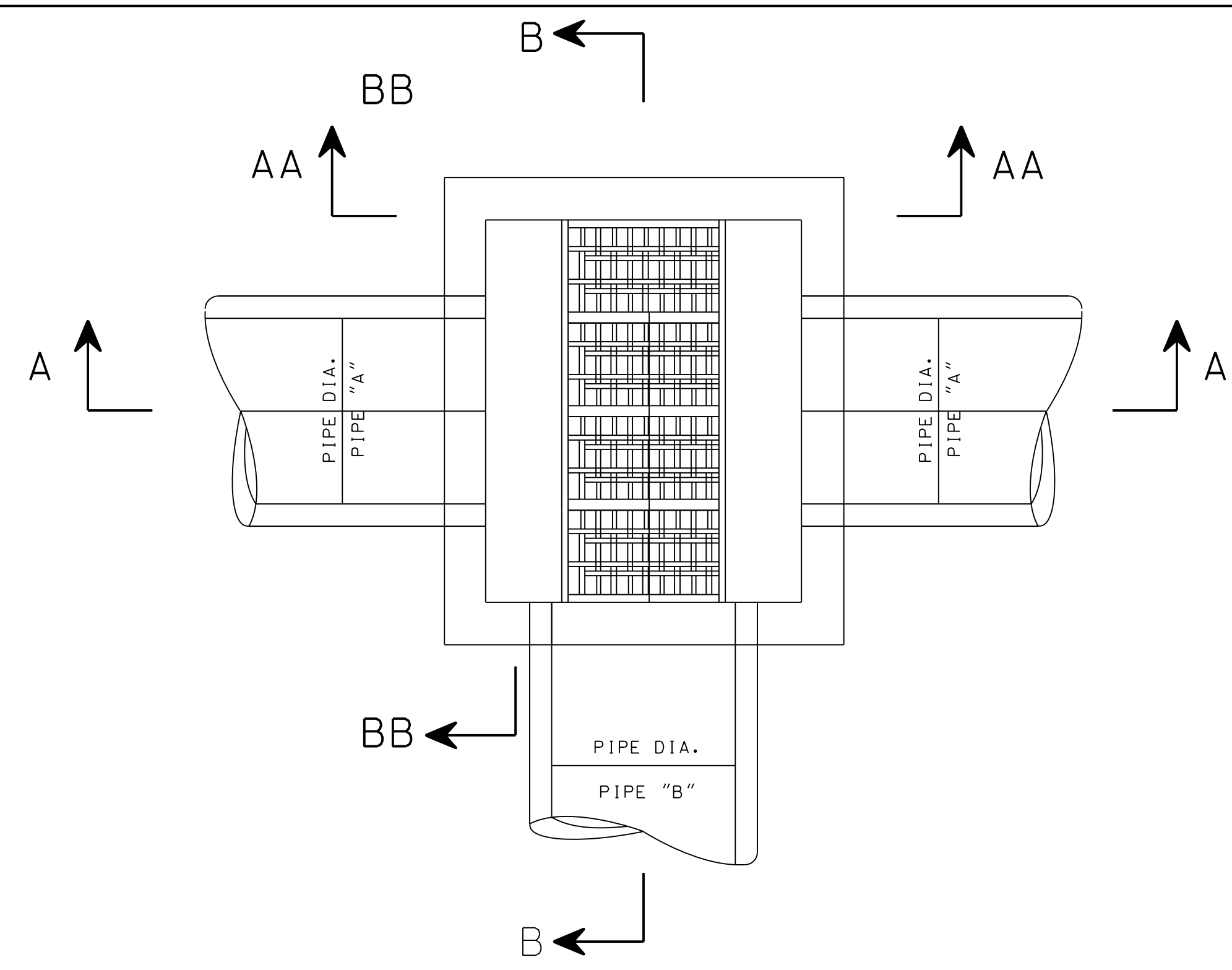
