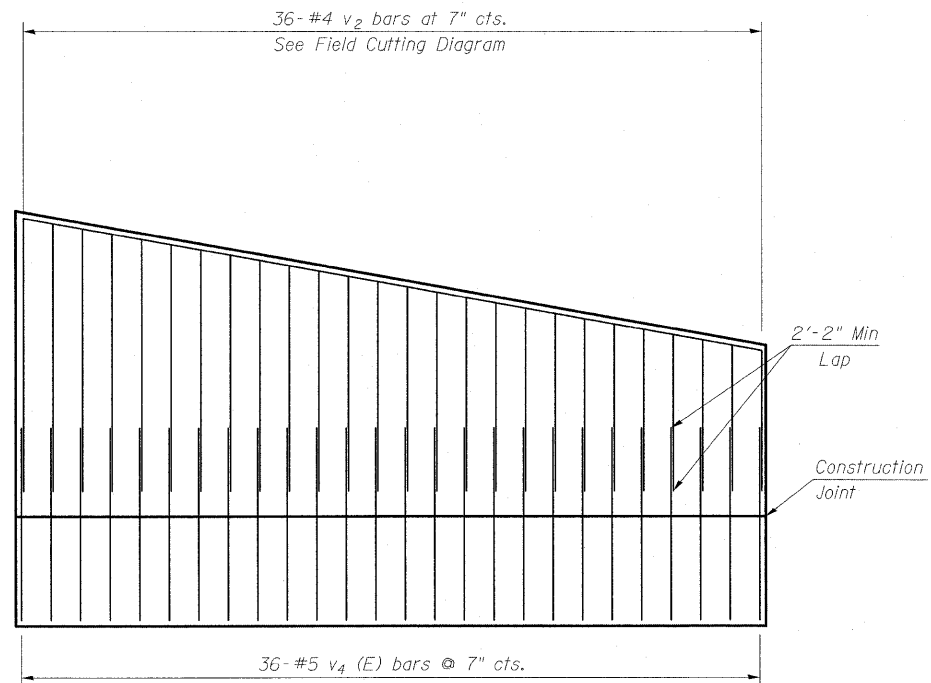
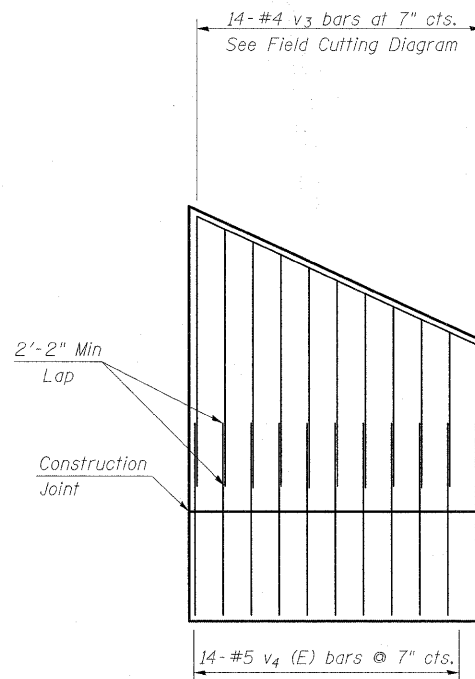


