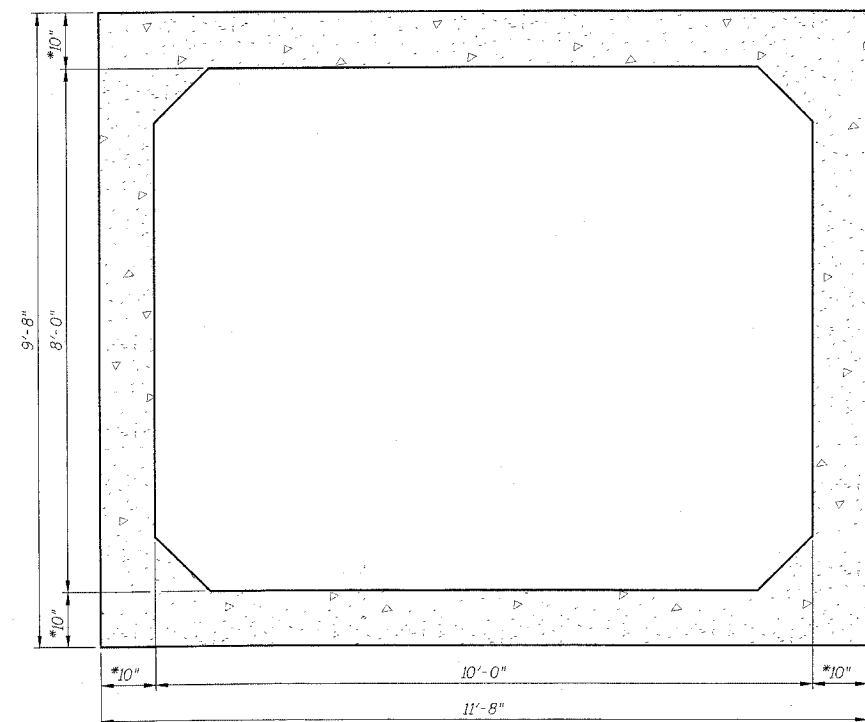
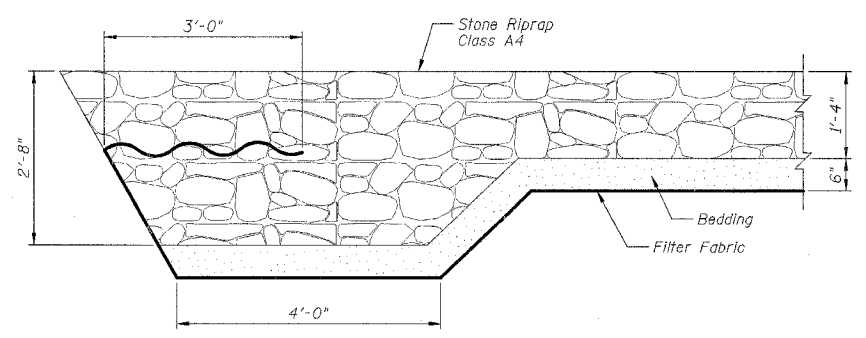


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
627	(I-1) BR & I	LA SALLE	106	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET NO. A2
OF 6 SHEETS



SECTION THRU BARREL
*Confirm slab & wall thickness with precaster.

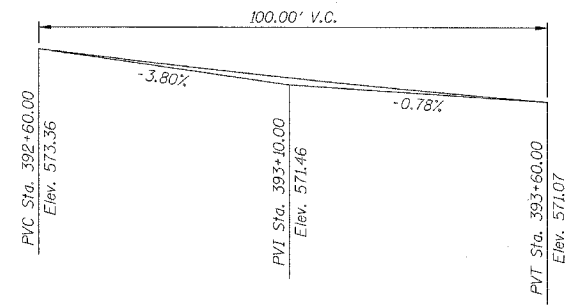


CLASS A4 STONE RIPRAP DETAIL

WATERWAY INFORMATION

Drainage Area (Sq. Mi.) = 0.53 Existing Low Grade Elevation = 570.97 ft. @ Sta. 394+00
Proposed Low Grade Elevation = 570.97 ft. @ Sta. 394+00

