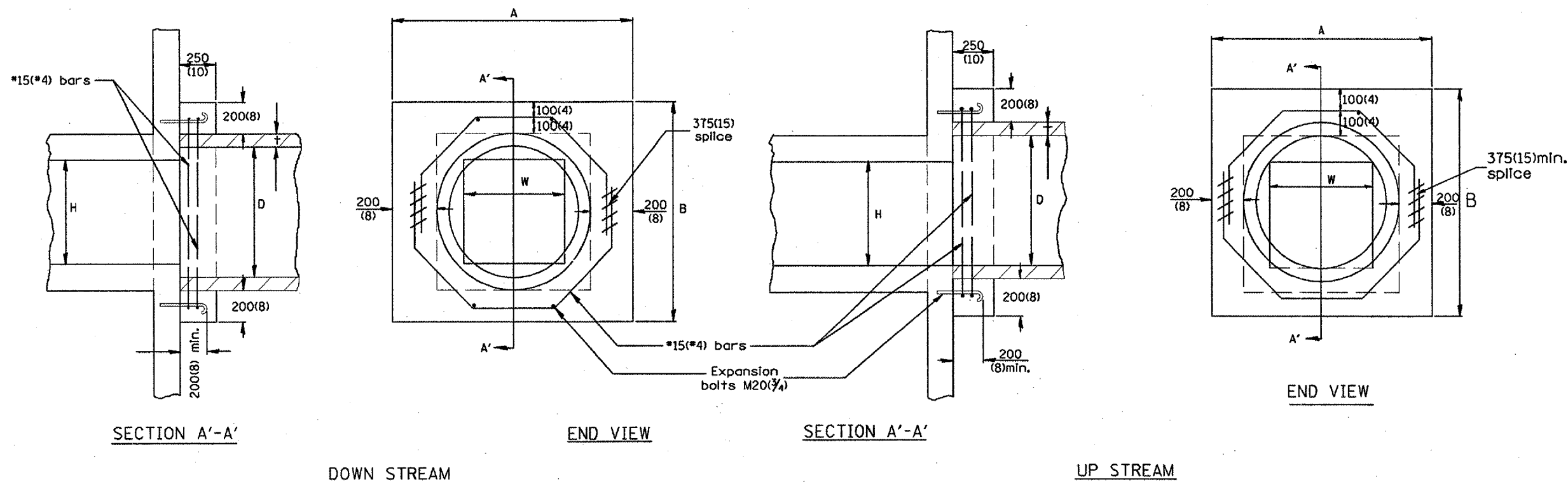
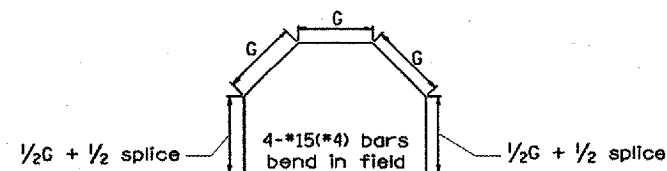


CONTRACT 88757				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(38-1)RS	MCDONOUGH	83	78
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



EXISTING BOX		A	B	D	f	EACH COLLAR			EXPANSION BOLT EACH	
W	H					CONC. COLLAR m ³ (CU. YD.)	REINFORCEMENT BARS G	L		kg (LBS.)
300(12)	PIPE	810 (32)	810 (32)	300 (12)	50(2)	0.14(0.18)	254 (10)	1.40m (4'-7")	9(12)	4
450(18)	PIPE	990 (39)	990 (39)	450 (18)	65(2 1/2)	0.18(0.24)	324 (12 3/4)	1.68m (5'-6")	11(15)	4
600(24)	PIPE	1.17m (3'-10")	1.17m (3'-10")	600 (24)	75(3)	0.23(0.30)	400 (15 3/4)	1.98m (6'-6")	12(17)	4
600(24)	600(24)	1.35m (4'-5")	1.35m (4'-5")	750 (30)	90(3 1/2)	0.28(0.37)	416 (18 1/2)	2.29m (7'-6")	14(20)	4
750(30)	750(30)	1.52m (5'-0")	1.52m (5'-0")	900 (36)	100(4)	0.34(0.45)	546 (21 1/2)	2.57m (8'-5")	16(22)	8
900(36)	900(36)	1.7m (5'-7")	1.7m (5'-7")	1050 (42)	115(4 1/2)	0.38(0.50)	622 (24 1/2)	2.87m (9'-5")	18(25)	10
1050(42)	1050(42)	1.88m (6'-2")	1.88m (6'-2")	1200 (48)	125(5)	0.47(0.61)	692 (27 1/4)	3.15m (10'-4")	20(28)	10
1200(48)	1200(48)	2.06m (6'-9")	2.06m (6'-9")	1350 (54)	140(5 1/2)	0.61(0.80)	768 (30 1/4)	3.45m (11'-4")	22(30)	10



GENERAL NOTES

- The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of Section 503 of the Standard Specifications. Reinforcement Bars shall conform to Section 508.
- Expansion Bolts shall consist of approved Expansion Anchors, and M20(3/4) Hook Bolts which conform to Section 1006.09. These Bolts shall extend at least 200(8) into the new Concrete.

All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
PIPE CULVERT EXTENSION COLLAR (WITH END SECTION)	
CADD STD. NO. 542001-D4	DRAWN BY CADD
SCALE: NOT DRAWN TO SCALE	CHECKED BY
DATE **DATE**	

DATE	REVISIONS	BY
1-1-97	RENUM. J-11.02. NEW REVISION BOX. REVISED TITLE BOX. ADDED QUANTITY CALCULATION BOX.	T.P.

QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION	

DATE