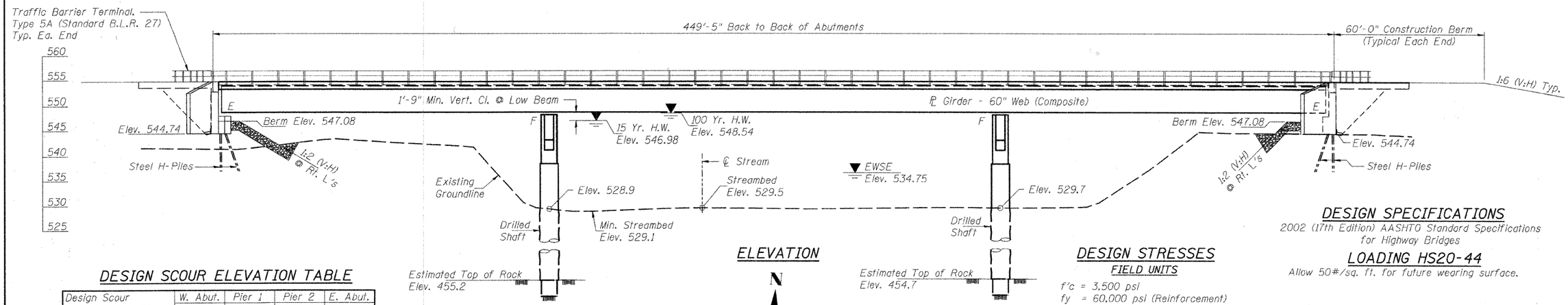
B.M. : Mag nail near west bank, Station 468+48.95, Rt. 2.56', Elev. 541.80
Wood hub, Station 471+78.76, Rt. 43.38', Elev. 545.70
Iron pin, Station 474+93.38, Rt. 29.24', Elev. 544.23

Existing Structure: None

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	31
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
26 SHEETS

*Section 01-00061-00-BR Contract #95552



ELEVATION

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.) 100 Yr.	W. Abut.	Pier 1	Pier 2	E. Abut.
	544.74	520.00	520.00	544.74

DESIGN SPECIFICATIONS

2002 (17th Edition) AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

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

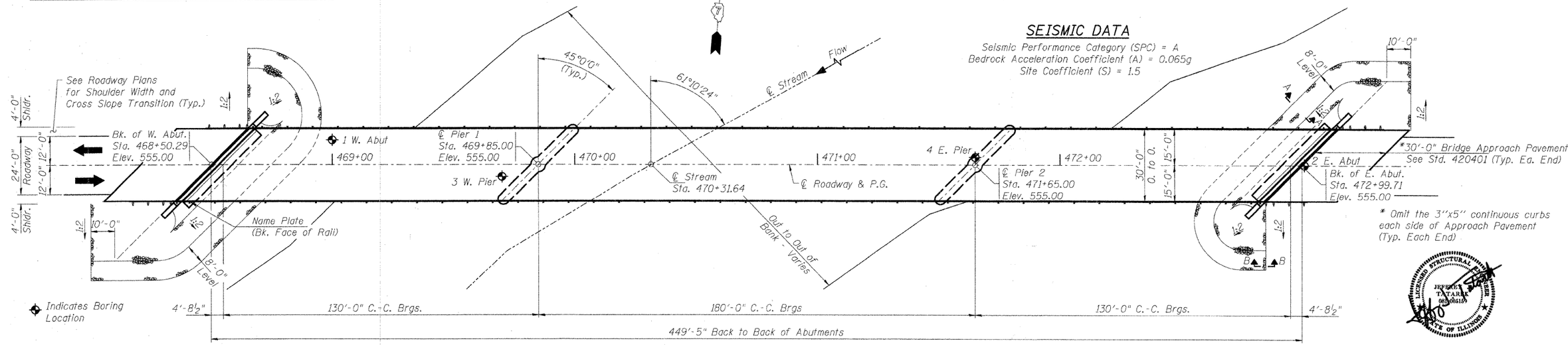
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W Structural Steel)

SEISMIC DATA

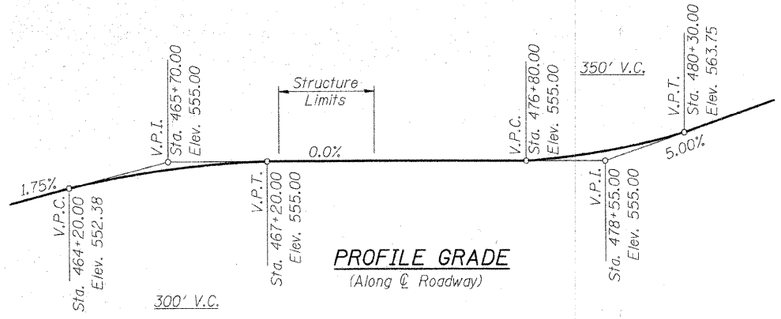
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.065g
Site Coefficient (S) = 1.5



PLAN

Note: See Sheet 2 of 26 for Section A-A & B-B.

* Omit the 3"x5" continuous curbs each side of Approach Pavement (Typ. Each End)

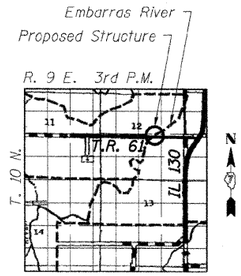


PROFILE GRADE
(Along ℄ Roadway)

WATERWAY INFORMATION

Drainage Area = 933 Sq. Miles Low Grade Elev. 548.00 @ Sta. 460+95.00

Flood	Freq. Yr.	Description	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.
Design	15	Overflow Bridge	2630	-	785	546.98	-	0.20	546.98	547.18
		River Bridge	15720	-	2614		-			
		Over-The-Road Flow	0	-	0		-			
		Total	18350	-	3399		-			
Overtopping	50					548.00			548.00	
Base	100	Overflow Bridge	5720	-	1021	548.54	-	0.45	548.54	549.09
		River Bridge	16040	-	2849		-			
		Over-The-Road Flow	4970	-	1787		-			
		Total	26730	-	5657		-			
Max. Calc.	500	Overflow Bridge	6420	-	1176	549.57	-	0.43	549.57	550.00
		River Bridge	15080	-	2849		-			
		Over-The-Road Flow	12390	-	3449		-			
		Total	33890	-	7474		-			



LOCATION SKETCH

JEFFREY TATARKE 062-058139 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

SIGNATURE
4-3-08
DATE

LIC. EXP. DATE : 11-30-08

"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 'AASHTO Standard Specifications for Highway Bridges.'"

GENERAL PLAN
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/30/07
DRAWN	DAB	12/28/07
REVIEWED	JWN	02/04/08

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