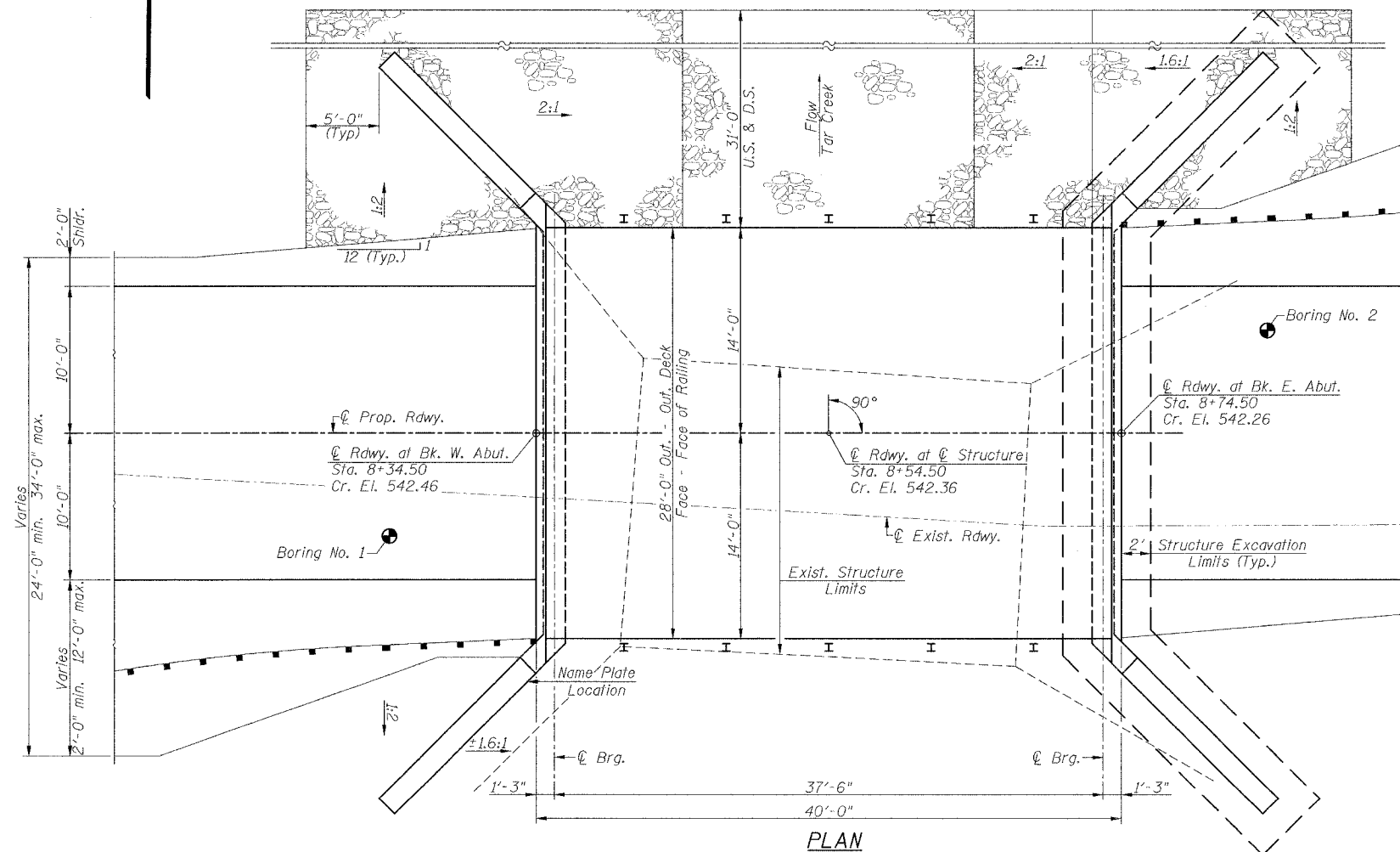
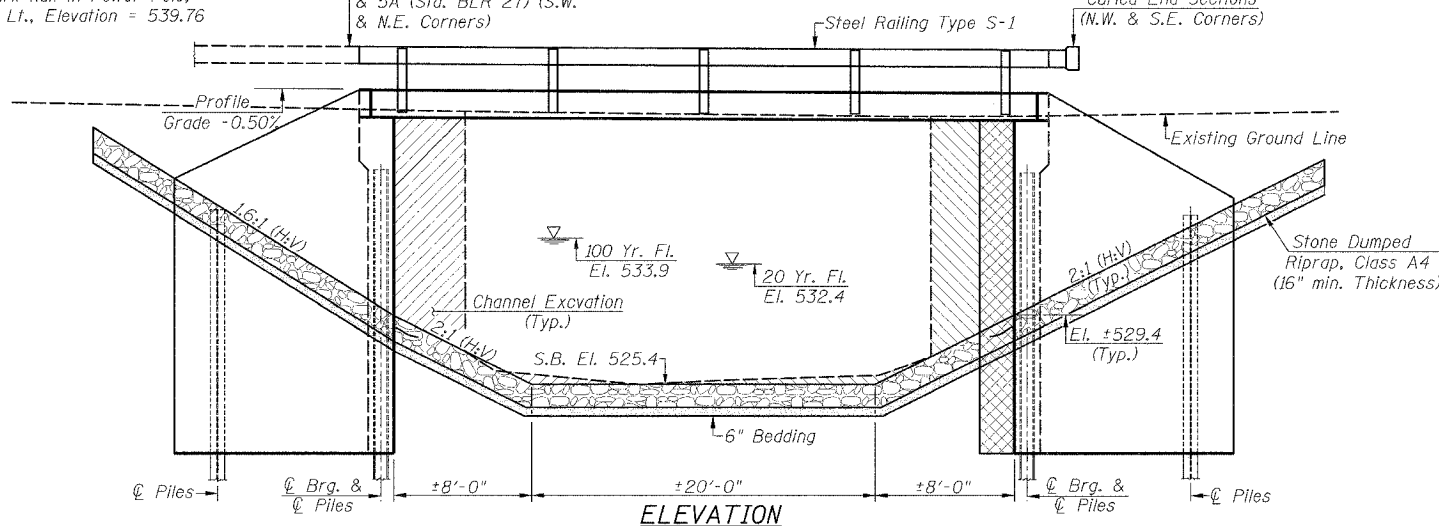


