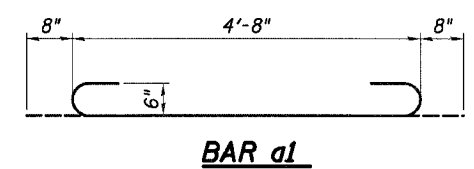
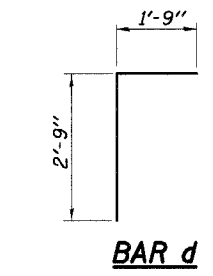
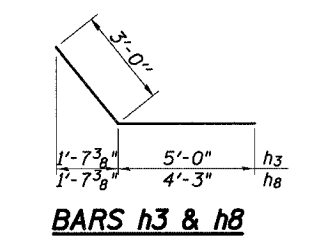
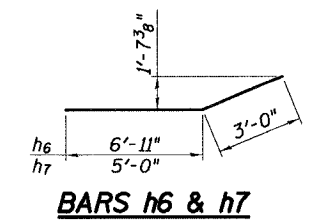
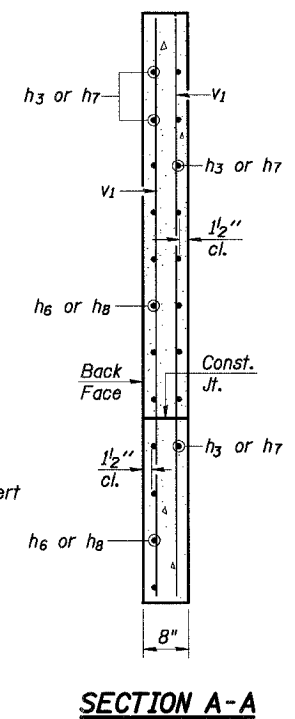
