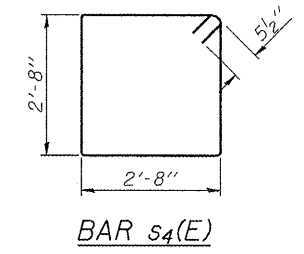
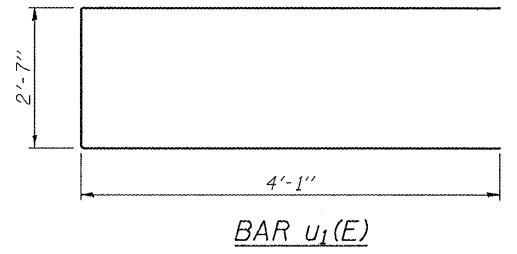


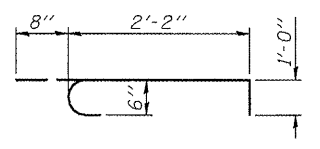
PLAN



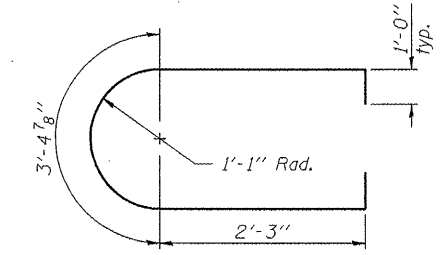
BAR s4(E)



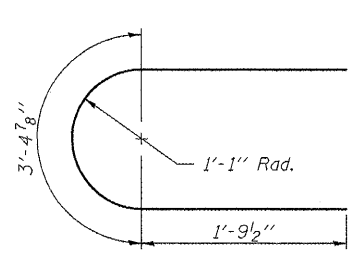
BAR u1(E)



BAR s5(E)



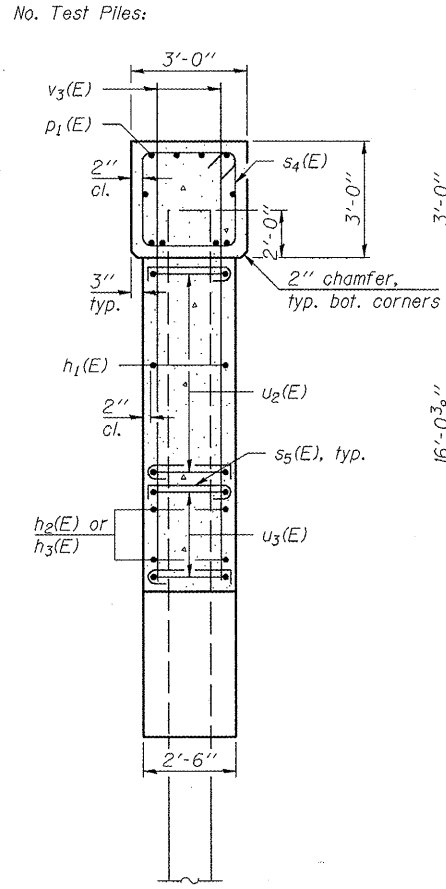
BAR u2(E)



