

B.M.: Chiseled square on southwest wingwall of S.N. 091-0021.
19.3' Rt., Sta. 585+42.3 - Elev. 546.39.

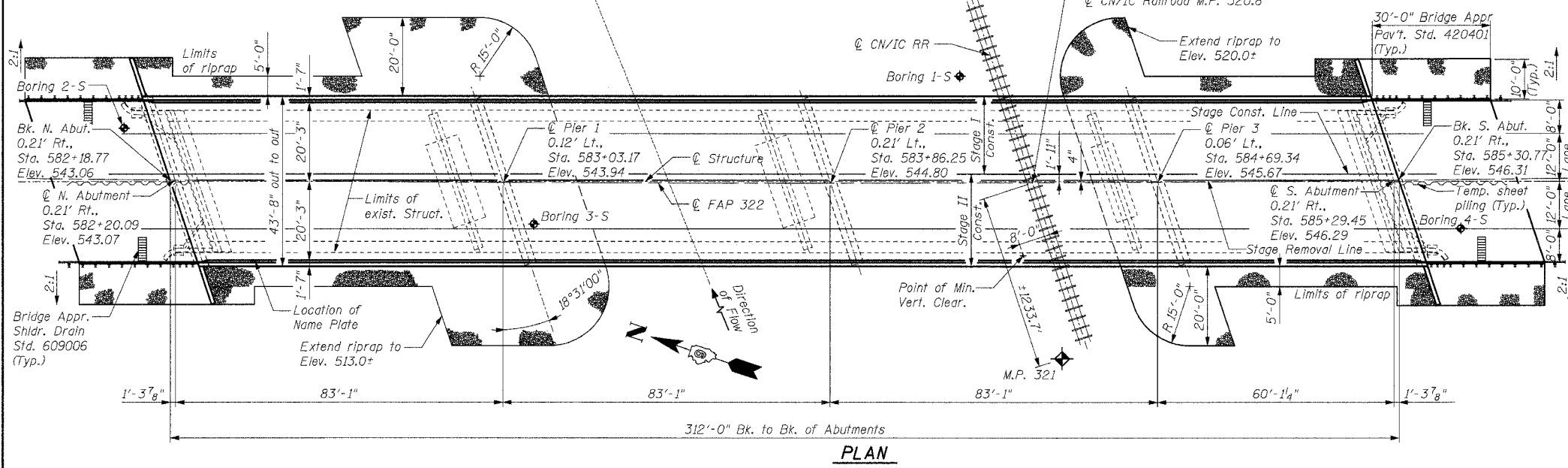
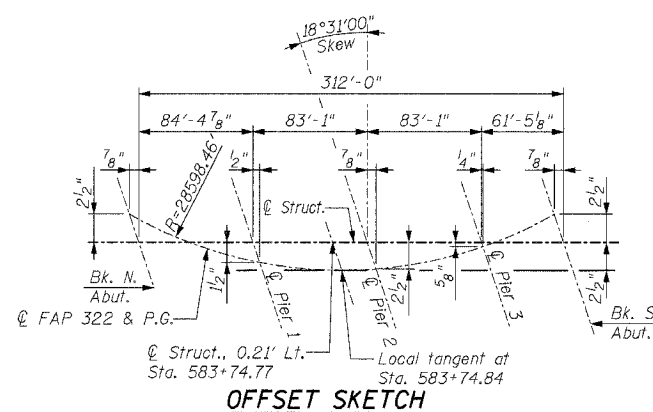
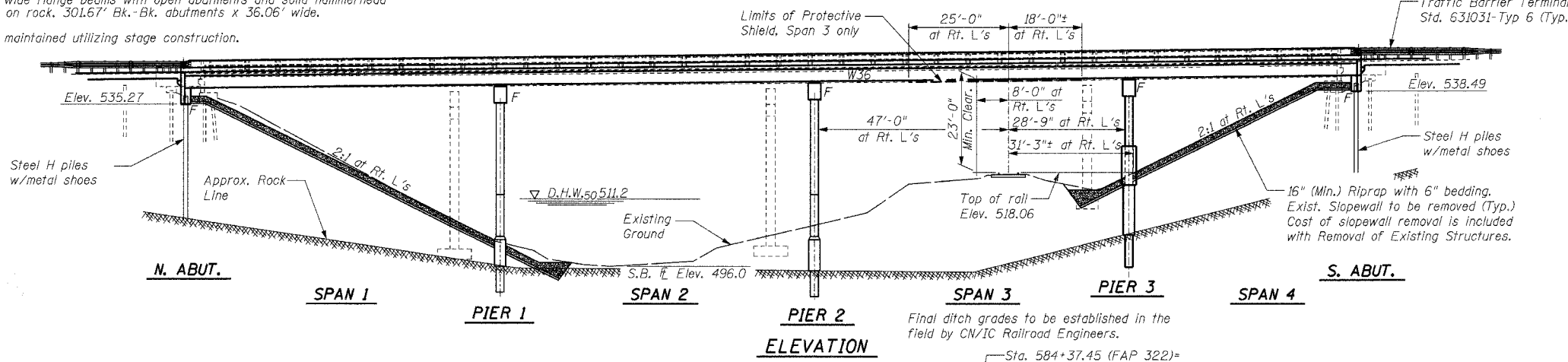
Existing Structure: S.N. 091-0021 built in 1959 as a four span cast-in-place deck on steel wide flange beams with open abutments and solid hammerhead piers founded on rock. 301.67' Bk.-Bk. abutments x 36.06' wide.

