

Bench Mark: I. Pin w/Cap Sta. 442+24±, 34' Lt. El. 384.42

Existing Structure: S.N. 083-0047 built in 1923 as a single span closed abutment structure with a reinforced concrete slab measuring 20'-0" clear face to face of abutments, and out to out deck width of 32'-3", and 0° skew. Structure to be removed and replaced.

Traffic to be maintained utilizing stage construction

No Salvage

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.P. 778	2B-1-1	SALINE	74	43
FED. ROAD DIST. NO. 9		ILLINOIS	FED. AID PROJECT-	

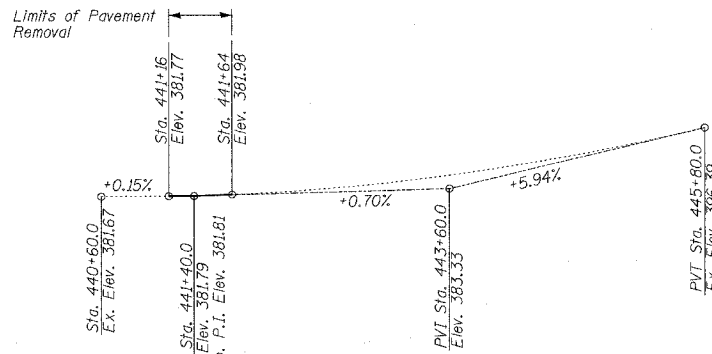
SHEET NO. 1  
8 SHEETS

**GENERAL NOTES**

1. Reinforcement bars shall conform to the requirements of AASHTO M 31, M 42 or M 53 Grade 60.
2. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
3. All construction joints shall be bonded.
4. Excavation behind existing abutment walls shall be done before removing the existing superstructure. The contractor shall sawcut the existing abutments at the stage removal line before Stage I removal.
5. Precast alternate is not allowed.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Stone Riprap, Class A5	Sq. Yd.	339
Filter Fabric for use with Riprap	Sq. Yd.	339
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	23400
Temporary Sheet Piling	Sq. Ft.	846
Temporary Bridge Rail	Foot	23
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	127.0
Steel Plate Beam Guardrail Attached to Structures	Foot	63
Bar Splicers	Each	122



**PROFILE GRADE**

(Along Center Roadway)  
(Existing & Proposed)

EXIST. RTE 34  
PI STA. = 438+50.65  
Δ = 34° 11' 51" (RT)  
D = 5° 05' 12"  
R = 1,126.42'  
T = 346.51'  
L = 672.31'  
E = 52.09'  
P.C. STA. = 435+04.15  
P.T. STA. = 441+76.46

**HORIZONTAL CURVE DATA**

**LOADING HS20-44**

Allow 50#/sq ft for future wearing surface.

**DESIGN SPECIFICATIONS**

AASHTO (1996) with 1997 thru 2002 Interims

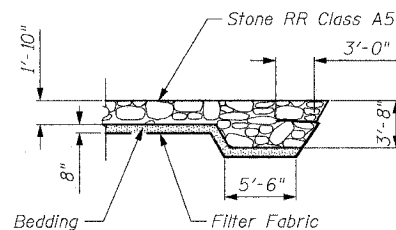
**DESIGN STRESSES**

FIELD UNITS  
f'c = 3,500 psi  
fy = 60,000 psi (Reinf.)

STATION 441+40.60  
BUILT 200 BY  
STATE OF ILLINOIS  
F.A.P. 778 SEC. (2B-1)-1  
LOADING HS20  
STR. NO. 083-2016

**NAME PLATE**

See Std. 515001

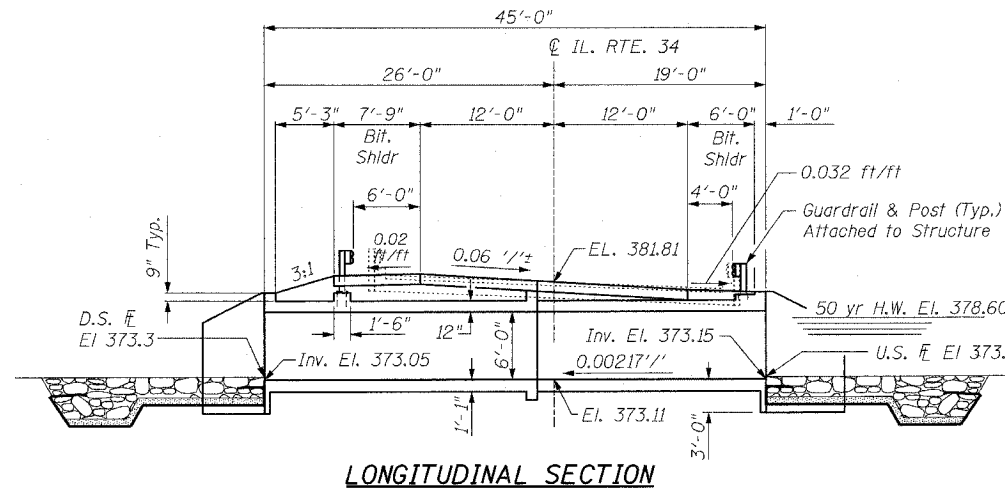


**SECTION A-A FLANK DETAIL**

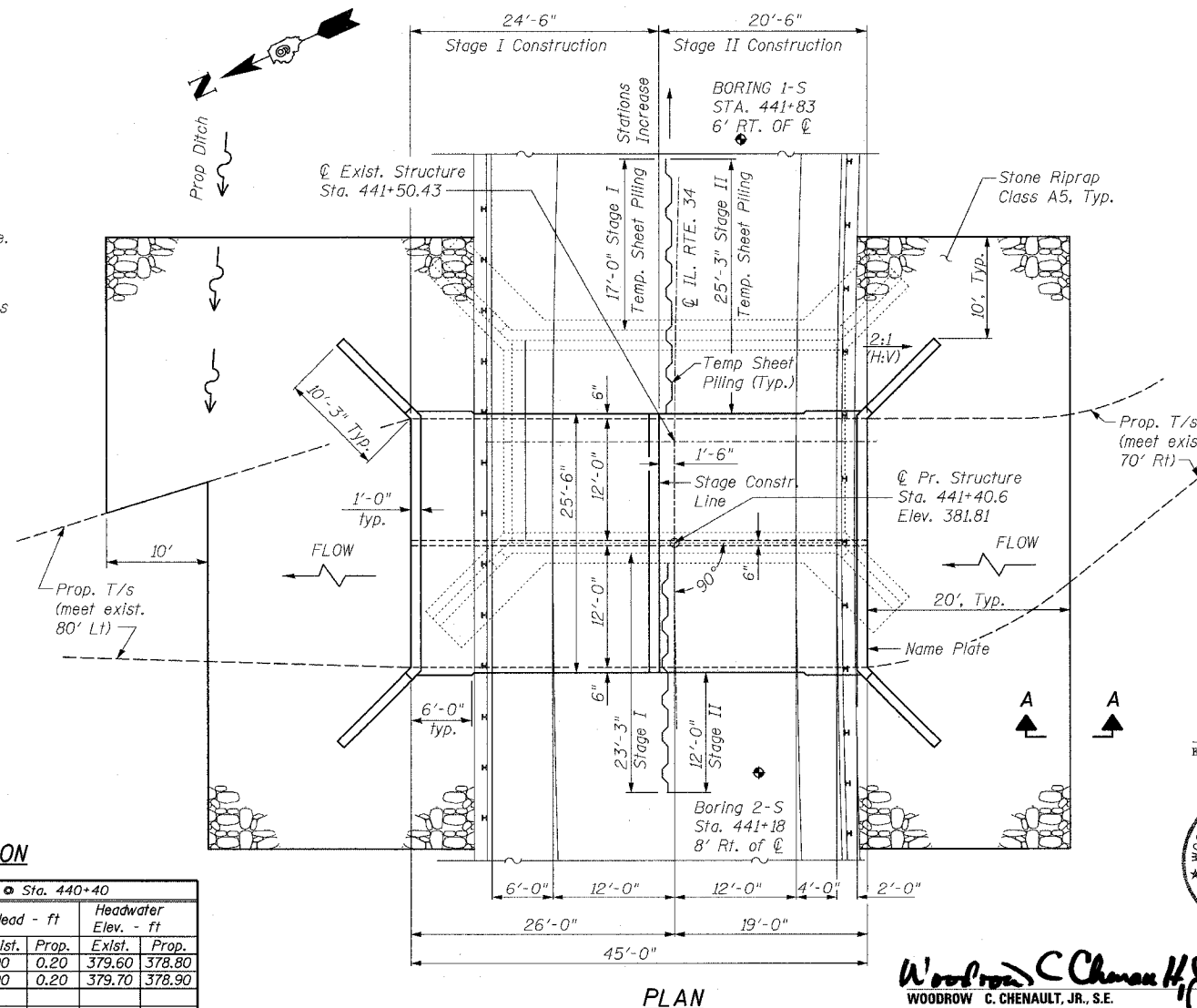
**WATERWAY INFORMATION**

Drainage Area = 0.57 mi<sup>2</sup> Low Grade Elev. 381.65 ft Sta. 440+40

Flood	Freq. Yr.	Q ft <sup>3</sup> /s	Opening Sq. ft		Nat. H.W.E. ft	Head - ft		Headwater Elev. - ft	
			Exlst.	Prop.		Exlst.	Prop.	Exlst.	Prop.
Design	50	830	62.2	124.8	378.60	1.00	0.20	379.60	378.80
Base	100	960	64.2	127.2	378.70	1.00	0.20	379.70	378.90
Overtopping									
Max. Calc.	500	1280	66.3	129.6	378.80	1.30	0.30	380.10	379.10



**LONGITUDINAL SECTION**

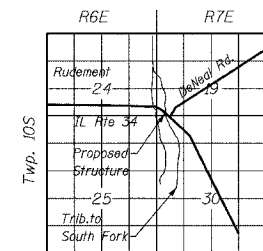


**PLAN**

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY  
*Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES



*Woodrow C. Chenault, Jr.* 11-19-03  
WOODROW C. CHENAULT, JR., S.E.  
IL REGISTERED STRUCTURAL ENGINEER  
ILLINOIS NO. 3567 EXPIRES NOVEMBER 30, 2006



**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**  
**IL. ROUTE 34 OVER UNNAMED TRIBUTARY**  
**TO SOUTH FORK SALINE RIVER**  
**FAP ROUTE 778 - SEC. (2B-1)-1**  
**SALINE COUNTY**  
**STATION 441+40.60**  
**STRUCTURE NO. 083-2016**