIDE VIEW

SCALE : 1" = 1'



OPENING DETAIL FOR CURB SECTION

SCALE : 1" = 6'



ISOMETRIC VIEW