

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
S.B.L.	*	Ogle	40	16	11 SHEETS
F.A.L.					
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

\* Section 119BR-3 Contract #64A47

**GENERAL NOTES**

If the contractor's 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 other 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.

Reinforcement bars shall conform to the requirements of AASHTO M-31, or M-322, Grade 60.

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 work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing structure construction plans and subsequent repair plans are available from the IDOT District office by written request. The contractor shall be responsible for obtaining and reviewing the plans prior to construction.

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

All construction joints shall be bonded.

No instream work will be allowed on this project.

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 for removal and replacement of the superstructure.

The contractor is advised that due to the lack of vertical reinforcement in the back of the abutment walls a temporary bracing system must be provided prior to the removal of the existing PPC deck beams in order to ensure stability of the abutments. The details and calculations must be sealed by an Illinois licensed structural engineer and submitted to the Engineer for his approval. Cost included with Removal of Existing Superstructures.

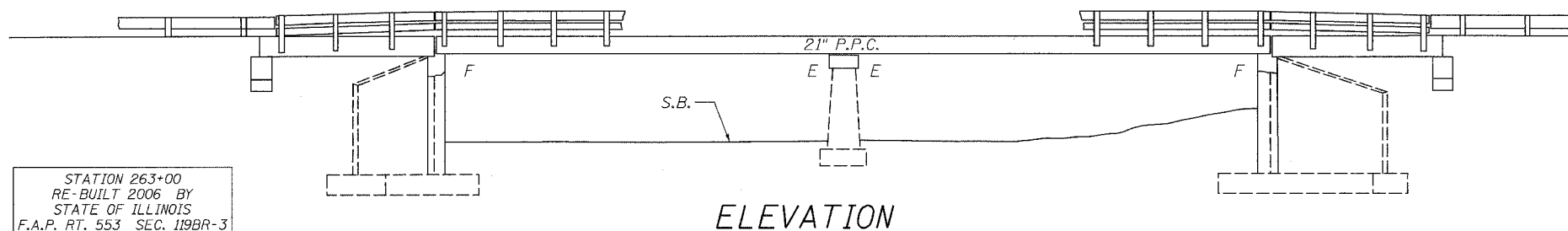
Existing name plate shall be cleaned and relocated adjacent to new name plate. Cost included with name plates.

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

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Removal of Existing Superstructures	Each	1
Bridge Deck Grooving	Sq Yd	323
Concrete Wearing Surface	Sq Yd	333
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	3155
Reinforcement Bars, Epoxy Coated	Pound	4560
Steel Bridge Rail, Type SM	Foot	273
Formed Concrete Repair (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	10
Formed Concrete Repair (Depth Greater Than 5 Inches)	Sq. Ft.	6
Name Plates	Each	1
Bar Splicers	Each	104
Bridge Joint System Expansion 1 5/8"	Foot	36
Protective coat	Sq. Yd.	399

GENERAL PLAN AND ELEVATION  
F.A.P. 553 (IL 72)  
OVER STILLMAN CREEK  
SECTION 119BR-3  
OGLE COUNTY  
STR. NO. 071-0042

