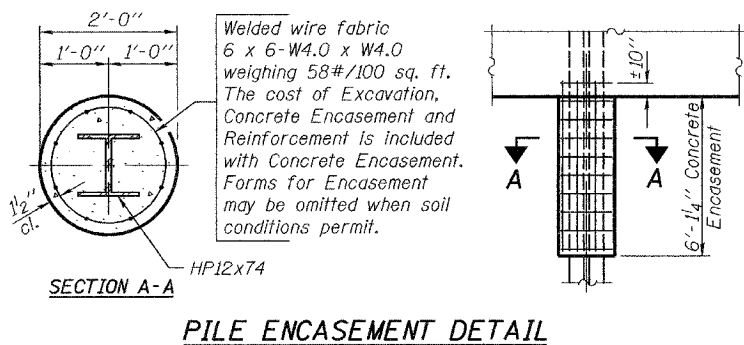


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO. 20
FAP 789	54BR-1	MADISON	02 44	25 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

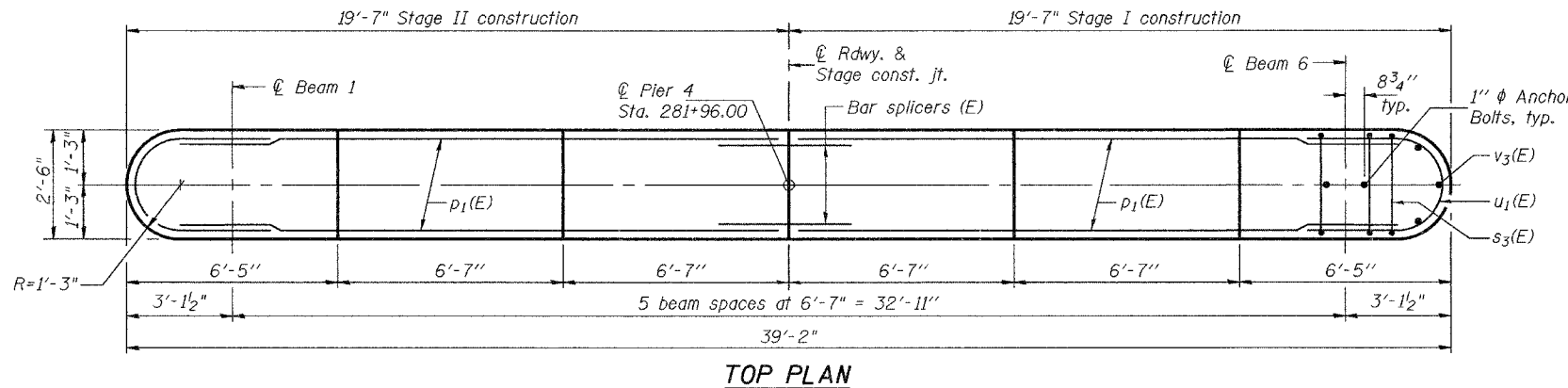
Contract #76864



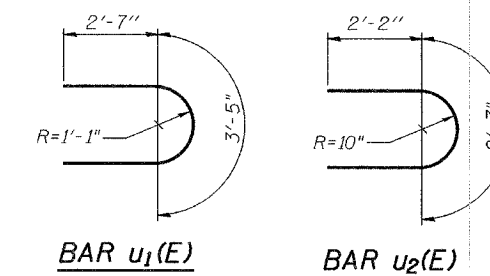
PILE ENCASEMENT DETAIL

PILE DATA

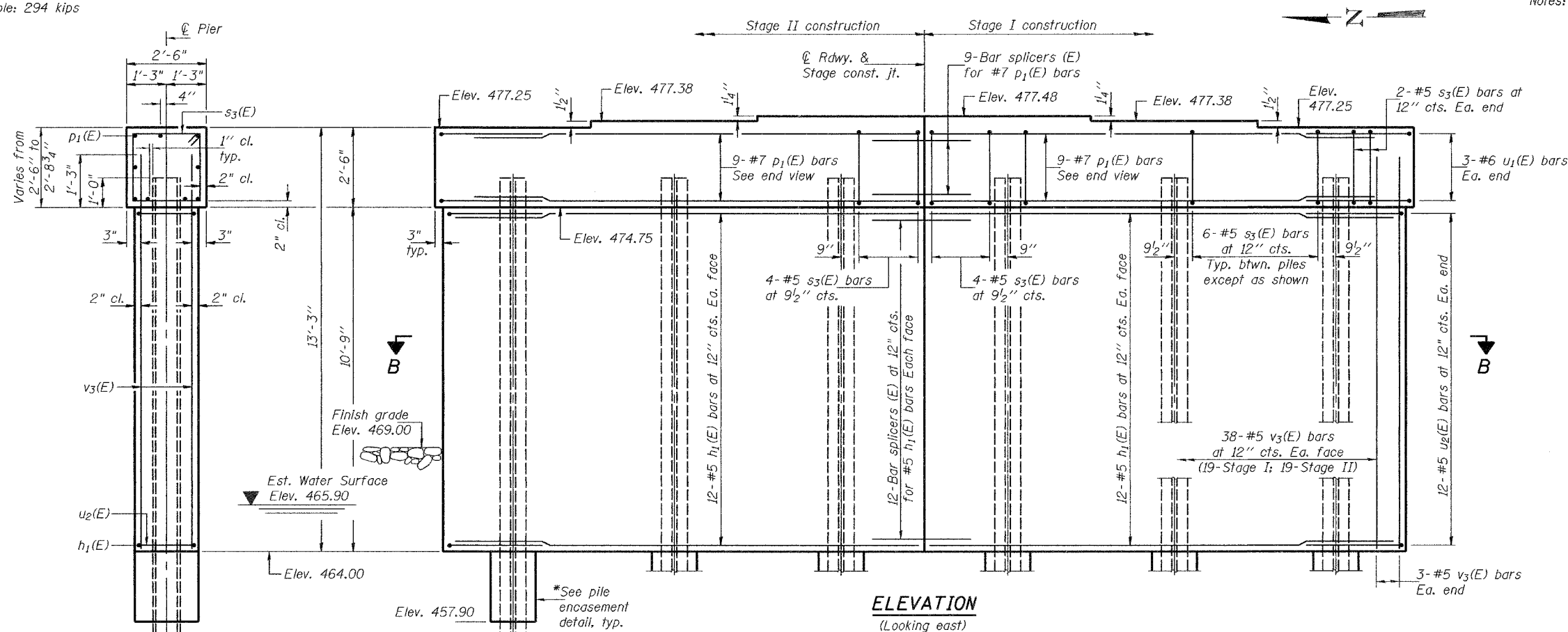
Type: Steel HP12x74  
Nominal Required Bearing: 589 kips  
Factored Resistance Available: 294 kips  
Est. Length: 32 feet  
No. Production Piles: 6  
No. Test Piles: 0



TOP PLAN



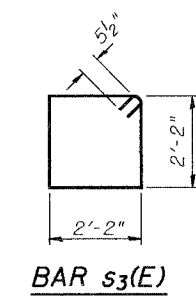
Notes: Pour steps monolithically with cap.  
For bar splicer details, see sheet 21 of 25.  
For anchor bolt installation details, see sheet 14 of 25.



