

Bench Mark: Square cut in top of asphalt located at S.W. corner of Structure 073-0024 Elev. 399.036.

Existing Structure: S.N. 073-0024 built 1927 as SBI-Route 152, Section 104 A, B, C at Station 875+10.0 as a 3 span reinforced concrete T-beam bridge, 160'-4 1/2" Bk.-to-Bk. abutments supported on untreated timber piles. Superstructure replacement and widening to 33'-0" out to out in 1980 at Station 875+13.10 with Simple Span PPC deck beams and bituminous wearing surface. Existing bridge to be removed and replaced. Traffic maintained utilizing stage construction.

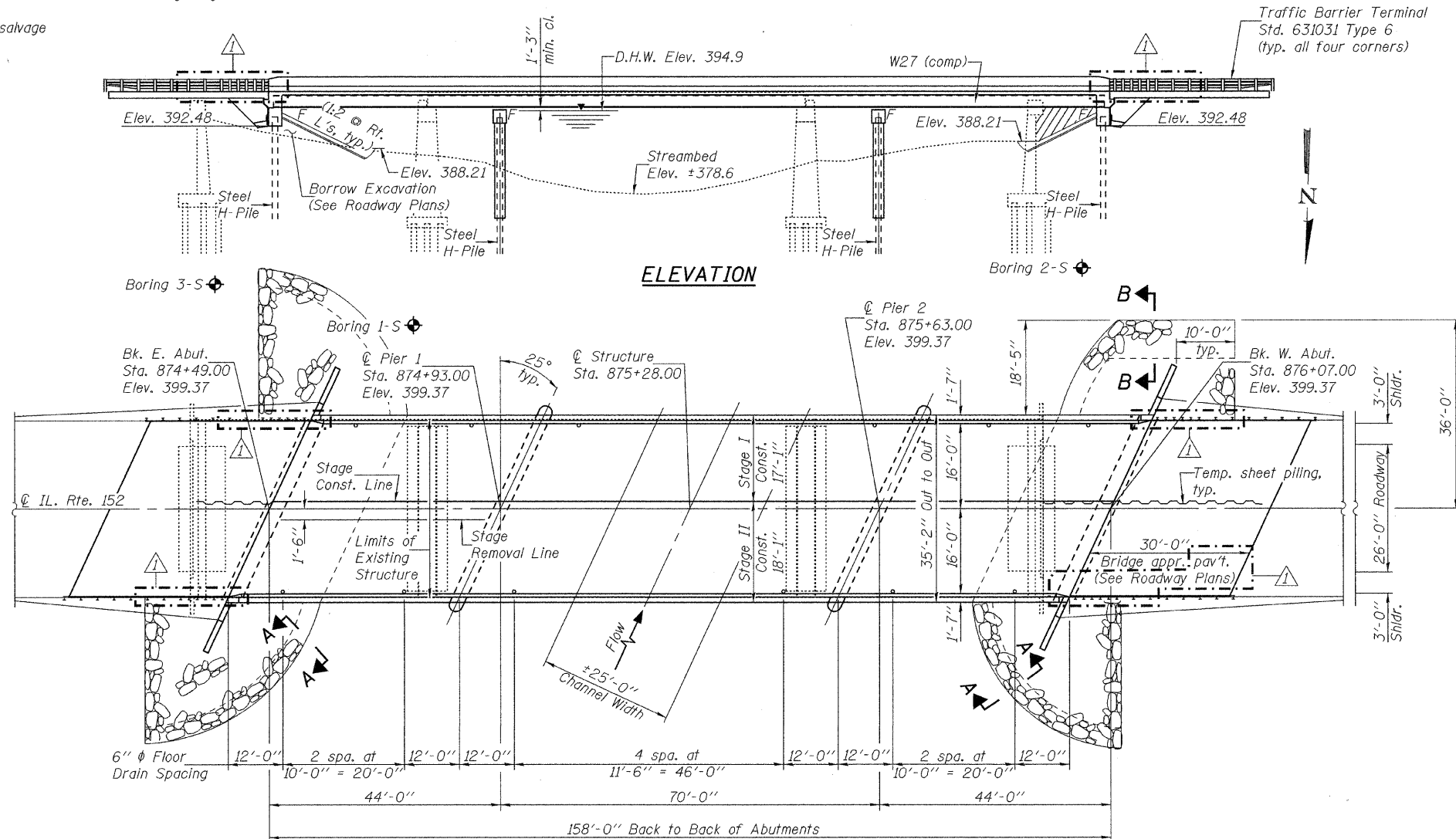
No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note:
Hatched area indicates channel excavation.
(See Roadway Plans)

