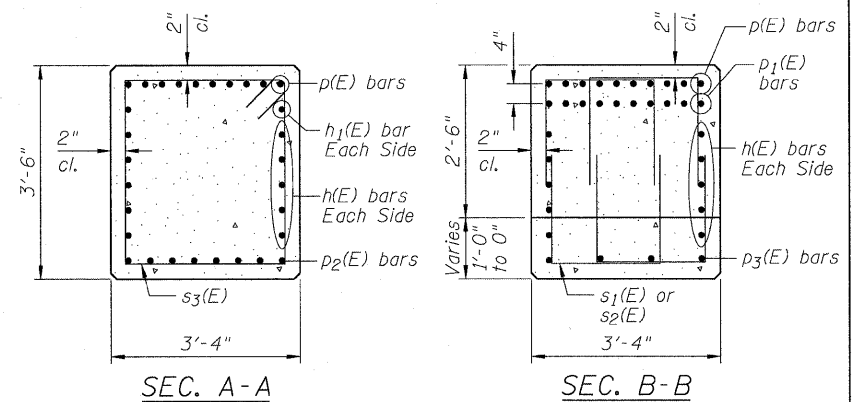
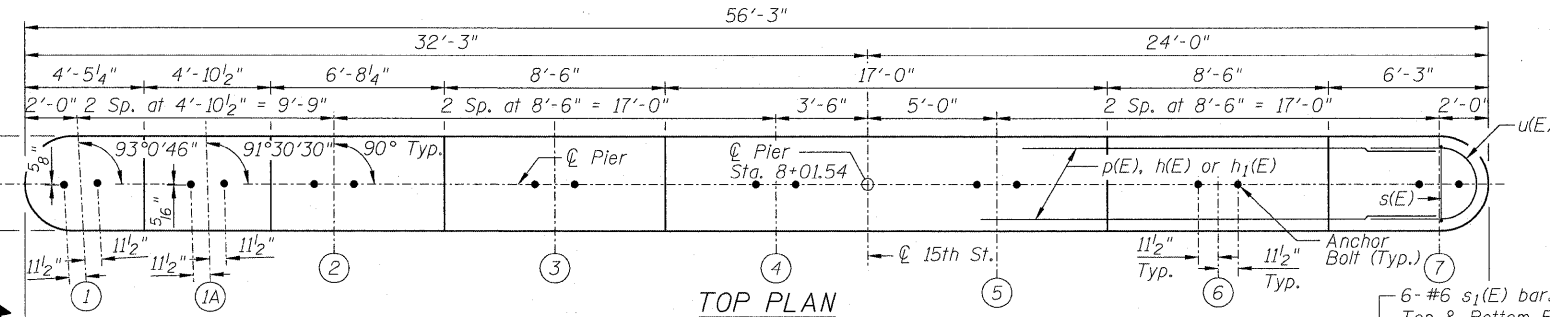
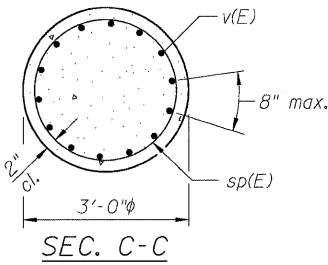


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Space reinforcement in cap to miss anchor bolts.
Four steps monolithically with cap.
The s₅(E) cross-ties shall be placed so that the 90° hooked ends of two successive cross-ties alternate end-for-end.
The s(E) bars shall be placed so that the longer side is alternated.



BARS n(E), n1(E), and v1(E)

