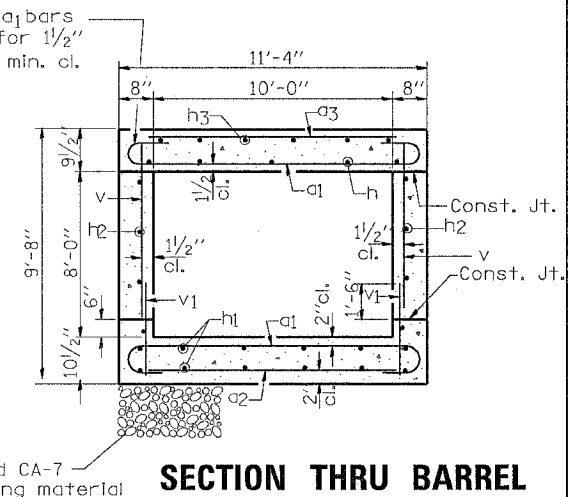
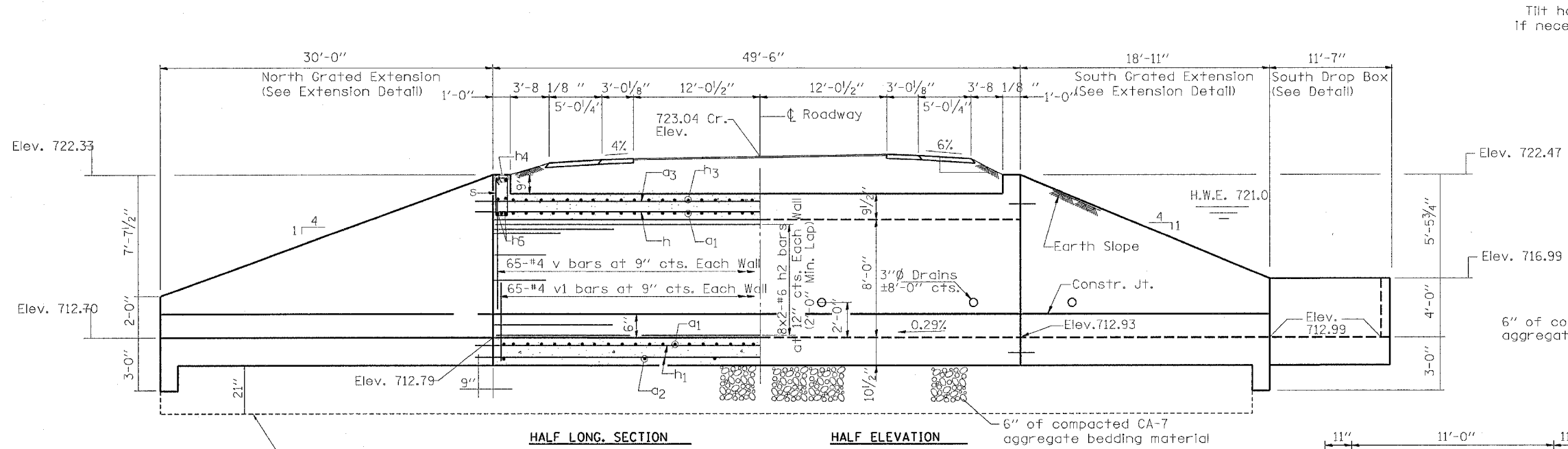


CONCRETE BOX CULVERTS STA 732+53

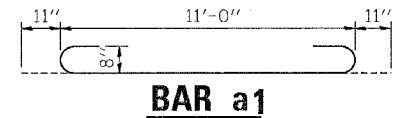
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
549	116RS-1	OGLE	593	213
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



