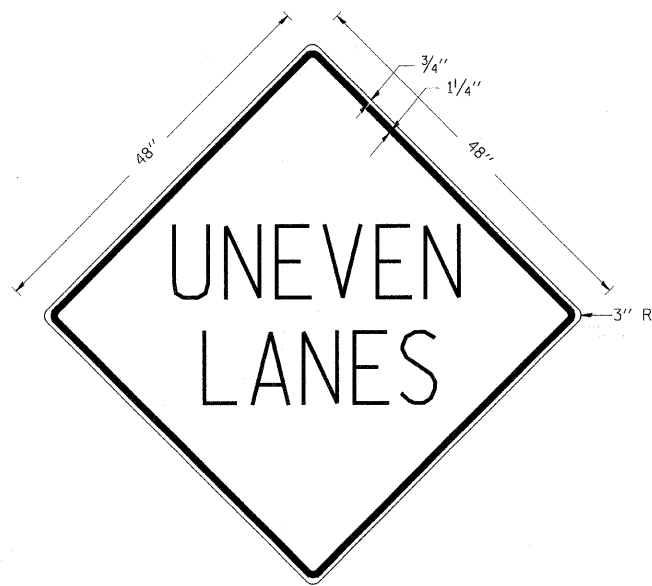


UNEVEN LANES SIGN

W8-11 (48" x 48")



COLORS:
LEGEND AND BORDER - BLACK NON-REFLECTORIZED
BACKGROUND - ORANGE REFLECTORIZED

NOTE: PRIOR TO ALLOWING TRAFFIC ON ANY PORTION OF THE ROADWAY THAT HAS BEEN COLD MILLED OR BEFORE RESURFACING OPERATIONS BEGIN, THE CONTRACTOR SHALL HAVE ERECTED "UNEVEN PAVEMENT" SIGNS THAT CONFORM TO THE ABOVE DETAILS. A MINIMUM OF ONE SIGN AT EACH END OF THE IMPROVEMENT WILL BE REQUIRED. THE CONTRACTOR SHALL MAINTAIN THE "UNEVEN PAVEMENT" SIGNS UNTIL THE RESURFACING OPERATIONS ARE COMPLETED.

IF AT ANY TIME THE SIGNS ARE IN PLACE BUT NOT APPLICABLE, THEY SHALL BE TURNED FROM THE VIEW OF MOTORISTS OR COVERED AS DIRECTED BY THE ENGINEER.

THE COST OF FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE REQUIRED SIGNS SHALL BE INCLUDED IN THE CONTRACT.

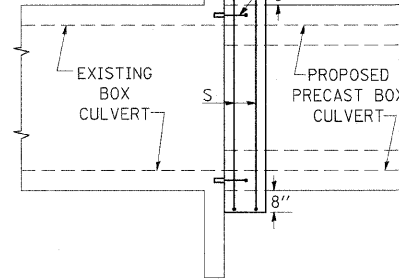
REVISIONS	
DRAWN	2-19-89
REVISED	4-6-93
REDESIGNED	7-23-04

STD. 9-41

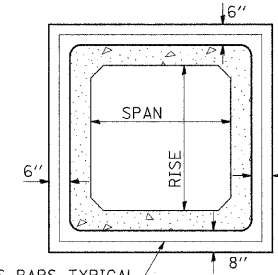
DETAILS OF CONCRETE COLLAR FOR PRECAST BOX CULVERT

REMOVE PORTION OF EXISTING HEADWALL DOWN TO 12" BELOW FINISHED GRADE

3/4" Ø X 18" EXPANSION BOLTS AT 18" CENTERS TYPICAL ALL FOUR SIDES. COST INCLUDED IN THE PROPOSED PRECAST BOX CULVERT. (SEE NOTE BELOW)



SIDE VIEW



2 - #5 S BARS TYPICAL
COST INCLUDED IN THE PROPOSED PRECAST BOX CULVERT.