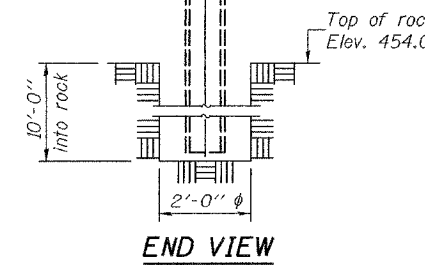
ELEVATION  
(Looking east)

BILL OF MATERIAL

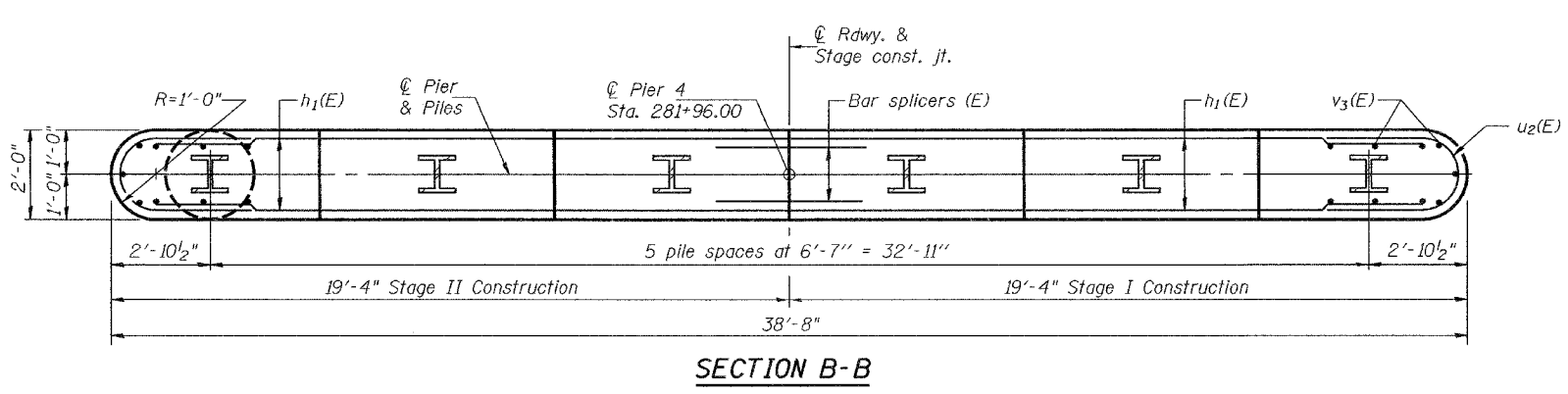
Bar	No.	Size	Length	Shape
h1(E)	48	#5	18'-2"	—
p1(E)	18	#7	18'-2"	—
s3(E)	36	#5	9'-7"	□
u1(E)	6	#6	8'-7"	—
u2(E)	24	#5	6'-11"	—
v3(E)	82	#5	11'-11"	—
Concrete Structures		Cu. Yd.	39.8	
Reinforcement Bars, Epoxy Coated		Pound	32,10	
Structure Excavation		Cu. Yd.	57	
Furnishing Steel Piles HP12x74		Foot	192	
Underwater Structure Excavation Protection Location 2		Each	1	
Concrete Encasement		Cu. Yd.	4.3	
Setting Piles in Rock		Each	6	
Anchor Bolts 1"		Each	12	



BAR s3(E)



END VIEW



SECTION B-B

\*Forms shall be placed below Elevation 464.00 after excavation for pier walls. Reinforcement and Concrete Encasement may be placed underwater into forms. The cost of Concrete Encasement, Reinforcement, form excavation and furnishing and placing forms is included with Concrete Encasement. If a portion of the pier wall is under water, concrete shall be trimmed under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be trimmed to an Elevation 1'-0" above water level at the time of construction.

PIER 4  
F.A.P. RTE. 789 - SEC. 54BR-1  
MADISON COUNTY  
STATION 280+73  
STRUCTURE NO. 060-0340

DESIGNED	Curt M. Evoy
CHECKED	Nick R. Barnett
DRAWN	h.t. duong
CHECKED	CME/NRB

Nov. 15, 2006  
EXAMINED *Thomas J. Demagala*  
PASSED *Ralph E. Anderson*