

Job Name: 25-4349 Lunsford St. Drainage Repair  
 Job Location: Madisonville, KY  
 Contractor: Knight Construction & Excavating, Inc.

Plant: Beaver Dam

Tech: J. Coppage

2/9/2026 10:50:52 AM

PC: T. Lewis



**Structure ID: BOX CULVERT**

**P4 BC096048-08WLF-9H**

**BOX CULVERT (08W/08F/08T)**

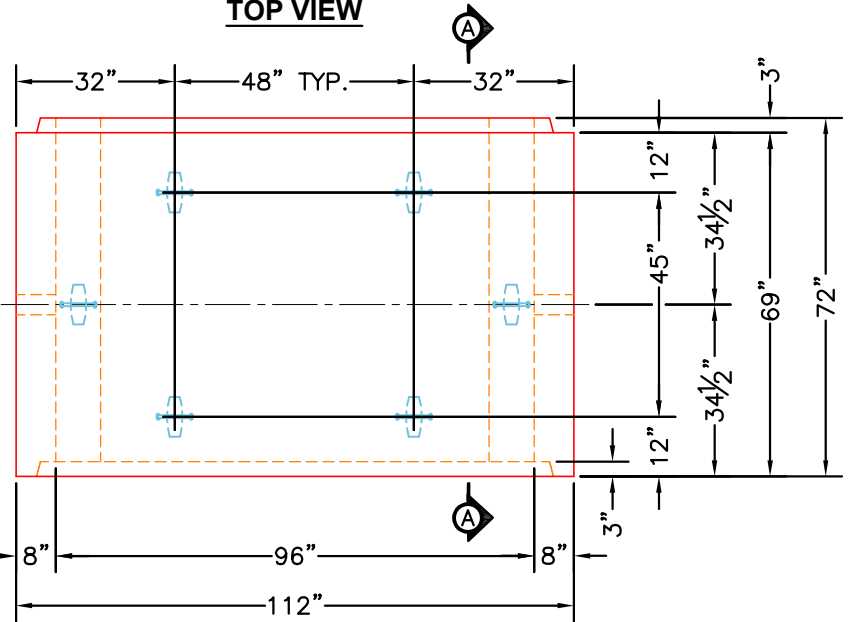
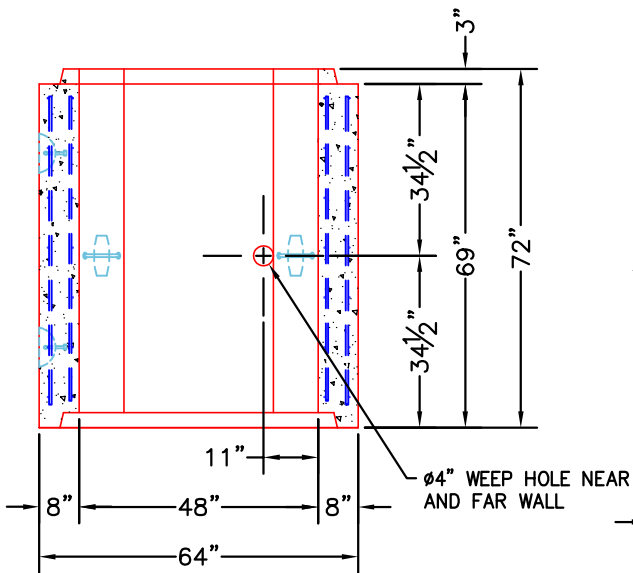
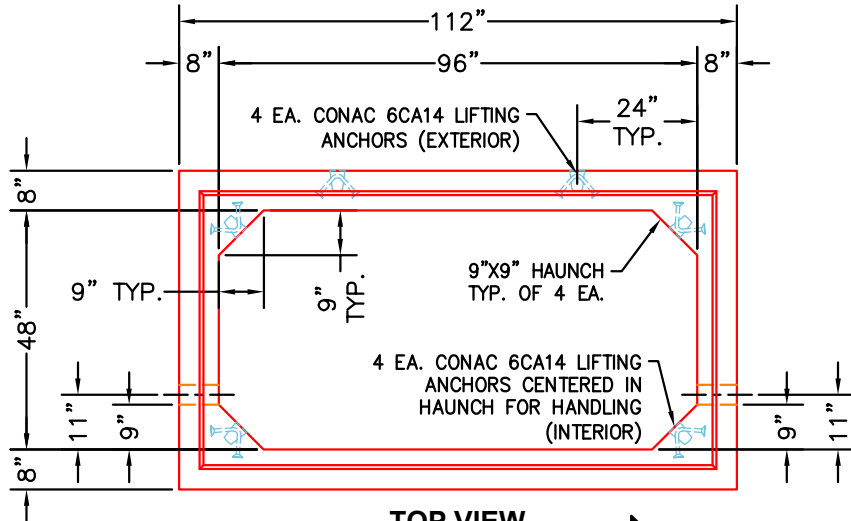
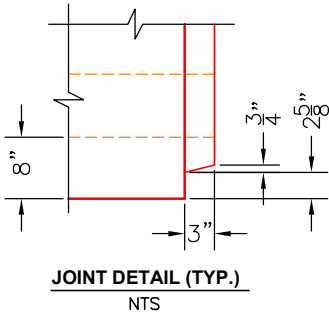
- P5) 96" x 48" - BOX CULVERT (08W/08F/08T) - 93"
- P4) 96" x 48" - BOX CULVERT (08W/08F/08T) - 69"
- P3) 96" x 48" - BOX CULVERT (08W/08F/08T) - 69"
- P2) 96" x 48" - BOX CULVERT (08W/08F/08T) - 69"
- P1) 96" x 48" - BOX CULVERT (08W/08F/08T) - 58"
- 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 5) 96" x 48" - Conseal CS-102 1.00"