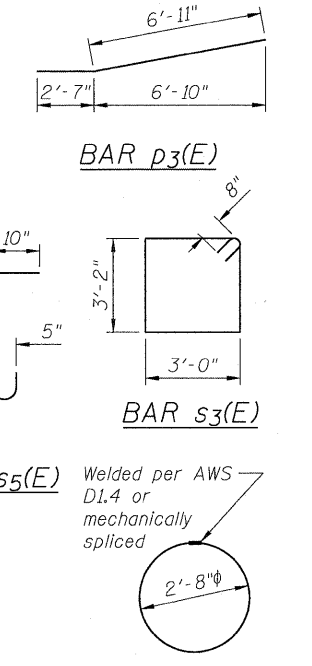
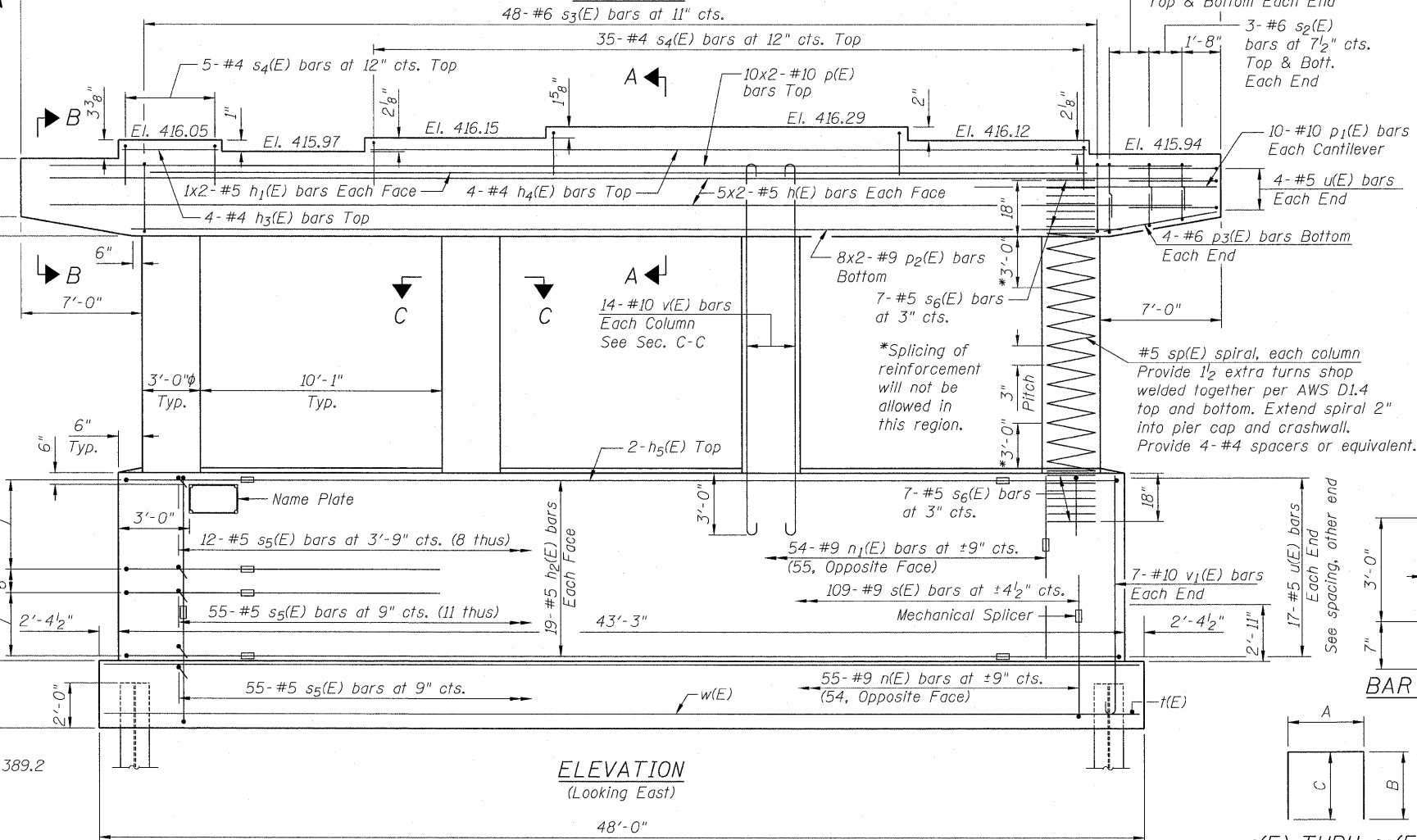
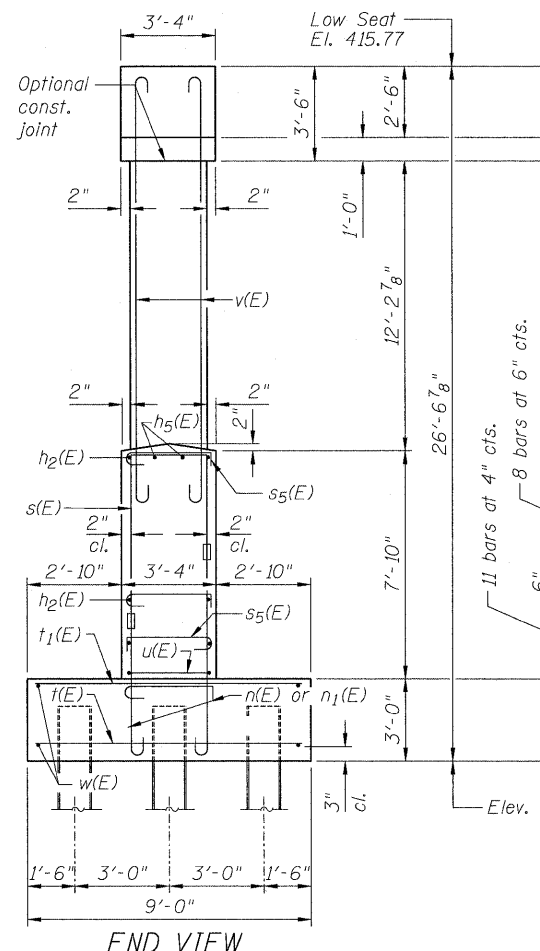
TABLE OF DIMENSIONS