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 General Data
- 3 Stage Construction & Temporary Sheet Piling Details
- 4 Temporary Concrete Barrier for Stage Construction
- 5-7 Top of Slab Elevations
- 8 Top of East Approach Slab Elevation
- 9 Top of West Approach Slab Elevation
- 10 Superstructure
- 11 Superstructure Details
- 12 Diaphragm Details
- 13-15 (Intentionally Left Blank)
- 16 Structural Steel
- 17 Bearing & Structural Steel Details
- 18 East Abutment
- 19 West Abutment
- 20 Piers
- 21 Bar Splicer Assembly Details
- 22 Steel HP Pile Details
- 23-25 Soil Boring Logs



STATION 875+28.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 865 SEC. 16B-2
LOADING HL-93
STRUCTURE NO. 073-0037

NAME PLATE
See Std. 515001

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
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.319 g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.7429 g
Soil Site Classification = D

DESIGN SCOUR ELEVATION TABLE

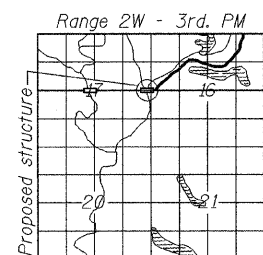
Design Scour Elevation (feet)	East Abut.	Pier 1	Pier 2	West Abut.
	392.48	367.56	367.56	392.48

WATERWAY INFORMATION

Exist. Low Grade Elev. 397.3 ft. @ Sta. 597+50
Prop. Low Grade Elev. 397.3 ft. @ Sta. 597+50

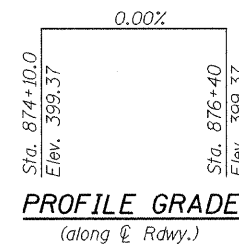
Freq. Yr.	Structure Number	Q (C.F.S.)		Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
		Exist.	Prop.	Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	073-0023	10,420	9,460	2,833	2,833	393.1	0.5	0.4	393.6	393.5
	073-0024	3,860	4,820	823	1,051					
	Total	14,280	14,280	3,656	3,884					
Design 50	073-0023	16,440	14,830	3,825	3,825	394.9	0.6	0.5	395.5	395.4
	073-0024	5,180	6,790	993	1,284					
	Total	21,620	21,620	4,818	5,109					
Base 100	073-0023	18,990	17,830	4,156	4,156	395.5	0.6	0.6	396.1	396.1
	073-0024	6,140	7,520	1,050	1,364					
	Total	24,690	24,690	5,206	5,520					
Max. Calc. 500	073-0023	27,200	24,710	4,928	4,928	397.0	1.2	1.4	398.2	398.4
	073-0024	5,610	8,100	1,142	1,568					
	Total	32,810	32,810	6,070	6,496					

10 Year Velocity through Existing Bridge = 4.7 fps
10 Year Velocity through Prop. Bridge = 5.6 fps



LOCATION SKETCH

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
25 SHEETS	865	16B-2	PERRY	47	23
CONTRACT NO. 78064					
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					



PROFILE GRADE
(along C.Rdwy.)

DESIGNED	Stephan M. Ryan	EXAMINED	
CHECKED	Jay D. Edward	PASSED	
DRAWN	h.t. duong		
CHECKED	SMR/SDE		

ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

EXPIRES 11-30-2010

GENERAL PLAN & ELEVATION
IL. ROUTE 152 OVER PANTHER CREEK
F.A.P. ROUTE 865 - SECTION 16B-2
PERRY COUNTY
STATION 875+28.00
STRUCTURE NO. 073-0037