

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

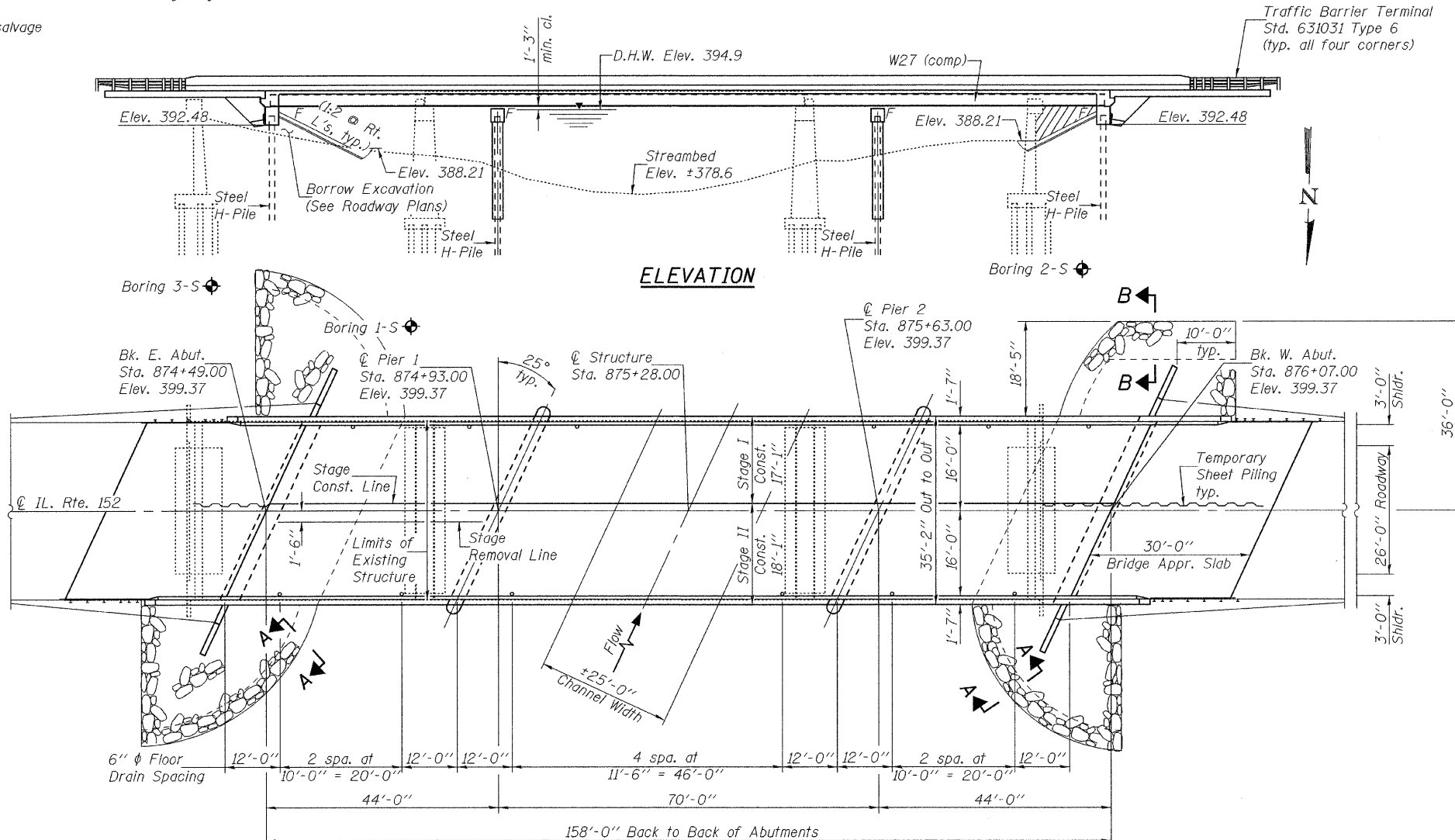
Existing Structure: S.N. 073-0024 built 1927 as SBI-Route 152, Section 104 A, B, C at Station 875+10.0 as a 3 span reinforced concrete T-beam bridge. 160'-4 1/2" Bk.-to-Bk. abutments supported on untreated timber piles. Superstructure replacement and widening to 33'-0" out to out in 1980 at Station 875+13.10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

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

No salvage

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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

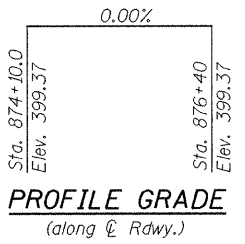
Design Scour Elevation (feet)	East Abut.	Pier 1	Pier 2	West Abut.
	392.48	367.56	367.56	392.48

WATERWAY INFORMATION

Exist. Low Grade Elev. 397.3 ft. @ Sta. 597+50
Drainage Area = 288.2 sq. mi. 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



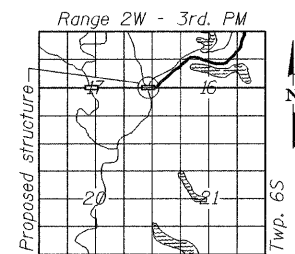
PROFILE GRADE
(along C. Rdwy.)

DESIGNED *Stephen Ryan*
CHECKED *Joy D. Edwards*
DRAWN *h.t. duong*
CHECKED *SMR / JDE*

EXAMINED *Thomas J. ...*
PASSED *Robert S. ...*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2010



LOCATION SKETCH

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

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