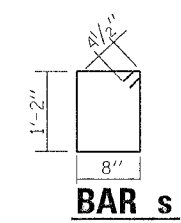
SECTION THRU BARREL

BILL OF MATERIAL

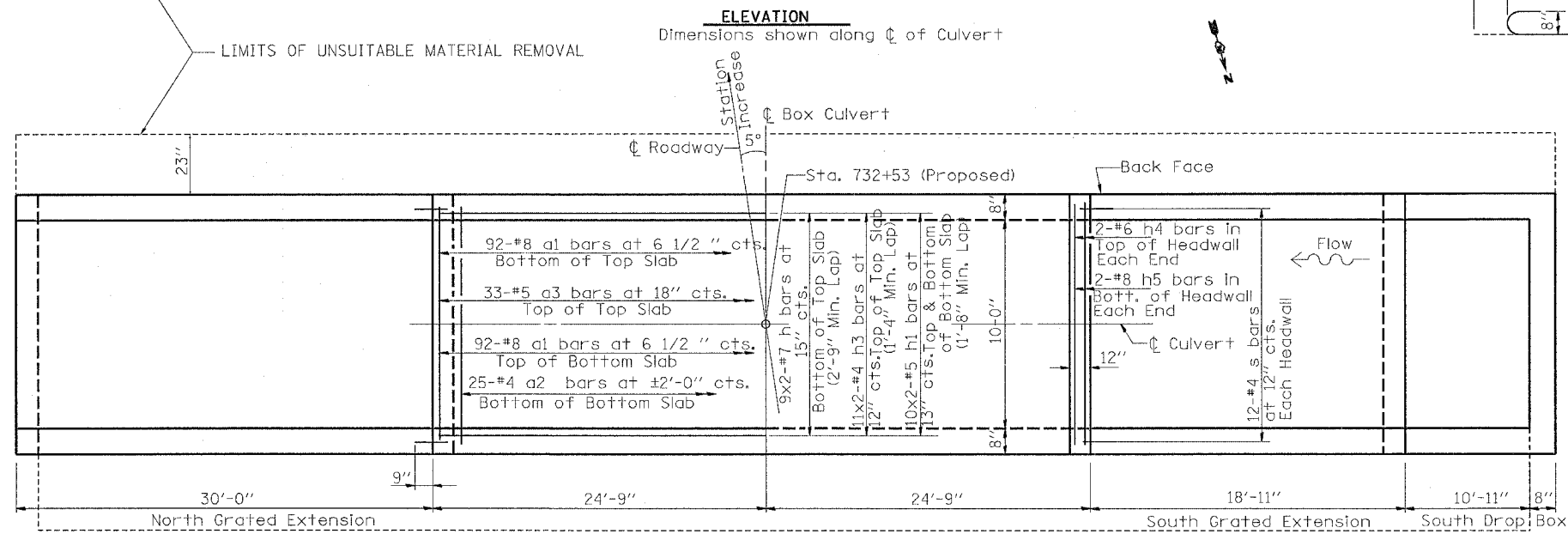
Bar	No.	Size	Length	Shape
a1	184	#8	12'-10"	U
a2	25	#4	11'-0"	—
a3	33	#5	11'-0"	—
h	18	#7	26'-9"	—
h1	40	#5	29'-0"	—
h2	32	#6	29'-4"	—
h3	22	#4	26'-0"	—
h4	4	#6	11'-0"	—
h5	4	#8	11'-0"	—
s	24	#4	4'-5"	□
v	130	#4	8'-2"	—
v1	130	#4	2'-5"	—
Concrete Box Culverts			Cu. Yd.	55.0
Reinforcement Bars			Pound	12026.54
Rem. of Unsuitable Material			Cu. Yd.	109
Breaker-Run Stone			Ton	159
Concrete Box Culvert Total			Cu. Yd.	96.2
Reinforcement Bars Total			Pound	18,742



BAR a1



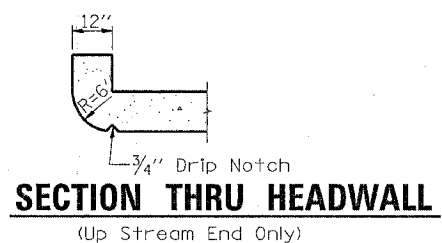
BAR s



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 11 x 2-#4 etc. indicates 11 lines of bars with 2 lengths per line.
 All construction joints shall be bonded.
 6" of compacted CA-7 aggregate bedding material shall be placed beneath the box culvert. The cost for the CA-7 aggregate shall be included in the cost of Concrete Box Culverts.
 The cost of excavation and backfilling shall be included in the cost of Concrete Box Culverts.



SECTION THRU HEADWALL
(Up Stream End Only)

DESIGN STRESSES

f_y = 60,000 psi
 f'c = 3,500 psi

LOADING HS 20-44 & ALT.

WATERWAY INFORMATION

Drainage Area = 0.51 sq mi Low Grade Elev. 723.42 (Exist) 723.61 (Proposed) @ Sta 732+53

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft., Headwater El.			
			Exist.	Prop.		Exist.	Prop.		
10-Year	10	285	72.4	80.0	721.00	1.14	1.14	722.14	722.14
Design	50	450	72.4	80.0	721.00	2.75	2.75	723.75	723.75
Base	100	521	72.4	80.0	721.00	3.14	3.13	724.14	724.13
Over top (Ex.)	37	417	72.4	-	721.00	2.43	-	723.43	-
Over top (Pr.)	42	432	-	80.0	721.00	-	2.62	-	723.62

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE