

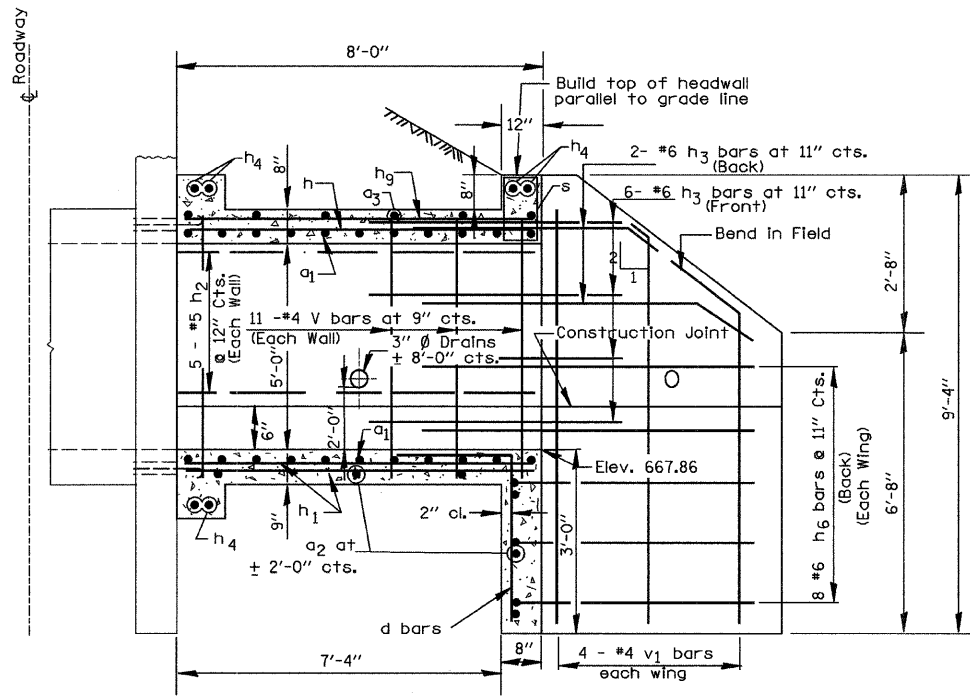
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 66560

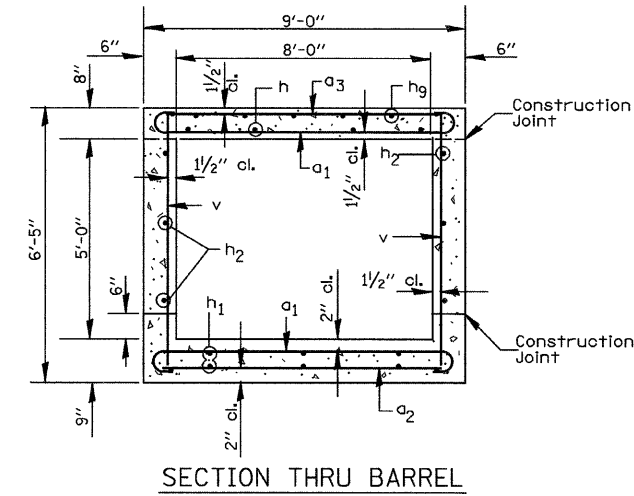
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	KANKAKEE	109	59

STA. TO STA.
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

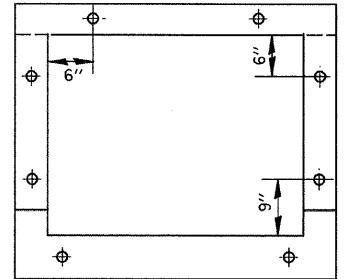
* FAU ROUTE 6176 (ARMOUR ROAD)
** SECTION (79)W&RS & 14ORS



ELEVATION



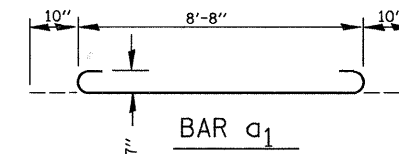
SECTION THRU BARREL



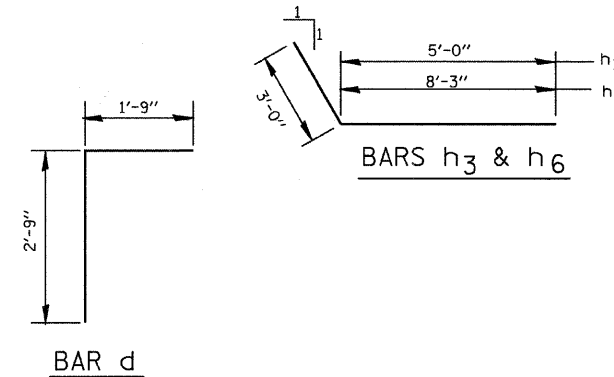
Top & Bottom . . . 4 @ 15" Cts.
Sidewalls 6 @ 17" Cts.