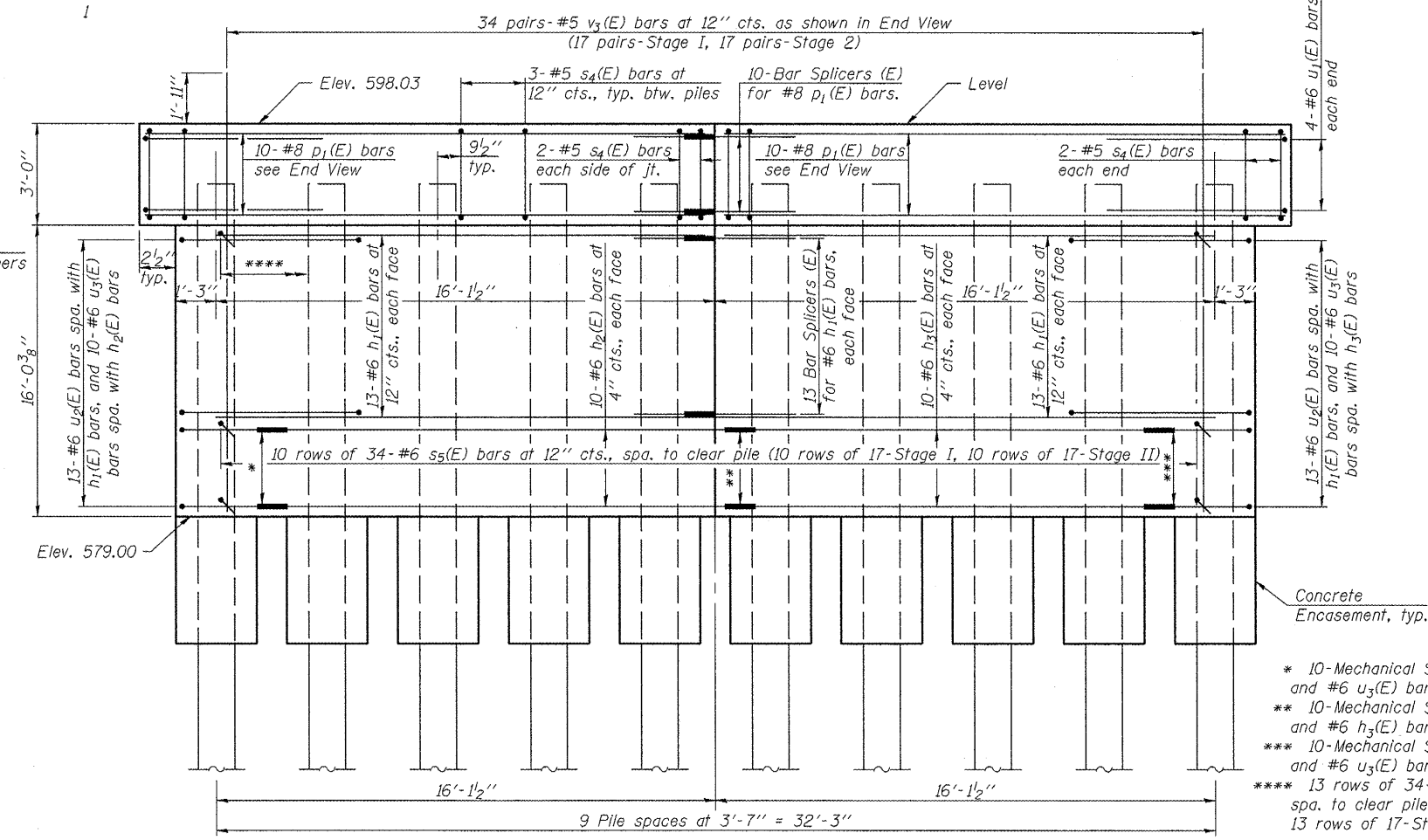
BAR u3(E)

**PIER 1 PILE DATA**  
 Type: Metal Shell - 14"  $\phi$  x 0.250" wall w/ pile shoes  
 Nominal Required Bearing: 295 Kips  
 Factored Resistance Available: 153 Kips  
 Est. Length: 63 ft.  
 No. Production Piles: 9  
 No. Test Piles: 1

**PIER 2 PILE DATA**  
 Type: Metal Shell - 14"  $\phi$  x 0.250" wall w/ pile shoes  
 Nominal Required Bearing: 275 Kips  
 Factored Resistance Available: 147 Kips  
 Est. Length: 62 ft.  
 No. Production Piles: 9  
 No. Test Piles: 1



END VIEW



ELEVATION

**BILL OF MATERIAL (BOTH PIERS)**

Bar	No.	Size	Length	Shape
h1(E)	104	#6	15'-11"	—
h2(E)	40	#6	15'-4"	—
h3(E)	40	#6	13'-4"	—
p1(E)	40	#8	17'-3"	—
s4(E)	64	#5	11'-7"	□
s5(E)	1,564	#6	3'-10"	U
u1(E)	16	#6	10'-9"	□
u2(E)	52	#6	9'-11"	□
u3(E)	40	#6	7'-0"	□
v3(E)	136	#5	20'-10"	—
Structure Excavation		Cu. Yd.	113	
Concrete Structures		Cu. Yd.	111.5	
Concrete Encasement		Cu. Yd.	8.5	
Reinforcement Bars, Epoxy Coated		Pound	20,260	
Furnishing Metal Shell Piles 14" x 0.250"		Foot	1,125	
Driving Piles		Foot	1,125	
Test Pile Metal Shells		Each	2	
Pile Shoes		Each	20	
Underwater Structure Excavation Protection - Location 1		Each	1	
Underwater Structure Excavation Protection - Location 2		Each	1	
Mechanical Splicers		Each	120	

- \* 10-Mechanical Splicers (E) for #6 h2(E) and #6 u3(E) bars, each face
- \*\* 10-Mechanical Splicers (E) for #6 h2(E) and #6 h3(E) bars, each face
- \*\*\* 10-Mechanical Splicers (E) for #6 h3(E) and #6 u3(E) bars, each face
- \*\*\*\* 13 rows of 34 #6 s5(E) bars at 12" cts., spa. to clear pile (13 rows of 17-Stage I, 13 rows of 17-Stage II)

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. Location 1 refers to Pier 1, Location 2 refers to Pier 2.

FILE NAME =	USER NAME = eiegemann	DESIGNED KAK	REVISED -
1:\088444\IL94\Cad\5\Plans\0368072-6863.dgn		CHECKED EML	REVISED -
PLOT SCALE =		DRAWN KAK	REVISED -
PLOT DATE = 12/16/2010		CHECKED EML	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



PIERS  
 STRUCTURE NO. 036-0072  
 SHEET NO. 12 OF 20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-1	HENDERSON	56	25
			CONTRACT NO. 68693	
ILLINOIS FED. AID PROJECT				