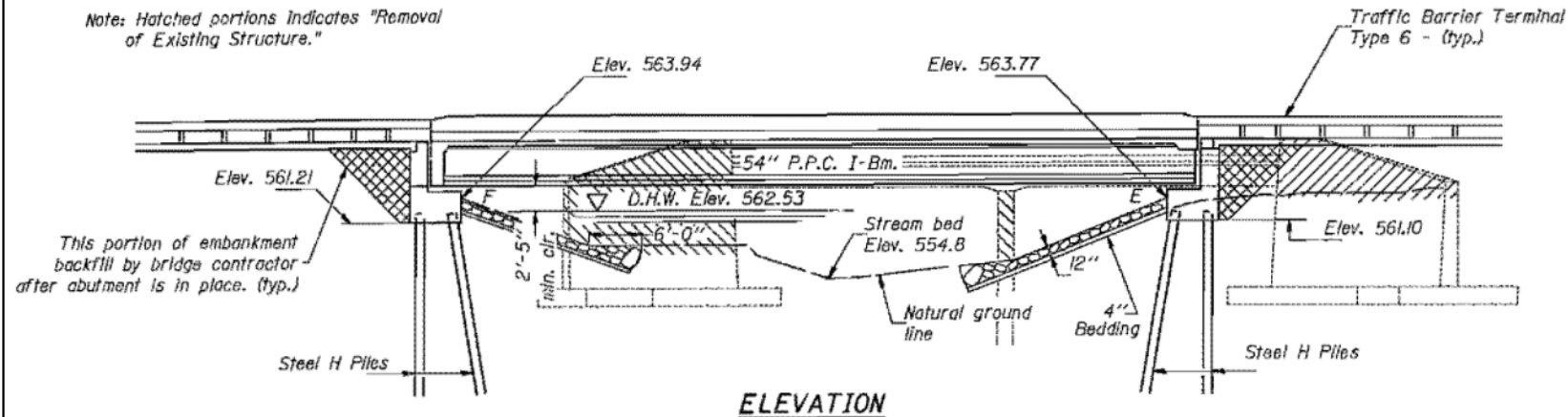


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	SECTION	SHEET NO.	SHEET NO.
F.A. 100	*	**	100	51	15 SHEETS

Bench Mark: #22 "□" @ N.W. corner of East hub guard 14.2' Rt. Sta. 137+27; Elev. 570.83  
Existing Structure: #032-0027 is a two span R.C. slab on R.C. closed abutments and open pile bent pier. Built in 1956 as S.B.I. Rte. 47, Section 10B-1, the existing structure is to be removed by the bridge contractor. One lane of traffic is to be maintained at all times utilizing stage construction. No salvage

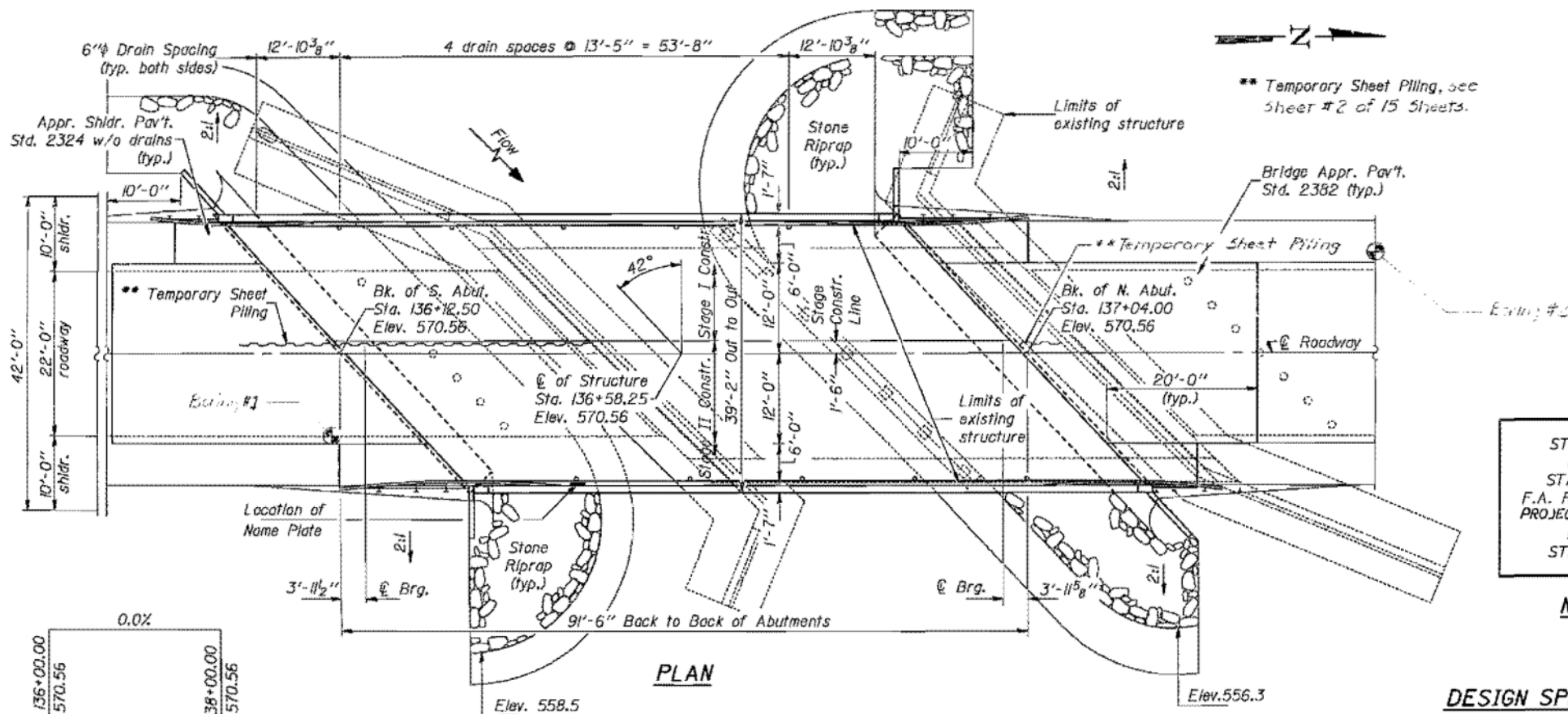
Note: Hatched portions indicates "Removal of Existing Structure."



