APPROVED

OCT 0 4 2004

CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
313	(4,5)-1	WARREN		
STA.	TO STA.			
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT		

AS A BASIS FOR PREPARATION OF DETAILED PLANS

BENCH MARKS:

B.M. #60
Chiseled "□" on North rim of M.H. in concrete median.
Sta. 442+21.88, 6.12' Rt.
Elev. 805.71

B.M. #61
Chiseled "□" on North rim of M.H. in concrete median.
Sta. 451+47.47, 1.15' Rt.
Elev. 805.03

EXISTING STRUCTURE:

S.N. 094-0041 built in 1991 under Section 4HB. The structure is a two span continuous plate girder bridge with Bk.-to-Bk. of abutment length of 222'-0" and out-to-out width varying from 69'-2¾" to 78'-3¾". The deck is skewed 12°-30' Lt. forward. The pier and pile bent abutments are supported by metal shell concrete piles.

PROPOSED IMPROVEMENTS:

Existing structure to be widened on each side. The road shall be kept open to two lanes of traffic (one each direction) at all times by utilizing staged construction.

Salvage existing structure to limits shown.

HIGHWAY CLASSIFICATION

F.A.P. Route 313 (U.S. Rte. 34)
Class Other Principal Arterial
DHV 570 (2025)
ADT 1368 (2001)
1642 (2025)
Design speed 70 mph
Posted speed 55 mph

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges"

DESIGN STRESSES

FIELD UNITS

New Construction
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M270 Grade 50)

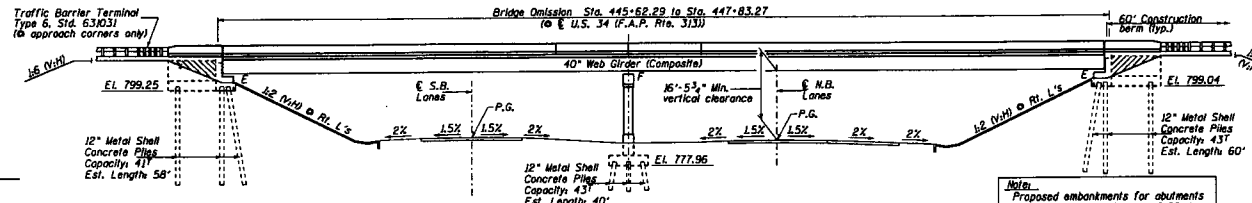
Existing Structure
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M223 Grade 50)

SEISMIC DATA

Seismic Performance Category (SPC)=A
Bed Rock Acceleration Coefficient (A)=0.04
Site Coefficient (S)=1.5

