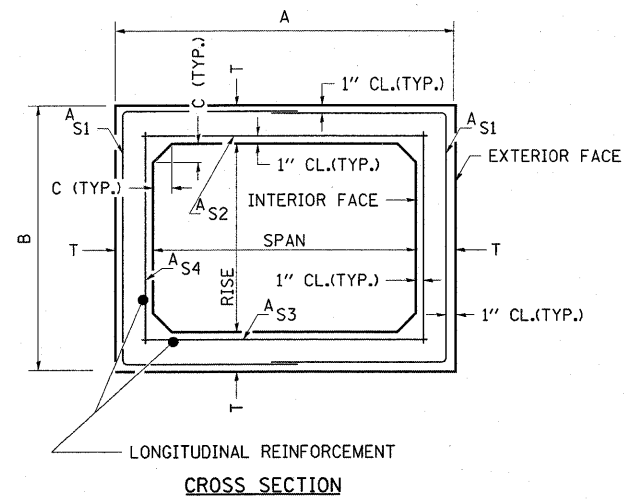
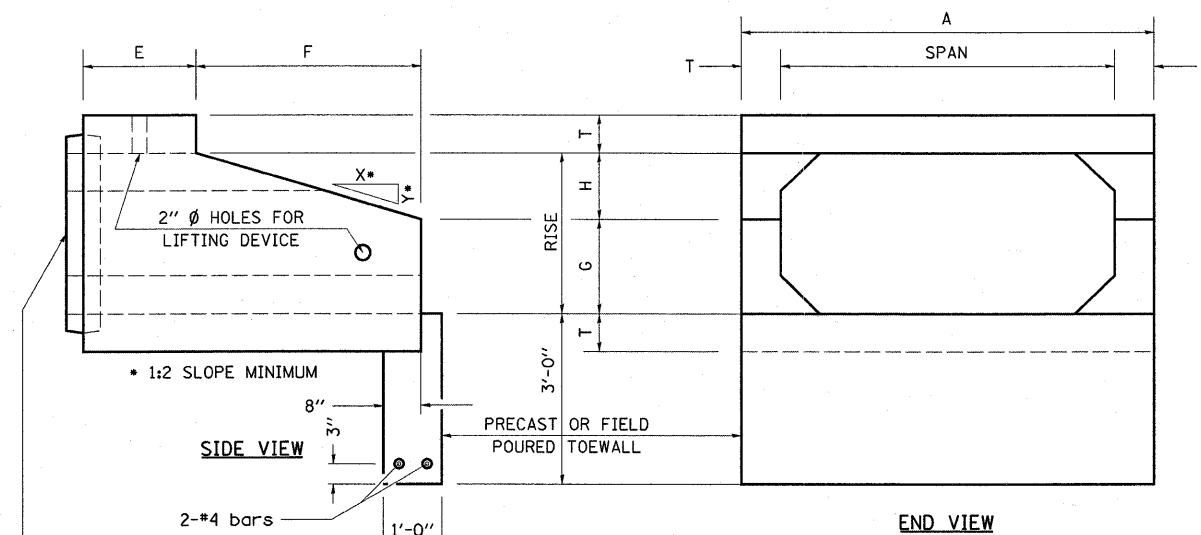


# DETAIL OF PRECAST CONCRETE BOX CULVERT END SECTION

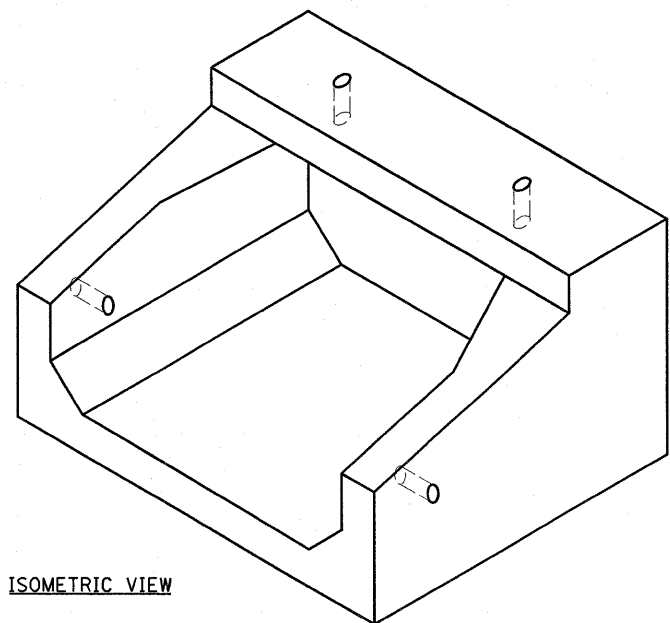


AASHTO DESIGNATION M259 (2' OR MORE COVER)

DESIGN LOADING:  
 TABLE 1 = HS20  
 TABLE 2 = INTERSTATE LOADING



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



### GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 540.06 OF THE STANDARD SPECIFICATIONS.

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED IN ACCORDANCE WITH ARTICLE 504.06 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS AS1, AS2, AS3, AND AS4 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M273.

REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO SPECIFICATIONS M55 OR M221.

LIFTING HOLES SHALL BE FILLED IN ACCORDANCE WITH 540.02 OR PROJECT SPECIAL PROVISIONS.

DESIGN FILL HEIGHT (F):

MAXIMUM FILL HEIGHT (fmax) AND MINIMUM FILL HEIGHT (fmin) ARE MEASURED BETWEEN THE EXTREME EDGES OF SHOULDER.

fmax/fmin (FT)	F (FT)	AASHTO
fmin < 2'	< 2'	M273
2' ≤ fmin < 3'	2'	M259
3' ≤ fmin < 4'	3'	M259
fmin ≥ 4'	fmax	M259

DESIGN FILL HEIGHTS APPLY TO ENTIRE CULVERT, INCLUDING EXTENSIONS AND END SECTIONS.

CULVERT SIZE	DIMENSIONS **								
	T	A	B	C	E	F	G	H	SLOPE
SPANxRISE (FOOT)	INCH	FT-IN	FT-IN	INCH	FT-IN	FT-IN	FT-IN	FT-IN	Y:X
* 2x2	4	2-8	2-8	4	3-0	3-0	1-0	1-0	1:3
3x2	4	3-8	2-8	4	3-0	3-0	1-0	1-0	1:3
3x3	4	3-8	3-8	4	2-0	4-0	1-8	1-4	1:3
4x2	5	4-10	2-10	5	3-0	3-0	1-0	1-0	1:3
4x3	5	4-10	3-10	5	2-0	4-0	1-8	1-4	1:3
4x4	5	4-10	4-10	5	2-0	4-0	2-0	2-0	1:2
* 4x6	7	5-2	7-2	7	2-0	6-0	3-0	3-0	1:2
* 5x2	5	5-10	2-10	6	3-0	3-0	1-0	1-0	1:3
5x3	6	6-0	4-0	6	2-0	4-0	1-8	1-4	1:3
5x4	6	6-0	5-0	6	2-0	4-0	2-0	2-0	1:2
5x5	6	6-0	6-0	6	2-0	4-0	3-0	2-0	1:2
* 6x2	7	7-2	3-2	7	3-0	3-0	1-0	1-0	1:3
6x3	7	7-2	4-2	7	2-0	4-0	1-8	1-4	1:3
6x4	7	7-2	5-2	7	2-0	4-0	2-0	2-0	1:2
6x5	7	7-2	6-2	7					
6x6	7	7-2	7-2	7	2-0	6-0	3-0	3-0	1:2
7x4	8	8-4	5-4	8	2-0	4-0	2-0	2-0	1:2
7x5	8	8-4	6-4	8					
7x6	8	8-4	7-4	8					
7x7	8	8-4	8-4	8					
8x4	8	9-4	5-4	8	2-0	4-0	2-0	2-0	1:2
8x5	8	9-4	6-4	8					
8x6	8	9-4	7-4	8					
8x7	8	9-4	8-4	8					
8x8	8	9-4	9-4	8					
9x5	9	10-6	6-6	9					
9x6	9	10-6	7-6	9					
9x7	9	10-6	8-6	9					
9x8	9	10-6	9-6	9					
9x9	9	10-6	10-6	9					
10x5	10	11-8	6-8	10					
10x6	10	11-8	7-8	10					
10x7	10	11-8	8-8	10					
10x8	10	11-8	9-8	10					
10x9	10	11-8	10-8	10					
10x10	10	11-8	11-8	10					
11x4	11	12-10	5-10	11					
11x6	11	12-10	7-10	11					
11x8	11	12-10	9-10	11					
11x10	11	12-10	11-10	11					
11x11	11	12-10	12-10	11					
12x4	12	14-0	6-0	12					
12x6	12	14-0	8-0	12					
12x8	12	14-0	10-0	12					
12x10	12	14-0	12-0	12					
12x12	12	14-0	14-0	12					

CULVERTS WITH RISE > 6' REQUIRE CAST-IN-PLACE END SECTIONS

\* NON-STANDARD SIZES PER AASHTO.  
 \*\* "T" MAY BE LARGER THAN SHOWN ON TABLE, PER AASHTO SPECIFICATIONS.