Existing Structure: Single Span Timber Deck on Steel Stringers Supported by a Timber Abutment on the East Side with Timber Wingwalls, and a Concrete Abutment on the West Side with Concrete Wingwalls. ± 26'-6" Bk.-Bk. Abutments, ± 18'-0" Clear Deck Width ± 23.5 Cu. Yds. Concrete, ± 7750 lbs. Structural Steel To Be Removed.
 Benchmark: Yellow Benchmark Nail in Power Pole, Sta. 8+01, 29' Lt., Elevation = 539.76

Traffic Barrier Terminal Types 1 (Standard BLR 23) & 5A (Std. BLR 27) (S.W. & N.E. Corners)

Curled End Sections (N.W. & S.E. Corners)



T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34	95-05109-00-BR	MENARD	14	5
CONTRACT NO. 93460				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			156
Stone Dumped Riprap, Class A4	Ton			482
Filter Fabric	Sq. Yd.			642
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		351	351
Concrete Structures	Cu. Yd.		132.1	132.1
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1083		1083
Reinforcement Bars	Pound		18110	18110
Steel Railing, Type S-1	Foot	80		80
Furnishing Steel Piles HP 10x42	Foot		576	576
Driving Piles	Foot		576	576
Test Pile, Steel HP 10x42	Each		2	2
Name Plates	Each		1	1
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

WATERWAY INFORMATION

Drainage Area = 4.56 Sq. Mi. Pr. Low Grade Elev. 542.46 Sta. 9+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head - ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	1045	176	220	532.4	0.3	0.0	532.7	532.4
Base	100	1594	217	276	533.9	0.5	0.0	534.4	533.9
Exist. Overtop.	Greater than 500 years								
Prop. Overtop.	Greater than 500 years								
Max. Calc.	500	2141	244	310	534.9	1.0	0.3	535.9	535.2

DESIGN STRESSES

FIELD UNITS

f_c = 1400 psi
 v_c = 56.2 psi
 f_s = 24000 psi
 n = 9

PRECAST PRESTRESSED UNITS

f'_c = 5000 psi
 f'_{ci} = 4000 psi
 f'_s = 270000 psi
 f'_{si} = 201960 psi
 1/2" Strands

GENERAL NOTES

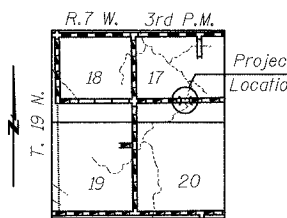
See Proposal for Boring Data.
 Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60. See Special Provision.
 The layout of the riprap slope wall may be varied to suit conditions in the field as determined by the Engineer.
 The contractor shall drive one test pile in a permanent location at each abutment as directed by the Engineer in the field prior to ordering the remainder of piles.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications.

LOADING HS 20-44

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



LOCATION PLAN

STA. 8+54.50
 BUILT 200 BY
 ROAD DISTRICT NO. 5 &
 MENARD COUNTY
 SECTION 95-05109-00-BR
 STR. NO. 065-3121 LOADING HS 20

NAME PLATE

(Standard 515001)



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "A.A.S.H.T.O. Standard Specifications For Highway Bridges".

Allen Henderson 02/10/08
 Expiration Date 11/30/2008

FILE NAME =	USER NAME = #USER#	DESIGNED - MAH	REVISED -
#FILE.#		DRAWN - MJS	REVISED -
	PLT DATE = #DATE#	CHECKED -	REVISED -
		DATE -	REVISED -

Allen Henderson & Associates, Inc.
 Civil and Structural Engineers Springfield, IL
 62703 Phone: (217)544-8033 IL Design Firm
 No. 184-001907

GENERAL PLAN & ELEVATION

SCALE: 1" = 5' SHEET NO. 5 OF 14 SHEETS STA. 5+99.00 TO STA. 11+75.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34	95-05109-00-BR	MENARD	14	5
CONTRACT NO. 93460				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				