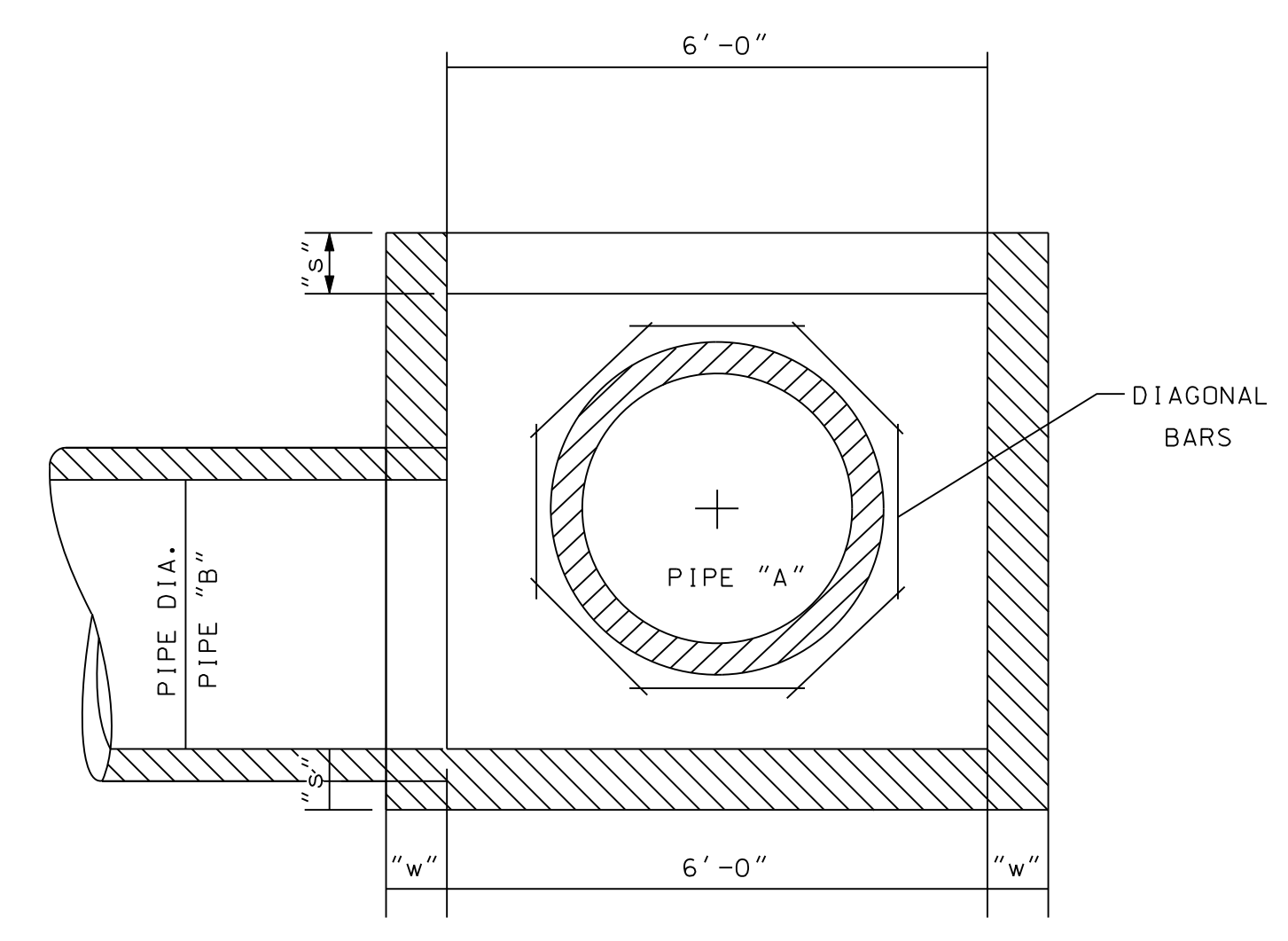


