

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 840	136 BR-1	IROQUOIS	45	11	9 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

Contract #66668

GENERAL NOTES

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

The Contractor is advised that the existing PPC Deck Beams are in 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 cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

The minimum thickness of the Bituminous overlay shall be 2" and varies as required to adjust for the new profile grade and actual beam camber.

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

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M 300, Type 1. Cost included with "Furnishing and Erecting Structural Steel".

The top surface of the beams shall be finished according to Article 504.06 of the 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, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".

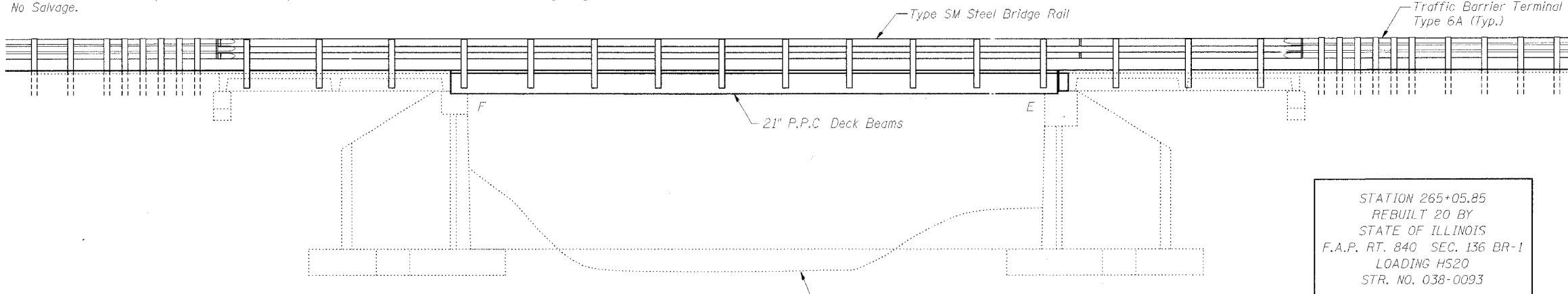
All construction joints shall be bonded.

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

Bench Mark: Chisled "□" in headwall of bridge at intersection of Route 49 and township road. ±1/4 mile south of Shavetail Creek Bridge. Sta. 606+96, 275' Ri. Elev. 647.40

Existing Structure: S.N. 038-0093. Built as SBI Route 49, Sec. 136 B in 1927. Superstructure replaced and widened in 1971. Single span 51'-9 5/8" bk. to bk. abutments (1927), 33'-0" o. to o. Precast prestressed concrete deck beams on R.C. closed abutments. Superstructure to be replaced. Traffic shall be maintained utilizing stage construction.

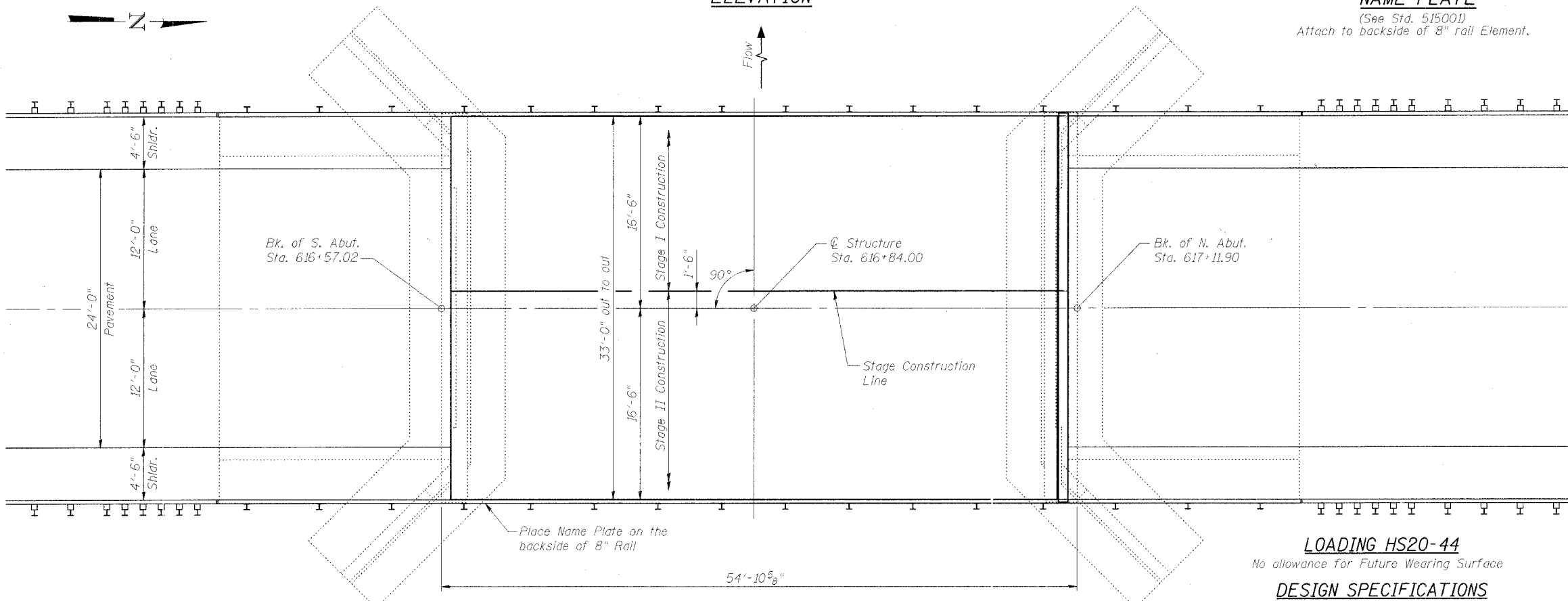
No Salvage.



