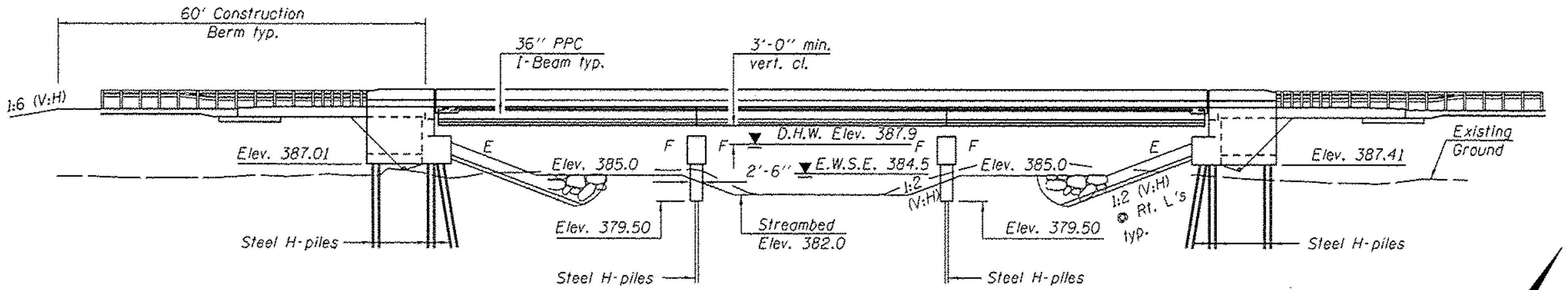
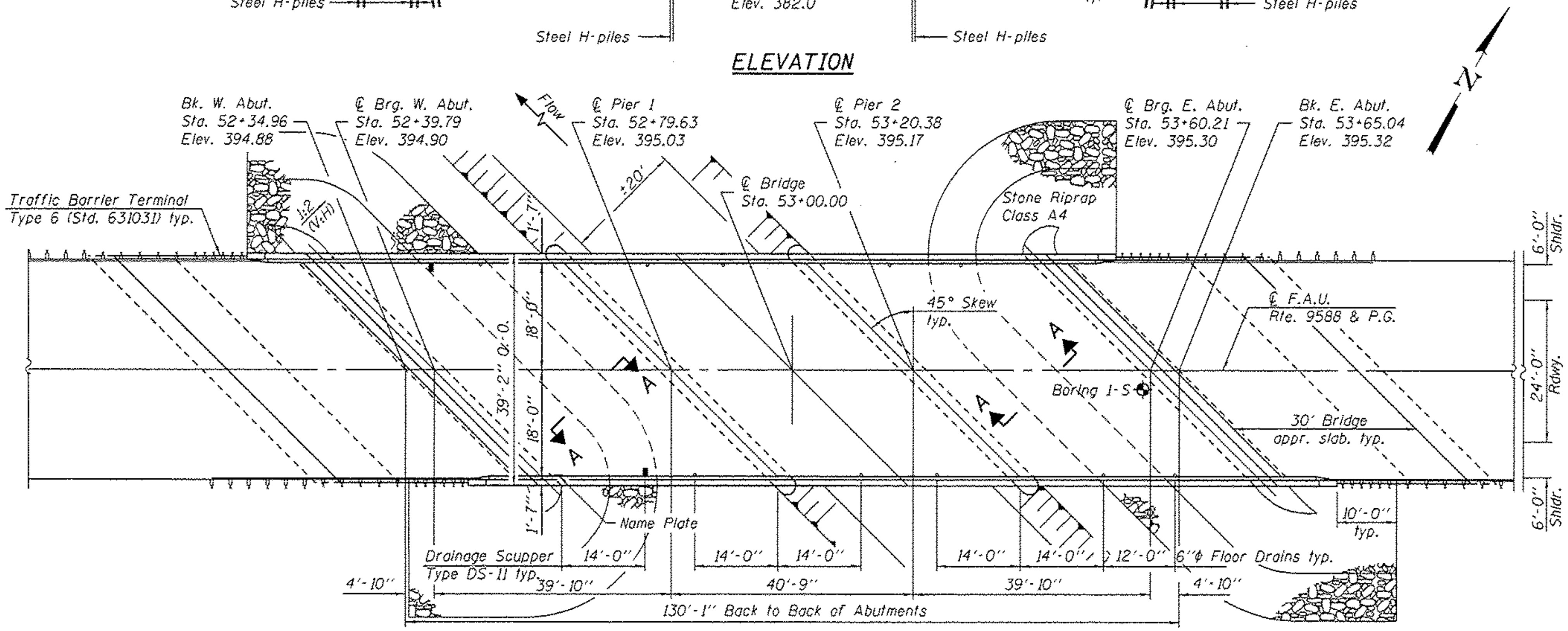
Bench Mark: #134 Square cut in wingwall S.N. 100-3009. Elevation 392.28