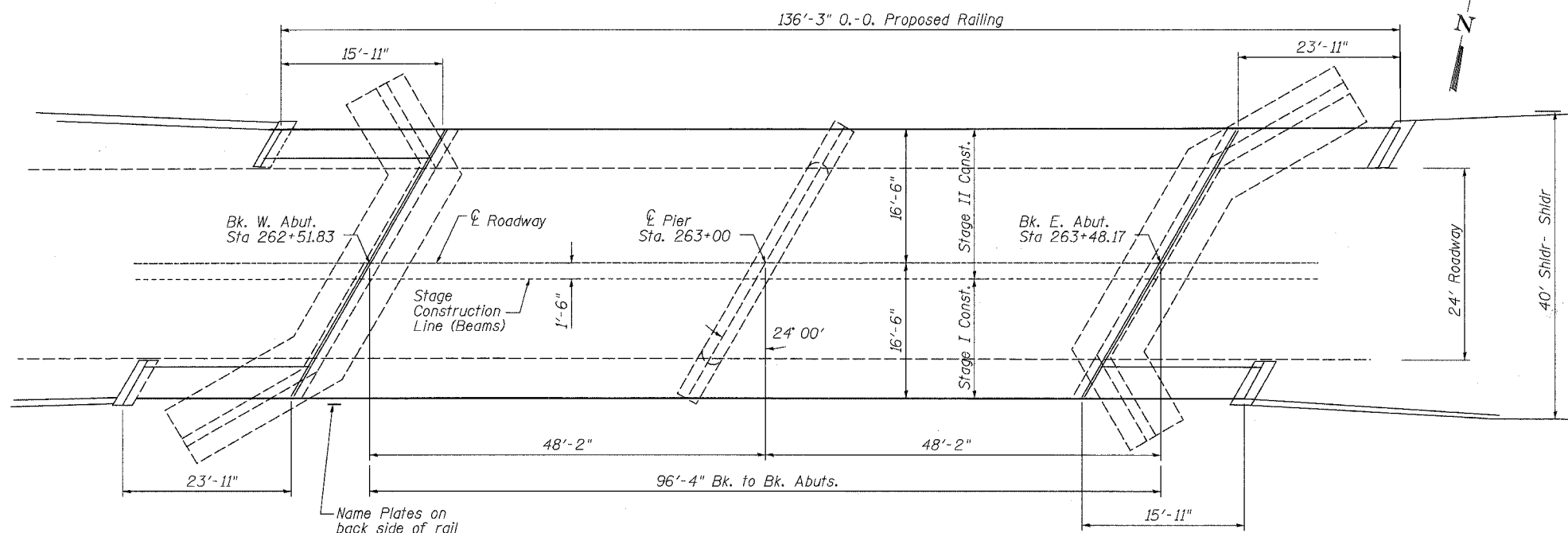


**ELEVATION**

STATION 263+00  
RE-BUILT 2006 BY  
STATE OF ILLINOIS  
F.A.P. RT. 553 SEC. 119BR-3  
LOADING HS20-44  
STR. NO. 071-0042

**LETTERING FOR NAME PLATE**

SEE STD. 515001



**PLAN**

**LOADING HS20-44 (New Construction)**

No Allowance for Future Wearing Surface

**DESIGN SPECIFICATIONS (New Construction)**

2002 AASHTO

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i. (Reinforcement)

**PRECAST PRESTRESSED UNITS**

$f'_c = 5,000$  p.s.i.  
 $f'_{ci} = 4,000$  p.s.i.  
 $f'_s = 270,000$  p.s.i. (1/2" Low Lax Strands)  
 $f'_{si} = 201,960$  p.s.i. (1/2" Low Lax Strands)

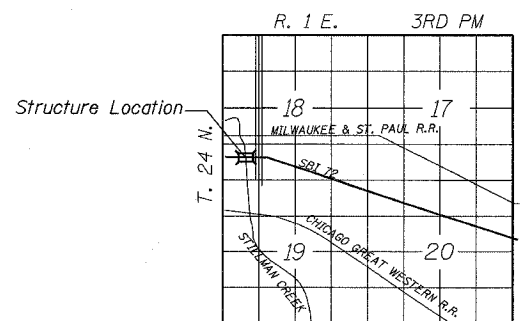
**WATERWAY INFORMATION**

(For Information Only)

Drainage Area 20,500 Acres

Character Rolling, hilly, sand, clay, wooded & cultivated

Existing Opening 574 Sq. Ft.  
 $Q(50) = 2500$  cfs



**LOCATION SKETCH**

**WENDLER ENGINEERING SERVICES, INC.**

Illinois Professional Design  
Firm No. 184-00848  
Bridge plan sheets  
1 thru 11 Only



Scott A. Brown 8/20/05  
DATE

SCOTT A. BROWN  
DIXON, ILLINOIS  
ILLINOIS LICENSED STRUCTURAL  
ENGINEER NO. 081-005981  
EXPIRES 11-30-2006

DESIGNED	SB
CHECKED	RB
DRAWN	BH, BS
CHECKED	SB