

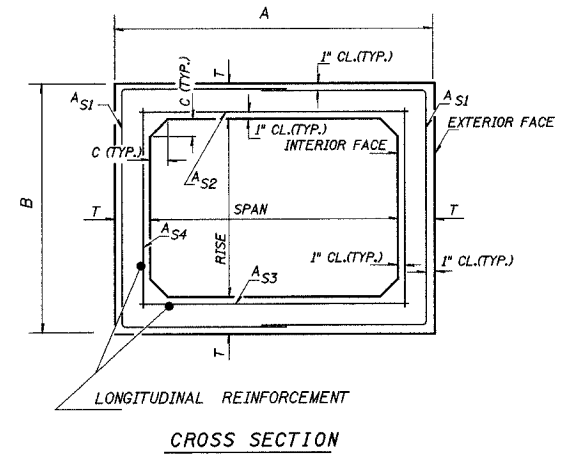
1 2 3 4 5 6 7 8 9 \$\$\$DATE\$\$\$  
 10 11 12 13 14 15 16 17 18  
 19 20 21 22 23 24 25 26 27 \*DGN-SPEC\*  
 28 29 30 31 32 33 34 35 36 MMO REV: 05-28-99  
 37 38 39 40 41 42 43 44 45  
 46 47 48 49 50 51 52 53 54  
 55 56 57 58 59 60 61 62 63

\*DGN-SPEC\*  
 \*DATE\*

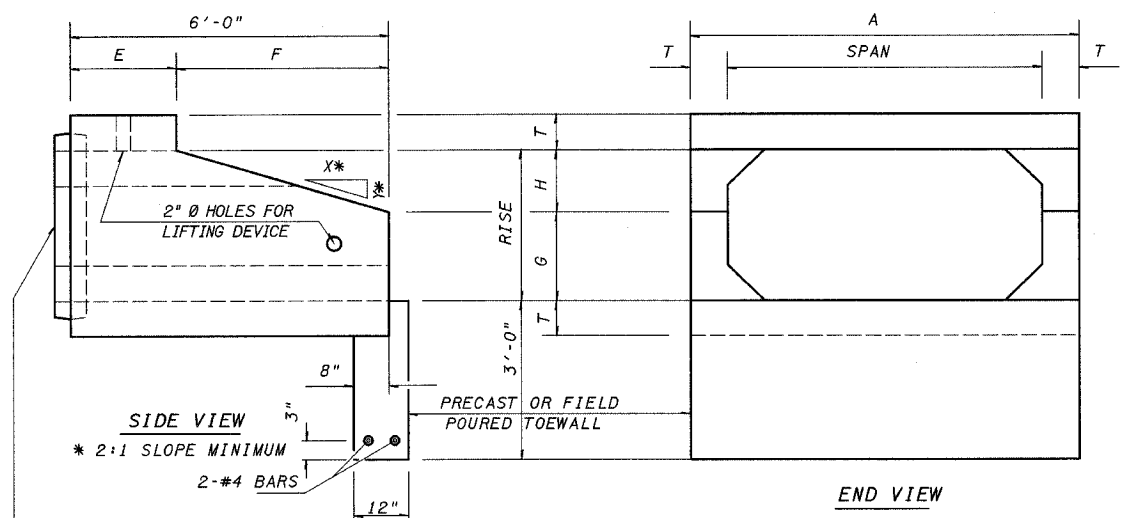
# DETAIL OF PRECAST CONCRETE BOX CULVERT END SECTION

AASHTO DESIGNATION M259  
 (ASTM DESIGNATION C-789)  
 DESIGN LOADING = HS20-44

NOTE: THE DIMENSIONS INDICATED ARE FOR END SECTIONS THAT ARE TO BE USED WITH PRECAST BOX CULVERT SECTIONS DESIGNED FOR 2 FEET OR MORE OF FILL. THE DIMENSIONS MUST BE MODIFIED FOR THE END SECTION TO BE COMPATIBLE WITH PRECAST CULVERT SECTIONS DESIGNED FOR LESS THAN 2 FEET OF FILL.