END VIEW

TABULATION (FOR INFORMATION PURPOSES ONLY)

SPAN X RISE	CLASS SI CONC. CU. YD. (EST.)
2' X 2'	0.26
3' X 2'	0.30
3' X 3'	0.34
4' X 2'	0.36
4' X 3'	0.39
4' X 4'	0.43
5' X 2'	0.41
5' X 3'	0.45
5' X 4'	0.49
6' X 2'	0.47
6' X 3'	0.51
6' X 4'	0.54

THE CONCRETE COLLAR SHALL BE CONSIDERED INCLUDED IN PRECAST CONCRETE BOX CULVERT, WHICH PRICE SHALL INCLUDE THE REMOVAL OF SUCH PORTIONS OF THE EXISTING HEADWALLS AS MAY BE REQUIRED. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

NOTE:

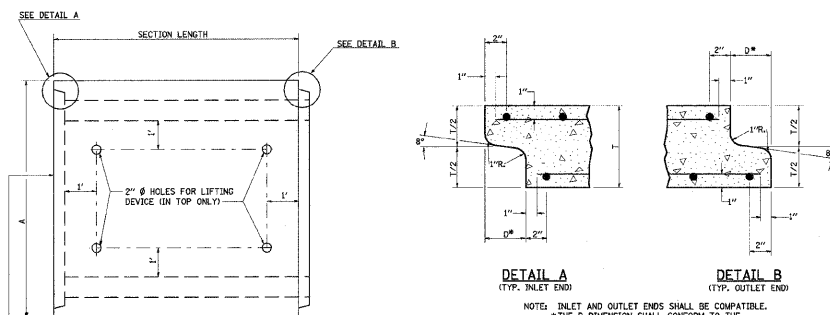
ANCHOR BOLTS, MEETING THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS, SHALL EXTEND A MINIMUM OF 9 INCHES INTO THE NEW CONCRETE. EXPANSION SHIELDS SHALL PROVIDE A MINIMUM CERTIFIED PROOF LOAD OF 4080 POUNDS.

REVISIONS			
DRAWN	8-15-89	REVISED	12-17-01
REVISED	2-15-90	REVISED	3-26-08
REVISED	8-10-90	REVISED	
REVISED	8-19-94	REVISED	

STD. 9-45

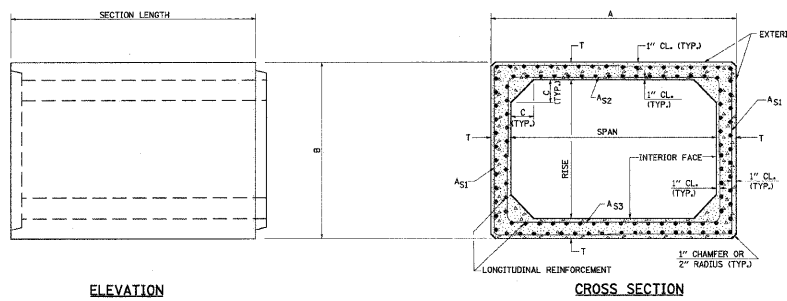
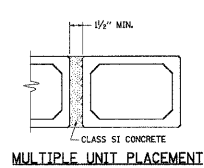
DETAIL OF PRECAST CONCRETE BOX CULVERT SECTION (WITH COVER 2 FEET OR GREATER - AASHTO DESIGNATION M259)

DESIGN LOADING: HS-20-44



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

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



GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04 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 MASTIC IN ACCORDANCE WITH ARTICLE 1055.02 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER THE BOX SECTIONS ARE IN PLACE.

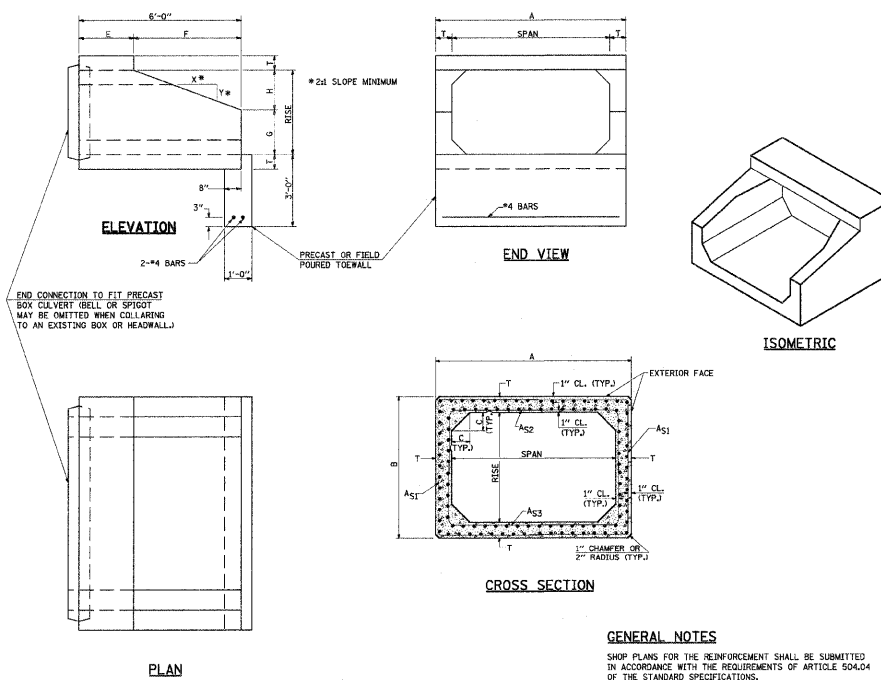
THE TERMS AS1, AS2, & AS3 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO M55-81.

DRAINAGE OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 505.11 OF THE STANDARD SPECIFICATIONS. LOCATION AND SPACING OF THE OPENINGS SHALL BE SHOWN ON THE SHOP DRAWINGS.

DIMENSIONS

SPAN X RISE	T (INCHES)	A (FT.-IN.)	B (FT.-IN.)	C (INCHES)
2' X 2'	4	2-8	2-8	4
3' X 2'	4	3-8	2-8	4
3' X 3'	4	3-8	3-8	4
4' X 2'	5	4-10	2-10	5
4' X 3'	5	4-10	3-10	5
4' X 4'	5	4-10	4-10	5
5' X 2'	6	6-0	3-0	6
5' X 3'	6	6-0	4-0	6
5' X 4'	6	6-0	5-0	6
5' X 5'	6	6-0	6-0	6
6' X 2'	7	7-2	3-2	7
6' X 3'	7	7-2	4-2	7
6' X 4'	7	7-2	5-2	7
6' X 5'	7	7-2	6-2	7
6' X 6'	7	7-2	7-2	7
7' X 4'	8	8-4	5-4	8
7' X 5'	8	8-4	6-4	8
7' X 6'	8	8-4	7-4	8
7' X 7'	8	8-4	8-4	8
8' X 4'	8	9-4	5-4	8
8' X 5'	8	9-4	6-4	8
8' X 6'	8	9-4	7-4	8
8' X 7'	8	9-4	8-4	8
8' X 8'	8	9-4	9-4	8
10' X 5'	10	11-8	6-8	10
10' X 6'	10	11-8	7-8	10
10' X 7'	10	11-8	8-8	10
10' X 8'	10	11-8	9-8	10
10' X 9'	10	11-8	10-8	10
10' X 10'	10	11-8	11-8	10
11' X 4'	11	12-10	5-10	11
11' X 6'	11	12-10	7-10	11
11' X 8'	11	12-10	9-10	11
11' X 10'	11	12-10	11-10	11
11' X 11'	11	12-10	12-10	11
12' X 4'	12	14-0	6-0	12
12' X 6'	12	14-0	8-0	12
12' X 8'	12	14-0	10-0	12
12' X 10'	12	14-0	12-0	12
12' X 12'	12	14-0	14-0	12

DETAIL OF PRECAST CONCRETE BOX CULVERT END SECTION



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

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH ARTICLE 1055.02 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS AS1, AS2, & AS3 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO M55-81.

GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04 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 MASTIC IN ACCORDANCE WITH ARTICLE 1055.02 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS AS1, AS2, & AS3 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO M55-81.

DIMENSIONS**

SPAN X RISE	T (INCHES)	A (FT.-IN.)	B (FT.-IN.)	C (INCHES)	E (FT.-IN.)	F (FT.-IN.)	G (FT.-IN.)	H (FT.-IN.)	SLOPE (X:Y)
2' X 2'	4	2-8	2-8	4	3-0	1-0	1-0	1-0	3:1
3' X 2'	4	3-8	2-8	4	3-0	1-0	1-0	1-0	3:1
3' X 3'	4	3-8	3-8	4	2-0	4-0	1-8	1-4	3:1
4' X 2'	5	4-10	2-10	5	3-0	3-0	1-0	1-0	3:1
4' X 3'	5	4-10	3-10	5	2-0	4-0	1-8	1-4	3:1
4' X 4'	5	4-10	4-10	5	2-0	4-0	2-0	2-0	2:1
5' X 2'	6	6-0	3-0	6	3-0	3-0	1-0	1-0	3:1
5' X 3'	6	6-0	4-0	6	2-0	4-0	1-8	1-4	3:1
5' X 4'	6	6-0	5-0	6	2-0	4-0	2-0	2-0	2:1
5' X 5'	6	6-0	6-0	6					
6' X 2'	7	7-2	3-2	7	3-0	3-0	1-0	1-0	3:1
6' X 3'	7	7-2	4-2	7	2-0	4-0	1-8	1-4	3:1
6' X 4'	7	7-2	5-2	7	2-0	4-0	2-0	2-0	2:1
6' X 5'	7	7-2	6-2	7	2-0	4-0	3-0	2-0	2:1
6' X 6'	7	7-2	7-2	7	2-0	4-0	4-0	2-0	2:1
7' X 4'	8	8-4	5-4	8	2-0	4-0	2-0	2-0	2:1
7' X 5'	8	8-4	6-4	8					
7' X 6'	8	8-4	7-4	8					
7' X 7'	8	8-4	8-4	8					
8' X 4'	8	9-4	5-4	8	2-0	4-0	2-0	2-0	2:1
8' X 5'	8	9-4	6-4	8					
8' X 6'	8	9-4	7-4	8					
8' X 7'	8	9-4	8-4	8					
8' X 8'	8	9-4	9-4	8					
9' X 5'	9	10-6	6-6	9					
9' X 6'	9	10-6	7-6	9					
9' X 7'	9	10-6	8-6	9					
9' X 8'	9	10-6	9-6	9					
9' X 9'	9	10-6	10-6	9					
10' X 5'	10	11-8	6-8	10					
10' X 6'	10	11-8	7-8	10					
10' X 7'	10	11-8	8-8	10					
10' X 8'	10	11-8	9-8	10					
10' X 9'	10	11-8	10-8	10					
10' X 10'	10	11-8	11-8	10					
11' X 4'	11	12-10	5-10	11					
11' X 6'	11	12-10	7-10	11					
11' X 8'	11	12-10	9-10	11					
11' X 10'	11	12-10	11-10	11					
11' X 11'	11	12-10	12-10	11					
12' X 4'	12	14-0	6-0	12					
12' X 6'	12	14-0	8-0	12					
12' X 8'	12	14-0	10-0	12					
12' X 10'	12	14-0	12-0	12					
12' X 12'	12	14-0	14-0	12					

FILE NAME =	USER NAME = greenleasm	DESIGNED -	REVISED -
c:\pwork\p1dot\greenleasm\dms51989\vd78898.sht.msc.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/27/2010		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: SHEET NO. OF SHEETS STA. TO STA.

DETAILS

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
841	108N-1	PERRY	76	36
CONTRACT NO. 78098				
[ILLINOIS] FED. AID PROJECT				