



GENERAL NOTES

1. 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.
2. Expansion bolts shall consist of approved expansions anchors, and 3/4" hook bolts which conform to Section 1006.09. These bolts shall extend at least 8" into the new concrete.
3. This work will be paid for by the cubic yard for CONCRETE COLLAR, by the pound for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.

#4 U BAR
FOUR REQUIRED
PER COLLAR

DIMENSIONS

EXISTING BOX		A	B	T	EACH COLLAR				
W ft	H ft				CL SI CU YD	REINFORCEMENT X	BARS Y	EXPANSION BOLTS POUNDS	NO.
2	2	4'-0"	4'-0"	4	0.27	3'-4"	27.5	21	8
3	2	5'-0"	4'-0"	4	0.32	4'-4"	27.5	24	8
3	2.5	5'-0"	4'-6"	4	0.34	4'-4"	30.5	25	8
3	3	5'-0"	5'-0"	4	0.36	4'-4"	33.5	26.5	8
3	4	5'-2"	6'-2"	5	0.41	4'-6"	40.5	30	10
4	3	6'-2"	5'-2"	5	0.41	5'-6"	34.5	30	10
4	4	6'-2"	6'-2"	5	0.45	5'-6"	40.5	33	12
4	5	6'-4"	7'-4"	6	0.51	5'-8"	3'-11.5"	36	14
5	4	7'-4"	6'-4"	6	0.51	6'-8"	3'-5.5"	36	14
5	5	7'-4"	7'-4"	6	0.55	6'-8"	3'-11.5"	39	16
5	6	7'-6"	8'-6"	7	0.60	6'-10"	4'-6.5"	42.5	16
6	4	8'-6"	6'-6"	7	0.56	7'-10"	3'-6.5"	40	14
6	5	8'-6"	7'-6"	7	0.60	7'-10"	4'-0.5"	42.5	16
6	6	8'-6"	8'-6"	7	0.64	7'-10"	4'-6.5"	45	16
6	8	8'-8"	10'-8"	8	0.74	8'-0"	5'-7.5"	51.5	18
8	8	10'-8"	10'-8"	8	0.82	10'-0"	5'-7.5"	57	20

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON
 FILE AT THE DISTRICT 4 OFFICE;
 BUREAU OF PROJECT IMPLEMENTATION;
 DOCUMENTATION SECTION

DESIGNER NOTES:
 MODEL: SHT_PLAN_1. IF USING A COLLAR SIZE NOT PROVIDED IN THE TABLE USE THE BLANK ROWS AT THE BOTTOM OF THE TABLE.
 FILE NAME: C:\Bentley\CONNECT10\10\organization\ChilidDOT_Standards\Civil\DOT_Sheets.ctb

All dimensions are in inches unless otherwise noted.

USER NAME = Eric.Thomas	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		COLLAR FOR BOX CULVERT EXTENSIONS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -							DISTRICT 4 DETAIL NO. 540001	CONTRACT NO.			
PLOT DATE = 12/7/2022	CHECKED -	REVISED -			SCALE: NOT TO SCALE	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	FED. AID PROJECT