

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 1
FA 686		JACKSON	12	5	6 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract Number: 78019

GENERAL NOTES

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 condition of the beams when developing construction procedures.

If the contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new or existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. If heavy equipment will be placed on new PPC deck beams, the following shall be done prior to placement of the timber mats: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys.

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

Reinforcement bars designated (E) shall be epoxy coated. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Temporary concrete barrier shall only be anchored into the overlay and not into the PPC deck beams.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

** This Bill of Material is configured for the removal of damaged PPC deck beams and their replacement with a composite steel HP section. The contractor has the option of choosing instead to replace the damaged PPC deck beams in kind per details shown on sheets 5 and 6 of 6. No adjustment in cost for the specified composite steel HP system will be allowed.

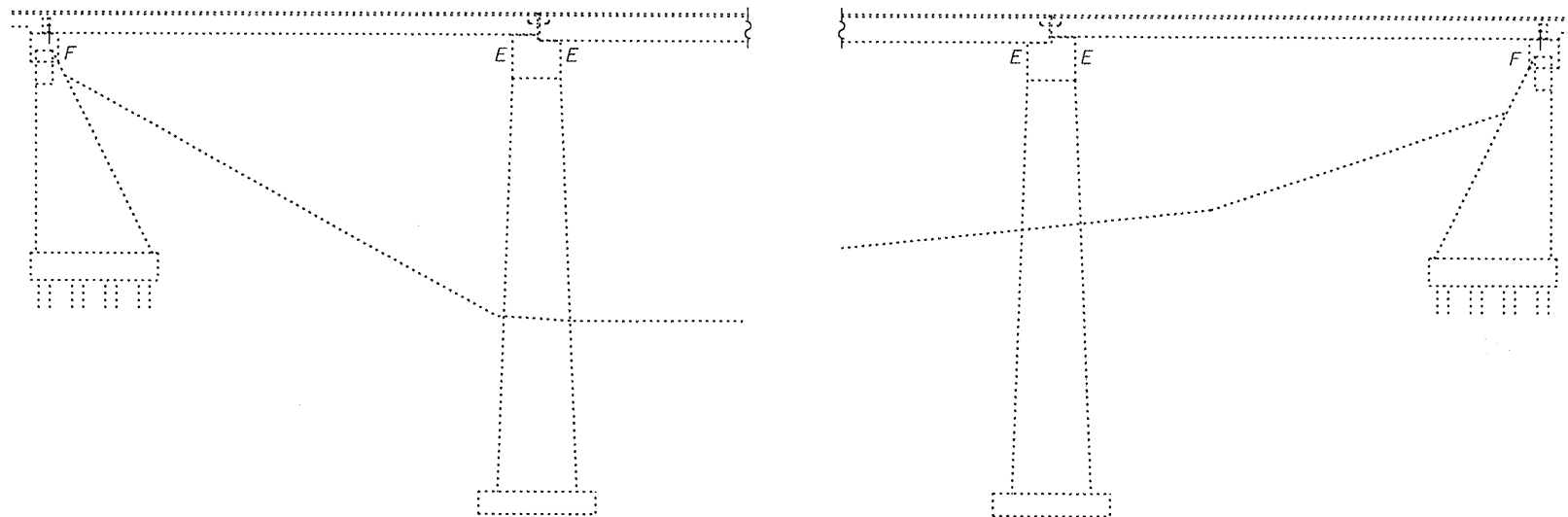
Compensation under the contract bid items for Concrete Superstructure, Reinforcement Bars, Epoxy Coated, Stud Shear Connectors and Furnishing and Erecting Structural Steel shall cover the cost of the PPC Deck Beams (21" Depth) and PC Mortar Fairing Course.

