Bench Mark: Chisled "□" on N.E. wingwall. Elev. 624.50.

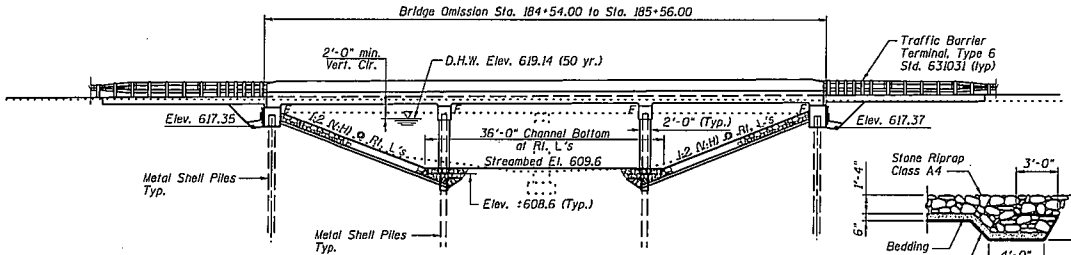
Existing Structure: S.N. 053-0146, built 1974 as FA Rte 18 Section 15-BR. 104'-0" bk. to bk. abutments 46'-0" out to out deck. Precast, prestressed concrete deck beam, 21", on open pile bent abutments and a tapered solid wall concrete pier. Traffic to be maintained during construction utilizing stage construction.

No Salvage.

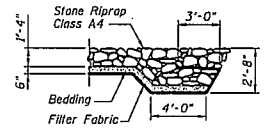
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP RTE 41	15-BR	LIVINGSTON	-	-
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

