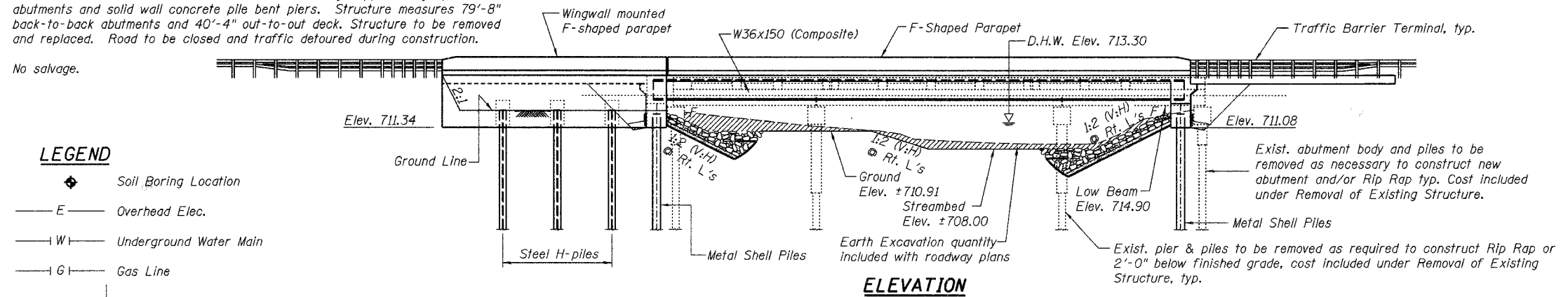


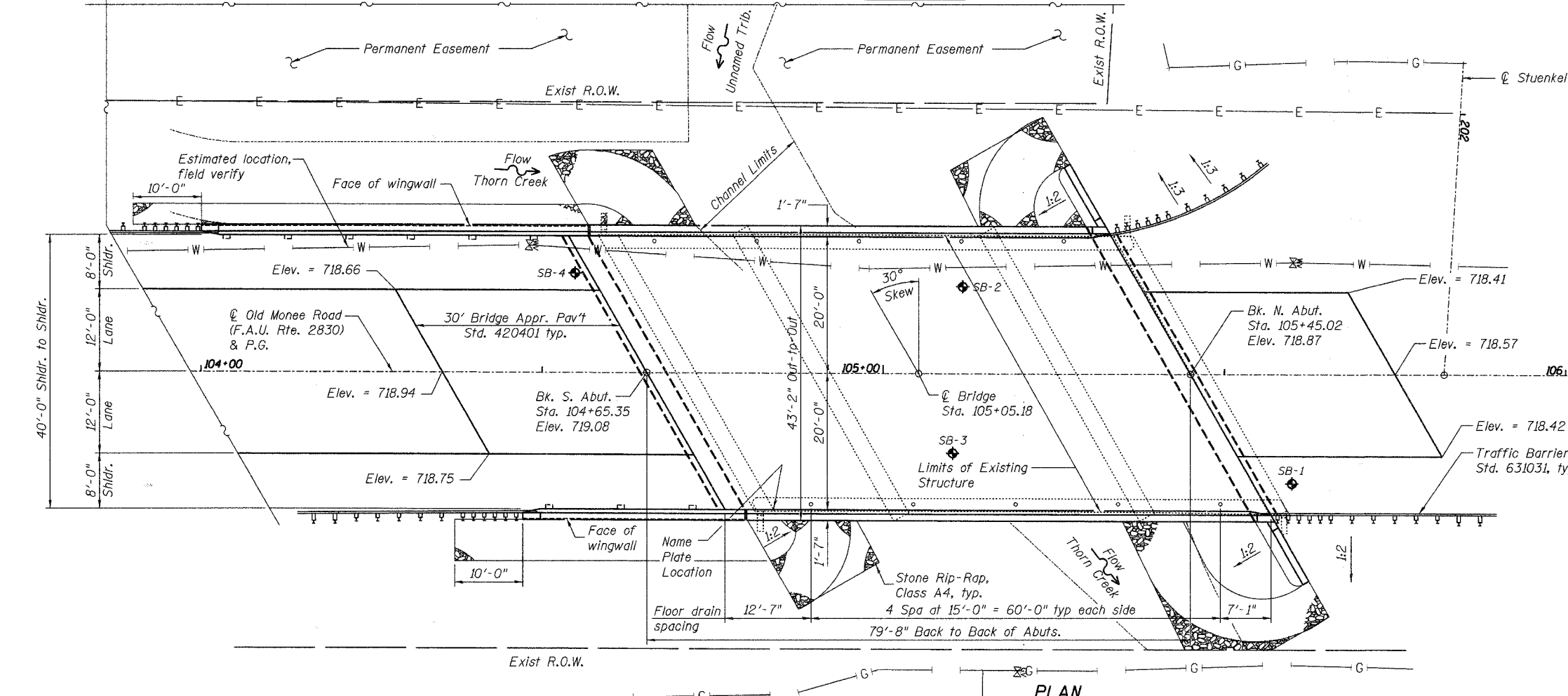
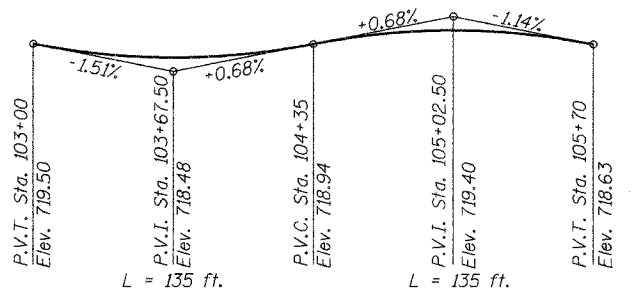
Benchmark: Cut \square on top of the Southeast wingwall of the existing bridge.
 Elev. = 718.03
 Existing Structure: S.N. 099-3065 built 1964 as F.A.S. Route 1414, Sec. 133B. Structure consists of three span precast prestressed concrete deck beams with variable thickness bituminous overlay supported by spill-thru abutments and solid wall concrete pile bent piers. Structure measures 79'-8" back-to-back abutments and 40'-4" out-to-out deck. Structure to be removed and replaced. Road to be closed and traffic detoured during construction.