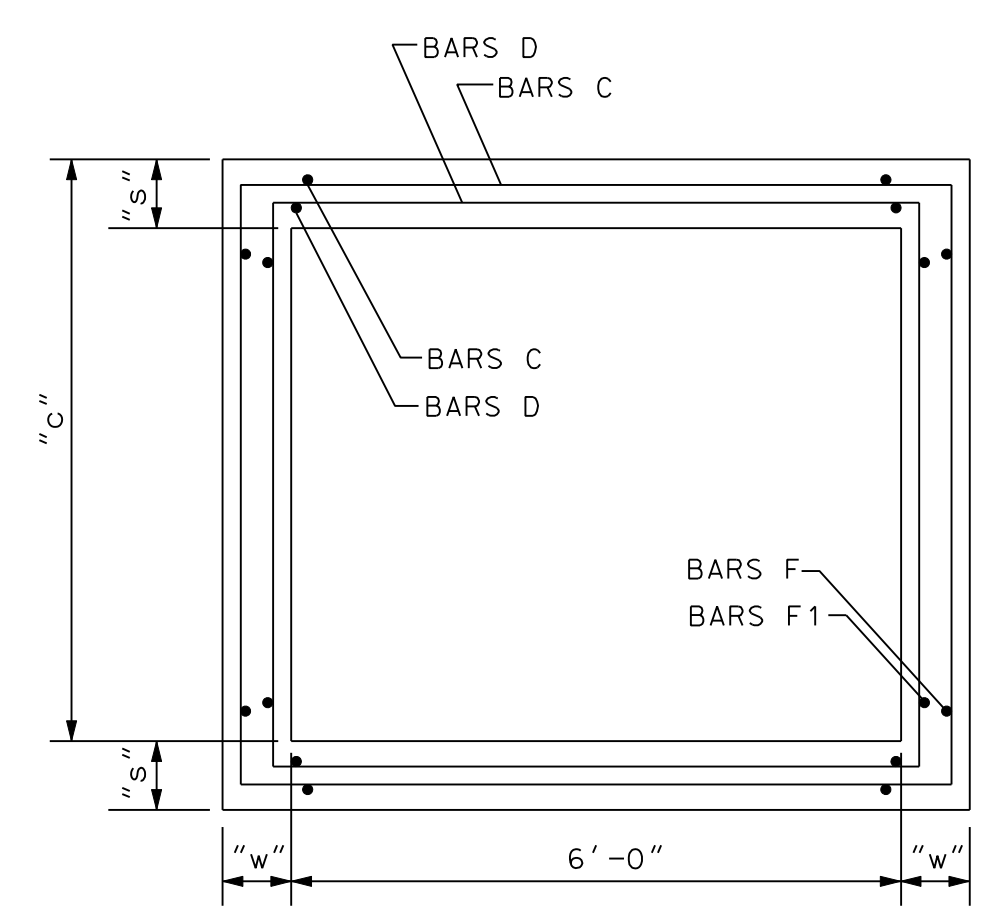
REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO



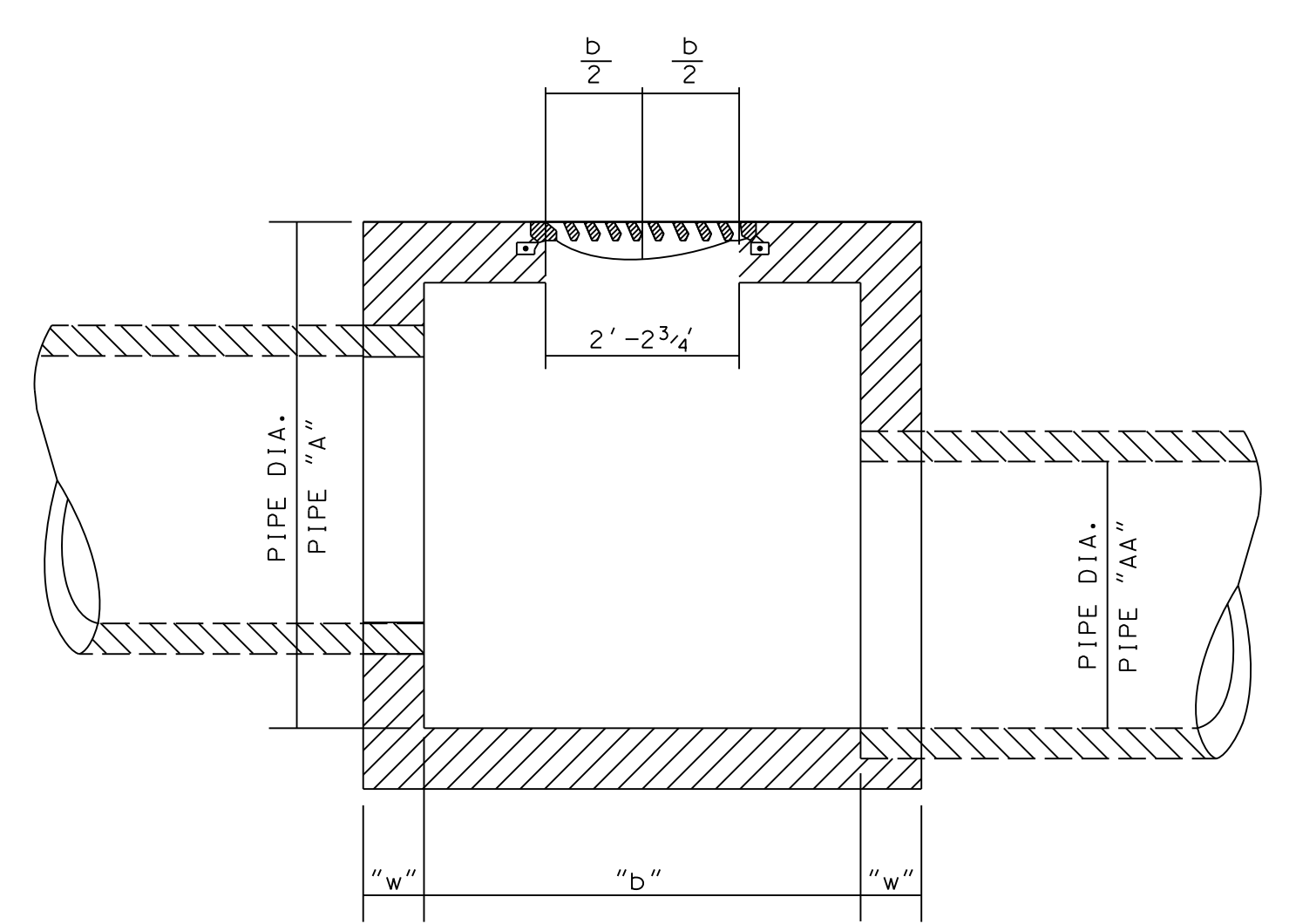
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