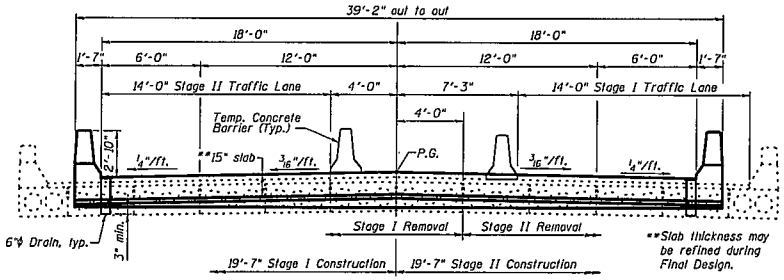
SHEET NO. 1
1 SHEETS



ELEVATION



SECTION A-A

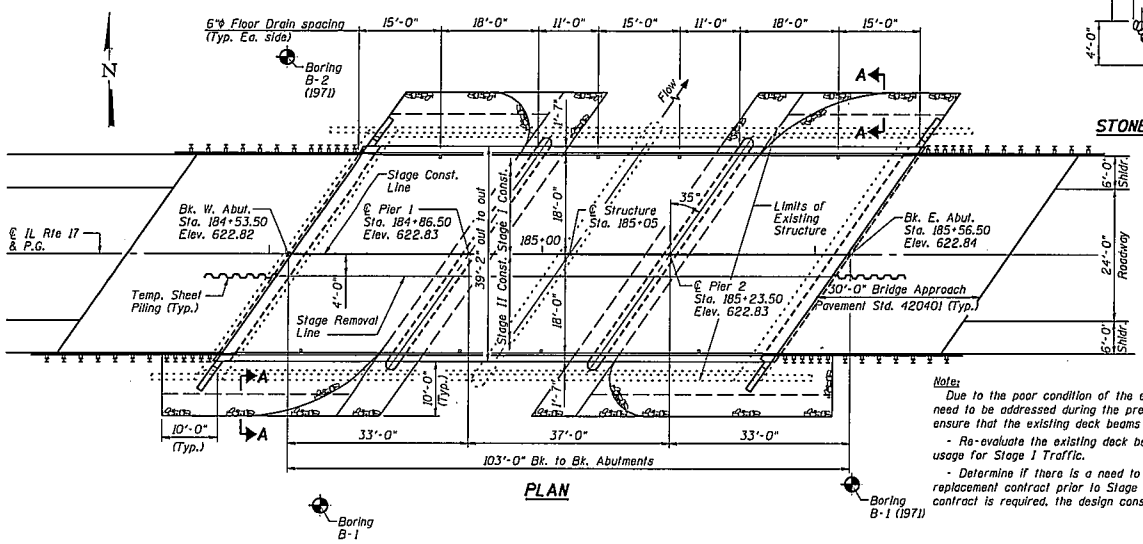


**Slab thickness may be refined during Final Design.

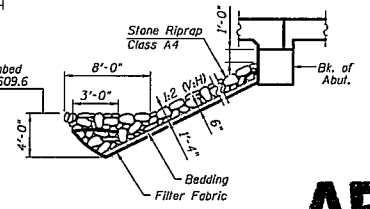
CROSS SECTION
(Looking East)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	West Abut.	Pier 1	Pier 2	East Abut.
	617.3	605.6	605.6	617.3

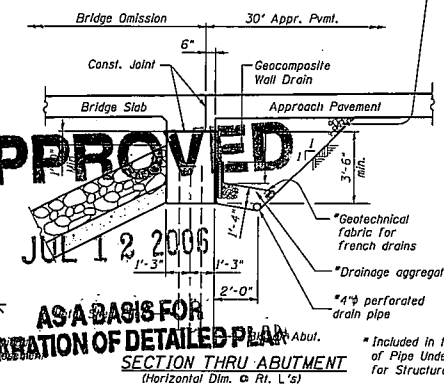


PLAN



STONE RIPRAP ANCHOR DETAIL

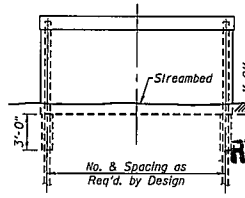
Excavation for placing Porous Granular Embankment (Special) is paid for as Structure Excavation



SECTION THRU ABUTMENT
(Horizontal Dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures.

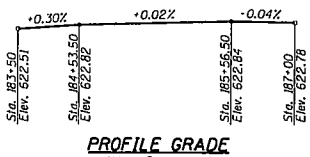
APPROVED
JUL 12 2006
AS A BASIS FOR PREPARATION OF DETAILED PLAN



PIER SKETCH

Note:
Due to the poor condition of the existing deck beams, the following items need to be addressed during the preparation of the final design plans to ensure that the existing deck beams will last the duration of Stage I Traffic.

- Re-evaluate the existing deck beams in order to verify the proper lane usage for Stage I Traffic.
- Determine if there is a need to post the structure or to provide a beam replacement contract prior to Stage I Traffic. If a beam replacement contract is required, the design consultant shall provide the necessary plans.



PROFILE GRADE
(Along ℄ Roadway)

Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

WATERWAY INFORMATION

Drainage Area = 15.11 sq. mi. Exist. Low Grade Elev. 622.5 ft. @ Sta. 184+00
Prop. Low Grade Elev. 622.8 ft. @ Sta. 181+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.
	10	1009	402	413	618.5	0.3	0.3	618.8	618.8
Design	50	1470	447	454	619.1	0.4	0.4	619.5	619.5
Base	100	1655	470	475	619.4	0.5	0.5	619.9	619.9
Overlapping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	2082	501	504	619.8	0.7	0.7	620.5	620.5

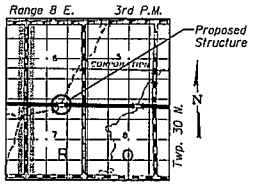
HIGHWAY CLASSIFICATION
FAP Rte. 41 - IL Rte. 17
Functional Class: Minor Arterial (Non-Urban)
ADT: 2850 (2005); 4250 (2025)
DHV: 271 (2005); 404 (2025)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

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

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.042 g
Site Coefficient (S) = 1.2



LOCATION SKETCH

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
IL RTE 17 OVER UNNAMED DRAINAGE DITCH
FAP RTE 41 - SECTION 15BR
LIVINGSTON COUNTY
STATION 185+05
S.N. 053-0182

REVISIONS	
NAME	DATE

SCALE: VERT. HORIZ.
DATE: 8/26/05
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO
COMPUTER FILE NO. SN053-0182rTSL
PROJECT 03236 #013
5/11/06 - MVL