Bench Mark: 60D Nail in P.P. ±800' South of SN 061-0002 East Side of Road. Sta. 697+38, 61' LT. Elevation 491.11

Existing Structure: SN 061-0002 was built in 1938 as FAP 2 Section 25BR. The Structure was widened in 1959 and reconstructed in 1974. The structure consists of a 3-span, 27" precast prestressed concrete deck beam bridge with a bituminous concrete overlay 3¼" thick. The spans measure 42'-1", 52'-0", and 42'-1" respectively. The out to out deck width is 42'-0" with a roadway width of 40' and back to back of abutments length of 135'-2". The superstructure is supported on concrete pile bent abutments with attached wingwalls, and concrete pile bent piers. Stage construction will be utilized.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Stage Construction and Sheet Piling Details
4. Temporary Concrete Barrier for Stage Construction
5-7. Top of Slab Elevations
8. North Approach Pavement Top of Slab Elevations
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10. Superstructure
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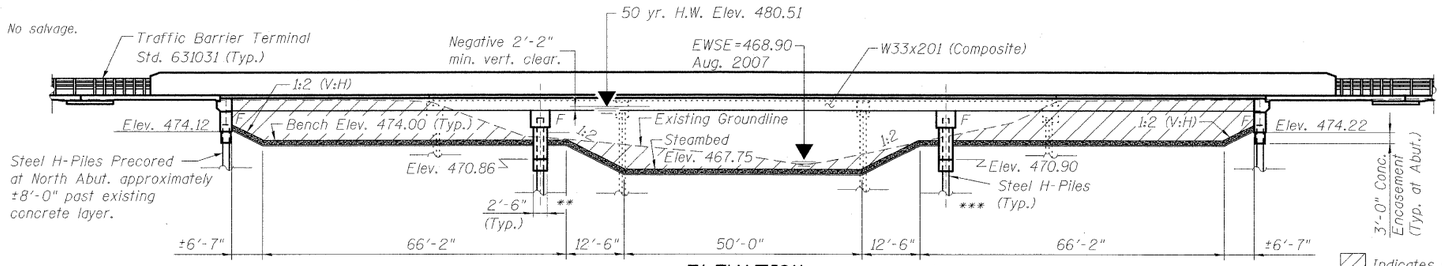
12-13. Bridge Approach Slab Details
14. Diaphragm Details
15. Structural Steel
16. Structural Steel & Bearing Details
17. North & South Abutmnets
18. Piers 1 & 2
19. Bar Splicer Assembly Details
20. HP Pile Details
21. Concrete Parapet Slipforming Option
22-23. Soil Borings

No salvage.

