

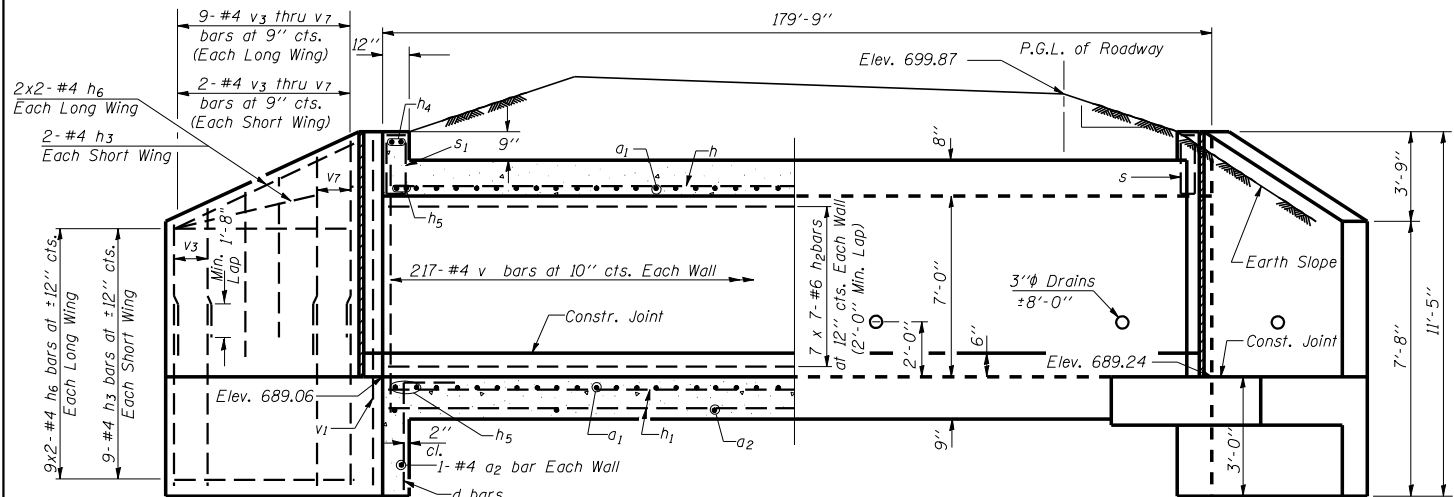
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	10-32HB-3,K	Champaign	352	159
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 90758				

DETAIL OF CAST IN PLACE BOX CULVERT & END SECTION

A.R. BOX CULVERT 1 @ 8.0' X 7.0'

STA. 31 + 31.92 (CULVERT NO. 16)

