

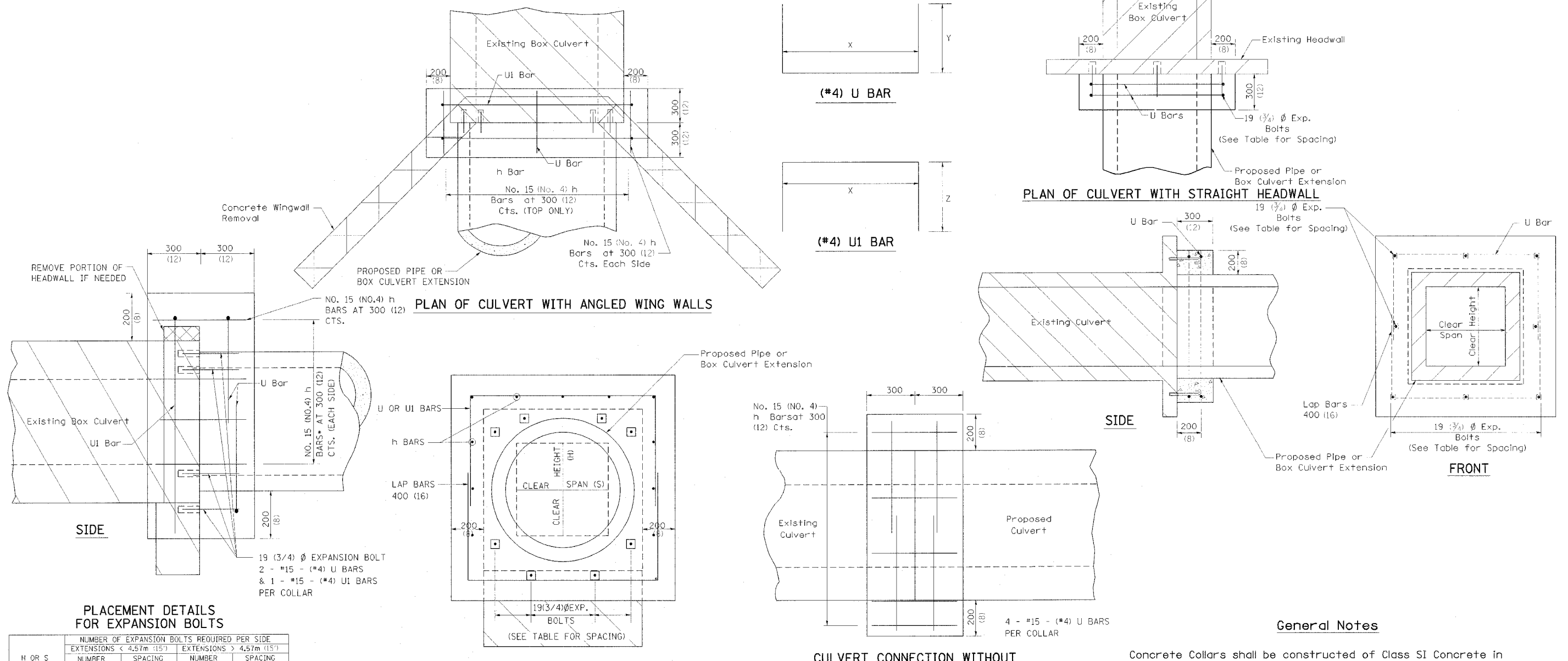
CONCRETE COLLARS FOR PIPE OR BOX CULVERT EXTENSIONS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	1 - 1	ROCK ISLAND	239	166
STA	TO STA			
FED. RD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT # 84986				

DATE	BY	REVISION

DATE	BY	REVISION

PLOT DATE = *DATE*
 PLOT SCALE = *SCALE*
 PLOT SHEET REFERENCE = *REF#*



PLACEMENT DETAILS FOR EXPANSION BOLTS

H OR S (24) (30) (36) (48) (60) (72) (84) (96) (108) (120) (132) (144)	NUMBER OF EXPANSION BOLTS REQUIRED PER SIDE			
	EXTENSIONS < 4.57m (15')		EXTENSIONS > 4.57m (15')	
	NUMBER	SPACING	NUMBER	SPACING
600	*		*	
750	2	450 (18)	2	450 (18)
900	2	600 (24)	2	600 (24)
1200	3	450 (18)	3	450 (18)
1500	4	400 (16)	3	600 (24)
1800	5	375 (15)	4	500 (20)
2100	5	450 (18)	4	600 (24)
2400	6	375 (15)	5	525 (21)
2700	6	475 (19)	5	600 (24)
3000	7	450 (18)	6	525 (21)
3300	8	425 (17)	6	600 (24)
3600	8	475 (19)	7	550 (22)

* MINIMUM ONE PER SIDE

General Notes

Concrete Collars shall be constructed of Class SI Concrete in accordance with Section 503 of the Standard Specifications.

Reinforcement bars shall conform to Section 508 of the Standard Specifications.

The concrete will be paid for at the contract unit price per cubic meter (cubic yard) for CONCRETE COLLAR. Reinforcement will be paid for at the contract unit price per kilogram (pound) for REINFORCEMENT BARS. Expansion Bolts, when required, will be paid for at the contract unit price each for EXPANSION BOLTS of the size indicated, which price shall include furnishing, drilling holes, and installing the expansion bolts complete in place. These bolts shall extend at least 200 (8 inches) into the new concrete.

FRONT

Bill of Materials

STATION	DIMENSIONS		h Bar No.	U Bar No.	Length	EXPANSION BOLTS No.	CONCRETE COLLAR CU. YD.	REINF. BARS lbs
	X	Y						
94+49 RT	72"	40"	16	2	152"	6	1.61	40
Total						6	1.6	40

All h Bars 450 (18) Long