Existing Structure:
S.N. 100-3009 built 1956 as F.A.S. Route 906, Section 390 at Station 53+56.
Structure consists of three span steel WF beams and reinforced concrete deck supported by spill-thru abutments and open concrete pile bent piers. 81'-6" back-to-back abutments, 30'-4½" out-to-out deck. Traffic to be maintained on existing structure during construction. Existing structure to be removed after construction complete and traffic shifted to new alignment.

No Salvage



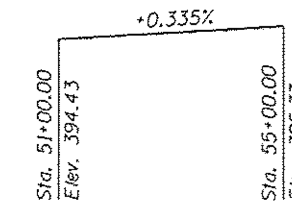
ELEVATION



PLAN

Note:
For Section A-A, see sheet 2 of 26.

INDEX OF SHEETS



PROFILE GRADE

(along ℄ roadway)

STATION 53+00.00
BUILT 201 BY
STATE OF ILLINOIS
F.A.U. RT. 9588 SEC. 39B-2
LOADING HS20-44
STR. NO. 100-0081

NAME PLATE

See Std. 515001

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 12%g
Site Coefficient (S) = 1.0

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½"ϕ low lax. strands)
f_{si} = 201,960 psi (½"ϕ low lax strands)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	387.01	375.00	375.00	387.41

WATERWAY INFORMATION

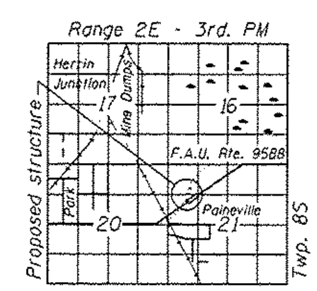
Drainage Area = 4.64 mi² — Exist. Low Grade Elev. 391.50 @ Sta. 54+00 (Exist. align.) — Prop. Low Grade Elev. 394.21 @ Sta. 50+00 (Prop. align.)

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	780	236.1	240.1	387.5	1.2	0.8	388.7	388.3
Design	50	1120	264.0	268.4	387.9	1.6	1.2	389.5	389.1
Base	100	1270	271.0	275.5	388.0	1.9	1.3	389.9	389.3
Max. Calc.	500	1600	298.9	304.7	388.4	2.1	1.5	390.5	389.9

10 Year velocity through Exist. Bridge = 3.3 fps 10 Year velocity through Prop. Bridge = 3.3 fps

DAVID CARL PUZEY 081-005470 SPRINGFIELD ILLINOIS — LICENSED STRUCTURAL ENGINEER — STATE OF ILLINOIS

EXPIRES 11-30-2014



LOCATION SKETCH

⚠1 SHEET ADDED 2-18-14

GENERAL PLAN & ELEVATION
HERRIN ROAD OVER
UNNAMED TRIBUTARY OF POND CREEK
F.A.U. ROUTE 9588- SECTION 39B-2
WILLIAMSON COUNTY
STATION 53+00.00
STRUCTURE NO. 100-0081

DESIGNED - [signature]	EXAMINED [signature] ACTING ENGINEER OF BRIDGE DESIGN	DATE - JANUARY 24, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - [signature]	PASSED [signature] ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	
DRAWN - W.D.C. / M.B.M.		REVISED	
CHECKED - FTIGRA			SHEET NO. 1 OF 26 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9588	39B-2	WILLIAMSON	224	94
		CONTRACT NO. 78277		

ILLINOIS FED. AID PROJECT