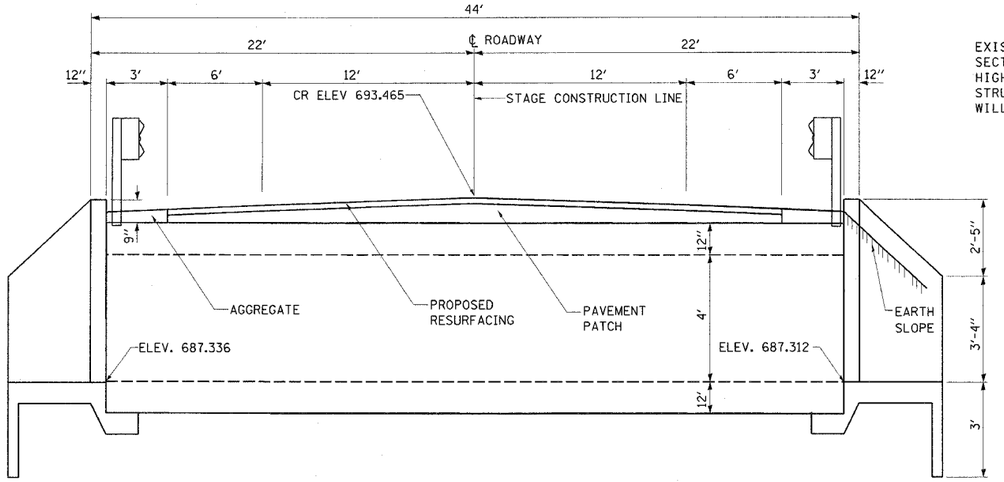
CONTRACT NO. 74225

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	*	MACON	31	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* (101)RS-3, 101B-1



ELEVATION

DIMENSION AT RIGHT ANGLES TO ℄ ROADWAY

EXISTING STRUCTURE: S.N. 058-8309 WAS BUILT IN 1975 UNDER FAP ROUTE 320, SECTION 101B. THE EXISTING STRUCTURE CONSISTS OF A 6 FEET WIDE BY 4 FEET HIGH DOUBLE BARREL CAST IN PLACE CONCRETE BOX CULVERT. THE EXISTING STRUCTURE IS TO BE REMOVED AND REPLACED. DURING CONSTRUCTION, TRAFFIC WILL BE MAINTAINED USING STAGE CONSTRUCTION.

STATION 149+88.5
BUILT 2007 BY
STATE OF ILLINOIS
F.A.P. RT. 320 SEC. 101RS-3, 101 B-1
PROJ.
LOADING HS20
STR. NO. 058-2011