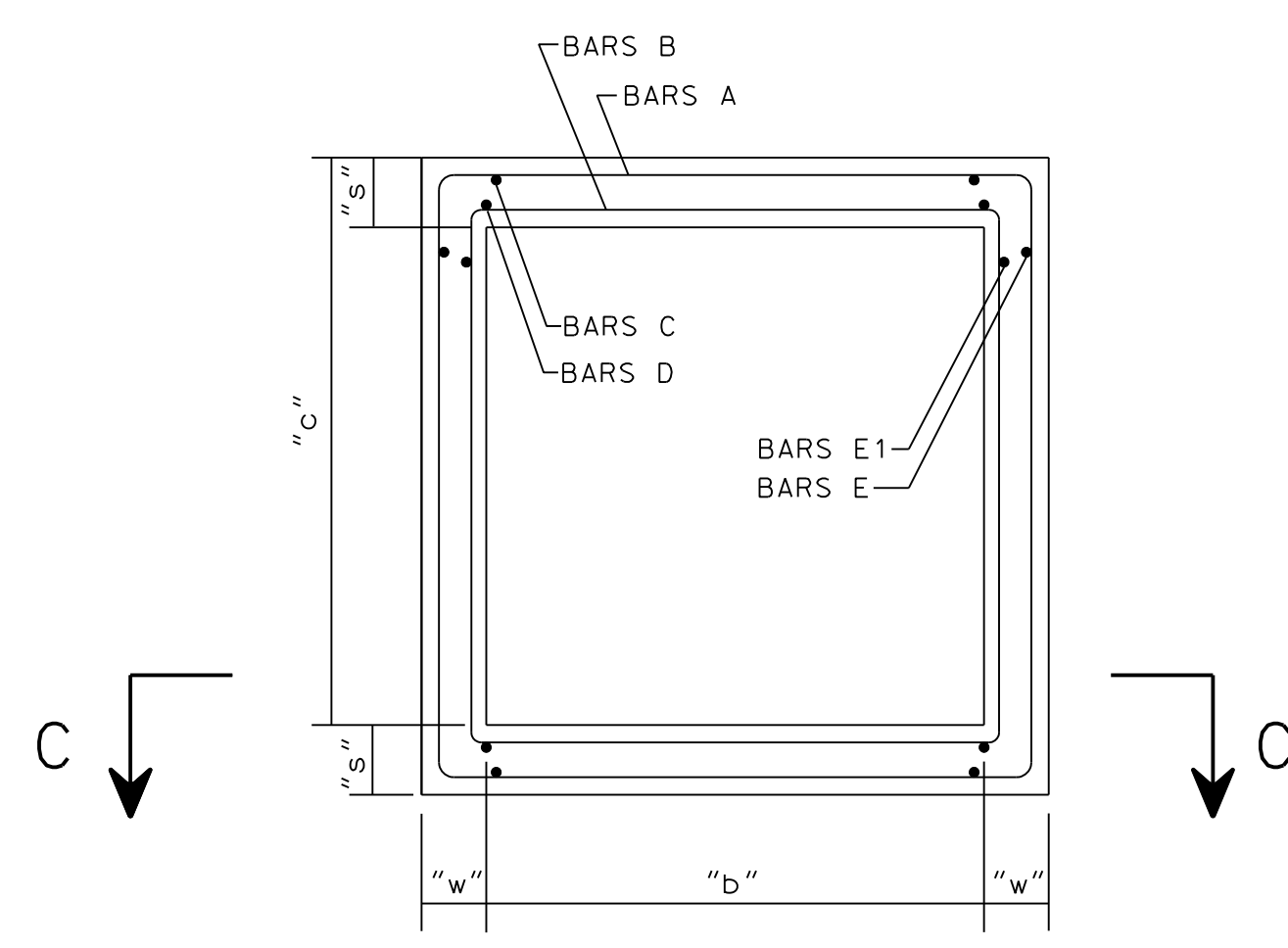
SECTION B - B



