

PATRICK

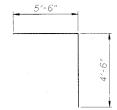
ENGINEERING INC.

Sheet S-9 of S-11

S-11	F.A.I. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	80	(32, 47-4)K	KENDALL/GRUNDY	243	179
	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
	CONTRACT	T NO CCOOL			

NOTES:

- 1. Class SI Concrete shall be used throughout. The inside dimensions of the Class SI Concrete Closure shall be the same as the New Precast Concrete Box Culvert.
- 2. Inserts for \$\frac{3}{4}"\$ \phi\$ hooked bolts shall be flared loop type with a minimum certified proof loading of 4,080 lbs. Hooked bolts shall extend a minimum of 9" into new concrete as shown in Detail A. Inserts shall be placed as shown in End View. Cost of the inserts and hooked bolts shall be included with the cost of Precast Box Culverts, 8' x 5'.
- 3. Expansion Bolts shall consist of self drilling expansion shields and ³₄" φ hooked bolts with a min, certified proof loading of 4,080 lbs, Hooked bolts shall extend a minimum of 9" into new concrete as shown in Detail A. Bolts shall be placed in exist, culvert in close proximity of the inserts cast at the end of the Precast Culvert.



#6 L-BAR

(8 Required)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Structures	Cu. Yd.	1.2
Reinforcement Bars	Lbs.	170
Expansion Bolts	Each	16
Box Culvert End Section, Culvert No. 3	Each	1

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAI ROUTE 80
(I-80 AT MINOOKA INTERCHANGE)
CULVERT NO. 3
8'X5' BOX CULVERT - RAMP A
EXTENSION DETAILS

SCALE: None
DATE: 2/10/06

DRAWN BY: M. Tryon CHECKED BY: A. Yargicoglu