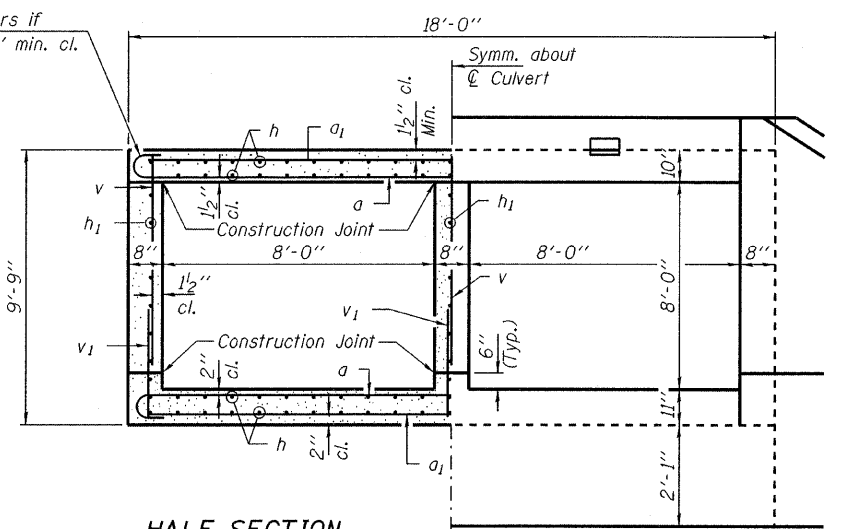


HALF LONG SECTION
Showing Reinforcement
HALF ELEVATION
Showing Outlines
Dimensions are at Rt. L's to \odot Roadway.



HALF SECTION THRU BARRELS
Showing Reinforcement
HALF END ELEVATION
Showing Outlines

MIN. BAR LAP
#5 - 1'-8" (Barrel)
#6 - 2'-0" (Barrel)

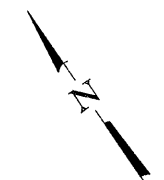
Tilt hook of a bars if necessary for 1/2" min. cl.

Name Plate to be located on outside face of southwest wingwall.

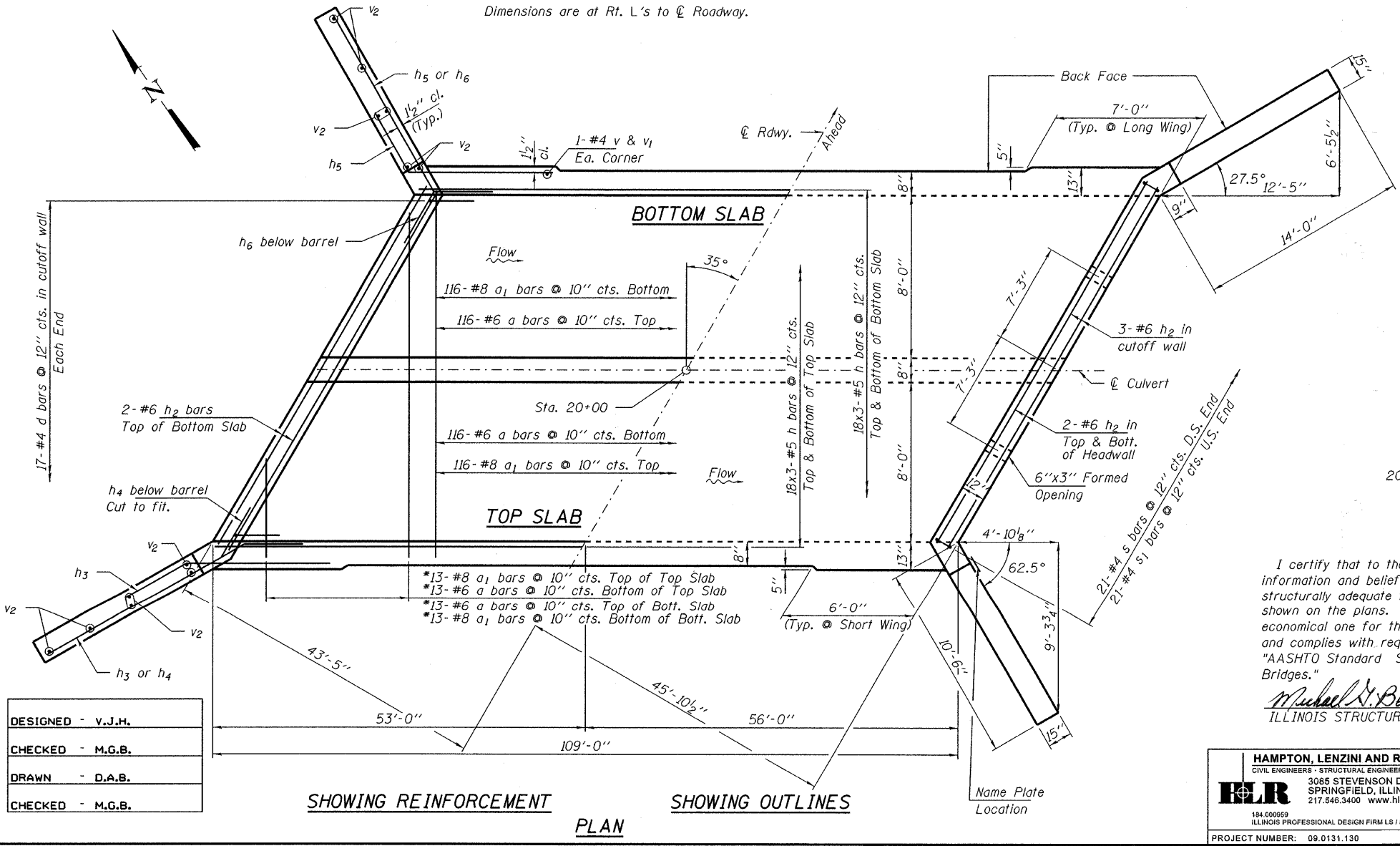
6-#9 h_3 bars @ 7" cts. (Back Face - Long Wing)
6-#6 h_5 bars @ 7" cts. (Back Face - Short Wing)
14-#9 h_3 bars @ 7" cts. (Front Face - Long Wing)
14-#6 h_5 bars @ 7" cts. (Front Face - Short Wing)
Bend in Field (Typ.)

