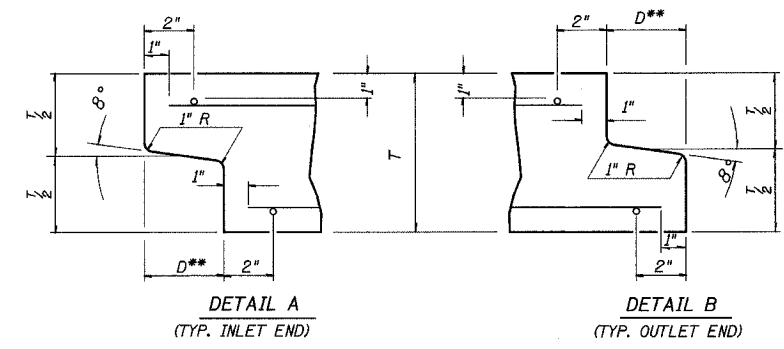


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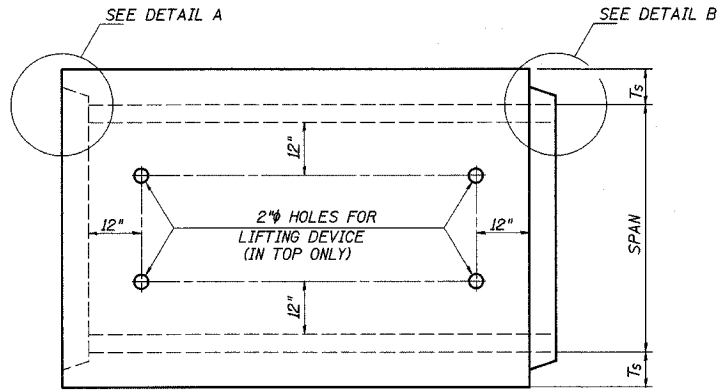
\*DGN-SPEC\*  
 \*DATE\*

# DETAIL OF PRECAST CONCRETE BOX CULVERT M273

(WITH LESS THAN 2 FEET OF COVER)  
 AASHO DESIGNATION M273  
 (ASTM DESIGNATION C-850)  
 DESIGN LOADING = HS20-44



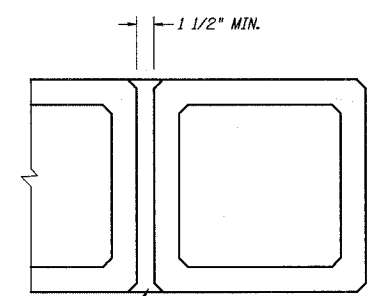
\*\* THE D DIMENSION SHALL CONFORM TO THE MANUFACTURER'S STANDARDS.



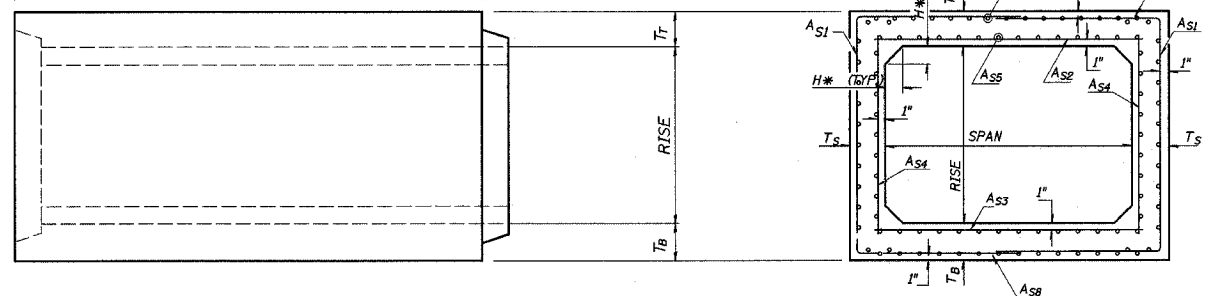
**PLAN**  
 LOCATION OF LIFTING HOLES MAY BE VARIED AS NEEDED TO CLEAR REINFORCEMENT.

SECTION LENGTH

WHEN EXTENDING AN EXISTING BOX, PLACE THIS END AGAINST THE EXISTING HEADWALL.



CLASS SI CONCRETE  
 MULTIPLE UNIT PLACEMENT



**ELEVATION**

**CROSS SECTION**  
 \* THE HAUNCH DIMENSION, H, IS EQUAL TO THE WALL THICKNESS,  $T_s$ .

**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 IN ACCORDANCE WITH ARTICLE 542.04(d) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- THE TERMS  $A_{s1}$ ,  $A_{s2}$ , ETC. DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN ASSHTO M273.
- REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO ASSHTO M55. LONGITUDINAL DISTRIBUTION REINFORCEMENT MAY CONSIST OF WELDED WIRE FABRIC OR DEFORMED BARS CONFORMING TO ASSHTO M31, M42, OR M53, GRADE 60.
- LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER THE BOX SECTIONS ARE IN PLACE.
- DRAINAGE OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 503.12 OF THE STANDARD SPECIFICATIONS. LOCATION AND SPACING OF THE OPENINGS SHALL BE SHOWN ON THE SHOP DRAWINGS.
- THE P.C.C. PAVEMENT PATCH REINFORCED WITH PAVEMENT FABRIC (STANDARD 42070J) WILL BE CONSTRUCTED OVER THE CULVERT. THE PATCH SHALL BE FULL PAVEMENT WIDTH, AND THE LENGTH SHALL EXTEND 24" BEYOND EACH SIDE OF THE CULVERT.

CULVERT SIZE (FEET)	DIMENSIONS (INCHES)			
	SPAN x RISE (FOOT)	$T_T$	$T_B$	$T_S$
3x2	7	6	4	
3x3	7	6	4	
4x2	7 1/2	6	5	
4x3	7 1/2	6	5	
4x4	7 1/2	6	5	
5x3	8	7	6	
5x4	8	7	6	
5x5	8	7	6	
6x3	8	7	7	
6x4	8	7	7	
6x5	8	7	7	
6x6	8	7	7	
7x4	8	8	8	
7x5	8	8	8	
7x6	8	8	8	
7x7	8	8	8	
8x4	8	8	8	
8x5	8	8	8	
8x6	8	8	8	
8x7	8	8	8	
8x8	8	8	8	
9x5	9	9	9	
9x6	9	9	9	
9x7	9	9	9	
9x8	9	9	9	
9x9	9	9	9	
10x5	10	10	10	
10x6	10	10	10	
10x7	10	10	10	
10x8	10	10	10	
10x9	10	10	10	
10x10	10	10	10	
11x4	11	11	11	
11x6	11	11	11	
11x8	11	11	11	
11x10	11	11	11	
11x11	11	11	11	
12x4	12	12	12	
12x6	12	12	12	
12x8	12	12	12	
12x10	12	12	12	
12x12	12	12	12	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT DETAILS  
 SHEET 1 OF 3

DATE REVISED: 05/28/99

DRAWN BY DIST. 7  
 CHECKED BY BWC