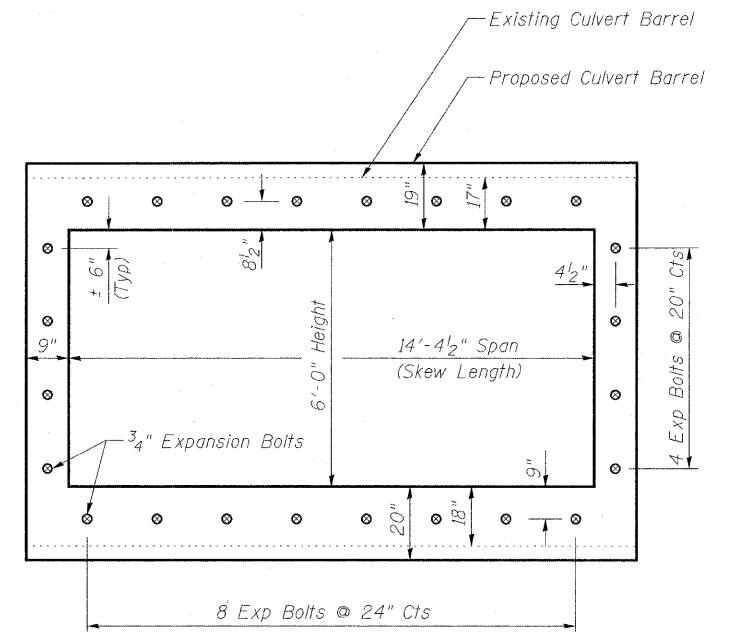
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**LONG WING  
SHOWING REINFORCEMENT**



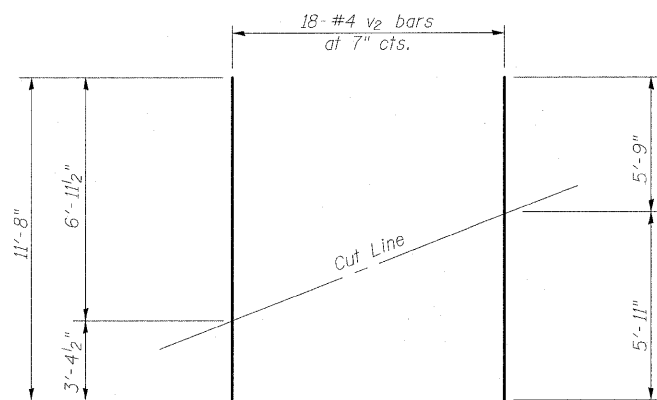
**SHORT WING  
SHOWING REINFORCEMENT**



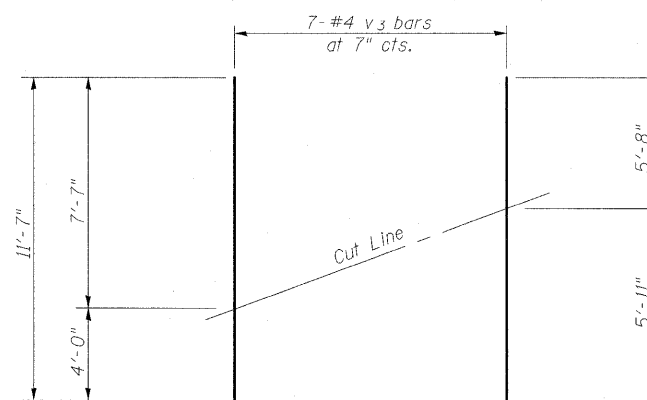
Note - Expansion Bolts shall be 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into the new concrete

**EXPANSION BOLT LAYOUT**

**FIELD CUTTING AND  
PLACEMENT DIAGRAMS**



**FIELD CUTTING DIAGRAM  
(v2 bars)**



**FIELD CUTTING DIAGRAM  
(v3 bars)**

Order v2 & v3 bars full length. Cut as shown. Use remainder of bar in opposite end of Wing Wall.



**BERNARDIN  
LOCHMUELLER &  
ASSOCIATES, INC.**

3 Oak Drive  
Maryville, IL 62962-6685  
Local (618) 398-4655  
Fax 618-298-4666

**BOX CULVERT DETAILS  
LT STA 11+18.70  
RAMP F WB**

DESIGNED	ACS
CHECKED	CJF
DRAWN	RCB
CHECKED	CJF

Revised Sheet 5/21/10 CJF

SHEET NO. 3 OF 3 SHEETS	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57/70	(25-3)R	EFFINGHAM	1416	458
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 74296					