PRECAST OPTION NOT ALLOWED

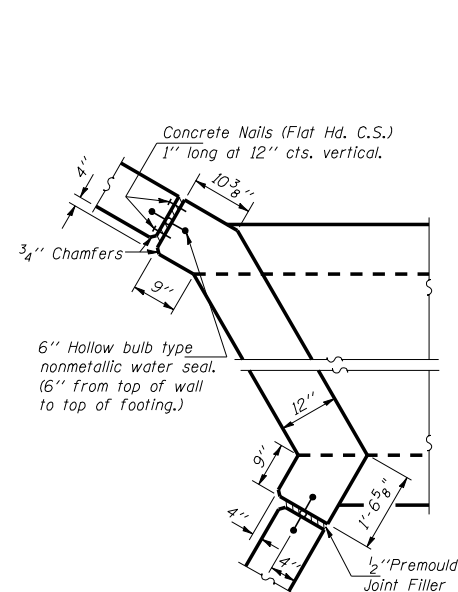


HALF LONG. SECT. HALF ELEVATION
Dimensions at Rt. L's to ϕ Roadway

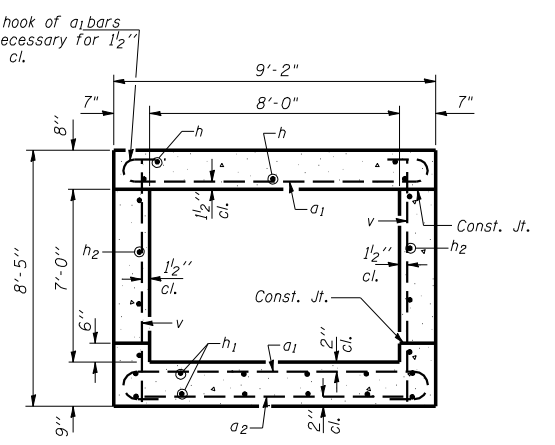
F.A.I. RT. 57
SEC. 10-32HB-3,K
LOADING HS 20-44 & ALT.
STR. NO. 010-2032

NAME PLATE

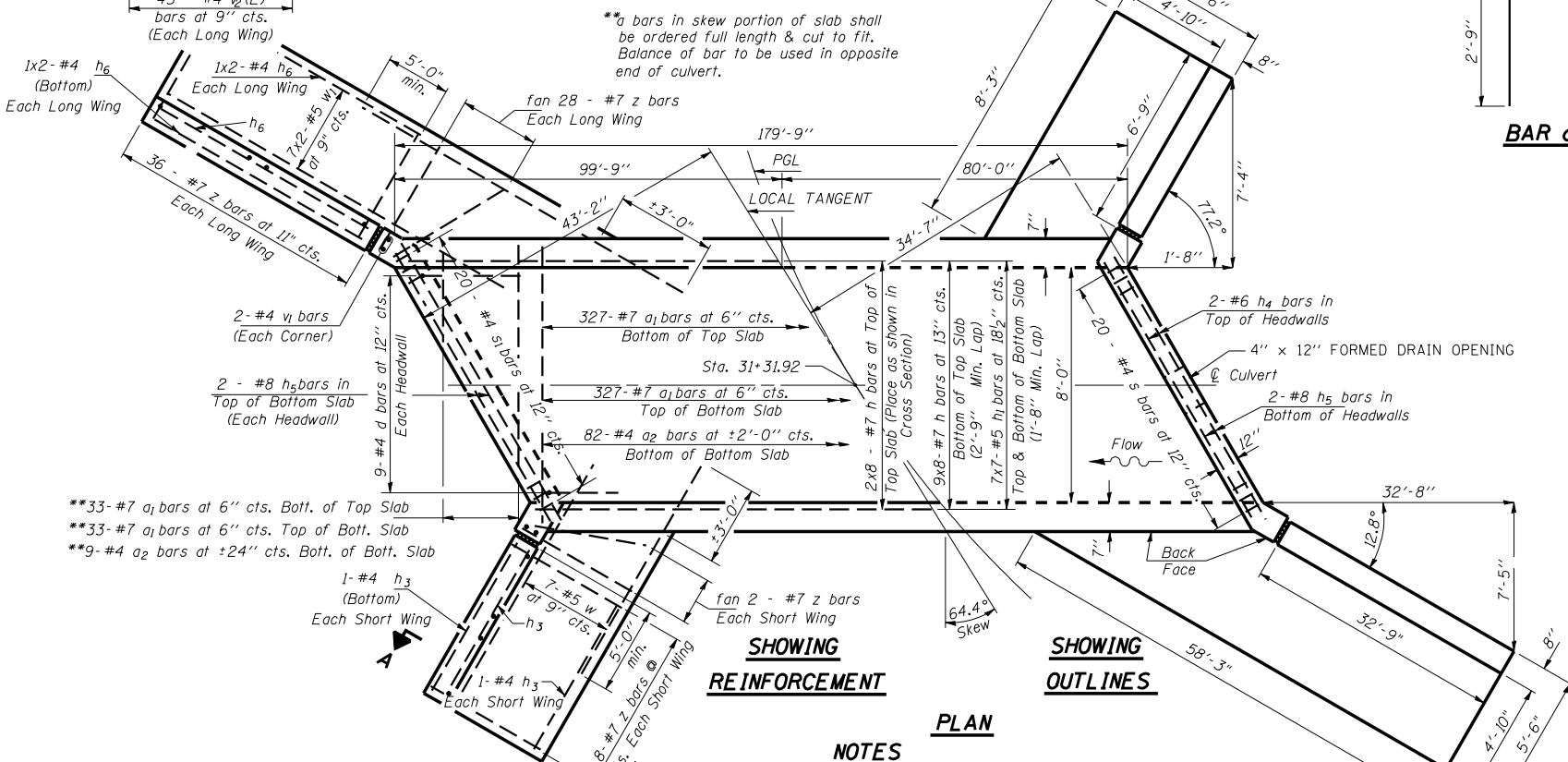
- See Highway Standard 515001-02 for dimensions and placement.
- Name Plate will be paid for at the contract unit price per "EACH" for "NAME PLATES".



