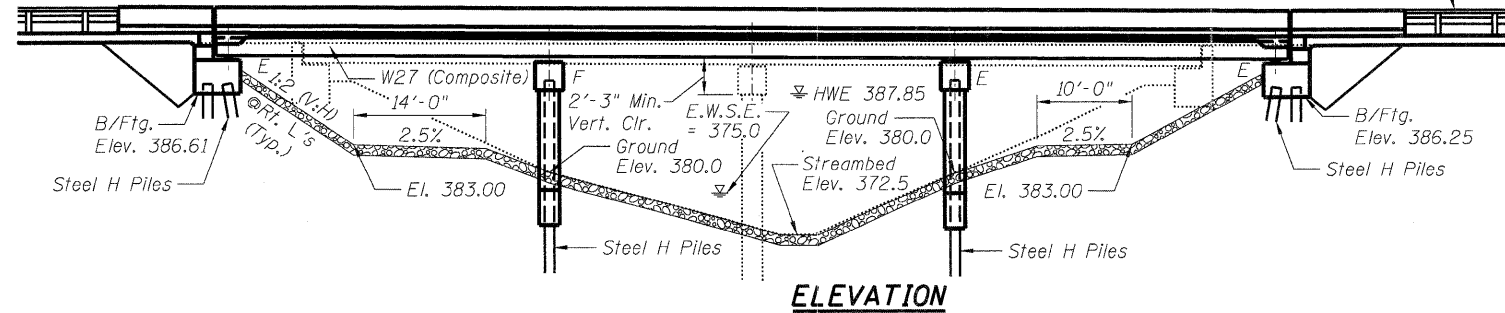


Bench Mark: WE-18 Chiseled square 8.1 miles east of Fairfield on the NE wingwall of Structure #096-0013 at Sta. 402+18, Offset 19.0' Rt. El. 393.396

Existing Structure: S.N. 096-0013 originally constructed in 1955 as SBI 15 Section (22,BR)B-1 at Sta. 402+80. Two span continuous structure with 7" reinforced concrete deck on a steel I-beam superstructure supported by pile supported reinforced concrete abutments and a column bent pier. Bk. to Bk. Abutments is 98'-0" and Out to Out Width is 34'-4".

Existing structure shall be removed and replaced using stage construction to maintain one lane of traffic.
No Salvage.

Traffic Barrier Terminal Type 6 Std. 631031 (Typ.)

