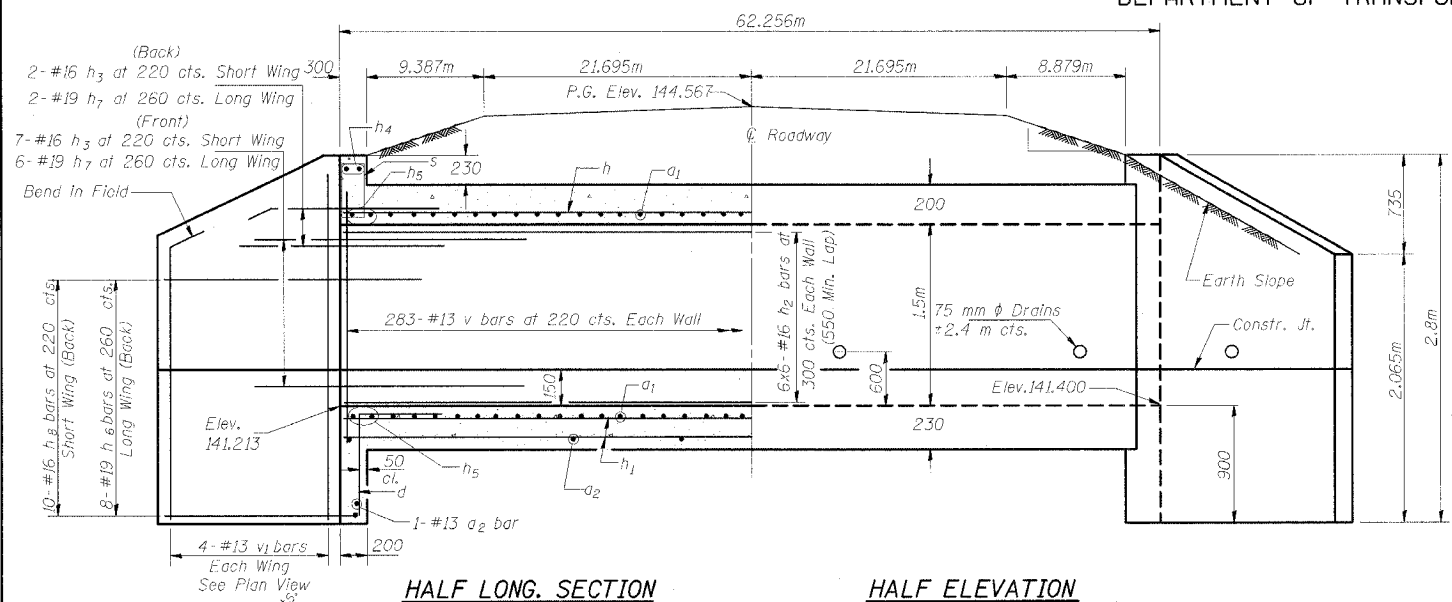


STATE OF ILLINOIS
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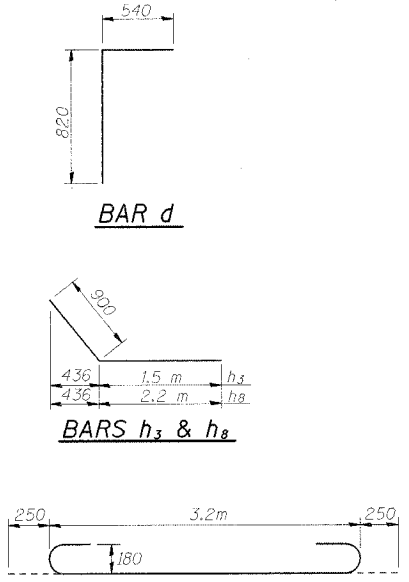
APP. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310		MADISON	452	149
STA. 32+585.225				
FED. ROAD DIST. NO. 8		ILLINOIS	FED. AID PROJECT	

