

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAI 74	(57-22) BR-2	McLEAN	42	12	23 SHEETS
FED. ROAD DIST. NO. 7		ILL. PROJ. NO.		FED. AID PROJECT	
Contract No. 70671					

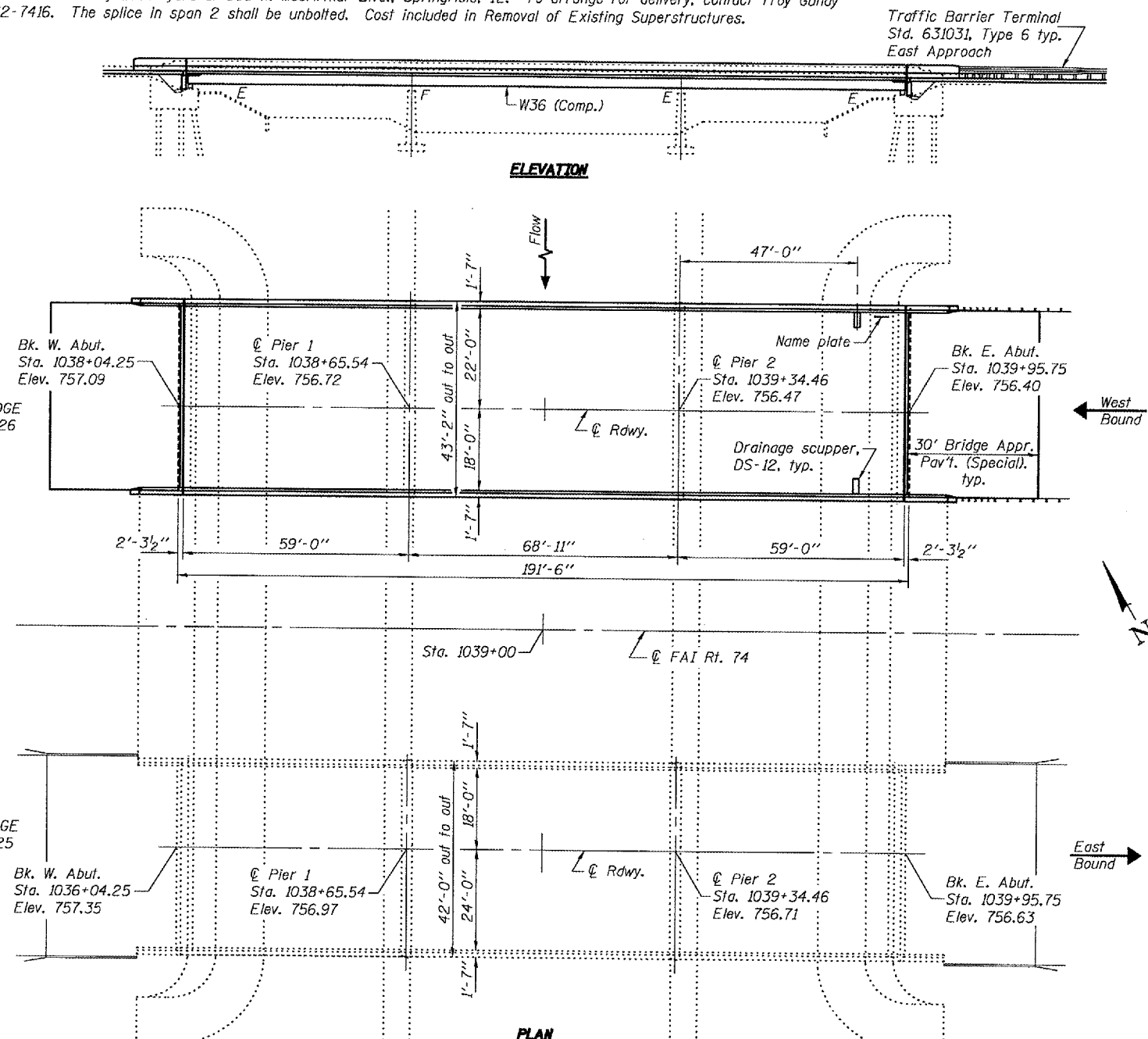
Benchmark: Chiseled square located on the top of N.E. wingwall of the North structure over Kickapoo Creek on I-74, Sta. 1040+05.7, 69.1' left, Elev. 757.87.  
Existing Structure: S.N. 057-0126, originally built in 1968 as F.A.I. Route 74, Section 57-22B. The existing structure is a three-span continuous, non-composite, rolled steel girder structure on pile bent abutments and solid wall piers on spread footing. The back to back abutment measured 191'-6" and the out to out of deck is 42'-0". The existing superstructure is to be removed and replaced. The roadway will be closed during construction.  
Salvage: The existing steel beams in span 1 and in span 2 up to approximately 60' from pier 1 shall be salvaged and delivered to the IDOT Day Labor yard at 505 N. MacArthur Blvd., Springfield, IL. To arrange for delivery, contact Troy Gundy at 217-782-7416. The splice in span 2 shall be bolted. 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 = 199,560 lbs. (AASHTO M270 Gr. 50) = 23,690 lbs. (AASHTO M270 Gr. 36)  
The structural steel and bearings are to be furnished under separate contract and erected under this contract.  
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 or girders, 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 existing abutment seats, and the exposed front face of the abutments.  
Cleaning and field painting of structural steel shall be done under a separate painting contract.  
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-2  
LOADING HS20  
STRUCTURE NO. 057-0126 (W.B.)