Flood Year	Freq. C.F.S.	Opening (Sq. Ft.)		H.W.E.		Head-Ft.		Headwater El.		
		Ex. Nat.	Pr. Nat.	Ex. Nat.	Pr. Nat.	Ex. Nat.	Pr. Nat.	Ex. Nat.	Pr. Nat.	
Design	50	509	30	33	558.34	558.34	4.04	3.74	562.38	562.08
Base	100	590	32	35	558.51	558.51	5.14	4.30	563.65	562.81
Overlapping	-	-	-	-	-	-	-	-	-	-
Max. Calc.	500	787	35	38	558.82	558.82	7.66	5.64	566.48	564.46



PROFILE GRADE
F.A.P. Rte. 627 (IL 71) (Along E. Roadway)

GENERAL NOTES:

- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Cast-in-place concrete exposed edges shall be beveled 3/4 in.
- Class SI concrete shall be used throughout.
- Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
- Reinforcement bars denoted (E) shall be epoxy coated.
- It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with the cost of "Concrete Structures."
- See Sheets A4 and A5 for soil boring data.
- Structural seal does not include design of precast elements.
- The precast concrete culvert sections shall be designed and manufactured in accordance with AASHTO M259 (ASTM C783).
- For backfilling and embankment, see Standard Specifications.
- End of precast section shall not have a bell or spigot.
- The apron end sections shown shall be cast-in-place.
- The pay item "Removal and Disposal of Unsuitable Material" shall include the excavation of unsuitable material to the top of the existing rock at Elevation +551.40 for a width of approximately 15'-8" within the limits of the proposed cast-in-place end-section as shown. If the distance between the 1'-0" of CA-7 and the top of the existing rock is less than 6", CA-7 should be placed instead of CA-1. The actual amount shall be determined in the field by the Engineer.
- The pay item "Porous Granular MATERIAL" shall include the placement of the CA-1 and CA-7 as shown in the Elevation View. The width for the "Porous Granular MATERIAL" shall be approximately 15'-8" wide under the culvert. The "Porous Granular MATERIAL" shall be within the limits of the toe wall as shown under the proposed cast-in-place apron end-section. The actual amount shall be determined in the field by the Engineer.
- Contractor to confirm all precast culvert dimensions with the supplier before starting construction.
- The cost of removing the existing boulder (downstream end) to facilitate the construction of the proposed cast-in-place concrete apron end-section is included with "Stone Riprap, Class A4".
- The existing plans are provided for informational use only.

TOTAL BILL OF MATERIALS

ITEMS	UNITS	TOTAL
Removal & Disposal of Unsuitable Material	Cu Yd	88
Porous Granular MATERIAL	Cu Yd	88
Stone Riprap, Class A4	Sq Yd	105
Filter Fabric	Sq Yd	105
Removal of Existing Structures No. 1	Each	1
Rock Excavation for Structures	Cu Yd	1.0
Reinforcement Bars	Pound	3130
Reinforcement Bars Epoxy Coated	Pound	700
Concrete Structures	Cu Yd	35.0
Precast Concrete Box Culvert 10'x8'	Foot	70

NOTE:

Work this sheet with Sheets A1 and A3.

10'x8' PRECAST CONCRETE BOX CULVERT SECTION, DETAILS, GENERAL NOTES AND BILL OF MATERIALS

**IL ROUTE 71
OVER TRIBUTARY TO ILLINOIS RIVER
F.A.P. ROUTE 627 - SEC. (I-1) BR & I
LA SALLE COUNTY
STATION 393+00.00**

DESIGNED BY J.M.L.	<p>3700 McGraw Drive Bloomington, Illinois 61704 309/883-9432, 309/883-6711 fax</p>	FILE NO. 24-6772
DRAWN BY D.J.M.		DATE 05-12-06
CHECKED BY M.S.W.		SHEET NO. 30 of 106