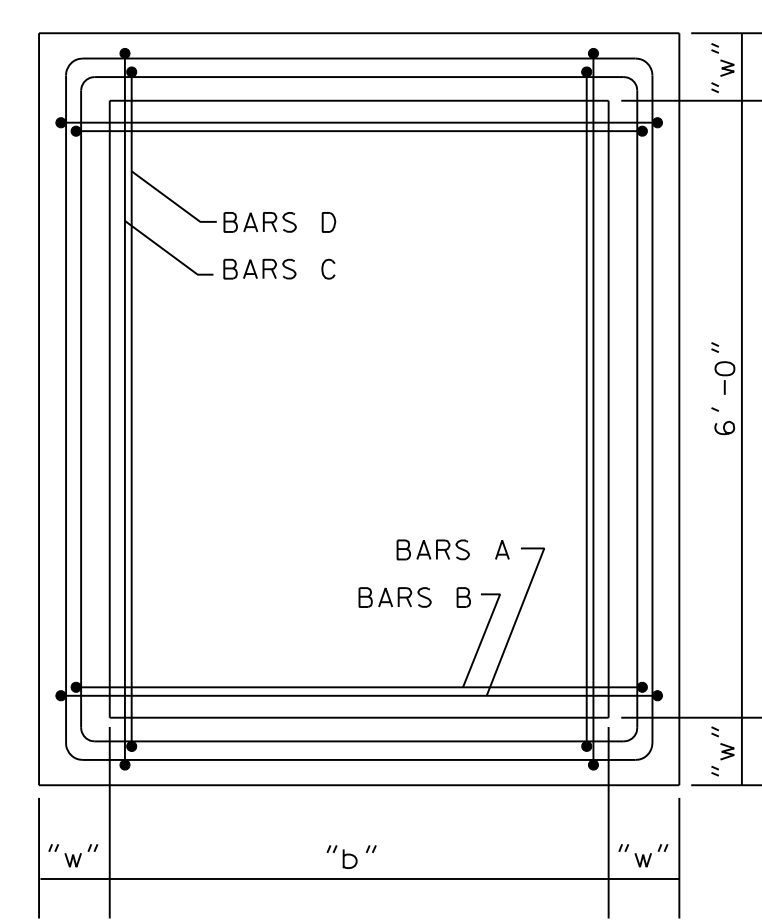
SECTION BB - BB



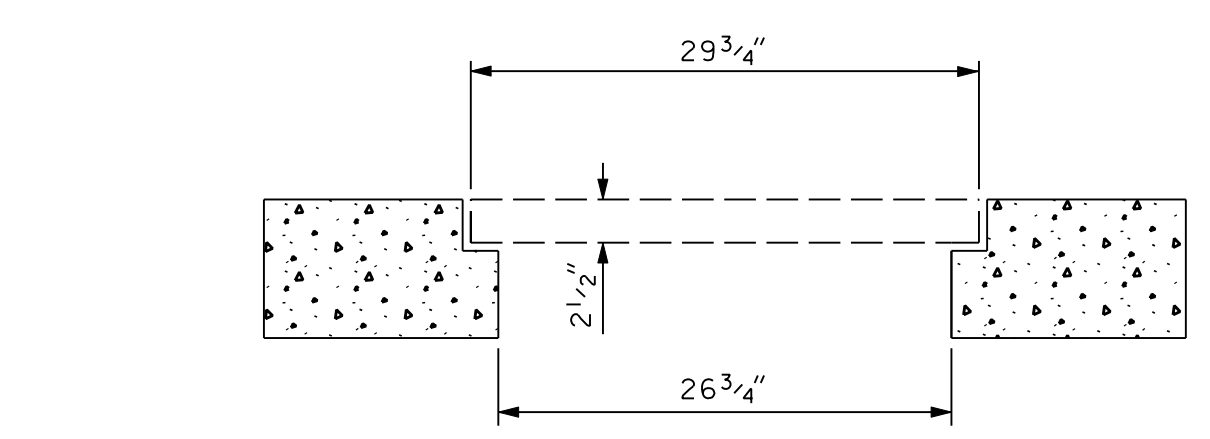
SECTION A - A



SECTION AA - AA



SECTION C - C



NEENAH FOUNDRY COMPANY Grate Type L

CATALOG No. R-4999-L9
FURNISHED IN 1/2 OR 3 FOOT INCREMENTS ONLY.

