

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 19 22 SHEETS
FAP 773 IL 121	(108BR- 3)B-1	CUMBERLAND	96	54	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			

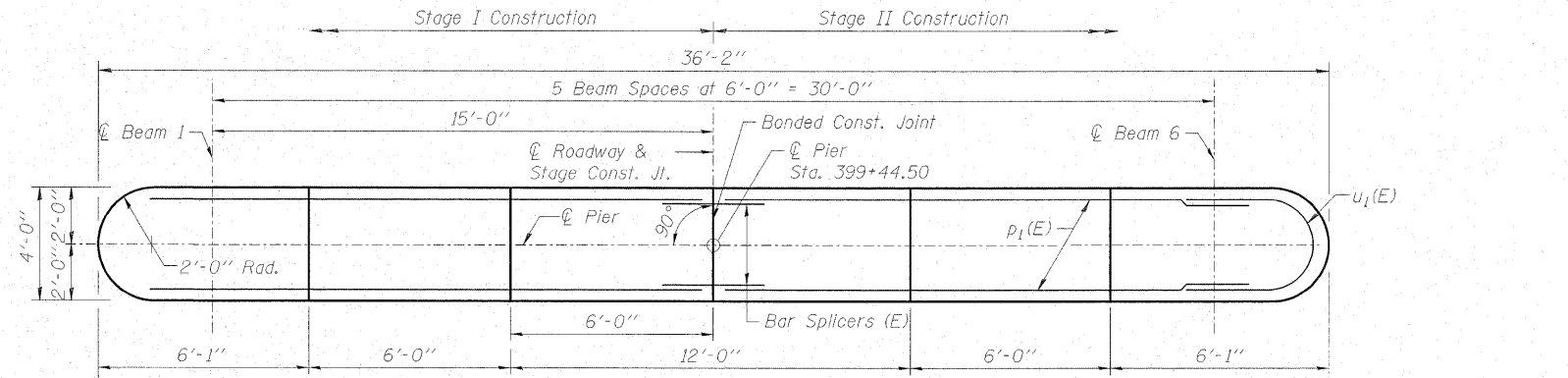
Contract # 74237

Notes:  
Four steps monolithically with cap.  
For details of piles, see sheet 20 of 22.  
For details of Bar Splicers, see sheet 21 of 22.  
Space reinforcement in cap to miss side retainer anchor bolts, see sheet 12 of 22.

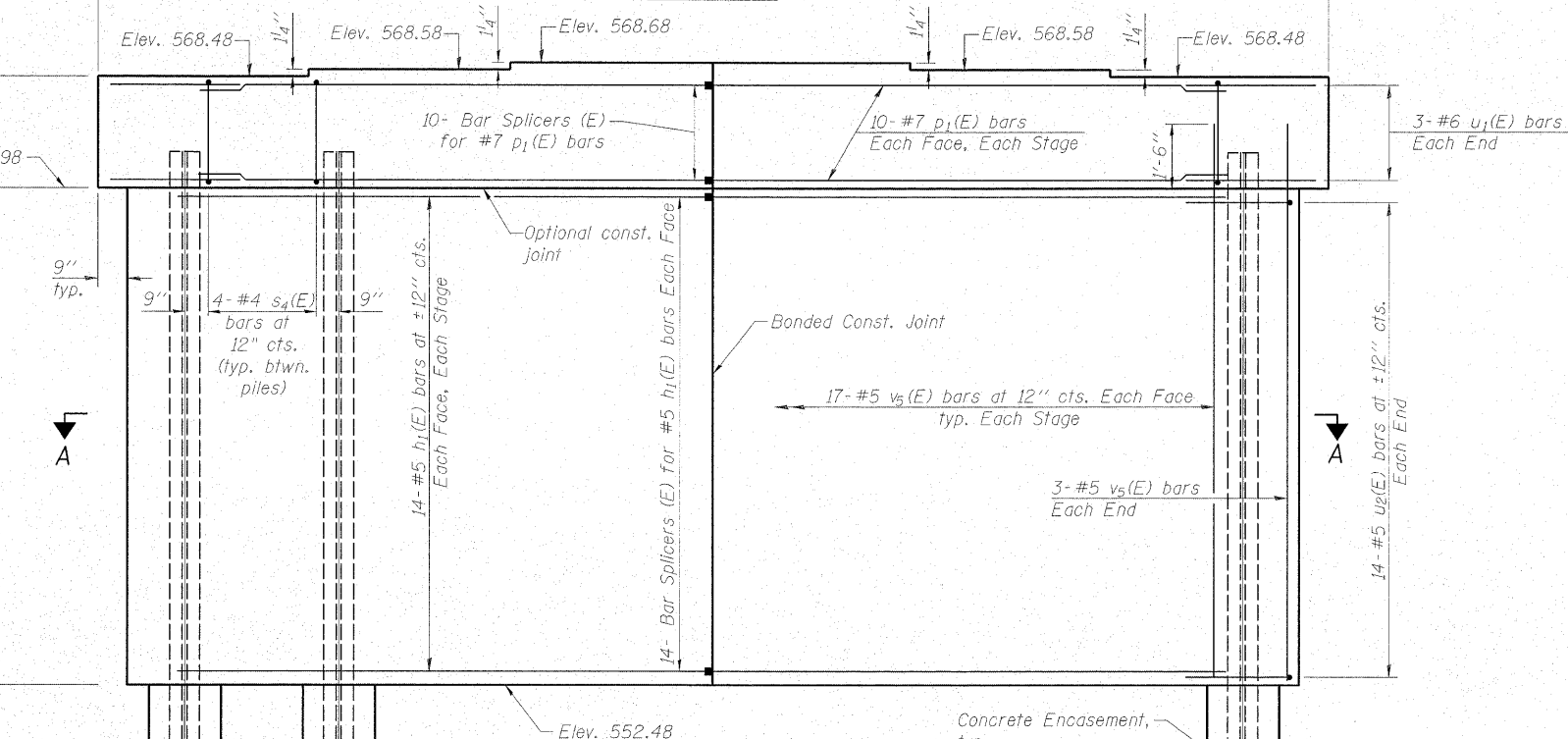
\*Estimated pile length has been increased by 2' to account for variability in rock elevation.