STATION 265+05.85
REBUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 840 SEC. 136 BR-1
LOADING HS20
STR. NO. 038-0093

NAME PLATE
(See Std. 515000)
Attach to backside of 8" rail Element.

ELEVATION



PLAN

LOADING HS20-44
No allowance for Future Wearing Surface

DESIGN SPECIFICATIONS
2002 AASHTO 17th Edition

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 36,000 psi (structural steel)

PRECAST PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" low lax. strands)
f'si = 202,000 psi (1/2" low lax. strands)

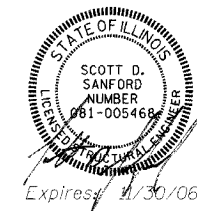
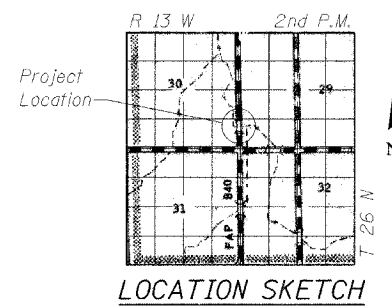
EXISTING UNITS
f'c = 3,000 psi
fy = 60,000 psi (reinforcement)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		1.9	1.9
Preformed Joint Seal, 2 1/2"	Foot	33		33
Concrete Structures	Cu. Yd.		1.9	1.9
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1729		1729
Bituminous Concrete Surface Course Superpave Mix "C," N50	Ton	33		33
Waterproofing Membrane System	Sq. Yd.	192		192
Reinforcement Bars Epoxy Coated	Lb.	100	370	470
Steel Bridge Rail, Type SM	Foot	187		187
Name Plates	Each	1		1
Furnishing and Erecting Structural Steel	Lb.	2570	110	2680
Asbestos Bearing Pad Removal	Each	22		22
Bar Splacers	Each	3	6	9
Portland Cement Mortar Fairing Course	Foot	523		523

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Temporary Concrete Barrier for Stage Construction
4. Superstructure Details
5. Superstructure Details
6. Type SM Steel Bridge Rail Side Mounted
7. Concrete Removal Details
8. North Abutment
9. Ear Splicer Assembly Details



ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION

FAP ROUTE 840 (IL 49) OVER SHAVETAILE CREEK
SECTION 136 BR-1 IROQUOIS COUNTY
STA. 616+84.00
S.N. 038-0093

REVISIONS	
NAME	DATE

SCALE: VERT. _____
HORIZ. _____
DATE: 9/27/05

DRAWN BY: HEBERLING
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

GREENE & BRADFORD, INC.
OF SPRINGFIELD

COMPUTER FILE NO.
SNO38-0093.GPE.dgn

PROJECT 03236 W012
11/3/05-MML

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 PLOT DATE = 12/27/2005
 PLOT TIME = 11:58 AM
 OPERATOR = RTRELOTT