**** TOTAL BILL OF MATERIAL**

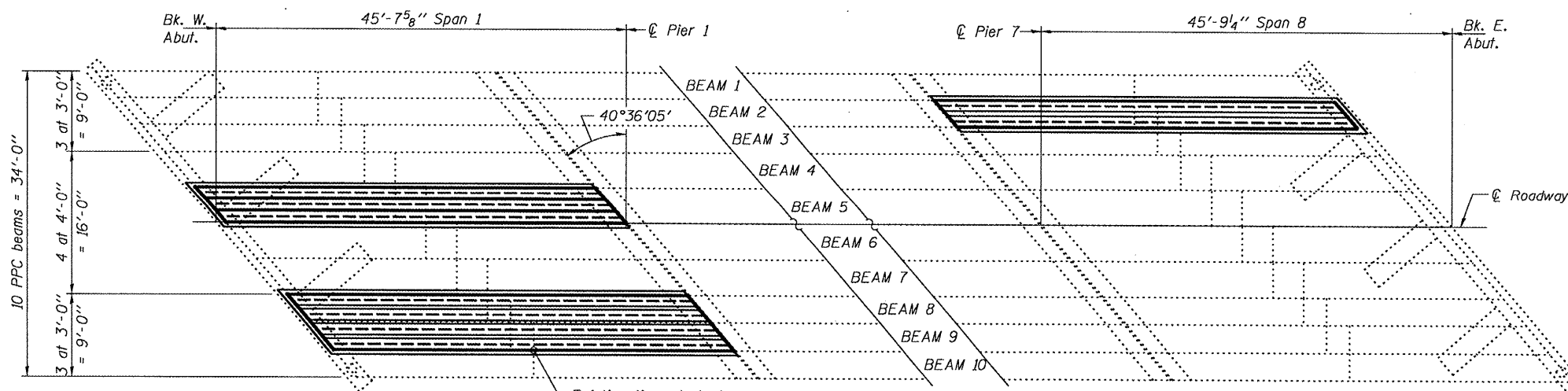
ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	579
Concrete Superstructure	Cu. Yd.	13.9
HMA Surface Removal	Sq. Yd.	15.1
HMA Surface Course, Mix "C", M ₅₀	Sq. Yd.	10.2
Reinforcement Bars, Epoxy Coated	Pound	2160
Stud Shear Connectors	Each	810
* Asbestos Bearing Pad Removal	Each	14
Waterproofing Membrane System	Sq. Yd.	80.4
Furnishing and Erecting Structural Steel	Pound	29260
Polymer Concrete	Cu. Ft.	9.9
Silicone Joint Sealer, 2"	Foot	89

* Where required, cut existing asbestos bearing pads flush with existing beams to remain.

PLAN AND ELEVATION
FA 686 (IL RTE 4)
JACKSON COUNTY
SN 039-0042



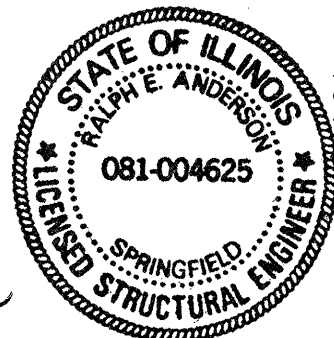
PARTIAL ELEVATION



Existing tie rods to be cut (Typ.) See detail on sheet 4 of 6.

PARTIAL PLAN

Span 1, beams 5, 8 & 9 to be removed and replaced with HP14x73.
Span 8, beam 2 to be removed and replaced with HP14x73.
Existing neoprene expansion joints at Piers 1 & 7 to be removed and replaced with silicone joint sealer.



Expires: November 30, 2008

DESIGN STRESSES

$f_y = 36,000$ psi (M270 Gr. 36)
 $f_y = 60,000$ psi (Reinforcement)
 $f'_c = 3,500$ psi

DESIGNED	Alvan T. Holloway
CHECKED	STB
DRAWN	baliva
CHECKED	ATH STB

EXAMINED	AUGUST 30, 2007
PASSED	Ralph E. Anderson

Rev. 10-26-07