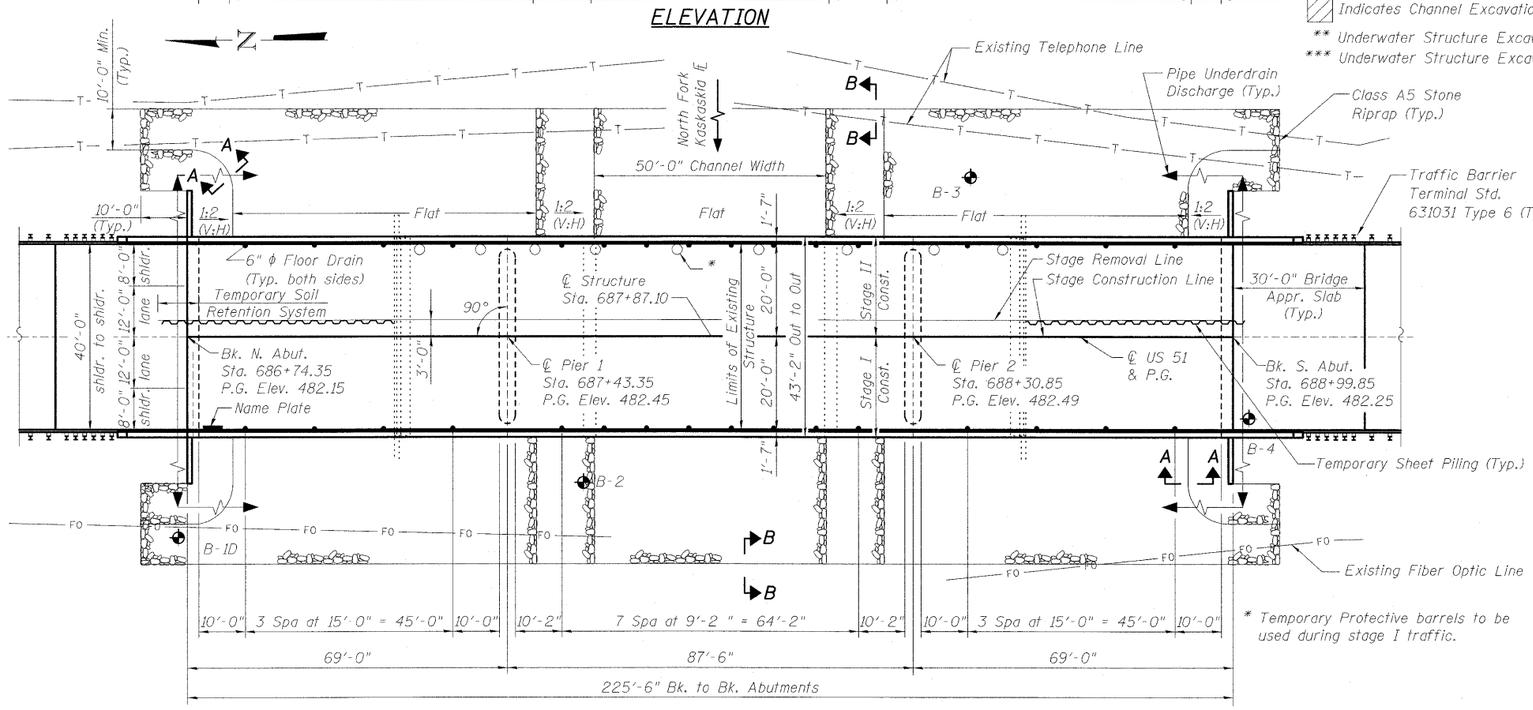


ELEVATION

Indicates Channel Excavation

** Underwater Structure Excavation Protection - Location 1

*** Underwater Structure Excavation Protection - Location 2



* Temporary Protective barrels to be used during stage I traffic.

PLAN

Note:
For Section A-A & B-B See Sheet 2 of 23.

WATERWAY INFORMATION

Drainage Area = 39.1 sq Miles; Existing Low Grade Elev. 481.12 @ Sta. 688+00.00; Proposed Low Grade Elev. 481.39 @ Sta. 684+60.00

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.
Design	50	6,133	817	1,297	480.51	1.98	1.83	482.49	482.34
Base	100	7,110	817	1,297	481.00	2.06	2.02	483.06	483.02
Existing Overtopping	11	4,160	817	-	479.38	1.74	-	481.12	-
Proposed Overtopping	20	4,920	-	1,297	479.85	-	1.54	-	481.39
Scour	10	3,914	817	1,297	479.22	1.60	1.17	480.82	480.39

STATION 687+87.10
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. 322 SEC. 25BR-1
LOADING HL-93
STR. NO. 061-0094

NAME PLATE

(See Std. 515001)

LOADING HL-93

Allow 50 #/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acc at 1.0 Sec (SD_1) = 0.18g
Design Spectral Acc at 0.2 Sec (SD_S) = 0.46g
Soil Site Class = C

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

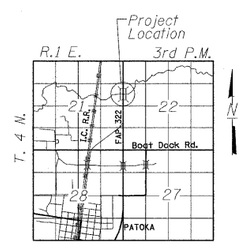
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Pier 1	Pier 2	S. Abut.
	471.33	456.00	456.00	472.09

DESIGN STRESSES

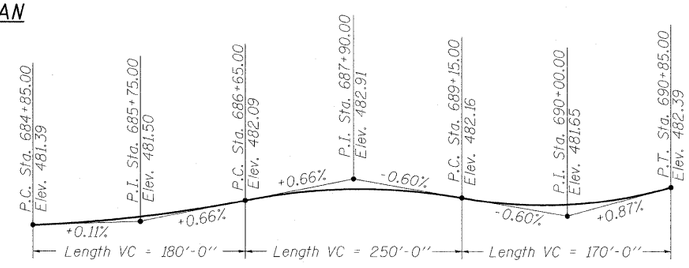
Field Units

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
US 51 OVER NORTH FORK KASKASKIA RIVER
F.A.P. ROUTE 322 - SECTION 25BR-1
MARION COUNTY
STATION 687+87.10
STRUCTURE NO. 061-0094



PROFILE GRADE

F.A.P. 322 (US 51)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TOP)
ENGINEER OF BRIDGES AND STRUCTURES

LICENSED STRUCTURAL ENGINEER
CHADWICK J. FUESTING
081-005834
STATE OF ILLINOIS
EXP. 11-30-2010
Chadwick J. Fuesting
10/30/09

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62062-5635
Local-(618) 288-4655
Fax 618-288-4666

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23 SHEETS	322	25BR-1	MARION	63	24
	SN 061-0094		CONTRACT NO. 76A83		
	FED. ROAD DIST. NO. 8	ILLINOIS	FED. AID PROJECT 322		

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