

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
314	111BR-1	MADISON	123	108
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

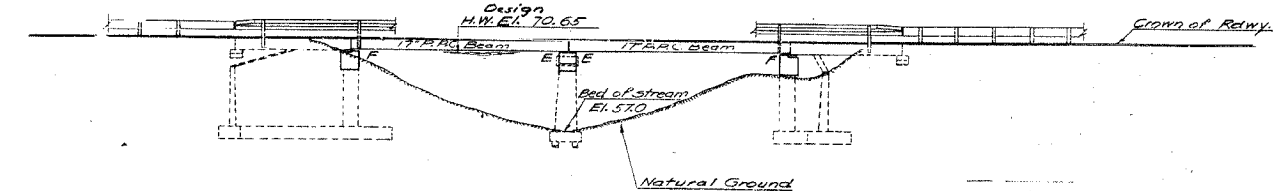
B.M.: R.R. Spike in lower pole 40' Rt Station  
155+39, Elev. = 78.58.  
Existing Structure - Built 1928 as S.B.I. Rte.  
150 Sec. III - B Sta. 161+40 R.C.D.S. Conc.  
Abuts. 4" Conc. W.S. Superstructure to be  
removed by Contractor. No Salvage.  
Structure to be widened utilizing  
staged construction.

STATE OF ILLINOIS

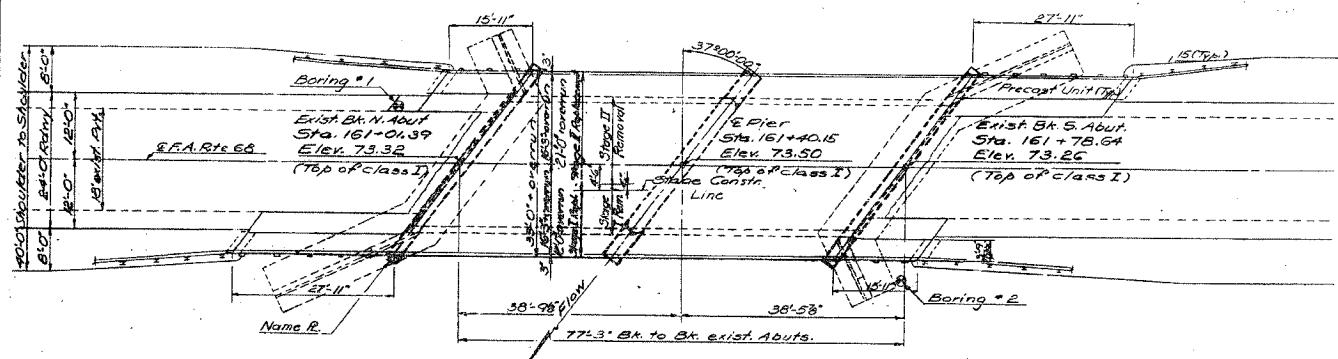
DATE	BY	CHECKED	APPROVED	SCALE	SHEET NO.
10/15/2005	H.L.	R.P.	H.L.	3/8"	8 SHEETS

**GENERAL NOTES**

All reinforcement bars shall be lapped 2d diameters unless otherwise shown.  
It shall be the responsibility of the contractor to verify all dimensions and conditions existing in the field prior to construction and ordering materials.  
An alternate strand pattern using Extra High Strength Prestressing Strand (270 k.s.i.) is permitted.  
Expansion bolts shall consist of self-drilling expansion anchors and 3/8" hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete unless otherwise shown.  
Shoulder transition to wingwall shall be shaped with broken concrete. Cost Incidental.  
The top surface of the beams shall be finished in accordance with Article 305.02 of Std Specs except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.



ELEVATION



PLAN

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Portland Cement Concrete Pavt (10')	Sq Yds	36		36
Pavement Fabric	Sq Yds	36		36
Concrete Removal	Cu Yds		20	20
Expansion Bolts (3/8")	Each	52	84	136
Class X Concrete	Cu Yds	40	367	367
Precast Prestressed Conc. Di. Beam	Sq Ft	2338		2338
Precast Concrete Bridge Slab	Sq Ft	328		328
Steel Railing Type N	Lin Ft	243		243
Reinforcement Bars	Lbs	180	4020	4200
Pre I Rem. of P.C. Pavt. Type X (10')	Sq Yds	8		8
Removal of Existing Super.	Each	1		1
Temporary Guard Rail	Lin. Ft.	77		77
Bit Conc. Surt Course Class I	Ton	39		39
Neoprene Expansion Joint (6")	Lin Ft	42		42
Name Plates	Each		1	1
Waterproofing Membrane System	Sq Yds	285		285
Portland Cement Mortar Finishing Course	Lin. Ft.	769		769

Limits of Waterproofing Membrane System shall be back to back of abutments.

STATION 161+40  
REBUILT 13P BY  
STATE OF ILLINOIS  
F.A.R.T.E. 68  
LOADING HS 20  
NAME PLATE  
Sec. Std. 211.1

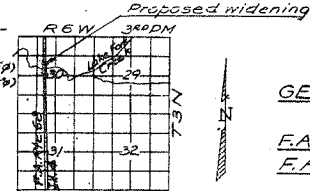
**DESIGN STRESSES**

WATERWAY INFORMATION	FIELD UNITS	PRESTR. PRECAST UNITS
Drainage Area	6,080 Acres	f <sub>c</sub> = 4,000 psi
Character		f <sub>c</sub> = 5,000 psi
Required Opening	615 Sq. Ft.	f <sub>c</sub> = 4,000 psi
Present Opening	572 Sq. Ft.	f <sub>s</sub> = 278,000 p.s.i. (Strands 6/8)
Proposed Opening (80% Allow.)	615 Sq. Ft.	f <sub>s</sub> = 173,600 p.s.i. (Strands 6/8)

**PRECAST CONC.**

f <sub>c</sub> = 4,500
f <sub>c</sub> = 1,800
f <sub>s</sub> = 20,000
n = 8

Loading HS 20-44  
Note: Allow 25% for future wearing surface



LOCATION SKETCH

**GENERAL PLAN & ELEVATION**

F.A.R.T.E. 68 OVER LAKE FORK CREEK  
F.A.R.T.E. 68 SECTION III BR  
MADISON CO.  
STA. 161+40.00

DESIGNED BY	H.L. Lee
CHECKED BY	R.P. Rowley
DRAWN BY	R.G.
CHECKED BY	H.L. Lee

EXAMINED	J.W.S.
APPROVED	[Signature]
DATE	10/15/05



FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
  
EXISTING STRUCTURE PLANS  
  
FAP ROUTE 314  
SECTION 111BR-1  
MADISON COUNTY