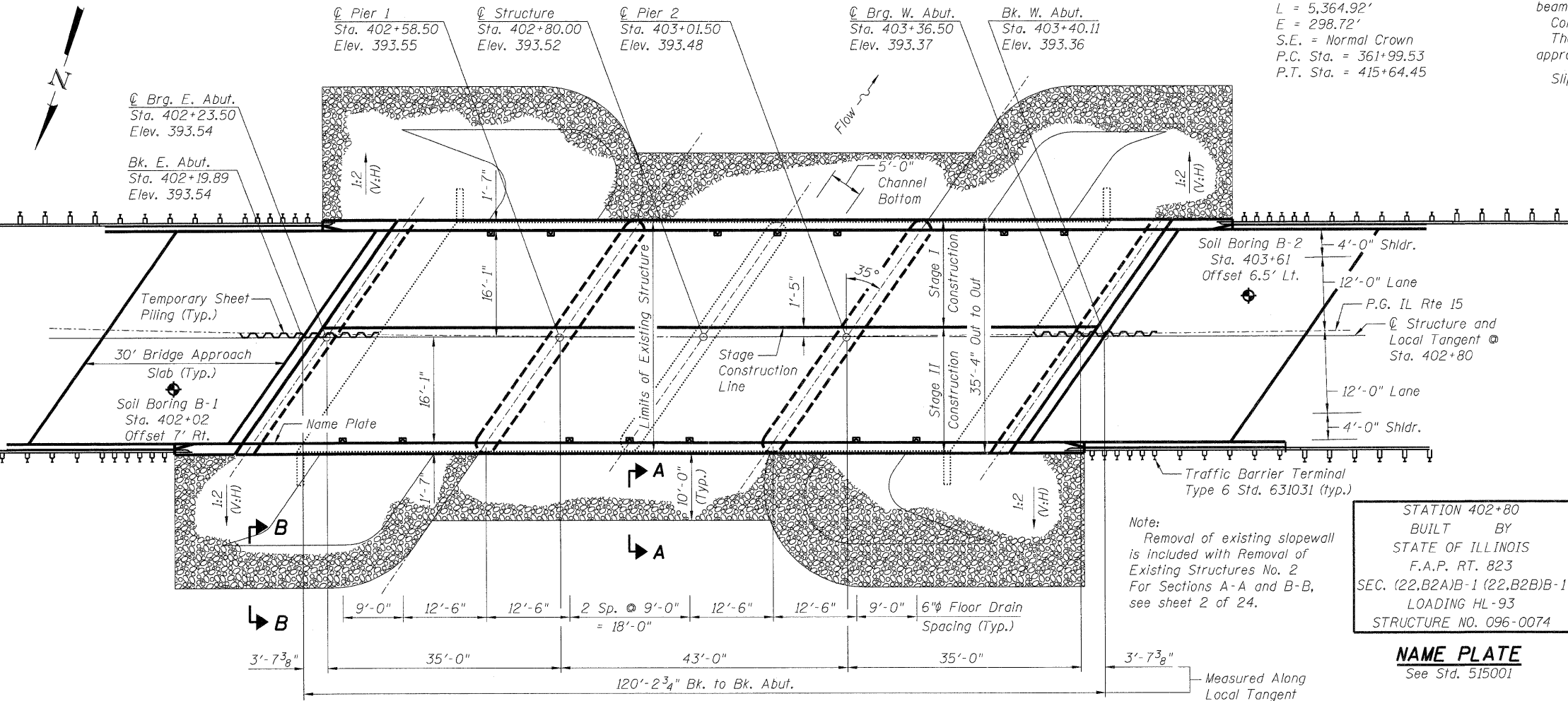


ELEVATION

HORIZONTAL CURVE DATA

Exist. Curve WC1
PI Sta. = 389+25.43
 $\Delta = 25^{\circ} 00' 54''$ (LT)
 $D = 0^{\circ} 27' 59''$
 $R = 12,288.13'$
 $T = 2,725.90'$
 $L = 5,364.92'$
 $E = 298.72'$
S.E. = Normal Crown
P.C. Sta. = 361+99.53
P.T. Sta. = 415+64.45

GENERAL NOTES
Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{1}{8}$ " in. ϕ , holes $\frac{1}{16}$ " in. ϕ , unless otherwise noted.
Calculated weight of Structural Steel = 60,000lb AASHTO M270 Grade 50
6,610lb AASHTO M270 Grade 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.
Reinforcement bars designated (E) shall be epoxy coated.
Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
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 steel surfaces shall be gray, Munsell No. 5B 7/1.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
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.
Concrete Sealer shall be applied to the designated areas 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.
Slipforming of the parapets will not be allowed.



PLAN

STATION 402+80
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 823
SEC. (22,B2A)B-1 (22,B2B)B-1
LOADING HL-93
STRUCTURE NO. 096-0074
NAME PLATE
See Std. 515001

Note:
Removal of existing slopewall is included with Removal of Existing Structures No. 2 For Sections A-A and B-B, see sheet 2 of 24.

INDEX OF SHEETS

1. General Plan & Elevation
- 2.-4. General Data & Details
5. Temporary Concrete Barrier
- 6.-7. Top of Slab Elevations
8. Approach Slab Elevations
9. Superstructure
10. Superstructure Details
- 11.-12. Approach Slab Details
13. Preformed Joint Strip Seal
14. Structural Steel
15. Structural Steel Details
- 16.-17. Bearing Details
18. West Abutment
19. East Abutment
20. Abutment Details
21. Piers
22. HP Pile Details
23. Bar & Mechanical Splicers
24. Boring Logs

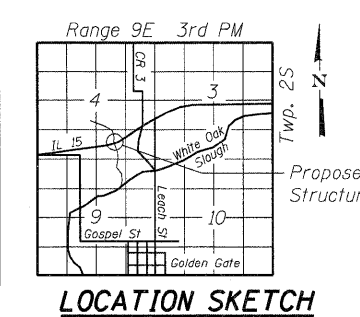
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Daniel Feuerborn
ENGINEER OF BRIDGES AND STRUCTURES



Daniel Feuerborn 12/6/2011
License Expires 11-30-2012 Date

**GENERAL PLAN & ELEVATION
IL RTE 15 OVER UNNAMED STREAM**
F.A.P. RTE. 823. SEC. (22,B2A)B-1 & (22,B2B)B-1

**WAYNE COUNTY
STATION 402+80
STRUCTURE NO. 096-0074**



LOCATION SKETCH

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

DESIGN STRESSES

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec (SD1) = 0.276g
Design Spectral Acceleration at 0.2 sec (SDS) = 0.666g
Soil Site Class = D

DESIGN SCOUR ELEVATION TABLE

E. Abut.	Pier 1	Pier 2	W. Abut.
386.5	365.0	365.0	386.3

WATERWAY INFORMATION

Little Wabash River, White Oak Slough, Union
Drainage Ditch Watershed Area = 1802.67 sq. mi.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	1166	392	474	386.30	0.27	386.57	386.57
Base	50	1685	482	605	387.85	0.35	388.20	388.20
	100	1931	521	653	388.42	0.36	388.78	388.78
Max. Calc.	500	2292	611	759	389.67	0.44	390.11	390.10

Exist. Low Grade Elev. = 390.58' @ Sta. 378+00
Prop. Low Grade Elev. = 390.58' @ Sta. 378+00

10-Year Velocity through Existing Bridge = 2.77 fps
10-Year Velocity through Proposed Bridge = 2.78 fps

PRINTED DATE: 12/15/2011
FILE NAME: c:\p\projects\148_148_148_148.dwg
PLOT DATE: 12/15/2011
PLOT TIME: 1:02:00 PM
PLOT SCALE: 1.0000
PLOT SHEET: 1 OF 24
PLOT FILE: 148_148_148_148.dwg

DESIGNED - SMA
CHECKED - DF
DRAWN - ADG
CHECKED - DF

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CHARLESTON, IL 61920
(217) 348-1900
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ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184-003585

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION
STRUCTURE NO. 096-0074**
SHEET NO. 1 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET
823	(22,B2A)B-1 & (22,B2B)B-1	Wayne	85	15
			CONTRACT NO. 74216	
ILLINOIS FEDERAL AID PROJECT				