GENERAL NOTES

1. REINFORCING STEEL SHALL BE GRADE 60.
2. USE CLASS A CONCRETE.
3. ALL REINFORCING STEEL SHALL BE 2" CLEARANCE (EACH FACE).
4. FIELD CUT REINFORCEMENT IN THE WALLS TO PROVIDE FOR PIPE ENTRANCE, AND IN THE TOP SLAB PROVIDE FOR GRATING GRATE FRAMING.
5. BARS PLACED DIAGONALLY AROUND PIPE OPENINGS ARE REQUIRED. BAR CUTOFFS MAY BE USED FOR DIAGONAL BARS.
6. BARS A, B, C, & D SHALL BE SPLICED 35 DIAMETERS MINIMUM.
7. INSTALLATION OF GRATE AND SEATS AS PER MANUFACTURERS SPECIFICATIONS.
8. THE SKEW ANGLE OF ANY PIPE ENTERING OR LEAVING BOX SHALL NOT EXCEED 15 DEGREES FROM THE PERPENDICULAR TO THE FACE.
9. GRATES AND SEATS NOT INCLUDED IN QUANTITIES.
10. PAYMENT FOR INLET SHOWN ON THIS DRAWING SHALL INCLUDE COST OF GRATE AND GRATE SEATS, GRATE AND APPURTANANCES SHALL BE NEENAH FOUNDRY CO. TYPE "L" GRATE - CATALOG NO. R-4999-L9 OR APPROVED EQUAL.
11. QUANTITIES GIVEN ARE FOR COMPLETE INLET (TOP AND BOTTOM SLABS WITH ALL WALLS). NO REDUCTION HAS BEEN MADE FOR GRATES OR PIPE OPENINGS.
12. CURVED VANE GRATE AND FRAME SHALL BE CONSTRUCTED OF DUCTILE IRON CONFORMING TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF ASTM A-536 GRADE 65-45-12, OR CONSTRUCTED OF STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A-36 AND GALVANIZATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

--SPECIFICATIONS--

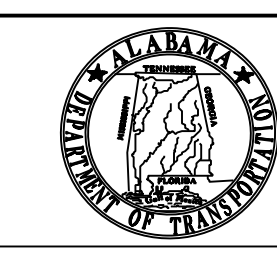
CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION

TYPE	PIPE DIAMETER	* "b"	"c"	"s"	"w"	Bars A	Bars B	Bars C	Bars D	Bars E & E1	Bars F & F1	QUANTITIES FOR BASIC INLET		QUANTITIES PER FT. DEPTH		
												DEPTH OF BASIC INLET (Min. Depth)	Conc. (Cu. Yds.)	Reinf. (Lbs.)	Conc. (Cu. Yds.)	Reinf. (Lbs.)
1	NONE	2'-2 3/4"		8"	8"	#4 @ 6" o.c.	#4 @ 6" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	4'-0"	2.86	612	0.47	87
1	18" & LESS	3'-0"		8"	8"	#4 @ 6" o.c.	#4 @ 6" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	4'-0"	3.27	693	0.51	93
1	24"	3'-6"		8"	8"	#5 @ 6" o.c.	#5 @ 6" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	4'-0"	3.53	945	0.54	116
1	30"	4'-6"		10"	10"	#5 @ 5" o.c.	#5 @ 5" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	4'-6"	5.67	1206	0.75	132
1	36"	5'-6"		12"	12"	#6 @ 7" o.c.	#6 @ 7" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	5'-0"	8.00	1411	0.96	141
1	42"	5'-6"		12"	12"	#6 @ 6" o.c.	#6 @ 6" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	#4 @ 9" o.c.	5'-6"	8.94	1709	1.00	155

* DIMENSION SHALL BE ESTABLISHED

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REVISIONS
1. Entered into CADD on 03-02-12 by J.F.T.



ALABAMA DEPARTMENT OF TRANSPORTATION
1409 COLISEUM BOULEVARD
MONTGOMERY, AL 36130-3050

DESIGN BUREAU SPECIAL DRAWING

CURVED VANE INLET

Bureau Std Engr: L.V.S.
DRAWN BY: R.TODD DATE DRAWN: 09-21-90

SPECIAL DRAWING NO. SPECIAL PROJECT DETAIL INDEX NO. CV-6

NOT TO SCALE