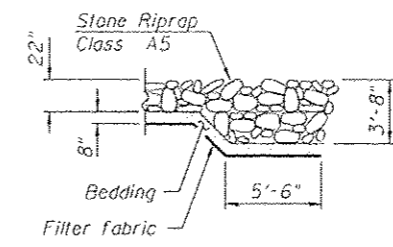
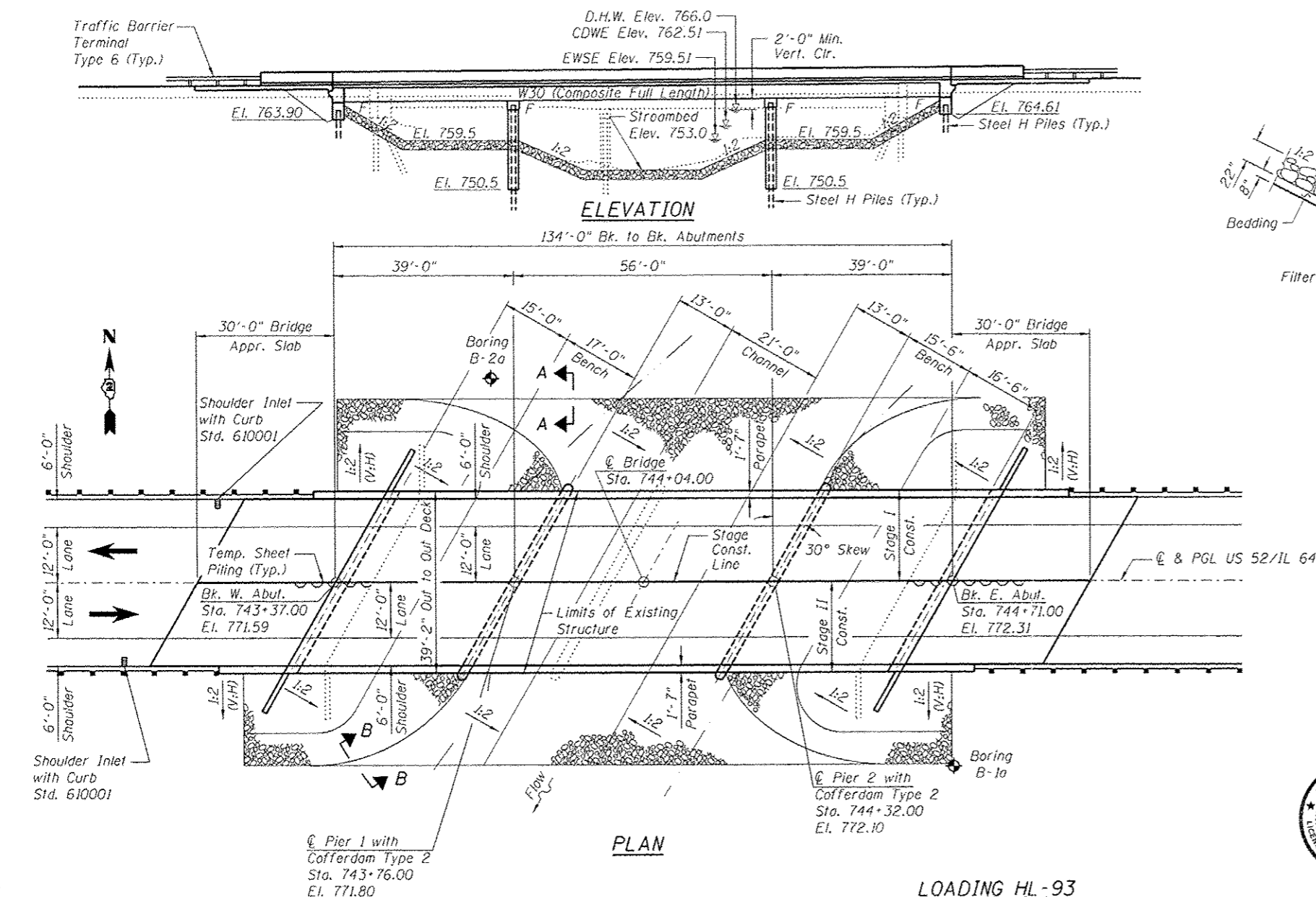


Bench Mark: Disc on headwall, Sta. 743+34.88, 20' Rt., Elev. 768.64

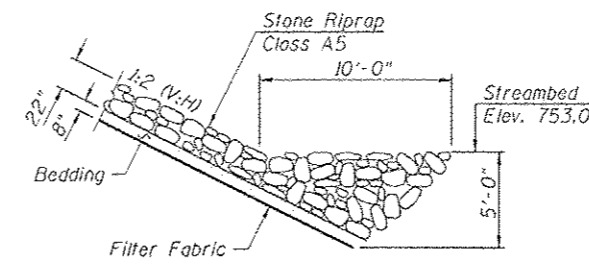
Existing Structure: S.N. 008-0030 originally constructed in 1983 as F.A. Route 17 Section 4BR-1. Two simple span PPC Deck Beams superstructure supported on stub abutments and a pile encased solid wall pier. In 2003, asphalt overlay was removed and replaced with 5" reinforced concrete wearing surface as FA17, Section (4BR-1 & 4BR-2)M. In 2008, four PPC Deck Beams were replaced as FAP17, Section (4BR-2)D & (4BR-1)D. Bk. to Bk. abutments is 116'-3" and Out to Out width is 39'-2".