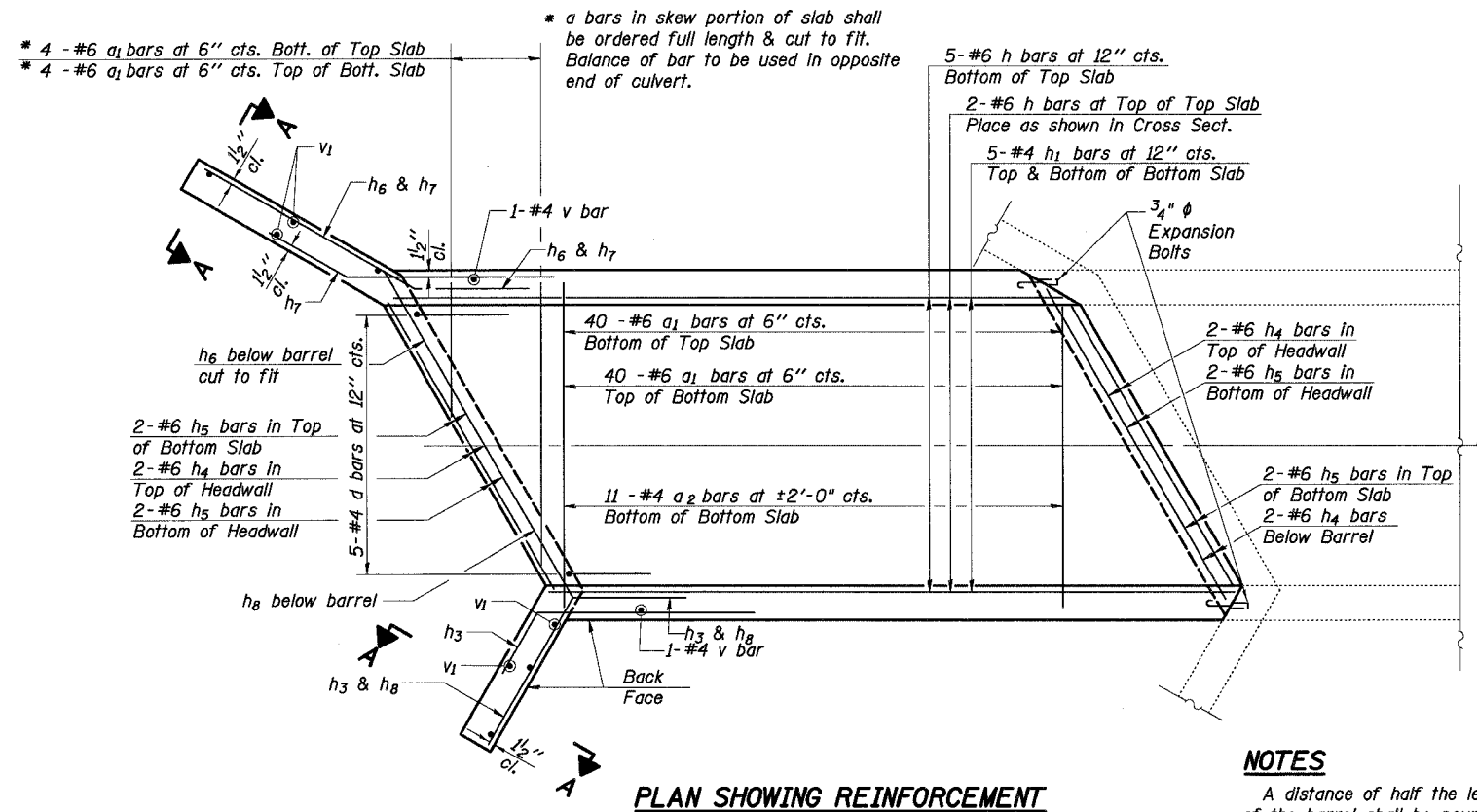
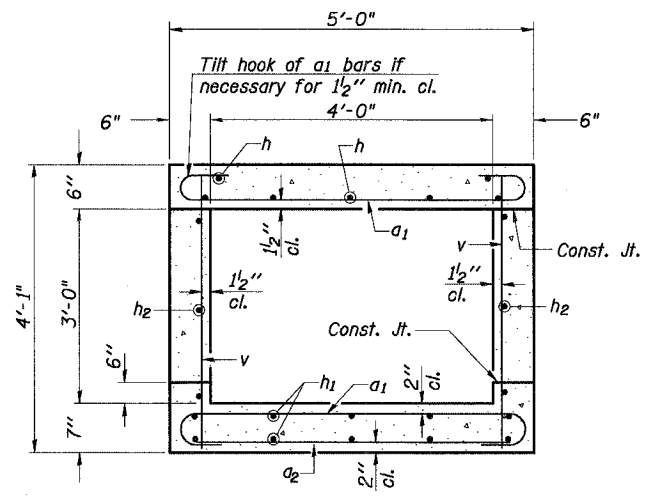
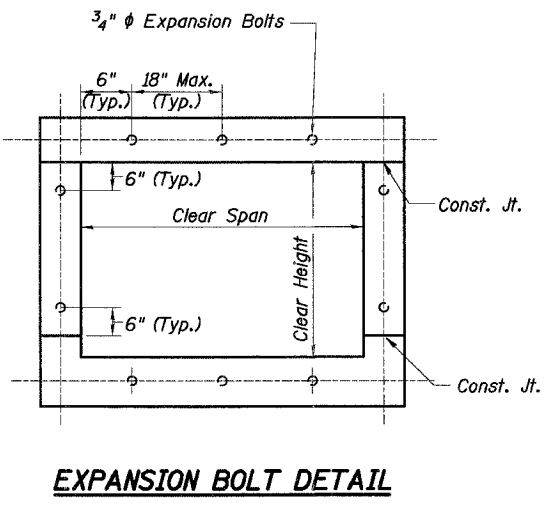
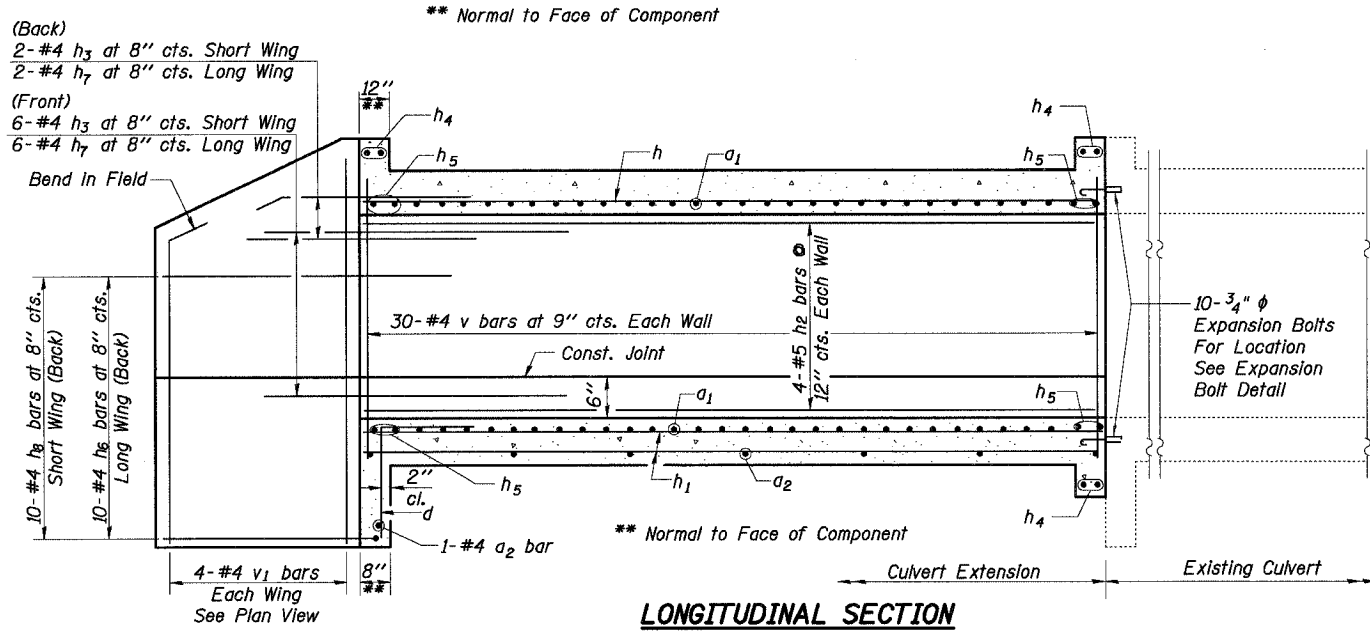