NAME PLATE

See Std. 515001

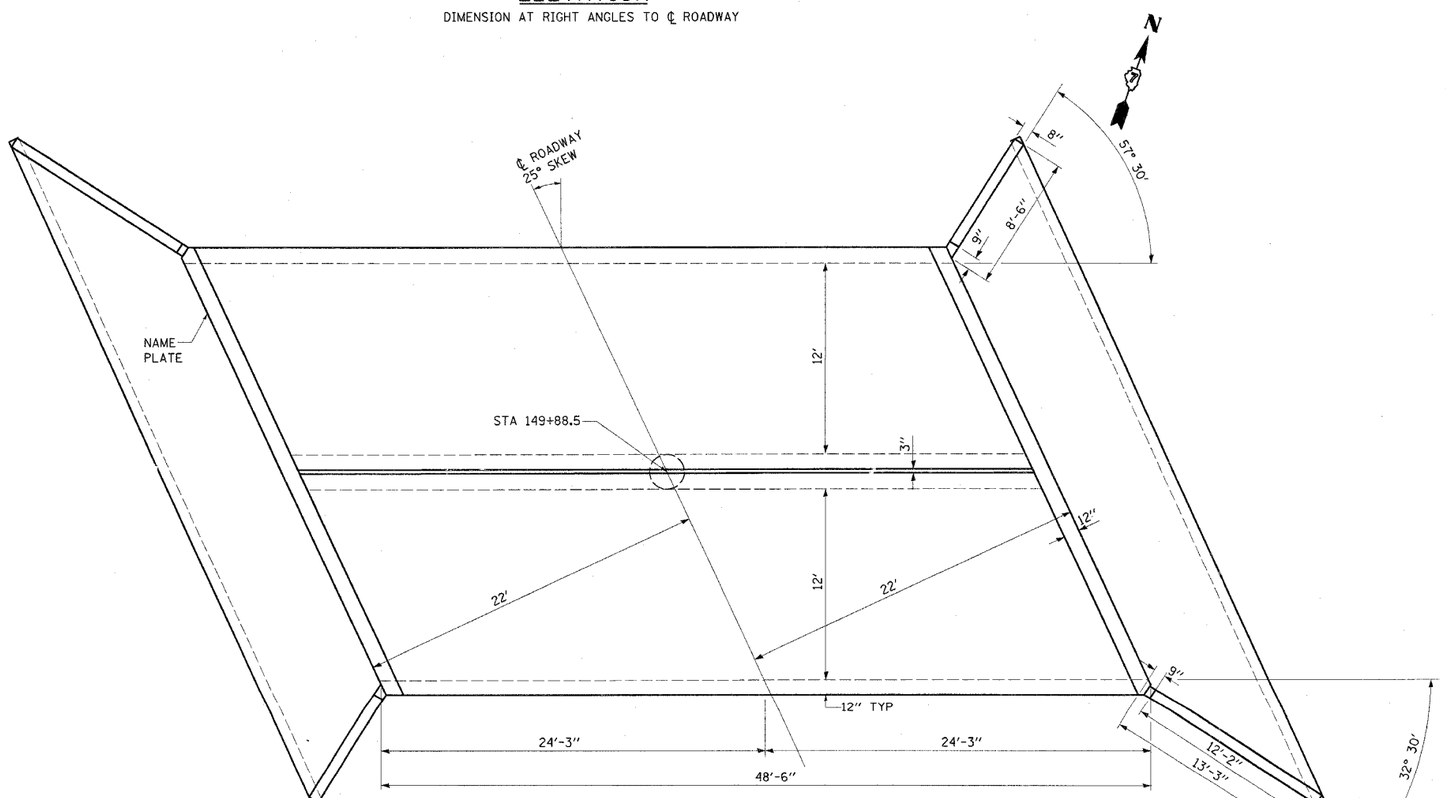
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	EACH	1
Precast Concrete Box Culvert 12 x 4 (M273)	FOOT	70
Box Culvert End Sections (Special)	EACH	2
Temporary Soil Retention System	SQ FT	224
Name Plates	EACH	1

BILL OF MATERIAL

(FOR INFORMATION ONLY)

ITEM	UNIT	TOTAL
Concrete Apron Headwall, End Wingwalls Section	CU YD	40.5
Wire Mesh	SQ FT	927.2



PLAN

The design fill height for this box culvert is 1 foot. The Precast Concrete Culvert End Sections shall conform to the requirements of AASHTO M 273

The joints between precast box sections shall be sealed all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place and protected duirng the backfilling process.

The cost of the concrete to fill the 3" gap between the precast boxes shall be included in the cost of the precast box culvert.

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

Allow 50#/sq.ft for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 65,000 psi (welded wire fabric)

PRECAST UNITS

f'c = 5,000 psi
fy = 65,000 psi (welded wire fabric)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DOUBLE 12'X4' BOX CULVERT
AT STA 149+88.5
(SKEWED 25° LT. FWD. WITH ROADWAY)

STR. NO. 058-2011

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 2/6/2007
FILE NAME = c:\pwworking\74225d\structdetails_74225.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = toeslayck