Existing structure shall be removed and replaced. Traffic to be maintained utilizing stage construction.

Existing steel shoring to be removed and taken to the nearest IDOT maintenance yard for salvage.



SECTION A-A



SECTION B-B

INDEX OF SHEETS

- SB-1. General Plan and Elevation
- SB-2. General Data
- SB-3. Stage Construction Details
- SB-4. Temporary Concrete Barrier for Stage Construction
- SB-5. Top of Slab Elevations 1
- SB-6. Top of Slab Elevations 2
- SB-7. Top of Slab Elevations 3
- SB-8. West Approach Top of Slab Elevations
- SB-9. East Approach Top of Slab Elevations
- SB-10. Superstructure
- SB-11. Superstructure Details
- SB-12. Integral Abutment Diaphragm Details
- SB-13. Bridge Approach Slab Details 1
- SB-14. Bridge Approach Slab Details 2
- SB-15. Framing Plan
- SB-16. Structural Steel Details
- SB-17. Bearing Details
- SB-18. West Abutment
- SB-19. East Abutment
- SB-20. Pier 1
- SB-21. Pier 2
- SB-22. Bar Splicer Assembly and Mechanical Splicer Details
- SB-23. HP Pile Details
- SB-24. Boring Logs

WATERWAY INFORMATION

Drainage Area = 38.8 sq. mi. Exist. Low Grade Elev. = 768.73 @ Sta. 740+70
 Prop. Low Grade Elev. = 769.42 @ Sta. 739+00

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Ten Year	10	2670	676	697	765.0	0.2	0.0	765.2	765.1
Design	50	4170	768	796	766.0	1.1	0.3	767.1	766.3
Base	100	4840	792	827	766.3	1.0	0.4	767.3	766.7
Max. Calc.	500	6480	805	889	766.9	1.3	0.8	768.1	767.7

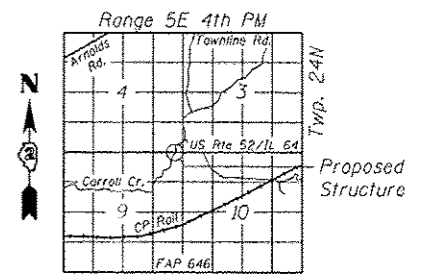
10-Year Velocity through Existing Bridge = 3.9 fps
 10-Year Velocity through Proposed Bridge = 3.8 fps

DESIGN SCOUR ELEVATION TABLE

W. Abut.	Pier 1	Pier 2	E. Abut.
763.9	750.5	750.5	764.6



Dwight Johnson 6-27-13
 Signature Date
 November 30, 2014
 Expires



LOCATION SKETCH

LOADING HL-93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES

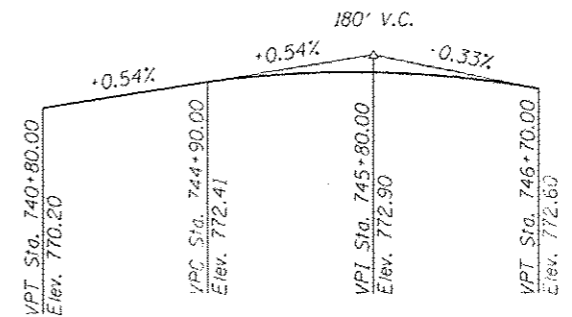
FIELD UNITS

- $f_c = 3,500$ psi
- $f_y = 60,000$ psi (reinforcement)
- $f_y = 50,000$ psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration @ 1.0 sec (S_{D1}) = 0.055
 Design Spectral Acceleration @ 0.2 sec (S_{D5}) = 0.091
 Soil Site Class = C

APPROVED
 For Structural Adequacy Only
D. Carl Krueger
 Engineer of Bridges & Structures



PROFILE GRADE

(along & US Route 52/IL 64)

GENERAL PLAN & ELEVATION
US 52/IL 64 OVER CARROLL CREEK
SECTION 4BR-6
F.A.P. RTE. 17
CARROLL COUNTY
STA. 744+04.00
STRUCTURE NO. 008-0050



DESIGNED	CHECKED	DRAWN	CHECKED
LAS	JLA	SAW	LAS
REVISIONS	REVISIONS	REVISIONS	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
S.N. 008-0050
 SHEET NO. SB-1 OF SB-24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-6	CARROLL	150	64

CONTRACT NO. 64083
 ILLINOIS FED. AID PROJECT