

Contract # 64C03

Bench Mark: Brass disk in top of west parapet wall on the north end of existing S.N. 043-0037. Elev. 646.80

Existing Structure: S.N. 043-0037, built in 1984 as F.A. 18 Section 103C-1BR. The existing structure is a three span PPC I-beam superstructure on solid reinforced concrete piers and open reinforced concrete stub abutments. The structure is 209'-1 3/8" Bk. to Bk. Abutments and 35'-2" O. to O. Deck. The superstructure shall be removed and replaced with PPC I-beams and the abutments shall be modified to semi-integral. The road shall be kept open to one lane of traffic at all times by utilizing stage construction.

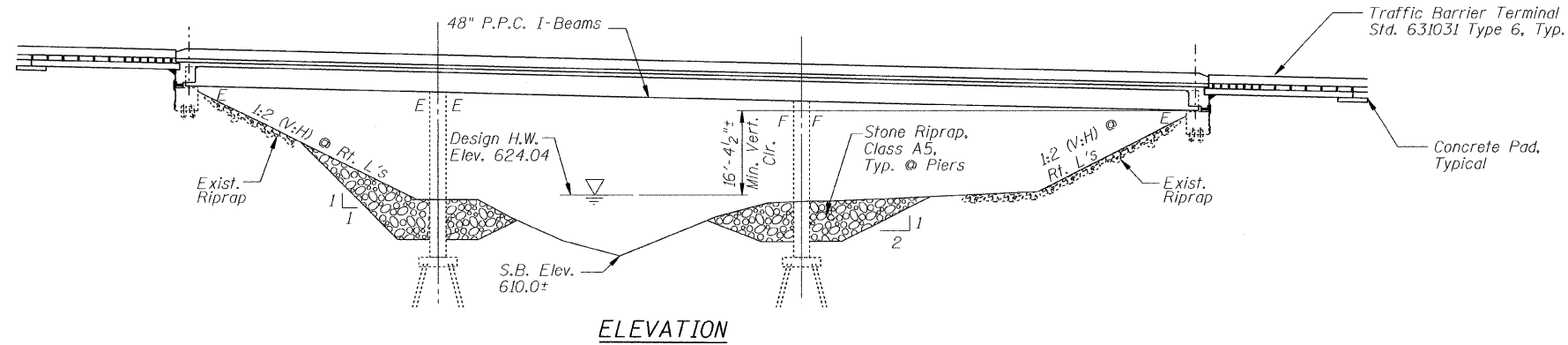
No Salvage.

STATION 449+62.02
REBUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RT. 308 SEC. (103C-1BR)D
LOADING HL-93
STR. NO. 043-0037

NAME PLATE

(See Std 51500I)

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



ELEVATION

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications With 2008 Interim

DESIGN STRESSES

FIELD UNITS (New & Exist. Construction)

