Bench Mark: Chiseled "□" on S.W. Wing Wall of existing abutment, S.N. 061-0036, Elevation. 519.48

Existing Structure: S.N. 061-0036, built in 1922 as Route 12, Section 15-B with reconstruction and widening in 1951 as S.B.I. Route 12, Section 15-B-Y is a 29'-0" long single span structure consisting of an 18" to 19½" thick concrete slab with a minimum of 7" bituminous overlay. The deck width is 37'-0" and the Bk-to-Bk of abutment length is 30'-0". Traffic shall be maintained utilizing stage construction.

No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

STATION 104+16.83
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. ROUTE 327, SEC. 15B-1
LOADING HS 20-44
STR. NO 061-2026

NAME PLATE
(See Std. 515001)

GENERAL NOTES

The minimum 2'-0" removal of unsuitable materials shall be replaced with Rockfill - Foundation.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

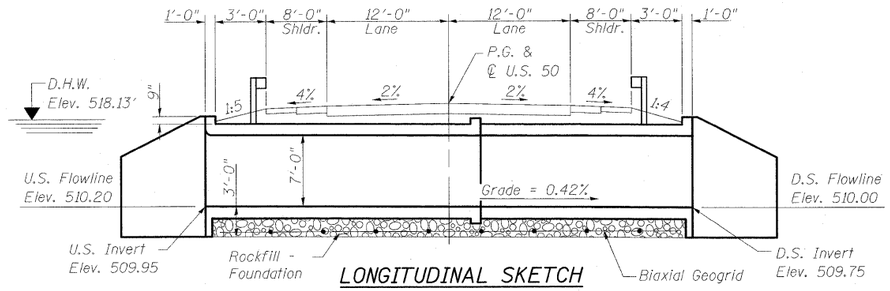
Layout of slope protection system may be varied in the field to suit ground condition as directed by the Engineer.

The Contractor is advised that the existing deck is in a deteriorated condition with reduced load carrying capacity. It is the Contractors responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

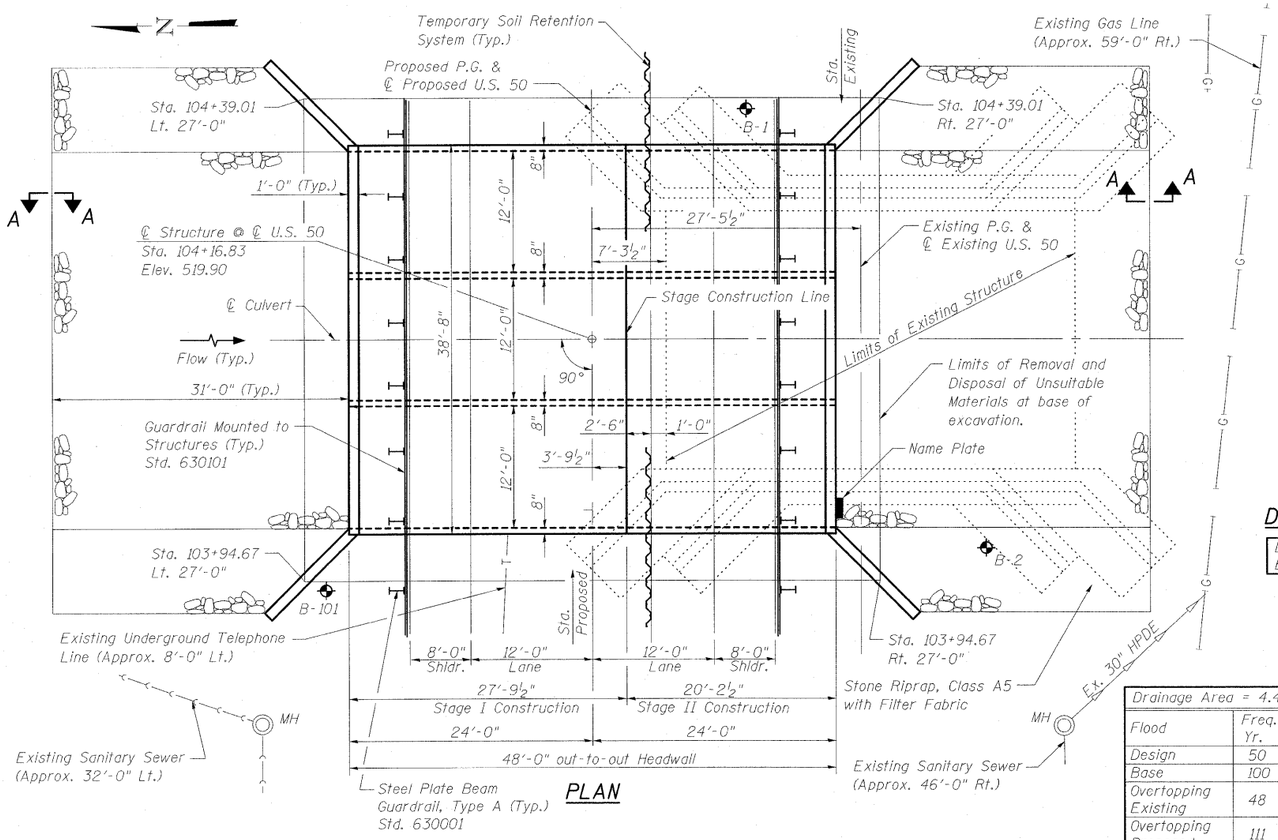
Precast alternative is not allowed.

