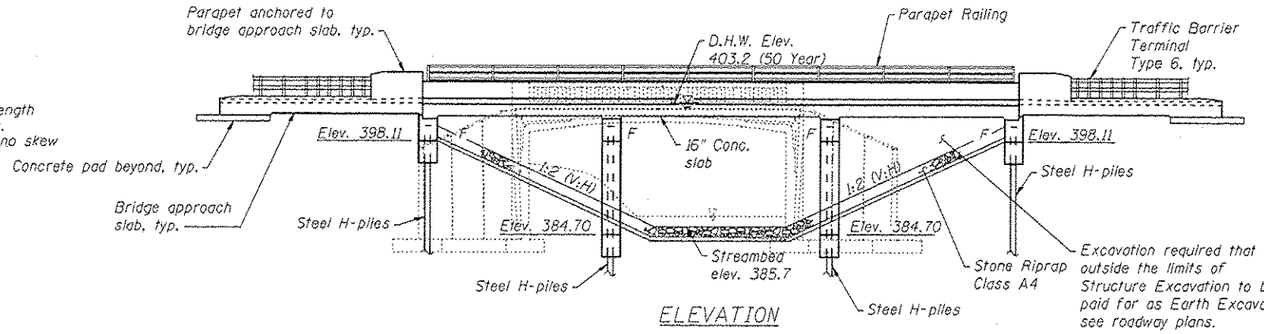
BENCHMARK: BM 539 -Chiseled square on northeast corner of southeast wing of SN 093-0008, Elev. 405.51 (NAVD 88)

EXISTING STRUCTURE:
SN 093-0008 was originally built as SBI 138, Section 103B, in 1935. It is a single span reinforced conc. rigid frame structure with closed abutments on untreated timber piles. The deck width is 43'-10" and the length is 35'-0" face to face of abutments. The structure was constructed with no skew and a 0.043 ft/ft superelevation. Traffic is to be detoured.

No salvage.



ELEVATION

Curve Data
Δ = 29° 36' 39"
D = 2° 59' 40"
R = 1,913.48'
T = 505.76'
L = 988.90'
E = 65.71'
S.E. = 0.03'/'
P.C. Sta. = 844+87.55
P.T. Sta. = 854+76.45
P.I. Sta. = 849+93.30

STRUCTURE INDEX OF SHEETS

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Bar Splicer Assembly and Mechanical Splicer Details	Sheet No. 16 of 21
HP Pile Details	Sheet No. 17 of 21
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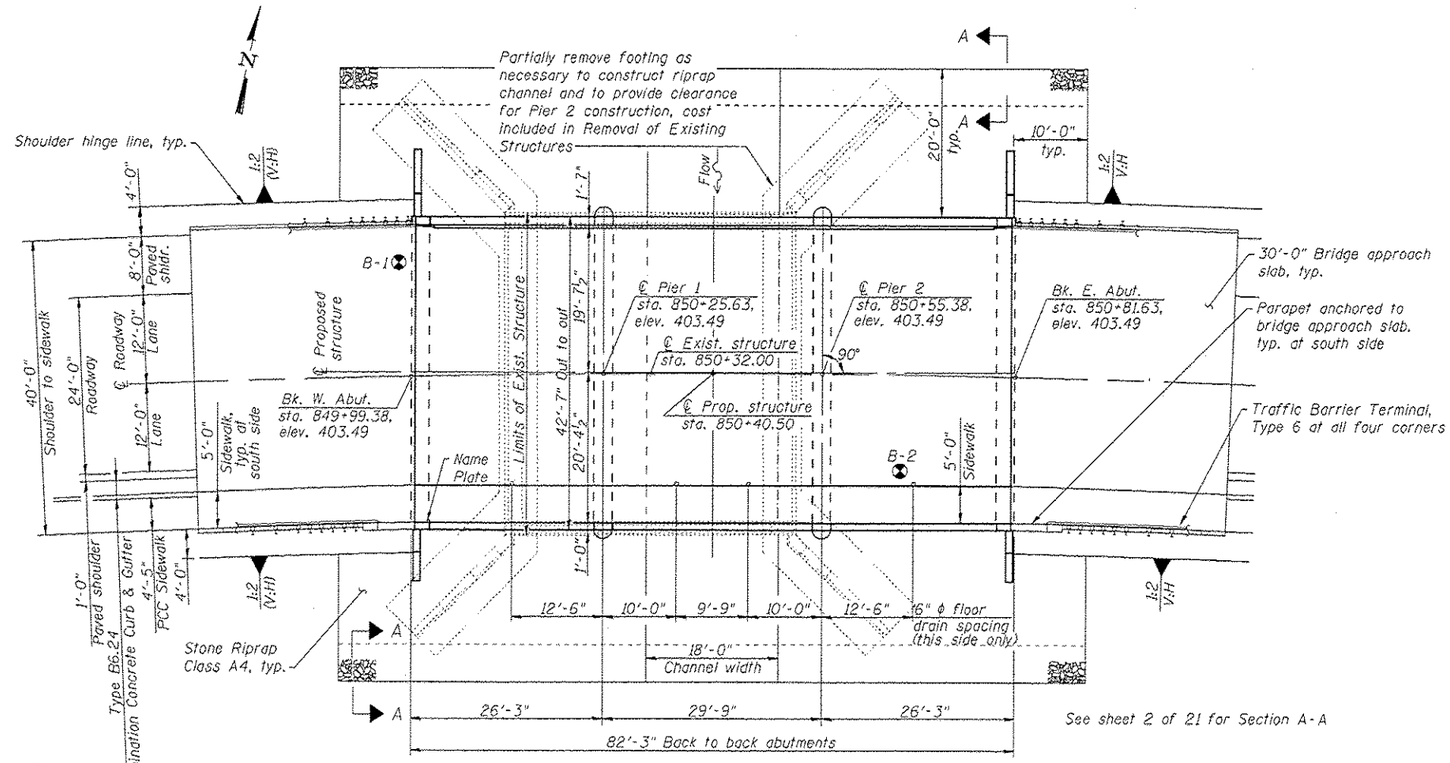
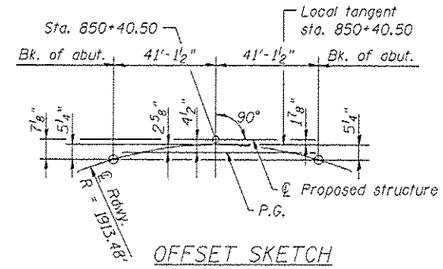
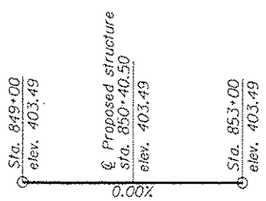