SECTION 60-14
SECTION 60-14-1B
CONTRACT NO. 76321



HALF LONG. SECTION

HALF ELEVATION

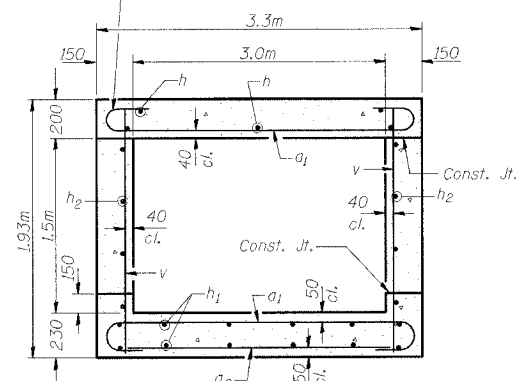


BAR d

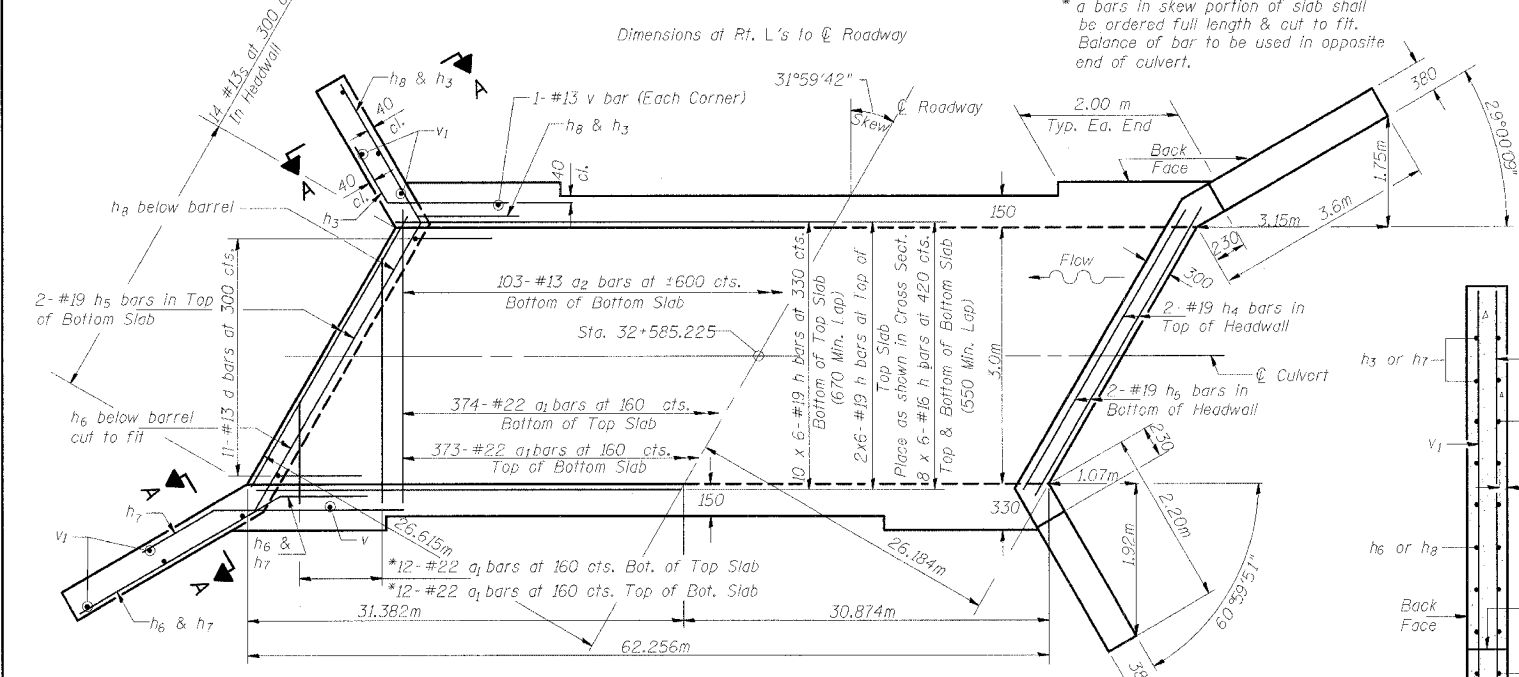
BARS h3 & h8

BAR a1

Tilt hook of a1 bars if necessary for 40 mm min. cl.



SECTION THRU BARREL



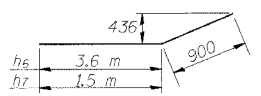
SHOWING REINFORCEMENT

SHOWING OUTLINES

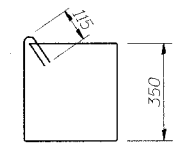
PLAN

NOTES

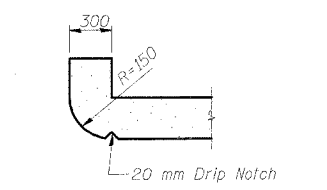
A distance of half the length of the wingwall but not less than 2 m of the barrel shall be poured monolithically with the wingwalls.
Reinforcement Bars shall conform to the requirements of AASHTO M-31M, M-42M or M-53M, Grade 420.
Bars indicated thus 12 x 4-#16 etc. indicates 12 lines of bars with 4 lengths per line.
All dimensions are in millimeters (mm) except as noted.
All construction joints shall be bonded.



BARS h6 & h7



BAR s



SECTION THRU HEADWALL

(Up Stream End Only)

DESIGN STRESSES

$f_y = 420 \text{ MPa}$
 $f'_c = 24 \text{ MPa}$

LOADING MS18 & ALT.

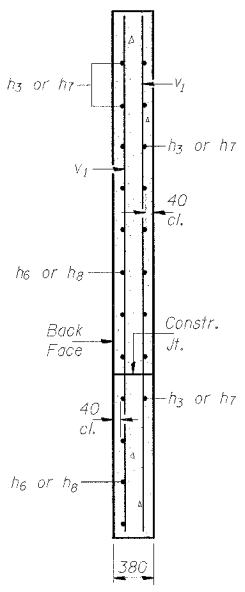
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
a1	771	#22	3.70	U
a2	105	#13	3.08	—
d	22	#13	1.36	L
h	72	#19	10.92	—
h1	96	#16	10.82	—
h2	72	#16	10.82	—
h3	18	#16	2.40	—
h4	4	#19	3.79	—
h5	8	#19	3.95	—
h6	16	#19	4.50	—
h7	16	#19	2.40	—
h8	20	#16	3.10	—
v	570	#13	1.83	—
v1	16	#13	2.72	—
s	28	#13	1.37	□
Concrete Box Culverts			m ³	131.5
Reinforcement Bars			kg	15240

DESIGNED
CHECKED
DRAWN
CHECKED

SSB-H-R (M) 6-1-2000

SECTION A-A



PLANS PREPARED BY:

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA 310
SECTION 60-14
MADISON COUNTY
STATION 32+585.225