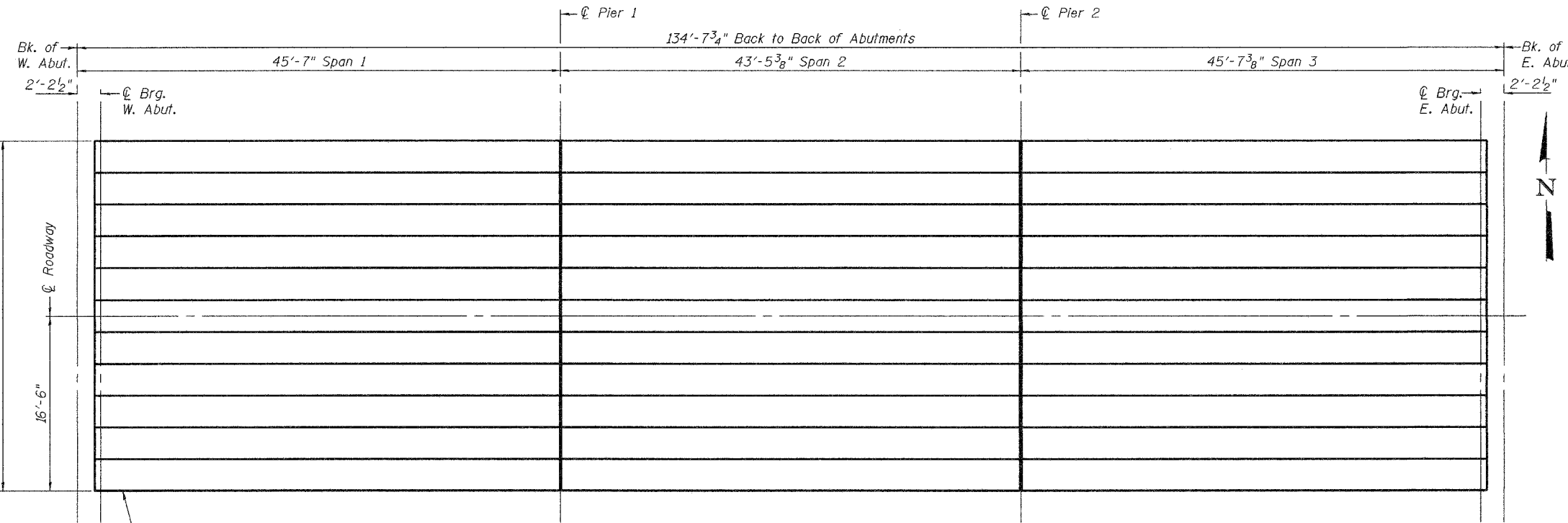
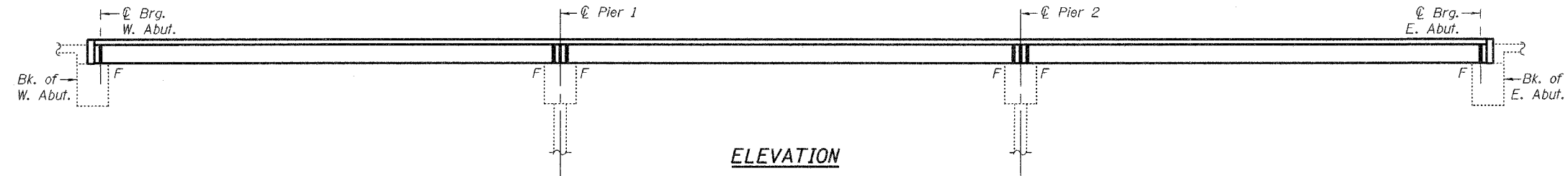


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Bond	22	22
SHEET NO. 1 6 SHEETS				
Contract Number: 76860				



Attach new name plate to backside of 8" rail element.

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 AASHTO M31 or M322, Grade 60.

Concrete sealer shall be applied to the exterior vertical face of each fascia beam. Cost included with PPC Deck Beams (21").

All construction joints shall be bonded.

No instream work will be allowed on this project.

Repair of the pier caps shall be completed prior to placement of the new deck beams.

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

If the contractors procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, 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 beams. To distribute load to multiple beams and protect the concrete, 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 cranes or other heavy equipment will be placed on new beams prior to placement of the concrete wearing surface, it shall be done after the dowel rods are grouted and cured for 24 hours minimum and prior to grouting the shear keys. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing Superstructures	Each	1
PPC Deck Beams (21" Depth)	Sq. Ft.	4,329
Concrete Structures	Cu. Yd.	3.5
Reinforcement Bars, Epoxy Coated	Pound	6,070
Steel Bridge Rail, Type SM	Foot	269
Concrete Wearing Surface, 5"	Sq. Yd.	457
Bridge Deck Grooving	Sq. Yd.	451
Formed Concrete Repair (≤5")	Sq. Ft.	151
Name Plates	Each	1

LOADING HS20-44

No allowance for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax strands)
 $f'_{si} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax strands)

DESIGNED	<i>Paul J. Johnson</i>
CHECKED	VICTOR H. VELTZ
DRAWN	<i>[Signature]</i>
CHECKED	PSJ VHV

EXAMINED	May 10, 2005 <i>John A. Morris</i>
PASSED	<i>Robert E. Anderson</i>



Expires: November 30, 2006

STATION 1808+75.00
BUILT 20 BY
STATE OF ILLINOIS
F.A. RT. 785 SEC. 138BR-3
LOADING HS20
STR. NO. 003-0025

NAME PLATE
(See Std. 515001)

PLAN AND ELEVATION
IL 140 / INDIAN CR.

F.A. RT. 785
SEC. 138BR-3
BOND COUNTY
STA. 1808+75.00
SN 003-0025