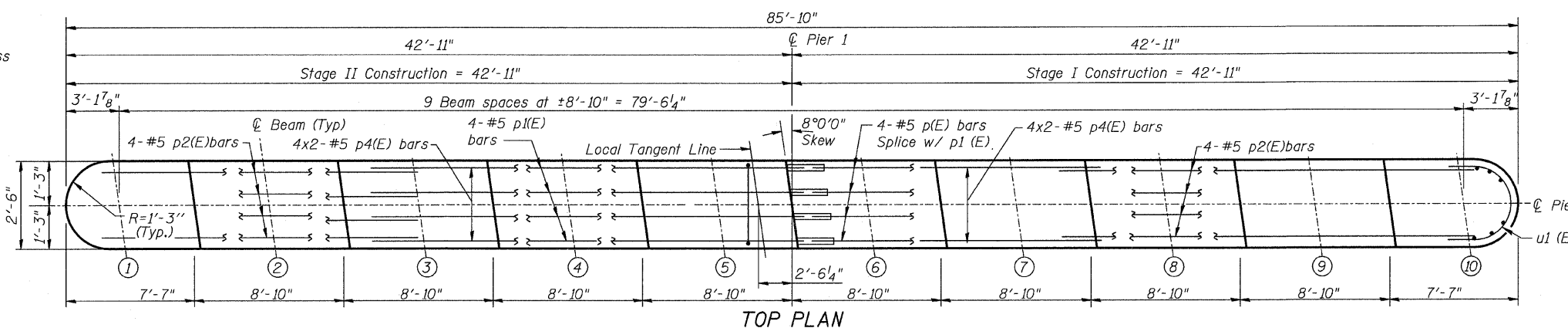


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	3268F-R-1	COOK	279	153
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

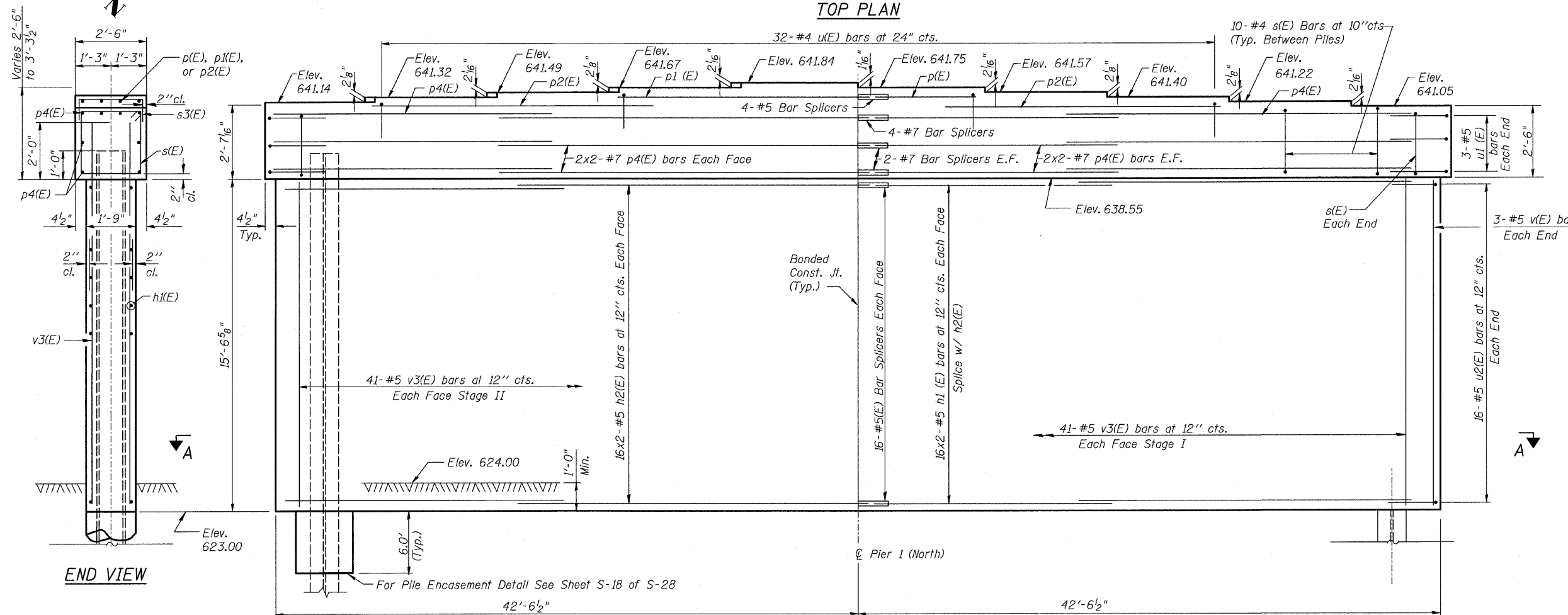
SHT. S-21 OF S-28

CONTRACT NO. 62387

Notes:  
 All edges shall have standard 3/4" chamfer except as noted.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Minimum Rebar Splice Length:  
 #5 - 2'-2"  
 #7 - 3'-5"  
 Bars indicated thus 16x2-#5 h(E) etc., indicates 16 lines of bars 2 lengths per line.

