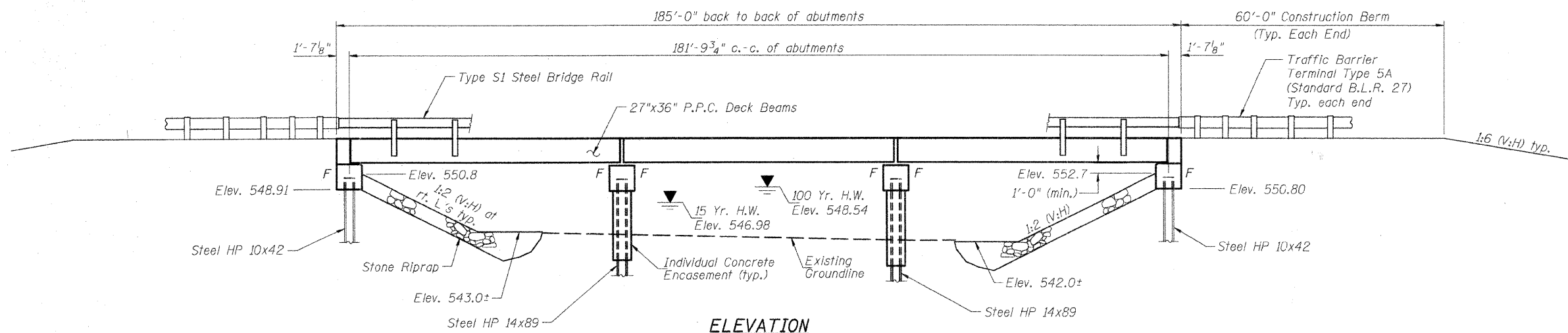


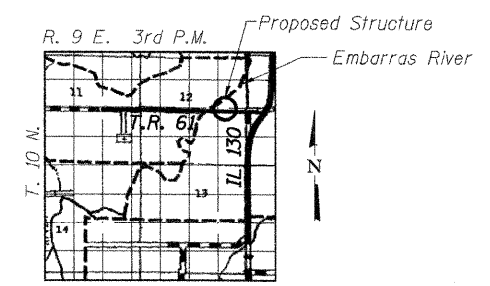
B.M. : Iron Pin, Station 474+93.38, Rt. 29.24', Elev. 544.23
 Iron Pin, Station 480+92.08, Lt. 1.36', Elev. 545.90

Existing Structure: None

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
FAS 662 (TR 6)	*	CUMBERLAND	85	57
FED. ROAD DIST. NO. 7		ILLINOIS		
FED. AID PROJECT		*Section 01-00061-00-BR Contract #95552		