If the Contractor's procedures for existing superstructure removal involves placement of heavy equipment on the existing superstructure, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the superstructure for the proposed loads. Cost included with Removal of Existing Structures.

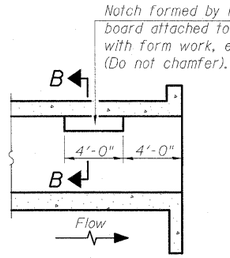
The actual depth of removal and replacement should be adjusted during construction based on dynamic cone penetration (DCP) test or other acceptable measures. If the IBV is determined to be <1, then Biaxial Geogrid will be used at the base of the rock excavation. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field. Please contact the District Geotechnical Engineer prior to starting the excavation for the box culvert.



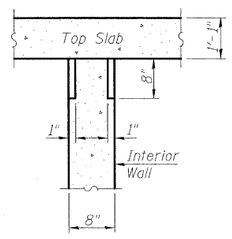
LONGITUDINAL SKETCH



PLAN

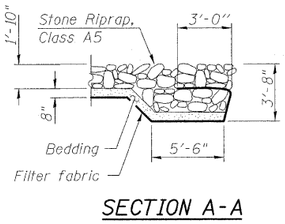


LONGITUDINAL SECTION



SECTION B-B

PHOEBE NESTING SITE DETAILS
(Downstream End Only)



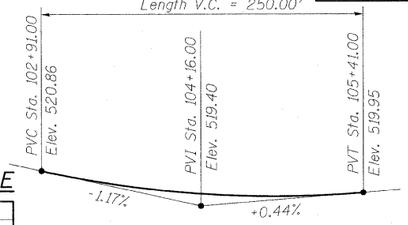
SECTION A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap Class A5	Sq. Yd.	368
Filter Fabric	Sq. Yd.	368
Removal of Existing Structures	Each	1
Removal & Disposal of Unsuitable Materials	Cu. Yd.	140.6
Reinforcement Bars	Pound	41510
Bar Splicers	Each	192
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	215.1
Rockfill - Foundation	Ton	189.8
Temporary Soil Retention System	Sq. Ft.	467.2
Biaxial Geogrid	Sq. Yd.	221

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	U.S. Invert	D.S. Invert
	506.95	506.75



PROPOSED PROFILE GRADE
(F.A.P. 327)

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges

DESIGN STRESSES
FIELD UNITS

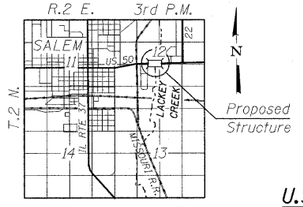
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

WATERWAY INFORMATION

Drainage Area = 4.45 sq. mi. Low Grade Elev. 519.8 ft. @ Sta. 104+73

Flood	Freq. Yr.	Q	Opening Sq. Ft.		Nat.	Head - Ft.		Headwater El.	
		C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Design	50	2,182	203	252	518.13	1.82	0.79	519.95	518.92
Base	100	2,570	203	252	518.50	2.70	1.20	521.20	519.70
Overtopping Existing	48	2,125	203		518.07	1.73		519.80	
Overtopping Proposed	111	2,625		252	518.55		1.25		519.80
Scour	10	1,332	193	251	517.16	0.64	0.16	517.80	517.32



LOCATION SKETCH

GENERAL PLAN
U.S. 50 OVER LACKEY CREEK
STRUCTURE NO. 061-2026

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

LICENSED STRUCTURAL ENGINEER — CHADWICK J. FUESTING 081-005834 — STATE OF ILLINOIS
EXP. 11-30-2010
11/19/2009

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

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

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9 SHEETS	327	15B-1	MARION	58	33
	SN 061-2026		CONTRACT NO. 76A59		
	FED. ROAD DIST. NO. 8	ILLINOIS	FED. AID PROJECT 327		

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