GENERAL NOTES

See Proposal for Boring Data.  
All structural steel shall be shop painted with the zinc-silicate and vinyl paint system.  
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42, or M-53 Grade 60.  
Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.  
The contractor shall drive (1) Steel (HP10x42) test pile in a permanent location at the South Abutment as directed by the Engineer before ordering the remainder of piles.

FOR INFORMATION ONLY



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete Superstructure	Cu. Yd.	122.7		122.7
Class X Concrete	Cu. Yd.		22.5	22.5
Reinforcement Bars (Epoxy Coated)	Lbs.	24,040		24,040
Reinforcement Bars	Lbs.		8,170	8,170
Furnishing & Erecting Precast Prestressed Concrete I Beams (54")	Lin. Ft.	510		510
Steel Piles (HP10x42)	Lin. Ft.		778	778
Test Piles Steel (HP10x42)	Each		1	1
Name Plates	Each		1	1
Stone Riprap	Sq. Yd.		542	542
Structure Excavation	Cu. Yd.	268		268
Preformed Joint Seal (1-1/2")	Lin. Ft.	53		53
Neoprene Expansion Joint (2")	Lin. Ft.	51		51
Protective Coat	Sq. Yd.		71	71
Structural Steel	Lbs.	1,330	1,440	2,770
Elastomeric Bearing Assembly, Type I	Each	6		6
Removal of Existing Structure	Each		1	1
Temporary Sheet Piling	Sq. Ft.		1,774	1,774
Floor Drains	Each		10	10

STATION 136+58.25  
BUILT 198 BY  
STATE OF ILLINOIS  
F.A. RT. 100 SEC. 10BR  
PROJECT F-100(59)  
LOADING HS20  
STR. NO. 032-0089

NAME PLATE  
See Std. 2113

DESIGN SPECIFICATIONS

AASHTO (1983) and applicable Interims (1984 thru 1985)

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

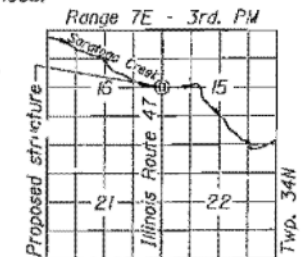
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$  psi  
 $f'_t = 60,000$  psi (Infl.)  
 $f_y = 36,000$  psi (Struct.)

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$  psi  
 $f'_t = 4,000$  psi minimum  
 $f'_s = 270,000$  psi (1/2"  $\phi$  strands)  
 $f'_s = 189,000$  psi (3/8"  $\phi$  strands)



LOCATION SKETCH

GENERAL PLAN  
ILLINOIS ROUTE 47 OVER  
SARATOGA CREEK  
F.A. ROUTE 100 - SECTION 10BR  
GRUNDY COUNTY  
STATION 136+58.25  
STRUCTURE NO. 032-0089

WATERWAY INFORMATION

Drainage Area = 12.0 sq. mi. Low Grade Elev. 570.50 @ Sta. 139+00.00

Flood	Freq. Yr.	C.F.S.	0	Opening Sq. Ft.	Extst.	Prop.*	Not. H.W.E.	Extst.	Prop.	Extst.	Prop.	Headwater El.
Design	50	III	228	232	562.53	1.06	0.77	563.6	563.3			
Base	100	1274	234	239	562.68	1.35	1.02	564.0	563.7			
Overlapping												
Max. Calc.	500	1657	248	256	563.00	2.07	1.61	565.1	564.6			

\* Single Span, open abutment bridge with 42° skew angle.

PROFILE GRADE  
(along @ roadway)

DESIGNED	VERNON VELTZ
CHECKED	ERIC SHAWBY
DRAWN	RITA WILLIAMS
CHECKED	V.V. ERIC SHAWBY

EXAMINED	[Signature]	1987
PASSED	[Signature]	
APPROVED	[Signature]	

FILE NAME =	USER NAME = bdearene	DESIGNED -	REVISED -
V:\3195\66883 (South Section)\CADD Sheets\0366883-sht-exstruct-1.dgn		DRAWN -	REVISED -
PLOT SCALE = 2.0000' / in.		CHECKED -	REVISED -
SHT.PLAN	PLOT DATE = 8/6/2013	DATE - 7/15/2013	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL. RTE. 47  
EXISTING BRIDGE PLANS

SCALE: N/A SHEET 1 OF 23 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	(110)R, BR & BR-1	GRUNDY	644	399
CONTRACT NO. 66883			ILLINOIS FED. AID PROJECT	