EXPANSION BOLT LOCATION

Note: Expansion bolts shall consist of self drilling expansion shield and 3/4" diameter hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete. Minimum Certified Proof Load = 4,080 lbs



BAR a1

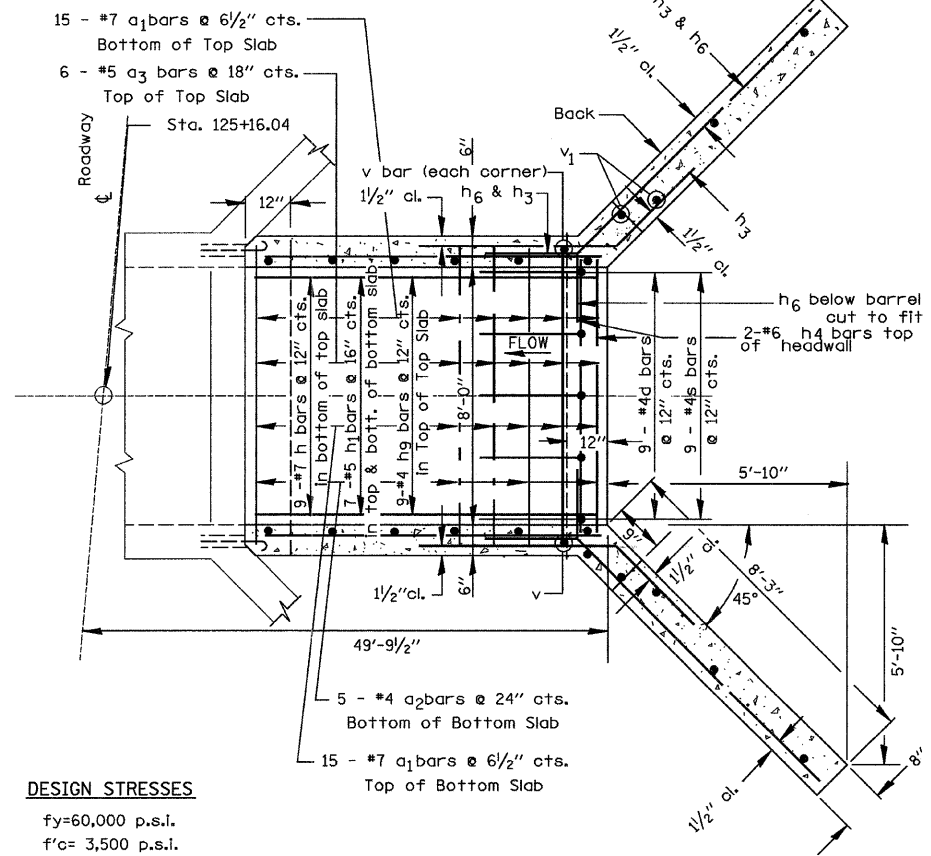


BARS h3 & h6

BAR d

BILL OF MATERIALS

Bar	Number	Size	Length
a1	30	#7	10'-4"
a2	8	#4	8'-3"
a3	6	#5	8'-3"
d	9	#4	4'-6"
h	9	#7	7'-9"
h1	14	#5	7'-9"
h2	10	#5	7'-9"
h3	16	#6	8'-0"
h4	6	#6	8'-9"
h6	16	#6	11'-3"
h9	9	#4	7'-9"
s	9	#4	4'-3"
v	24	#4	6'-1"
v1	8	#4	9'-0"
Concrete Box Culverts	Cu. Yds.		9.7
Reinforcement Bars	Lbs.		1850
Expansion Bolts	Each		20

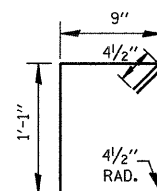


PLAN

DESIGN STRESSES

fy=60,000 p.s.i.
f'c= 3,500 p.s.i.

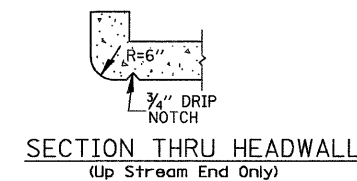
LOADING HS 20-44 & ALT.



BAR s

GENERAL NOTES

Class SI Concrete shall be used throughout.
At least six feet of Barrel shall be poured monolithically with wingwalls.
Exposed edges shall be beveled 3/4".
For backfilling and embankments see Standard Specifications.
Tilt hook of a1 bars, if necessary, to obtain 1/2" minimum clearance at top of hook.
Reinforcement Bars shall conform to the requirements of AASHTO M-31, or M-322, Grade 60.



SECTION THRU HEADWALL
(Up Stream End Only)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BOX CULVERT EXTENSION PLAN
FAU ROUTE 6176 (ARMOUR ROAD)
SECTION (79)W&RS & 14ORS
STA. 125+16.04
KANKAKEE COUNTY

SCALE: VERT. 1"=4'
HORIZ. 1"=10'
DATE 11/05
DRAWN BY ARR
CHECKED BY JKC

PLOT DATE = 12/06
FILE NAME = 2043BOLLVDJN
SCALE = 1"=10'
USER NAME = ARR