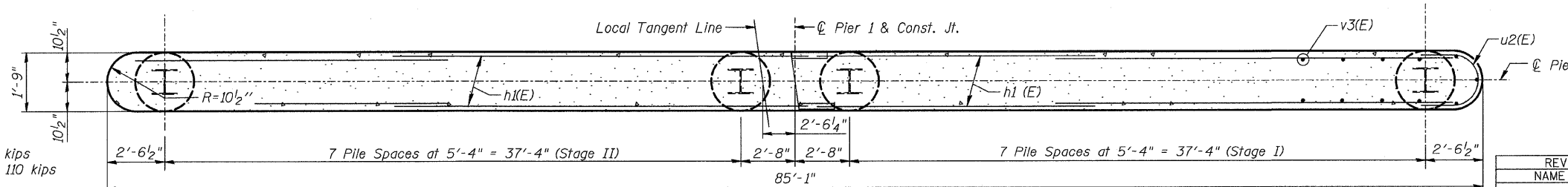


TOP PLAN



ELEVATION

(Looking South)



SECTION A-A

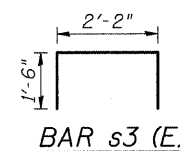
PILE DATA

Type: Steel HP 10x42 with Pile Shoes  
 Nominal Required Bearing: 498 kips  
 Allowable Resistance Available: 110 kips  
 Est. Length: 61 feet  
 No. Required: 15  
 Plus 1 Steel Test Pile HP 10x42

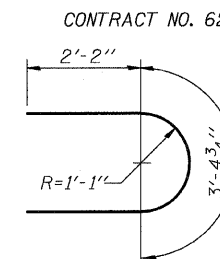
The Steel H-piles shall be according to AASHTO M270 Grade 50.

NOTE:

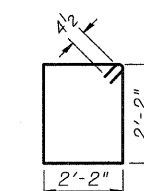
Forms shall be placed below Elev. 623.00 after excavation for pier walls. Reinforcement and Class SI Concrete Encasement shall be placed underwater into forms. The cost of class SI Concrete Encasement, reinforcement, form excavation, and furnishing and placing forms is incidental to furnishing piles. If a portion of the pier wall is underwater, Class SI Concrete shall be tremied underwater into the forms in accordance with Article 503.08(a) of the Standard Specifications. Concrete shall be tremied to an elevation 12" above the water level at the time of construction.



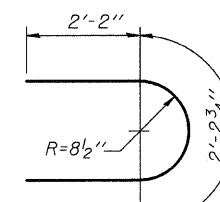
BAR s3 (E)



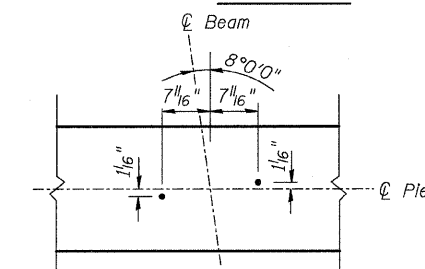
BAR u1 (E)



BAR s(E)



BAR u2(E)



ANCHOR BOLT SPACING

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	128	#5	21'-11"	—
p1(E)	4	#5	8'-6"	—
p2(E)	4	#5	17'-4"	—
p4(E)	8	#5	19'-10"	—
p4(E)	32	#7	22'-6"	—
s(E)	92	#4	9'-5"	□
s3(E)	62	#4	5'-2"	□
u1(E)	6	#5	7'-9"	U
u2(E)	32	#5	6'-7"	U
v3(E)	170	#5	17'-5"	—
Reinforcement Bars, Epoxy Coated		Pound		8820
Concrete Structures		Cu. Yd.		116.9
Test Piles Steel HP 10x42		Each		1
Furnishing Steel Piles HP 10x42		Feet		915
Driving Piles		Feet		915
Pile Shoes		Each		15
Underwater Structure Excavation Protection Location 1		Each		1
Structure Excavation		Cu. Yd.		60

Reinforcement bars designated (E) shall be epoxy coated.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 ILLINOIS ROUTE 21  
 MILWAUKEE AVE. OVER DES PLAINES RIVER  
 F.A.P. ROUTE 374 SECTION 3268F-R-1  
 COOK COUNTY, SN 016-6566

PIER 1 ELEVATION & PLAN

DESIGN BY: AWH DRAWN BY: AWH  
 DATE: 02/05/08 CHECKED BY: JAW CHECKED BY: JAW

