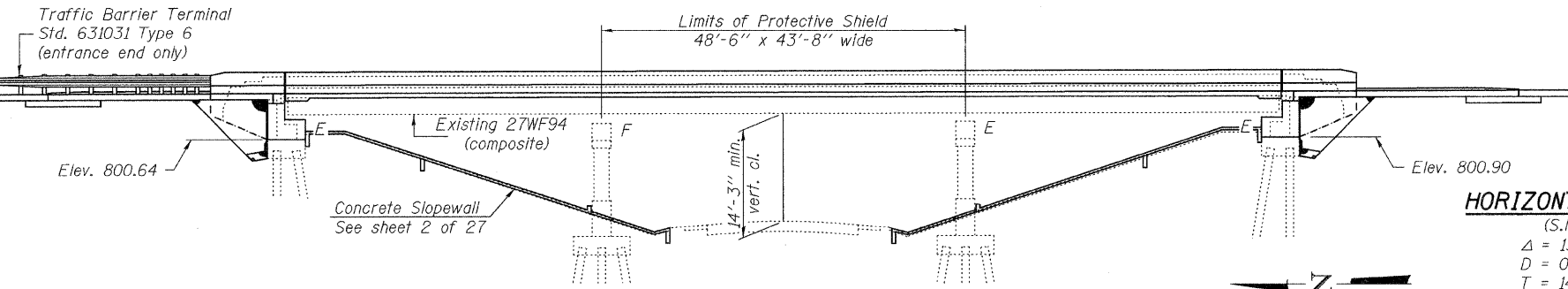


Bench Mark: TR 379B in the N.B. structure S.E. corner, steel plug; Elev. 810.62

Existing Structure: S.N. 037-0017 Built in 1966 as project I-74-2(54)30 Section 37-4HB-2. Structure is a three span wide flange bridge with spans of 41'-5" - 48'-6" - 41'-5". 135'-0" Back to Back abutments, 43'-8" Out to Out, supported on spill through abutments and multi column piers. Skew 6°-27'-38". The existing deck is to be removed and replaced. Traffic to be maintained utilizing stage construction.

No salvage.