CORNER DETAIL



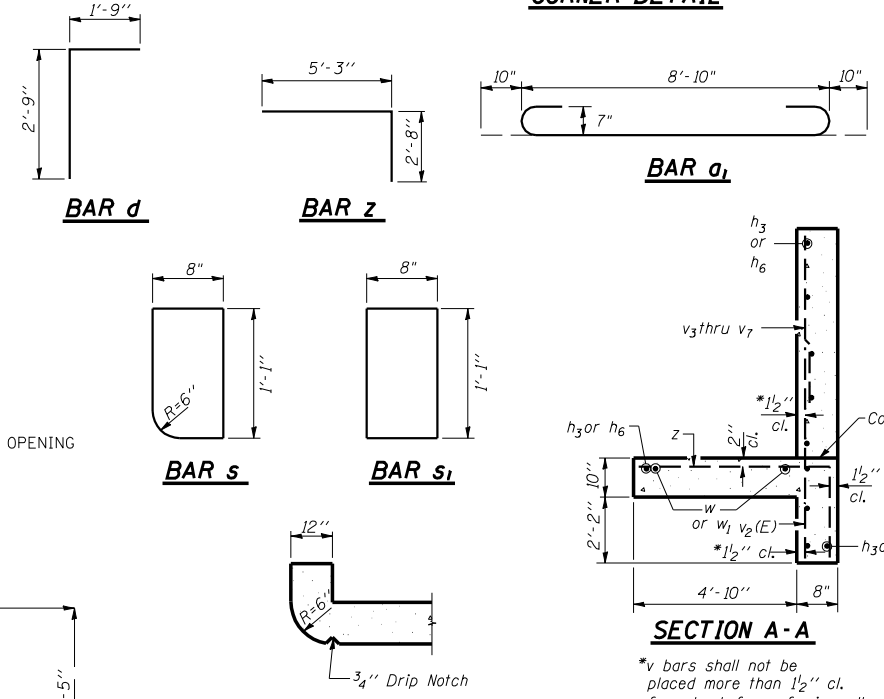
SECTION THRU BARREL



SHOWING REINFORCEMENT SHOWING OUTLINES

NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
Bars indicated thus 12 x 4 - #5 etc. indicates 12 lines of bars with 4 lengths per line.
Reinforcement bars designated (E) shall be epoxy coated.
All construction joints shall be bonded.
Any excavation required for box culvert construction shall be included in the contract unit price for concrete, per Art. 502.15.



SECTION THRU HEADWALL (Up Stream End Only)

DESIGN STRESSES

$f_y = 60,000$ psi
 $f'_c = 3,500$ psi
Max. Soil Pressure under footing = 2778 psf

LOADING HS 20-44 & ALT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	720	#7	10'-6"	U
a2	93	#4	8'-10"	U
d	18	#4	4'-6"	J
h	88	#7	24'-10"	—
h1	98	#5	27'-2"	—
h2	98	#6	27'-4"	—
h3	26	#4	6'-5"	—
h4	4	#6	20'-10"	—
h5	8	#8	20'-10"	—
h6	52	#4	17'-1"	—
s	20	#4	3'-6"	U
s1	20	#4	3'-6"	U
v	434	#4	8'-1"	—
v1	8	#4	11'-1"	—
v2(E)	110	#4	4'-9"	—
v3	22	#4	4'-8"	—
v4	22	#4	5'-6"	—
v5	22	#4	6'-4"	—
v6	22	#4	7'-2"	—
v7	22	#4	8'-0"	—
w	14	#5	9'-5"	—
w1	28	#5	17'-10"	—
z	148	#7	7'-11"	—
Concrete Box Culverts Cu. Yd.				180
Reinforcement Bars, Epoxy Coated Pound				349
Reinforcement Bars Pound				34,618

BOX CULVERT & END SECTIONS (CAST IN PLACE)
1 @ 8.0' X 7.0'
STA. 31+31.92 64.4° SKEW

REINFORCED CONCRETE CULVERT DETAILS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE		

CULVERT DETAILS

SCALE: VERT. DRAWN BY JDC
HORIZ. CHECKED BY JDE
DATE 062205