

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
132	1BR-1	SALINE	114	36
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT AID	

083-0018 STR

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

The top surface of the beams shall be finished in accordance with Article 903.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

Expansion bolts shall consist of self-drilling expansion anchors and 3/4" x 4" hooked bolts.

Reinforcement bars shall conform to the requirements of AASHTO M31, Grade 60.

Limits of Waterproofing Membrane System shall be 6" beyond both ends of deck and out to out of deck.

**STATION 102+28.00  
BUILT BY  
STATE OF ILLINOIS  
F.A. RT. 132 SEC. 18-DR  
LOADING HS20  
STR. No. 083-0018**

**NAME PLATE**  
Sht. 213

\*\*Structure Number to be applied by District.

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Alternating Concrete Surface Course Class I	Sq. Yd.	17	11	28
Concrete Removal	Cu. Yd.		11	11
Class II Concrete	Cu. Yd.		15.8	15.8
Precast Concrete Bridge Slab	Sq. Ft.	239		239
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1067		1067
Steel Reinforcing Bars	Lbs.	159		159
Reinforcement Bars	Feet	1900	1800	3700
Removal of Existing Superstructures	Each	1		1
Waterproofing Membrane System	Sq. Yd.	122		122
Name Plates	Each	1		1
Portland Cement Mortar Jointing Course	Lbs.	323		323
Expansion Bolts 3/4"	Each	32		32
Temporary Guardrail	Lin. Ft.	33		33
Temporary Supporting System	L. Sum	1		1

**DESIGN STRESSES**

**PRECAST PRESTRESSED UNITS**

FC = 5,000 psi  
 Fcl = 4,000 psi  
 Fst = 270,000 psi (1/2 strands)  
 Fsl = 180,000 psi (1/4 strands)

**FIELD UNITS**

FC = 5,500 psi  
 Fcl = 4,500 psi  
 Fst = 200,000 psi  
 Fsl = 140,000 psi

**PRECAST UNITS**

FC = 4,500 psi  
 Fcl = 3,500 psi  
 Fst = 200,000 psi  
 n = 6

**WATERWAY INFORMATION**

Drainage Area: 2000 Acres  
 Design Discharge (50 yr. HWE): 1450 CFS  
 Existing Opening (below 50 yr. HWE): 210 Sq. Ft.  
 Required Opening (below 50 yr. HWE): 200 Sq. Ft.  
 Proposed Opening (below 50 yr. HWE): 220 Sq. Ft.  
 Crested Head for Design Flood: 25 Ft.  
 100-Year Discharge: 1860 CFS  
 Crested Head for 100-Year Flood: 25 Ft.

**DESIGNED** L. S. MSUEH  
**CHECKED** L. S. MSUEH  
**DRAWN** J.H.  
**CHECKED** L. S. MSUEH

**APPROVED**

**PROPOSED GRADE PROFILE F.A.R.T.E. 132**  
 (to end to end of Appn Sloops)

**GENERAL PLAN & ELEVATION**  
**F.A.R.T.E. 132 OVER BRIER CREEK**  
**F.A.R.T.E. 132 SEC. 18-DR**  
**SALINE COUNTY**  
**STA. 102+28.00**

**LOCATION SKETCH**