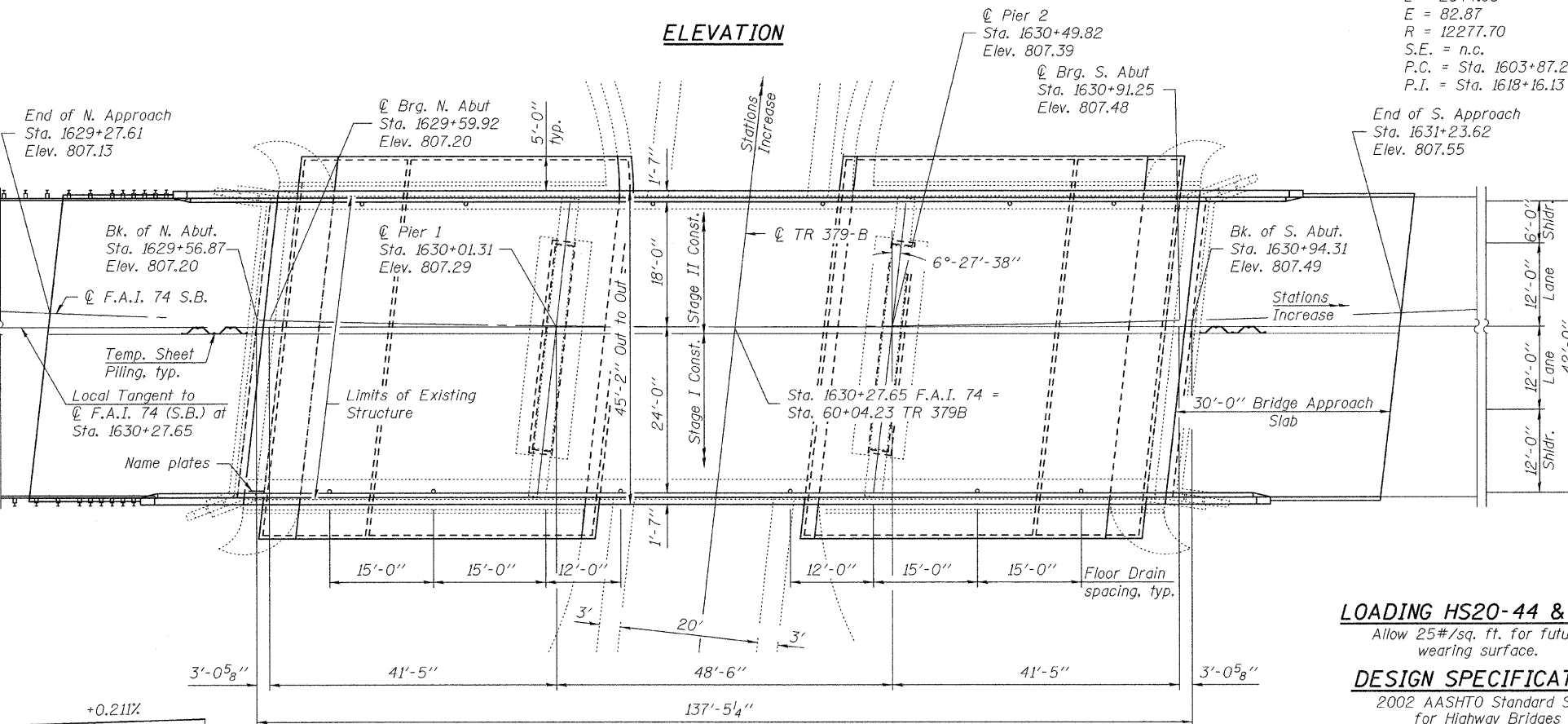


HORIZONTAL CURVE DATA

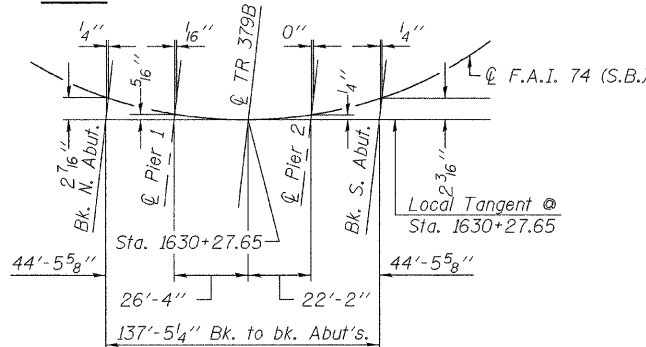
(S.N. 037-0017)

- $\Delta = 13^{\circ}16'35''$
- $D = 0^{\circ}28'00''$
- $T = 1428.88$
- $L = 2844.95$
- $E = 82.87$
- $R = 12277.70$
- S.E. = n.c.
- P.C. = Sta. 1603+87.25
- P.I. = Sta. 1618+16.13

ELEVATION



PLAN



OFFSET SKETCH

LOADING HS20-44 & ALT

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Spec. for Highway Bridges

DESIGN STRESSES

FIELD UNITS EXISTING STRUCTURE

- $f_c = 1,400$ psi
- $f_s = 20,000$ psi (reinforcement)
- $f_s = 20,000$ psi (structural steel)

FIELD UNITS NEW CONSTRUCTION

- $f_c = 3,500$ psi
- $f_y = 60,000$ psi (reinforcement)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.036g
Site Coefficient (S) = 1.0

GENERAL NOTES

No field welding is permitted except as specified in the contract documents. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the seat areas, front faces of backwalls and hatch blocks of the abutments.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

A minimum of one air monitor will be required to monitor abrasive blasting operations at this site, see special provision for Containment and Disposal of Lead Paint Cleaning Residues.

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will be required for this bridge.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures." All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing and new steel shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6. Slip-forming of the parapets is not allowed.

STATION 1630+27.65
RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 37-4HB-1
LOADING HS20-44 & ALT.
STRUCTURE NO. 037-0017

NAME PLATE

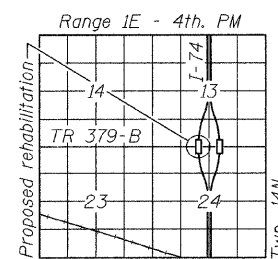
See Std. 515001.

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

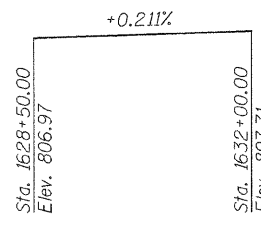
INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Details
- 3 Stage Construction Details
- 4 Temporary Concrete Barrier
- 5-7 Top of Slab Elevations
- 8-9 Top of Approach Slab Elevations
- 10-12 Superstructure
- 13-14 Bridge Approach Slab Details
- 15 Preformed Joint Strip Seal
- 16-18 Structural Steel
- 19 Bearing Details
- 20-21 N. & S. Abutment Concrete Removal
- 22-25 N. & S. Abutments
- 26 Bar Splicer Assembly Details
- 27 Cantilever Forming Brackets

GENERAL PLAN & ELEVATION
I-74 OVER TR 379-B
F.A.I. RTE. 74 - SEC. 37-4HB-1
HENRY COUNTY
STA. 1630+27.65
STRUCTURE NO. 037-0017 (S.B.)



LOCATION SKETCH



PROFILE GRADE

DESIGNED	<i>M.R.B.</i>
CHECKED	<i>Michael D. Kelly</i>
DRAWN	W.D. Collins / M.B.M.
CHECKED	N.R.B./M.D.R./G.R.A.

September 29, 2009
EXAMINED *Thomas J. Kelly*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2010

SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	Henry	148	67
27 SHEETS	CONTRACT NO. 64264			ILLINOIS FED. AID PROJECT	