

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 1
FAI 74	(57-22) BR-3	MCLEAN	42	12	24 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #70672

Bench Mark: Chiseled square located on the top of N.E. wingwall of the North structure over Kickapoo Creek on I-74, Sta. 1040+05.7, 69.1' left, Elev. 757.87.

Existing Structure: S.N. 057-0125, originally built in 1968 as F.A.I. Route 74, Section 57-22B. The existing is a three-span continuous, non-composite, rolled steel girder structure on pile bent abutments and solid wall piers on spread footings. The back to back abutment measures 191'-6" and the out to out of deck is 42'-0". The existing superstructure is to be removed and replaced. Traffic is to be maintained utilizing stage construction.

Salvage: The existing steel beams shall be salvaged and delivered to the LeRoy Maintenance Yard. To arrange for delivery, contact Rod Lashway at 309-962-4471. The splice in span 2 shall be unbolted. Cost included in Removal of Existing Superstructures.

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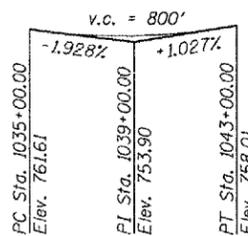
GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8"  $\phi$ , holes 15/16"  $\phi$ , unless otherwise noted.  
Calculated weight of Structural Steel = 138410 lbs. (AASHTO M270 Gr. 50) = 14100 lbs. (AASHTO M270 Gr. 36)  
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 (IL Modified). See Special Provisions  
If the Contractor elects to use cantilever forming brackets on the exterior beams, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.  
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.  
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 inside face of the back walls, the abutment seats, and the exposed front face and side faces of the abutments. The Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. 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 Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provisions for "Cleaning and Painting New Metal Structures".  
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. Slipforming of parapets will not be allowed.  
Up to 1/4" will be ground off the bridge deck and the bridge approach pavement. See special provisions.  
Reinforcement bars designated (E) shall be epoxy coated.

STATION 1039+00  
REBUILT 20 BY  
STATE OF ILLINOIS  
F.A.I. RT. 74 SEC. (57-22)BR-3  
LOADING HS20  
STRUCTURE NO. 057-0125 (E.B.)

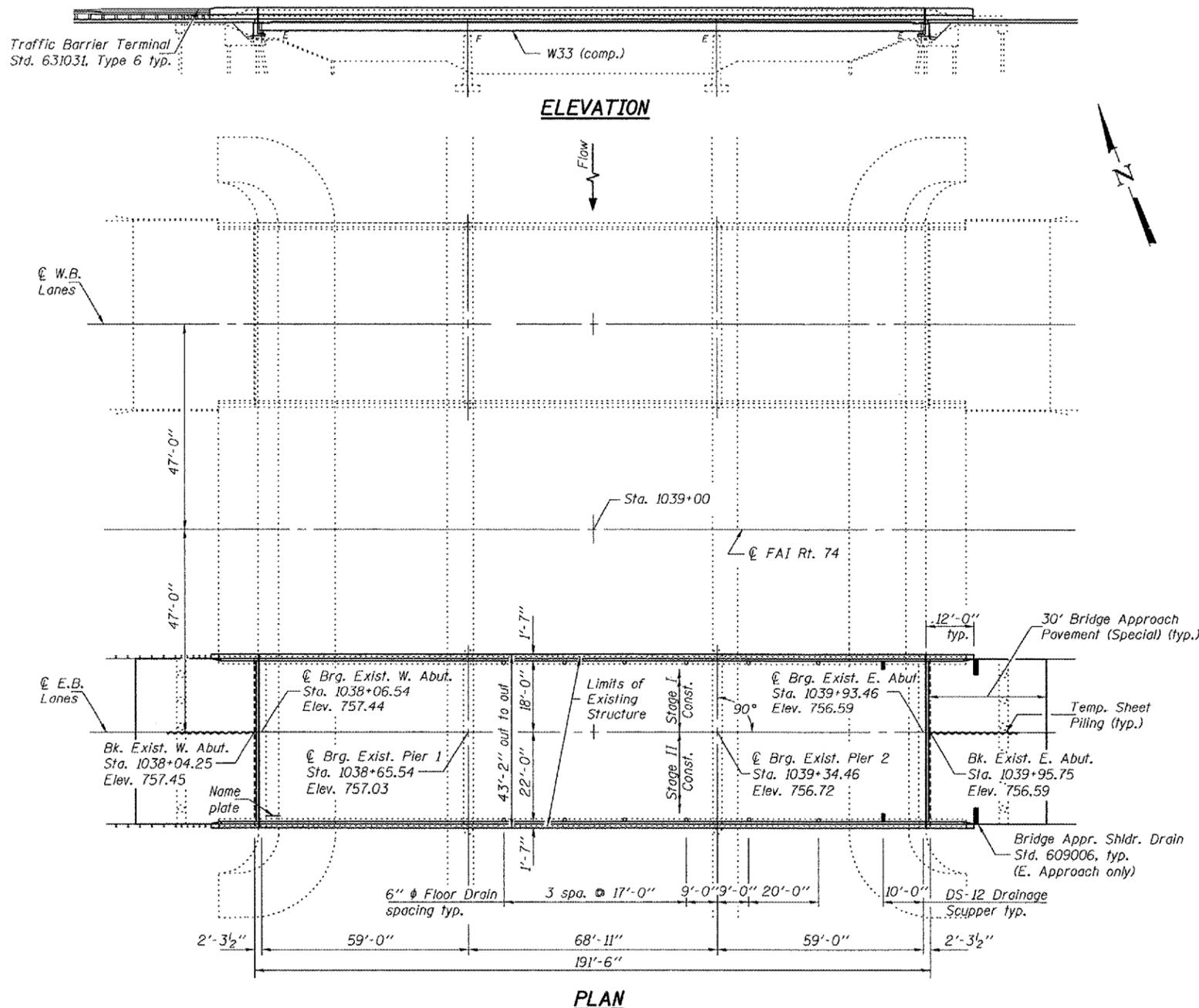
NAME PLATE

See Std. 515001  
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plate.



PROFILE GRADE

The profile grade shows the final elevations after grinding.



LOADING HS20-44 & ALT.  
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

New Construction

- $f'_c = 3,500$  psi
- $f_y = 60,000$  psi (reinforcement)
- $f_y = 50,000$  psi (M270 Grade 50)
- $f_y = 36,000$  psi (M270 Grade 36)

Existing Construction

- $f'_c = 3,500$  psi
- $f_y = 40,000$  psi (reinforcement)

SEISMIC DATA

Seismic Performance Category (SPZ) = A  
Bedrock Acceleration Coefficient (A) = 0.045g  
Site Coefficient (S) = 1.2



GENERAL PLAN & ELEVATION  
F.A.I. RT. 74 OVER  
KICKAPOO CREEK  
F.A.I. RT. 74 - SEC. (57-22)BR-3  
MCLEAN COUNTY  
STATION 1039+00  
STRUCTURE NO. 057-0125 (E.B.)

DESIGNED	Phuoc P. Nam
CHECKED	Stephan M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

EXAMINED  
PASSED



EXPIRES 11-30-2008