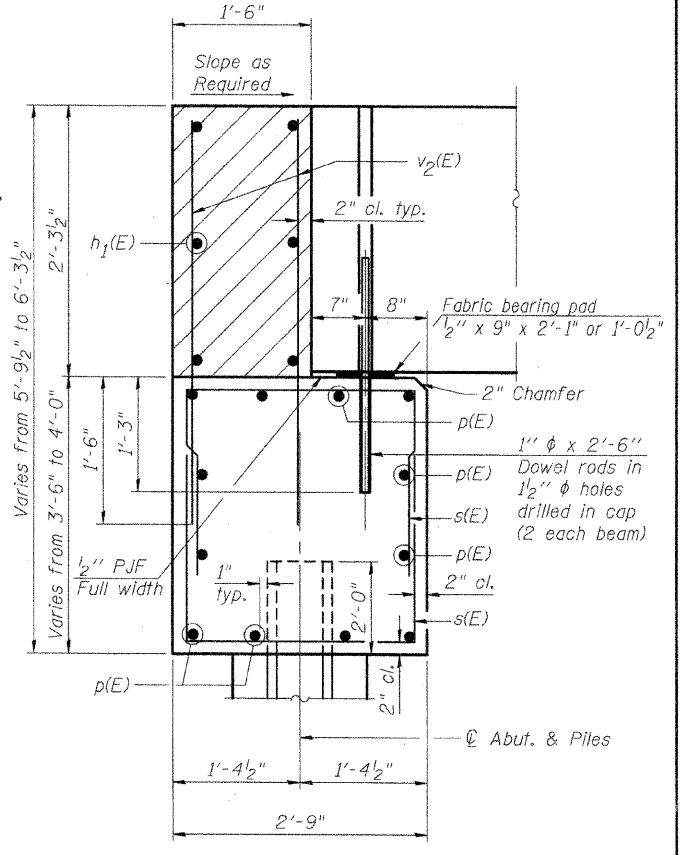


**ELEVATION**

(Looking West at W. Abut.)  
(Looking East at E. Abut.)  
Elevations given at back of abutment  
See Plan for other cap elevations

**TABLE OF ELEVATIONS**

	Pt. A	Pt. B	Pt. C	Pt. D	Pt. E	Pt. F
W. Abut.	552.41	552.71	552.41	552.41	552.71	552.41
E. Abut.	554.80	554.88	554.37	554.72	554.80	554.30



**SECTION THRU ABUTMENT**

**NOTES:**

After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys. All horizontal dimensions are at right angles to beam ends. Hatched area to be poured after deck beams are in place. See sheet 5 of 10 for bearing pad details. Space cap reinforcement to miss Dowel Rods. Structure Excavation required shall be according to Article 502 of the Standard Specifications. Cost for Structure Excavation included with Concrete Structures.

**MIN. BAR LAP**

#5 - 2'-2"

**PILE BENT ABUTMENT DETAILS**  
F.A.S. 662 (TR 6D) 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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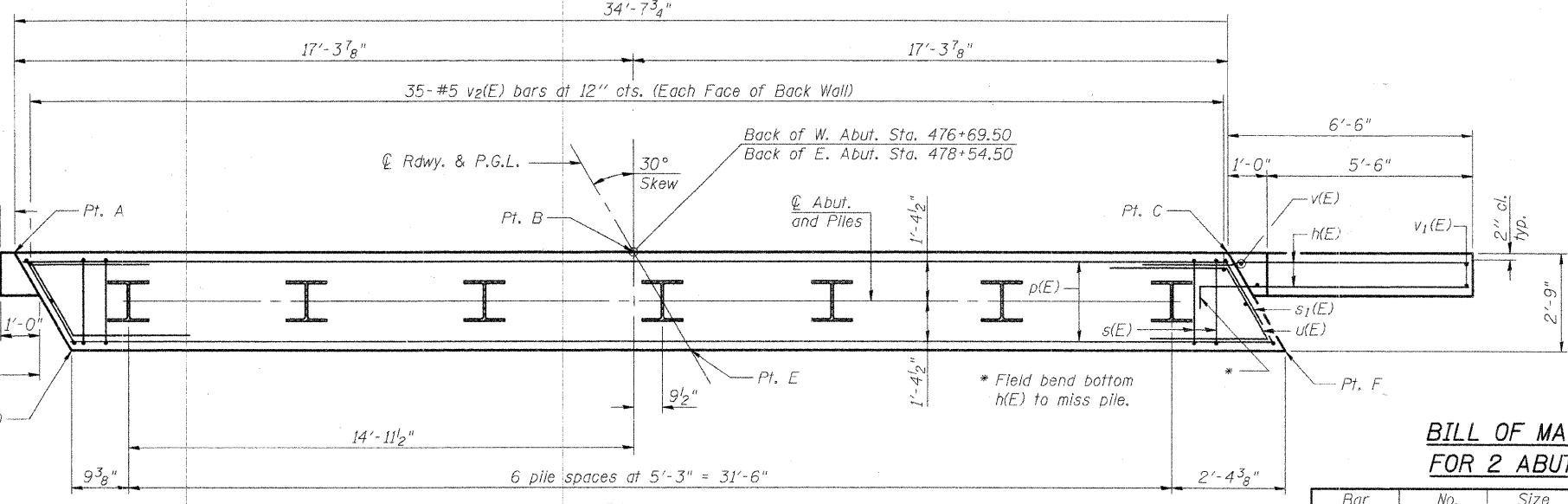
Hanson Professional Services Inc.