See sheet 2 of 21 for Section A-A

PLAN



OFFSET SKETCH



PROFILE GRADE
(Along ℄ roadway)

DESIGN SCOUR ELEVATION TABLE

	W. Abut.	Pier 1	Pier 2	E. Abut.
Design Scour Elevation (Ft.)	398.11	381.7	381.7	398.11

WATERWAY INFORMATION

Drainage Area = 7.6 Sq. Mi.
Exist. Low Grade Elev. = 403.77 Ft. @ Sta. 850+54
Prop. Low Grade Elev. = 404.09 Ft. @ Sta. 850+90

Flood	Freq. Yr.	Q C.F.S.	Opening-Sq. Ft. Exist.	Opening-Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1500	410	664	400.3	0.2	0.2	400.4	400.5
Overtop.	45	2340	416	-	403.1	0.7	-	403.8	-
Design	50	2440	416	691	403.2	0.7	0.2	403.9	403.4
Base	100	2860	416	691	403.5	0.7	0.2	404.2	403.7
Overtop.	150	2960	-	691	403.6	-	0.2	-	403.8
Max. Calc.	500	3910	416	691	404.5	0.4	0.1	404.9	404.6

DESIGN SPECIFICATIONS

2007 AASHTO LRFD with 2008 & 2009 Interims

LOADING HL-93

Allow 50 psf for future wearing surface.

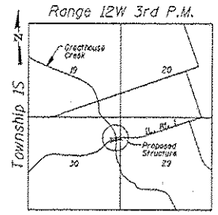
DESIGN STRESSES

FIELD UNITS

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec (SD1) = 0.253g
Design Spectral Acceleration at 0.2 sec (SDs) = 0.596g
Soil Site Class = D



LOCATION SKETCH

STATION 850+40.50
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 332 SEC. (103B)B-1
LOADING HL-93
STR. NO. 093-0026

NAME PLATE
See Std. 515001

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS — ERIC L. HERMES — No. 6159 — REGISTERED STRUCTURAL ENGINEER

EXPIRES 11-30-11
SIGNATURE
01/14/11
DATE

GENERAL PLAN & ELEVATION
IL 1 OVER GREATHOUSE CREEK
FAP ROUTE 332 - SECTION (103B)B-1
WABASH COUNTY
STATION 850+40.50
STRUCTURE NO. 093-0026

FILE NAME = 8938826-74220-01-GenPln.dgn	USER NAME = RJT	DESIGNED - ELH 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -
	PLOT SCALE = 0.1 '/' IN.	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = 12/15/2011 1:29:23 PM	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	16
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		