

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(18B)I	FULTON	50	12
STA. 252+75		TO STA. 262+40		
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT				

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		20.5	20.5
Concrete Structures	Cu. Yd.		20.9	20.9
Bridge Deck Grooving	Sq. Yd.	1103		1103
Protective Coat	Sq. Yd.	1174		1174
P.P.C. Deck Beams (17" Depth)	Sq. Ft.	1292		1292
P.P.C. Deck Beams (27" Depth)	Sq. Ft.	4218		4218
P.P.C. Deck Beams (33" Depth)	Sq. Ft.	5042		5042
Reinforcement Bars, Epoxy Coated	Pound	14720	1620	16340
Bar Splicers	Each	308	20	328
Steel Railing, Type SM	Foot	641		641
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	45		45
Epoxy Crack Injection	Foot		286	286
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.		106	106
Concrete Wearing Surface, 5"	Sq. Yd.	1174		1174

**LOADING HS20-44**

No allowance for future wearing surface.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications.

**DESIGN STRESSES**

**FIELD UNITS**

$f'c = 3500$  psi  
 $f_y = 60000$  psi (Reinforcement)  
 $f'c = 5000$  psi (Concrete Wearing Surface)

**PRECAST PRESTRESSED UNITS**

$f'c = 5000$  psi  
 $f'ci = 4000$  psi  
 $f's = 270000$  psi ( $\frac{1}{2}$ "  $\phi$  low lax strands)  
 $f'si = 201960$  psi ( $\frac{1}{2}$ "  $\phi$  low lax strands)

**GENERAL NOTES**

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.

The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the conditions of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on new deck beams, a detailed procedure shall be submitted to the Engineer for approval.

The procedure shall include calculations sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with "Removal of Existing Superstructures".

Reinforcement bars designated (E) shall be epoxy coated. Repair of pier caps shall be completed prior to placement of the new deck beams.

No in-stream work will be allowed on this project.

**GENERAL NOTES AND BILL OF MATERIAL**  
**F.A.P. ROUTE 317 (U.S. 24)**  
**OVER OTTER CREEK**  
**SECTION (18B)I**  
**FULTON COUNTY**  
**STATION 257+54.33**  
**STRUCTURE NO. 029-0005**