21242 lb  
 15760 lb  
 15760 lb  
 15760 lb  
 13248 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 81770 lb

**NOTES:**

1. BOX CULVERT IS DESIGNED PER SECTION 605 OF THE KYTC STANDARD SPECIFICATION FOR ROAD & BRIDGE CONSTRUCTION.
2. LOAD REQUIREMENTS PER KY-HL93 (KY TABLE 1)
3. KYTC AND ASTM RATED FOR 0' - 2' COVER.
4. COVER DEPTH = 0' - 2'
5. CONCRETE: 6,500 PSI AT 28 DAYS.
6. REINFORCING: AS SHOWN BY WINFORD PATRONE.
7. BOX CULVERT TO BE SEALED WITH CS-102 ROLL BUTYL MASTIC & CS-212 12" WRAP. (SUPPLIED BY ICAST).
8. WEIGHT: 15,760 LBS.

Rim: 30' Rim to Invert: 0' Slack: 2" Sump: 0" Step Position:



Coating (Int):  
 Coating (Ext):

Seam Up: Tongue  
 Seam Dn: Groove

Wall Thickness: 8"  
 Floor Height: 0"

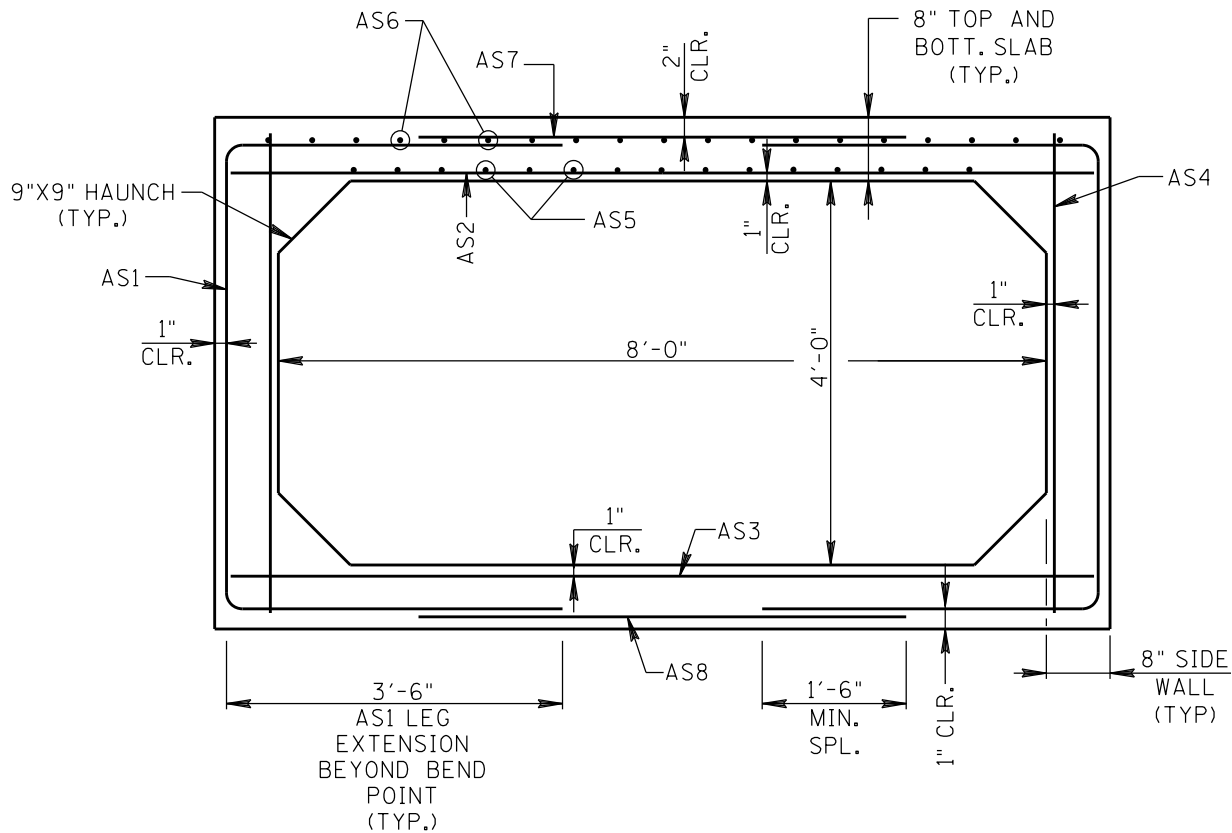
Height (Int): 69"  
 Height (Ext): 69"

Weight (Net): 14822 lb  
 Volume (Net): 3.79cu.yd

NOTE: SEE "PRECAST CONCRETE JUNCTION BOXES AND PRECAST BOX CULVERTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.  
