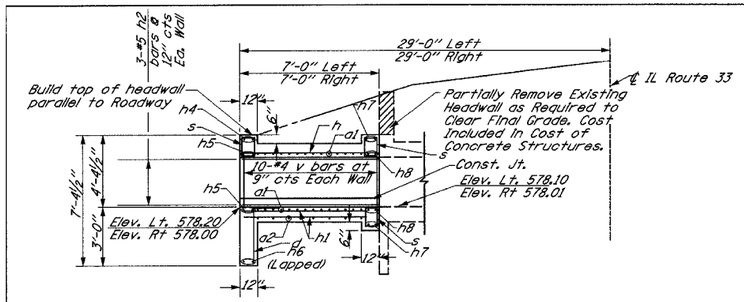
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
95	*	EFFINGHAM	409	148
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

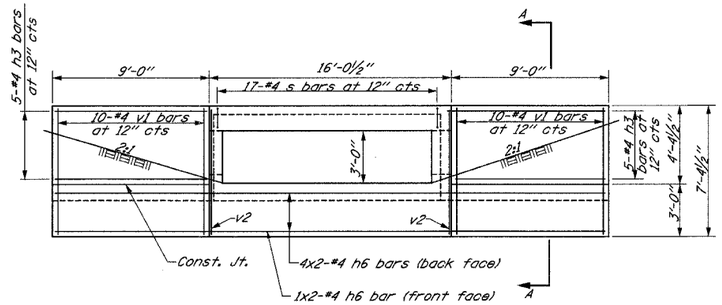
* (6,7)Y, RS-1, 6B-1, 7B-1, 7BR-2

CONTRACT NO. 94356



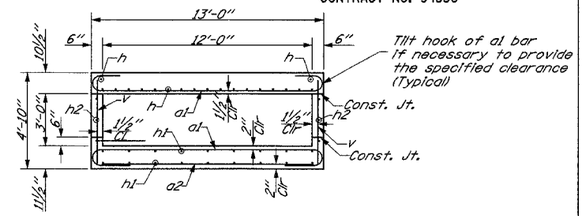
HALF LONG SECTION

Dimensions at Rt L to ℄ Roadway

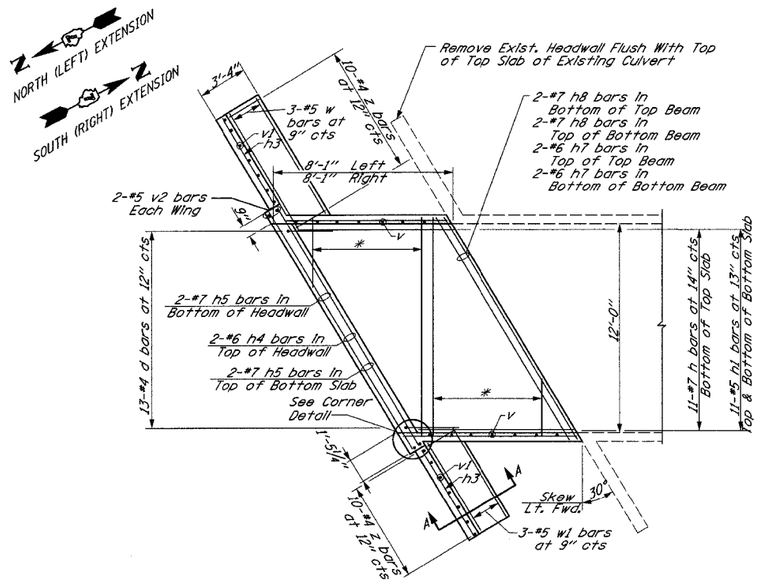


END ELEVATION

Dimensions Parallel to ℄ of Roadway

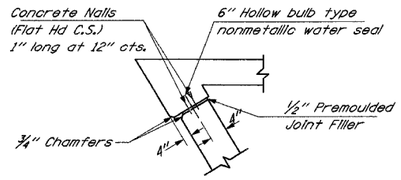


SECTION THRU BARRELS

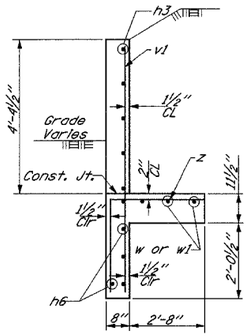


* Cut bars in field to fit skew and use the remainder of bars at other end of slab:
12-#9 a1 bars at 7½" cts., Top of Bottom Slab
4-#4 a2 bars at 2'-0" cts., Bottom of Bottom Slab
12-#9 a1 bars at 7½" cts., Bottom of Top Slab

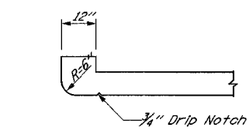
PLAN SHOWING REINFORCEMENT



CORNER DETAIL

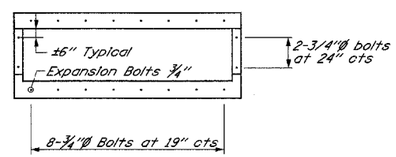


SECTION A-A

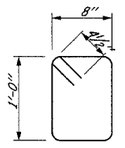


SECTION THRU HEADWALL

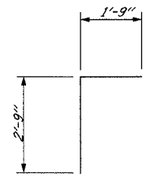
(Up Stream End Only)



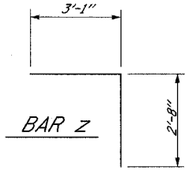
EXPANSION BOLT PLACEMENT DETAIL



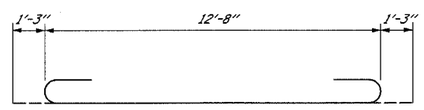
STIRRUP s



BAR d



BAR z



BAR a1

BILL OF MATERIAL

(For Two Extensions, 1 Lt. & 1 Rt.)

Bar	No.	Size	Length
a1	36	#9	15'-2"
a2	8	#4	12'-3"
d	26	#4	4'-6"
h	26	#7	7'-9"
h1	44	#5	7'-9"
h2	12	#5	7'-9"
h3	20	#4	8'-8"
h4	4	#6	15'-8"
h5	8	#7	15'-8"
h6	20	#4	18'-6"
h7	8	#6	14'-8"
h8	8	#7	14'-8"
s	98	#4	4'-1"
v	40	#4	4'-6"
v1	40	#4	7'-0"
v2	8	#5	7'-0"
w	6	#5	11'-0"
w1	6	#5	9'-0"
z	44	#4	5'-9"
Concrete Structures	Cu Yd		29.8
Reinforcement Bars	Pound		9838
Expansion Bolts ¾"	Each		40

NOTES:

Bench Mark: ℄ IL Route 33 ℄ Culvert (Sta. 544+21.63), Elev. 583.71.

Design Fill Height 2' Lt & Rt.

Exposed edges shall be chamfered ¾".

Class SI Concrete shall be used throughout.

Reinforcement Bars shall conform to the requirements of AASHTO M31 or M322, Grade 60.

Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.

For backfilling and embankment, see Standard Specifications.

Expansion Bolts shall consist of self-drilling expansion shields and hooked bolts. Hooked Bolts shall extend a minimum of 9" into new concrete.

SPECIFICATION

1996 AASHTO with 1997, 1998, 1999, 2000 and 2002 Interims

DESIGN STRESSES

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

LOADING HS 20-44

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT EXTENSION DETAILS
℄ STA. 544+21.63
SHEET 5 OF 5

DRAWN BY BDM
DATE 9/01 CHECKED BY SJK