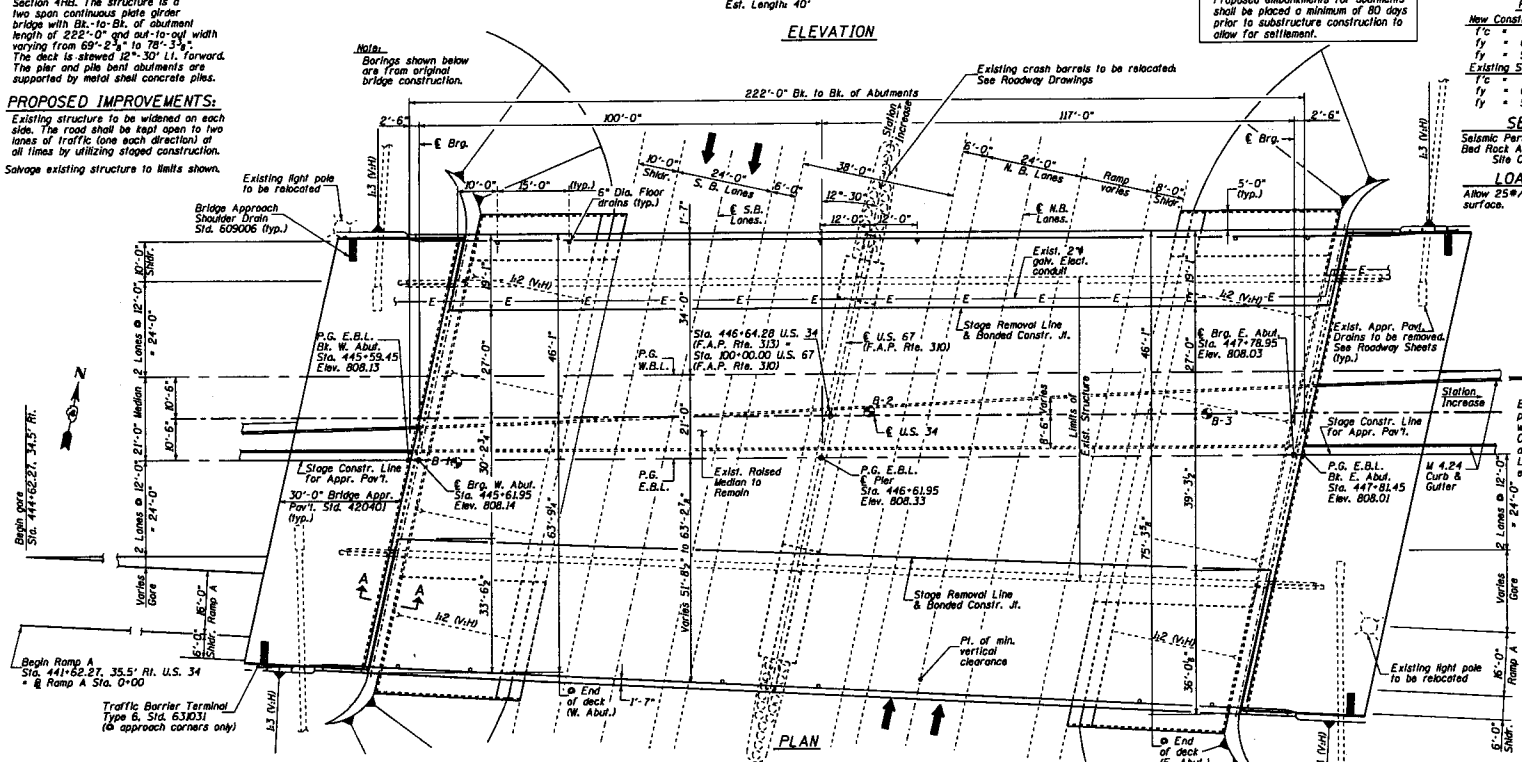
LOADING HS20-44

Allow 25#/Sq. Ft. for future wearing surface.

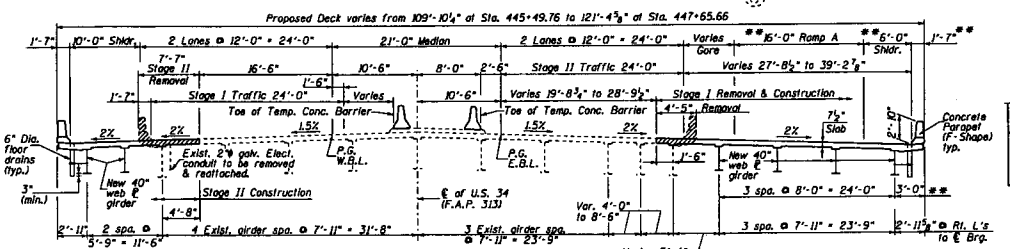


ELEVATION

Note: Proposed embankments for abutments shall be placed a minimum of 80 days prior to substructure construction to allow for settlement.

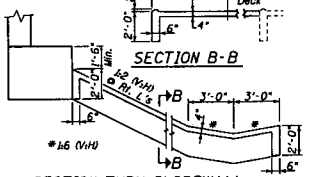


PLAN



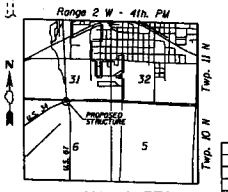
Note: Design New 40" web ℄ girders to match camber and deflection of existing girders.

CROSS SECTION THRU BRIDGE
(Looking East @ Rt. L's to ℄ Rdwy.)

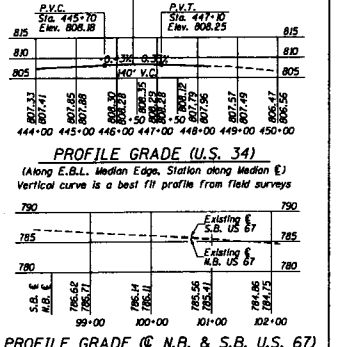


SECTION B-B

SECTION THRU SLOPEWALL

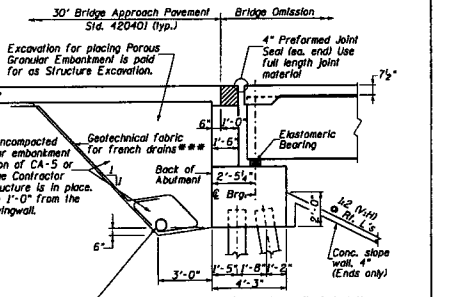


LOCATION SKETCH



PROFILE GRADE (U.S. 34)
(Along E.B.L. Median Edge, Station along Median ℄)
Vertical curve is a best fit profile from field surveys

PROFILE GRADE (℄ N.B. & S.B. U.S. 67)

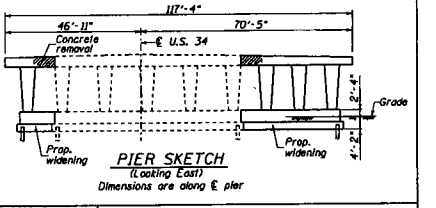


Note: Staged Construction will be accomplished utilizing median crossovers off of the bridge.

A 6"ø perforated drain pipe shall be situated at the bottom of an approximate 2'x2' area of porous granular embankment. The 2'x2' area shall be wrapped completely in geotechnical fabric for french drains. Extend pipe parallel with the cap until intersecting with the sideslope. Pipes shall drain onto concrete headwalls (Article 601.05 of the Std. Specifications.)***

*** Included in the cost of Porous Granular Embankment. Tie drain pipe into existing

SECTION A-A THRU NEW ABUTMENT
Horizontal Dimensions @ Rt. L's



PIER SKETCH
(Looking East)
Dimensions are along ℄ pier

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION

FAP ROUTE 313 (U.S. 34)
U.S. ROUTE 34 OVER U.S. ROUTE 67
SECTION (4,5)-1 STATION 446+64.28
WARREN CO. STRUCTURE NO. 094-0041

SCALE: NONE DRAWN BY: G.L.D.
DATE: 09/2004 CHECKED BY: W.L.B.

T.S. & L.

W:\Highways\Spl\D07\0206602\drawings\sheets\structure\TSL-RT 34.dgn
09/27/2004