 NOTE: ICAST WORKING DRAWINGS FOR ADDITIONAL INFORMATION.



**25-4349 Lunsford St. Drainage Repair  
 REINFORCEMENT INFORMATION  
 Box Culvert  
 SECTIONS P1(A), P2(B), P3(C), AND P4(D)**



**8'X4' PRECAST BOX CULVERT SECTION: SECTIONS "A" THRU "D"**  
 NOTE: F'c-min=6,500 P.S.I. NOT TO SCALE

LOCATION	AREA OF STEEL (IN <sup>2</sup> )	
	MAX. REQ'D.	TO BE PROVIDED
AS1	.354	NO. 5'S @ 10", AS=.372
AS2	.518	NO. 5'S @ 5", AS=.744
AS3	.350	NO. 5'S @ 10", AS=.372
AS4	.192	NO. 4'S @ 10", AS=.240
AS5	.192	NO. 4'S @ 10", AS=.240
AS6	.192	NO. 4'S @ 10", AS=.240
AS7	.192	NO. 4'S @ 10", AS=.240
AS8	.192	NO. 4'S @ 10", AS=.240

NOTE: SEE ICAST DRWGS. FOR LOCATIONS OF PRECAST SECTIONS.  
 NOTE: A 22"Ø OPENING IN RIGHT SIDE WALL IS TO BE PROVIDED BY THE PRECAST PLANT. SEE DETAIL REGARDING ADDITIONAL REINFORCEMENT FOR PRECAST OPENING.

**AREAS REINFORCING STEEL**  
 Fy-min=60 K.S.I.

SK-1/4

**8'X4' PRECAST CONCRETE BOX CULVERT: SECTIONS "A" THRU "D"**  
 LUNSFORD DRAINAGE REPAIRS PROJECT: MADISONVILLE, KENTUCKY