14-#9 h_4 bars @ 7" cts. (Back-Long Wings)
14-#6 h_6 bars @ 7" cts. (Back-Short Wings)

Elev. 568.28
Elev. 566.88
Elev. 558.70
Elev. 557.30



NOTES
Exposed edges shall be beveled 3/4".
For backfilling and embankment, see Standard Specifications, except that porous granular embankment shall be placed as shown, in the detail.
Reinforcement bars shall conform to the requirements of AASHTO M-31, or M-322 Grade 60. It shall be the responsibility of the Contractor to divert flow during construction in order to keep construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and shall be considered included in the cost of Concrete Box Culverts. Bars indicated thus 23x3-#6 etc. indicates 23 lines of bars with 3 lengths per line.
All construction joints shall be bonded.
Precast concrete box culverts will not be allowed.
See sheets 20 & for borings.
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with wingwalls.
All reinforcement bars shall be epoxy coated.



SHOWING REINFORCEMENT
SHOWING OUTLINES
PLAN

* a & a1 bars in skew portion of slab shall be ordered full length and cut to fit. Balance of bar to be used in opposite end of culvert.

LOADING HS-20 DESIGN STRESSES
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
DESIGN SPECIFICATIONS
2002 AASHTO and all applicable inferences

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges."

Michael N. Berry 12/16/09
ILLINOIS STRUCTURAL NO. 081-4622



Expires 11-30-2010

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	258	#6	19'-0"	
a1	258	#8	17'-8"	
d	34	#4	4'-6"	
h	216	#5	37'-4"	
h1	63	#6	37'-7"	
h2	18	#6	21'-8"	
h3	40	#9	8'-0"	
h4	28	#9	18'-5"	
h5	40	#6	8'-0"	
h6	28	#6	13'-8"	
s	21	#5	4'-9"	
s1	21	#5	4'-7"	
v	565	#5	8'-2"	
v1	565	#5	2'-4"	
v2	24	#4	12'-3"	
Concrete Box Culverts		Cu. Yd.	222.0	
Reinf. Bars, Epoxy Coated		Pound	42,670	
Porous Granular Embankment		Ton	555	
Name Plates		Each	1	

DESIGNED - V.J.H.
CHECKED - M.G.B.
DRAWN - D.A.B.
CHECKED - M.G.B.

HAMPTON, LENZINI AND RENWICK, INC.
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184.000659
ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORPORATION
PROJECT NUMBER: 09.0131.130 DATE: 11/03/09

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12	09-00268-00-DR	CLARK	20	18
EAST CULVERT		CONTRACT NO. 95612		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

STRUCTURE NO. 012-5008