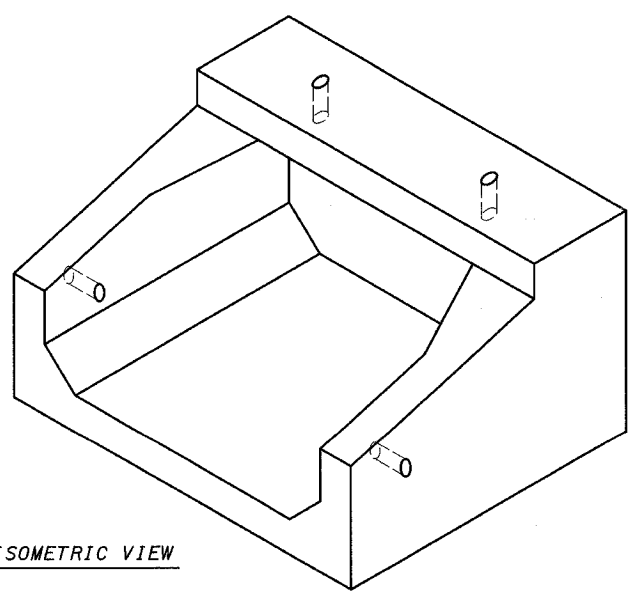
CROSS SECTION



SIDE VIEW

END VIEW

END CONNECTION TO FIT PRECAST BOX CULVERT (BELL OR SPIGOT MAY BE OMITTED WHEN COLLARING TO AN EXISTING BOX OR HEADWALL).



ISOMETRIC VIEW

PLAN

CULVERT SIZE	DIMENSIONS **									
	SPANxRISE (FOOT)	T	A	B	C	E	F	G	H	SLOPE
		INCH	FT-IN	FT-IN	INCH	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN
2x2	4	2-8	2-8	4	3-0	3-0	1-0	1-0	1-0	3:1
3x2	4	3-8	2-8	4	3-0	3-0	1-0	1-0	1-0	3:1
3x3	4	3-8	3-8	4	2-0	4-0	1-8	1-4	1-4	3:1
4x2	5	4-10	2-10	5	3-0	3-0	1-0	1-0	1-0	3:1
4x3	5	4-10	3-10	5	2-0	4-0	1-8	1-4	1-4	3:1
4x4	5	4-10	4-10	5	2-0	4-0	2-0	2-0	2-0	2:1
5x2	6	6-0	3-0	6	3-0	3-0	1-0	1-0	1-0	3:1
5x3	6	6-0	4-0	6	2-0	4-0	1-8	1-4	1-4	3:1
5x4	6	6-0	5-0	6	2-0	4-0	2-0	2-0	2-0	2:1
5x5	6	6-0	6-0	6	2-0	4-0	3-0	2-0	2-0	2:1
6x2	7	7-2	3-2	7	3-0	3-0	1-0	1-0	1-0	3:1
6x3	7	7-2	4-2	7	2-0	4-0	1-8	1-4	1-4	3:1
6x4	7	7-2	5-2	7	2-0	4-0	2-0	2-0	2-0	2:1
6x5	7	7-2	6-2	7	2-0	4-0	3-0	2-0	2-0	2:1
6x6	7	7-2	7-2	7	2-0	4-0	4-0	2-0	2-0	2:1
7x4	8	8-4	5-4	8	2-0	4-0	2-0	2-0	2-0	2:1
7x5	8	8-4	6-4	8	2-0	4-0	3-0	2-0	2-0	2:1
7x6	8	8-4	7-4	8			4-0	2-0	2-0	
7x7	8	8-4	8-4	8			5-0	2-0	2-0	
8x4	8	9-4	5-4	8	2-0	4-0	2-0	2-0	2-0	2:1
8x5	8	9-4	6-4	8	2-0	4-0	3-0	2-0	2-0	
8x6	8	9-4	7-4	8	2-0	4-0	4-0	2-0	2-0	
9x5	9	10-6	6-6	9	2-0	4-0	3-0	2-0	2-0	
9x6	9	10-6	7-6	9	2-0	4-0	4-0	2-0	2-0	

CULVERTS WITH RISE > 12 FT REQUIRE CAST-IN-PLACE END SECTIONS

GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04(a) OF THE STANDARD SPECIFICATIONS.  
 MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.  
 THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH ACCORDANCE WITH ARTICLE 542.04(d) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS A<sub>S1</sub>, A<sub>S2</sub>, A<sub>S3</sub>, AND A<sub>S4</sub> DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO SPECIFICATIONS M55.  
 LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER THE END SECTIONS ARE IN PLACE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 PRECAST CONCRETE BOX CULVERT DETAILS  
 SHEET 3 OF 3  
 DATE REVISED: 05/28/99  
 DRAWN BY DIST. 7  
 CHECKED BY BWC