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

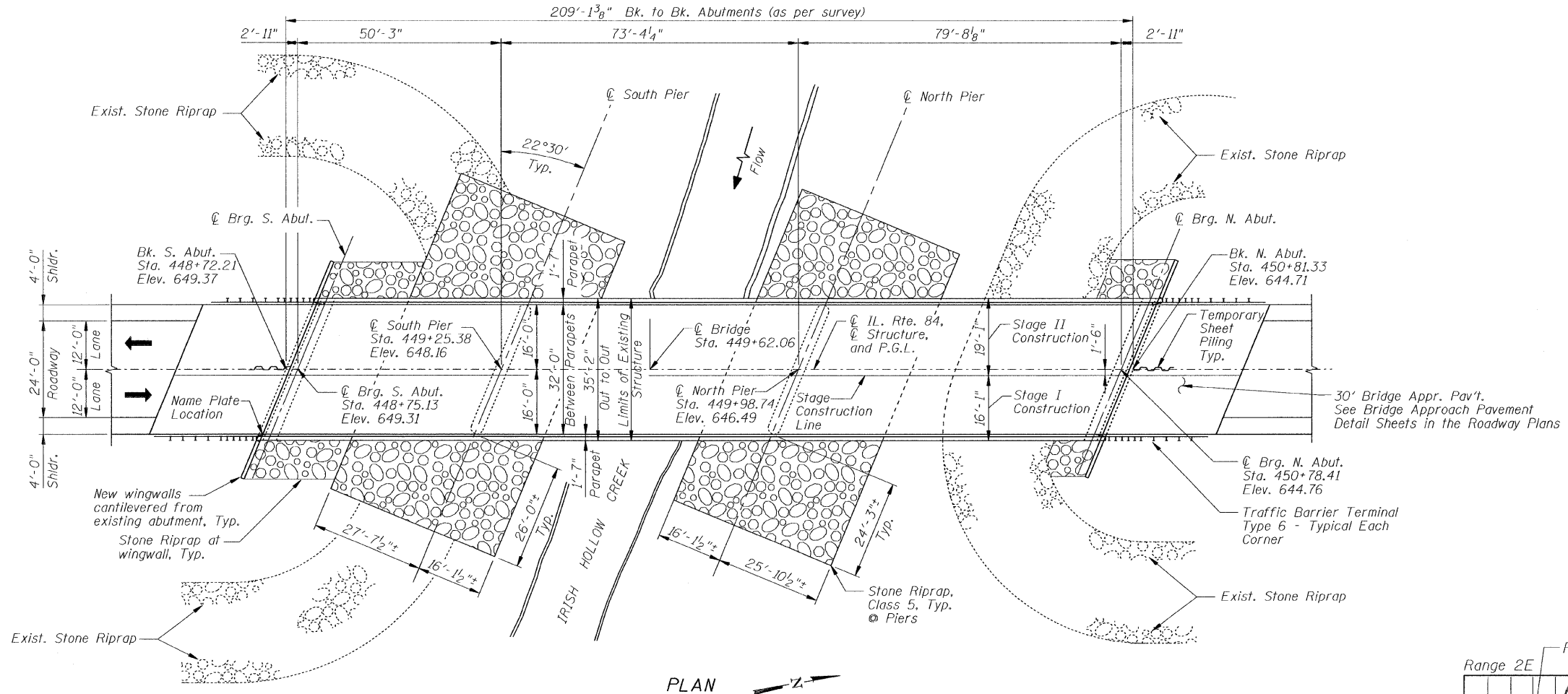
f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2" φ low lax. strands)
fpt = 201,960 psi (1/2" φ low lax. strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0

LOADING HL-93

Allow 50 #/ sq. ft. for Future Wearing Surface



PLAN

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson, (TSD)
ENGINEER OF BRIDGES AND STRUCTURES



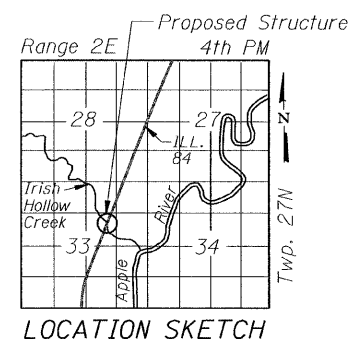
Jerome J. G.P.P.

WATERWAY INFORMATION

Drainage Area = 18.6 Sq.Mi. Low Grade Elev. = 642.27 Ft. @ Sta. 452+79.60

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Ten-Year	10	2450	327	327	622.59	0.51	0.51	623.10	623.10
Design	50	3970	466	466	624.04	0.55	0.55	624.59	624.59
Base	100	4670	515	515	624.52	0.58	0.58	625.10	625.10
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	6410	620	620	625.53	0.63	0.63	626.16	626.16

10-Year Velocity through Exist. & Proposed Structure = 8.82 fps



LOCATION SKETCH

DESIGNED	J.Z.
CHECKED	S.D.H.
DRAWN	M.S.M.
CHECKED	J.Z.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (Ft.)	S. Abut.	S. Pier	N. Pier	N. Abut.
	640.11	607.05	607.04	635.20

GENERAL PLAN
IL Route 84 over Irish Hollow Creek
F.A.P. RTE 308, SECTION (103C-1BR)D
JO DAVIESS COUNTY
STATION 449+62.06
DATE: 12-11-08 S.N. 043-0037
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

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