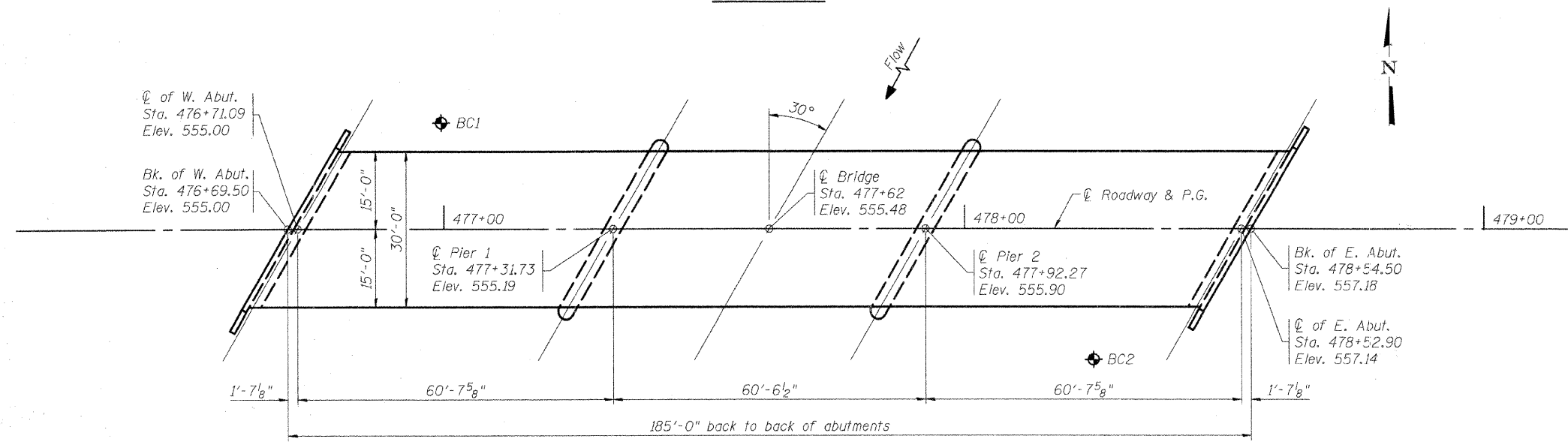
ELEVATION



LOCATION SKETCH

**EMBARRAS RIVER
 BUILT 200_ BY
 CUMBERLAND COUNTY
 SECTION 01-00061-00-BR
 F.A.S. RT. 662 STATION 477+62
 STR. NO. 018-3194 LOADING HS25**

NAME PLATE
 Locate Name Plate at Southwest
 Corner of Bridge (See Std. 515001)



PLAN

◆ Indicates Boring Location

DESIGN SPECIFICATIONS

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

SEISMIC DATA

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

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
-	-	532.0	532.0	-

LOADING HS25

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

DESIGN STRESSES

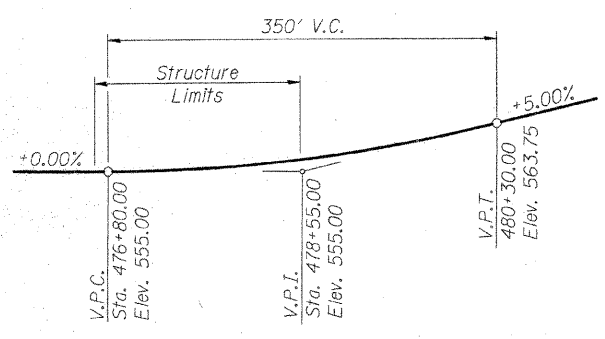
Super: f'c = 6,000 p.s.i. (P.P.C. Deck Beams)
 f'ci = 5,000 p.s.i.
 f's = 270,000 p.s.i. (1/2" φ Strand)
 f'si = 201,960 p.s.i. (1/2" φ Strand)
 fy = 60,000 p.s.i.

Sub: f'c = 3,500 p.s.i.
 fy = 60,000 p.s.i.

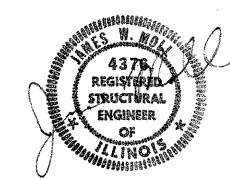
WATERWAY INFORMATION

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

Flood	Freq. Yr.	Description	Q		Nat. H.W.E.	Head - Ft.		Headwater El.	
			C.F.S.	Opening Sq. Ft.		Exist.	Prop.	Exist.	Prop.
Design	15	Overflow Bridge	2630	-	785	-	-	-	-
		River Bridge	15720	-	2614	-	0.20	546.98	547.18
		Over-The-Road Flow	0	-	0	-	-	-	-
		Total	18350	-	3399	-	-	-	-
Overtopping	50	Overflow Bridge	5720	-	1021	-	-	-	548.00
		River Bridge	16040	-	2849	-	-	-	-
		Over-The-Road Flow	4970	-	1787	-	0.45	548.54	549.09
		Total	26730	-	5657	-	-	-	-
Base	100	Overflow Bridge	6420	-	1176	-	-	-	-
		River Bridge	15080	-	2849	-	-	-	-
		Over-The-Road Flow	12390	-	3449	-	0.43	549.57	550.00
		Total	33890	-	7474	-	-	-	-
Max. Calc.	500	Overflow Bridge	6420	-	1176	-	-	-	-
		River Bridge	15080	-	2849	-	-	-	-
		Over-The-Road Flow	12390	-	3449	-	0.43	549.57	550.00
		Total	33890	-	7474	-	-	-	-



PROFILE GRADE
 (Along Q Roadway)



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 AND ELEVATION
 F.A.S. 662 (TR 6) EMBARRAS RIVER OVERFLOW STRUCTURE
 CUMBERLAND COUNTY
 SECTION 01-00061-00-BR
 STA. 477+62
 STRUCTURE NUMBER 018-3194
 PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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DATE: 02/04/08

04/03/2008 03:25 PM I:\01085\018-3194\Structure\Structure\overflow_2008-01-31-01-01-01.dwg

LAYOUT	MM	11/16/07
DRAWN	MCM	01/30/08
REVIEWED	MM	01/30/08