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	50-SHBK-2	LASALLE	331	152
STA. 105+00		TO STA. 136+00		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	88	# 6	6'-0"	
a2	12	# 4	4'-8"	
d	5	# 4	4'-6"	
h	7	# 6	21'-8"	
h1	10	# 4	21'-8"	
h2	8	# 5	21'-8"	
h3	8	# 4	8'-0"	
h4	6	# 6	4'-1"	
h5	8	# 6	5'-2"	
h6	10	# 4	9'-11"	
h7	8	# 4	8'-0"	
h8	10	# 4	7'-3"	
v	62	# 4	3'-9"	
v1	8	# 4	6'-8"	
Concrete Box Culverts			Cu Yd	10
Reinforcement Bars			Pound	1,890

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

All construction joints shall be bonded.

Expansion bolts shall be 3/4" diameter hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.

If necessary, cut to fit bars in the culvert extension at the interface between the existing culvert and the culvert extension.

Cost of 3/4" diameter Expansion Bolts to be included with Concrete Box Culverts.

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$

LOADING HS 20-44 & ALT.

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

4'X3' BOX CULVERT EXTENSION DETAILS

MARSEILLES ROAD (FAS Rt. 268)
 OVER I-80 (F.A.I. ROUTE 80)
 STRUCTURE NUMBER 050-0245

LA SALLE COUNTY SECTION 50-SHBK-2
 STATION 120+00.08
 DATE: 11/02/07

DESIGNED: DM
 CHECKED: GG

DRAWN: DM
 CHECKED: GG

Baker
 Baker Engineering, Inc.

H:\07486\3.0 deliverables\3.3 structure\Drawings\Final\Culvert 4x3 Details.dgn
 11/5/2007