**PILE DATA**

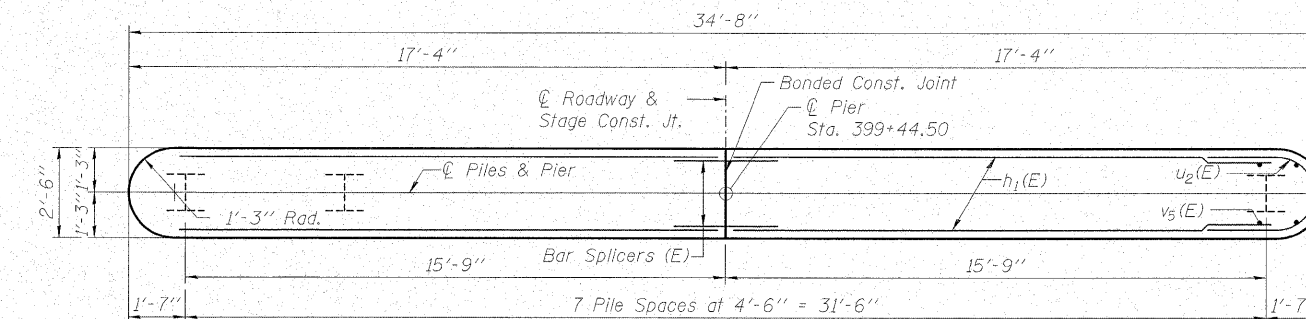
Type: Steel HP12x63  
Nominal Required Bearing: Set in Rock  
Factored Resistance Available: 216 kips  
\*Est. Length: 38 feet  
No. Production Piles: 8  
No. Test Piles: 0  
Est. Top of Rock Elev.: 539.2  
Rock Socket Depth: 8 feet  
Rock Socket Diameter: 2 feet



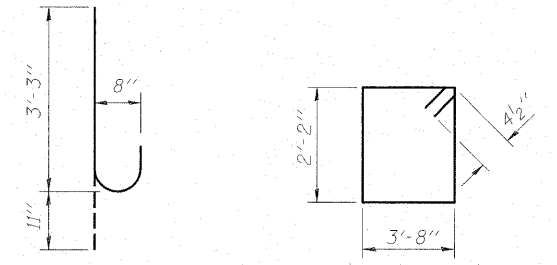
**TOP PLAN**



**ELEVATION**  
(Looking East)

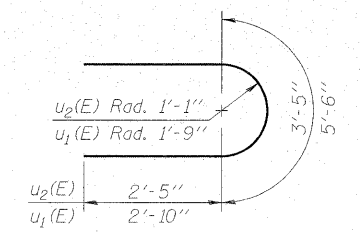


**SECTION A-A**



**BAR v4(E)**

**BAR s4(E)**



**BARS u1(E) & u2(E)**

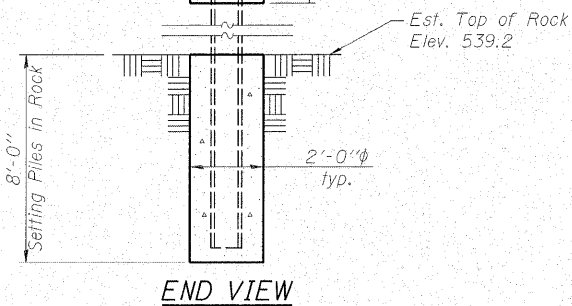
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	56	#5	16'-0"	—
p1(E)	20	#7	15'-11"	—
s4(E)	28	#4	12'-5"	□
u1(E)	6	#6	11'-2"	U
u2(E)	28	#5	8'-3"	U
v4(E)	30	#8	4'-2"	U
v5(E)	74	#5	14'-10"	—
Structure Excavation			Cu. Yd.	42
Concrete Structures			Cu. Yd.	56.3
Concrete Encasement			Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated			Pound	3640
Furnishing Steel Piles, HP12x63			Foot	304
Setting Piles in Rock			Each	8
Underwater Structure Excavation Protection, Location 1			Each	1

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

**PIER**

IL ROUTE 121 OVER MULE CREEK  
F.A.P. RTE. 773 - SECTION (108BR-3)B-1  
CUMBERLAND COUNTY  
STATION 399+34.00  
STRUCTURE NO. 018-0062



**END VIEW**



DESIGNED - BAS
CHECKED - KEF
DRAWN - LAD
CHECKED - RJA