No salvage.

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
FAU 2830	01-00133-08-BR	WILL	37	12
SHEETS S-19				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
1		#83989		



- LEGEND**
- \blacklozenge Soil Boring Location
 - E — Overhead Elec.
 - W — Underground Water Main
 - G — Gas Line



LOADING HS20-44
 Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
 2002 AASHTO Standard Specifications - 17th Ed.

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50)

SEISMIC DATA
 Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 4%
 Site Coefficient (S) = 1.0

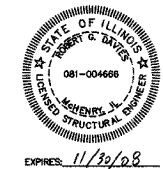
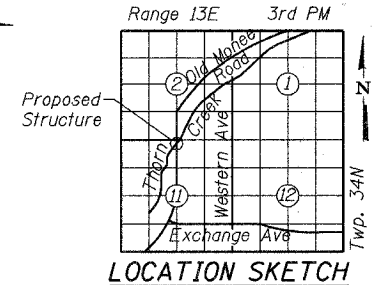
INDEX OF SHEETS

S-1	General Plan & Elevation
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S-4	Top of Slab Elevations
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S-7	Superstructure Details
S-8	Diaphragm Details
S-9	Structural Steel
S-10	Steel Framing Details
S-11	North Abutment
S-12	South Abutment
S-13	Southeast Wingwall Details
S-14	Southwest Wingwall Details
S-15	Pile Details - Metal Shell
S-16	Pile Details - H-Piles
S-17	Bar Splicer Assembly Details
S-18	Soil Boring Logs
S-19	Soil Boring Logs

WATERWAY INFORMATION
 Drainage Area = 4.0 sq. mi. Low Grade Elev. 718.22 @ Sta. 106+40.32

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	375	175	249	713.30	0.7	0.6	714.00	713.90
Base	100	441	196	271	713.60	0.5	0.5	714.10	714.10
Overtopping									
Max. Calc.	500	800	255	331	714.40	0.6	0.6	715.00	715.00

NAME PLATE
 THORN CREEK
 BUILT 200 BY
 WILL COUNTY
 SEC 01-00133-08-BR
 F.A.U. 2830 STA. 105+05.18
 STR. NO. 099-3379 LOADING HS20



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 "AASHTO Standard Specifications for Highway Bridges".

Robert G. Davies 11/24/07
 Robert G. Davies Date
 Licensed Structural Engineer
 License Expires November 30, 2008



ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
OLD MONEE ROAD (COUNTY HIGHWAY 48)
OVER THORN CREEK
WILL COUNTY
SECTION NO. 01-00133-08-BR
STRUCTURE NO. 099-3379
 DATE: 11-26-2007