NAME PLATE

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		39.0	39.0
Removal of Existing Superstructures	Each			1
Concrete Removal	Cu. Yd.		30.1	30.1
Structure Excavation	Cu. Yd.		39.0	39.0
Concrete Structures	Cu. Yd.		26.1	26.1
Concrete Superstructure	Cu. Yd.	260.0		260.0
Bridge Deck Grooving	Sq. Yd.	1058		1058
Protective Coat	Sq. Yd.	1293		1293
Erecting Structural Steel	L. Sum	1.0		1.0
Stud Shear Connectors	Each	4500		4500
Reinforcement Bars, Epoxy Coated	Pound	61310	2430	63740
Bar Splicers	Each	88		88
Name Plates	Each	1		1
Erecting Elastomeric Bearing Assembly, Type I	Each	12		12
Erecting Elastomeric Bearing Assembly, Type II	Each	6		6
Anchor Bolt 1" $\phi$	Each	24		24
Anchor Bolt 1 1/2" $\phi$	Each	24		24
Slope Wall Removal	Sq. Yd.		120.0	120.0
Slope Wall 6"	Sq. Yd.		120.0	120.0
Diamond Grinding (Bridge Section)	Sq. Yd.	1050.0		1050.0
Geocomposite Wall Drain	Sq. Yd.		38.0	38.0
Pipe Underdrains for Structures, 4"	Foot		92.0	92.0
Drainage Scupper, DS-12	Each	2		2
Concrete Sealer	Sq. Ft.		731.0	731.0
Prefabricated Joint Strip Seal	Foot	84.0		84.0
Structural Repair of Concrete (Depth $\leq$ 5")	Sq. Ft.		40.0	40.0

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)

Existing Construction

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

SEISMIC DATA

Seismic Performance Category (SP2) = 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-2

McLEAN COUNTY

STATION 1039+00

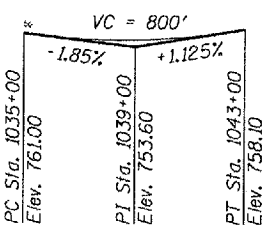
STRUCTURE NO. 057-0126 (W.B.)

DESIGNED *Duong H. C. C.*  
CHECKED *DWC/CCC*  
DRAWN *h.t. duong*  
CHECKED *DWC/CCC*

EXAMINED *[Signature]*  
PASSED *[Signature]*  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES

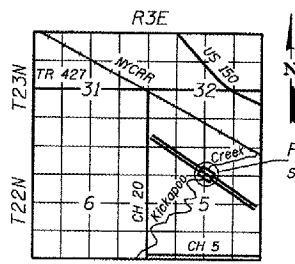


EXPIRES 11-30-2008



PROFILE GRADE

The profile grade shows the final elevations after grinding.



LOCATION SKETCH