Traffic to be maintained utilizing stage construction.

No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

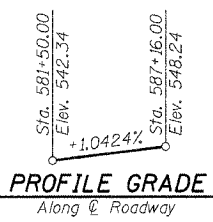
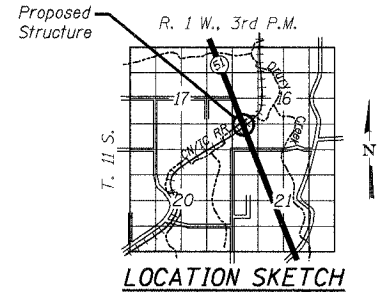
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. 1
322	*	UNION	39	18
22 SHEETS				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
* (11-IVB)-1 CONTRACT NO. 98488				



CURVE DATA

P.I. Sta. 585+62.92
 $\Delta = 4^{\circ}05'34''$
 $D = 0^{\circ}12'01''$
 $R = 28598.46'$
 $T = 1021.86'$
 $L = 2042.86'$
 $E = 18.25'$
P.C. Sta. 575+41.05
P.T. Sta. 595+83.91
S.E. Normal Crown

STATION 583+74.84
BUILT 200 BY
STATE OF ILLINOIS
FAP 322 - SEC. (11-IVB)-1
LOADING HS20
STR. NO. 091-0073
NAME PLATE
See Std. 515001



**TOP OF RAIL ELEVATIONS
CN/IC RR**

E. Sta. 4+17.7	Elev. 514.75
E. Sta. 0+14.3	Elev. 517.84
W. Sta. 0+19.3	Elev. 518.06
W. Sta. 4+91.6	Elev. 521.39

NOTES

The width between the guardrails shall be the width between the bridge parapets, which will require approach shoulder widening.

The Contractor shall avoid undermining or otherwise disturbing the existing pier foundations during construction of the new piers.

DESIGN STRESSES

FIELD UNITS
 $f'c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (Structural Steel)
(AASHTO M270 Grade 50)
 $f_y = 36,000$ psi (AASHTO M270 Grade 36)

DESIGN SPECIFICATIONS

AASHTO-2002, 17th Edition
LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 14.5%/g
Site Coefficient(S) = 1.2

WATERWAY INFORMATION

Drainage Area = 5.35 mi² Low Grade Elev. 540.0 ft. Sta. 577+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.
Design	50	3683	1097.6	511.2	0.2	511.4
Base	100	4246	1145.6	511.5	0.2	511.7
Overtopping	-	-	-	-	-	-
Max. Calc.	500	5594	1231.0	512.3	0.3	512.6

DESIGNED	GLH
CHECKED	TML
DRAWN	RJN
CHECKED	TML



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Expires Nov. 30, 2006

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
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ENGINEER OF BRIDGES AND STRUCTURES

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CONSULTING ENGINEERS • LAND SURVEYORS
201 SOUTH LOCUST STREET 4 INDUSTRIAL DRIVE
CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
618-532-1992 618-539-3178
ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

GENERAL PLAN
U.S. ROUTE 51 OVER TRIBUTARY TO
DRURY CREEK AND CN/IC RAILROAD
FAP 322 - SECTION (11-IVB)-1
UNION COUNTY
STATION 583+74.84
STRUCTURE NO. 091-0073

02/21/2005