JOB NO. 01S2021B  
DATE 02/04/08

**BILL OF MATERIAL FOR 2 ABUTMENTS**

Bar	No.	Size	Length	Shape
h(E)	56	#6	9'-4"	—
h1(E)	12	#6	34'-4"	—
p(E)	24	#7	34'-4"	—
s(E)	112	#5	7'-11"	U
s1(E)	8	#5	8'-3"	U
u(E)	16	#6	8'-7"	┘
v(E)	8	#4	5'-6"	—
v1(E)	24	#4	9'-0"	—
v2(E)	140	#5	3'-8"	—
Concrete Structures		Cu. Yd.	39.6	
Reinforcement Bars, Epoxy Coated		Pound	5000	
Furnishing Steel Piles, HP10x42		Foot	846	
Driving Piles		Foot	846	
Test Pile, Steel HP10x42		Each	2	
Concrete Encasement		Cu. Yd.	4.9	

For details of piles and Concrete Encasement, see sheet 9 of 10.

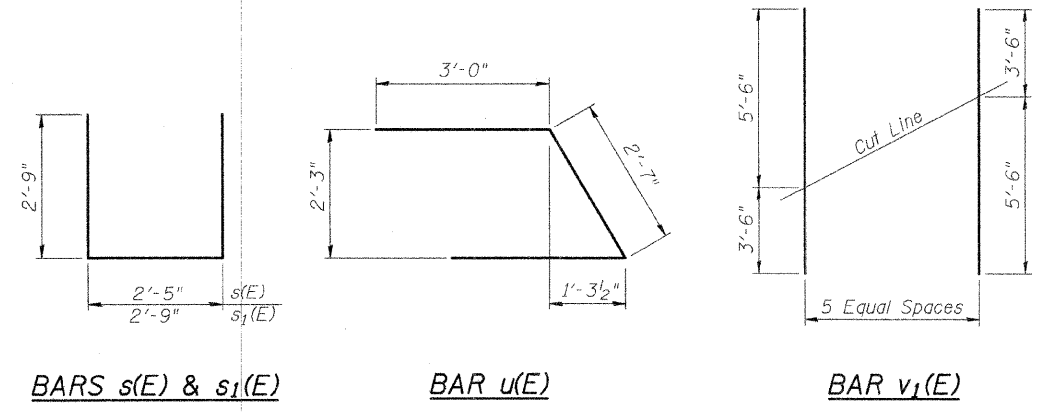


**PLAN**

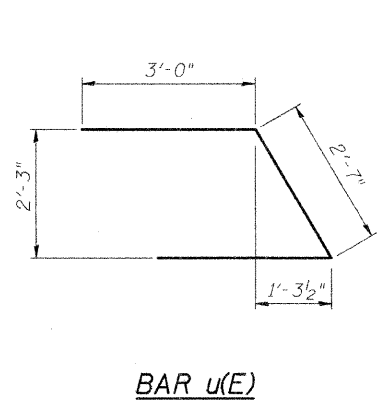
**PILE DATA**

Type: Steel HP 10x42\*\*  
Nominal Required Bearing: 335 Kips  
Allowable Resistance Available: 97 Kips (W. Abut.), 92 Kips (E. Abut.)  
Est. Length: 75' (W. Abut.), 66' (E. Abut.)  
No. Production Piles: 12 (6 at each abutment)  
No. Test Piles: 2 (One per abutment)

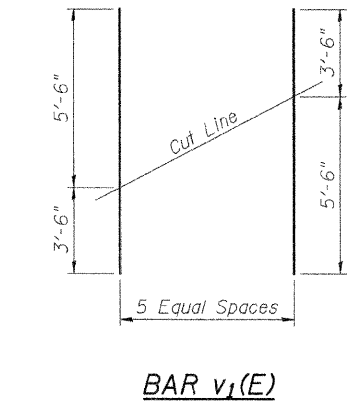
\*\* Piles shall be driven through 2'-0" diameter percored holes extending to natural groundline according to Article 512.09(C) of the Standard Specifications. Cost included in Driving Piles.



**BARS s(E) & s1(E)**



**BAR u(E)**



**BAR v1(E)**

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 LAYOUT  
 DRAWN  
 REVIEWED  
 MMJ  
 MGN  
 MMJ  
 11/16/07  
 01/30/08  
 01/30/08