Bar	A	B	C
n(E)	6'-1"	1'-3"	11 3/4"
n1(E)	8'-1"	1'-3"	11 3/4"
v1(E)	10'-5"	1'-5"	1'-1 1/4"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	29'-1"	—
h1(E)	4	#5	22'-9"	—
h2(E)	38	#5	29'-11"	—
h3(E)	4	#4	4'-6"	—
h4(E)	4	#4	33'-8"	—
h5(E)	2	#5	42'-9"	—
n(E)	109	#9	7'-4"	U
n1(E)	109	#9	9'-4"	U
p(E)	20	#10	33'-1"	—
p1(E)	20	#10	12'-0"	—
p2(E)	16	#9	24'-4"	—
p3(E)	8	#6	9'-6"	—
s(E)	109	#9	9'-8"	L
s1(E)	24	#6	7'-2"	L
s2(E)	12	#6	6'-8"	L
s3(E)	48	#6	13'-8"	□
s4(E)	40	#4	6'-6"	L
s5(E)	756	#5	4'-5"	U
s6(E)	56	#5	8'-4"	O
sp(E)	4	#5	12'-6"	W
t(E)	126	#6	8'-8"	—
t1(E)	49	#5	8'-8"	—
u(E)	40	#5	14'-9"	U
v(E)	56	#10	20'-5"	U
v1(E)	14	#10	11'-10"	U
w(E)	40	#5	24'-11"	—
Concrete Structures		Cu. Yd.	126.8	
Reinforcement Bars, Epoxy Coated		Pound	33,910	
Furnishing Steel Piles, HP14x89		Foot	3,744	
Driving Piles		Foot	3,744	
Pile Shoes		Each	39	
Mechanical Splicers		Each	286	

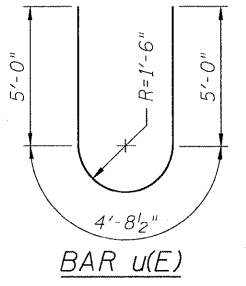
** Length is height of spiral.



s(E) THRU s2(E) BARS, s4(E) BAR

TABLE OF DIMENSIONS

Bar	A	B	C
s(E)	3'-0"	4'-4"	2'-4"
s1(E)	2'-0"	2'-7"	2'-7"
s2(E)	2'-0"	2'-4"	2'-4"
s4(E)	3'-0"	1'-9"	1'-9"

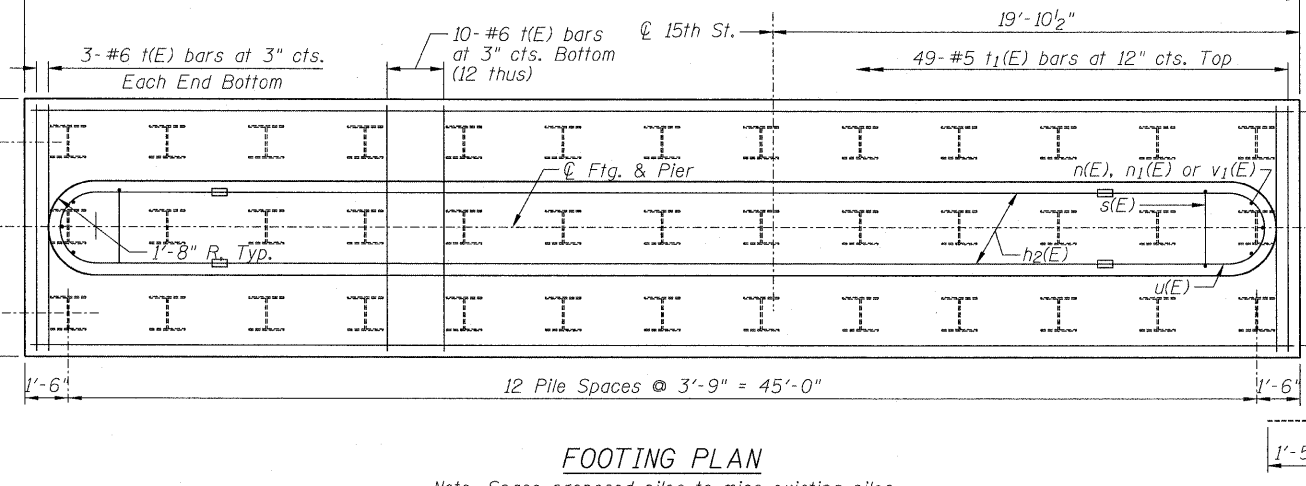


Note:
When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

ZROKA engineering
Zroka Engineering, P.C.
4216 North Hermitage
Chicago, IL 60613

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

MIN. BAR LAPS
#5 bar = 2'-2"
#9 bar = 5'-9"
#10 bar = 10'-3"



SHEET NO. 36	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
44 SHEETS	64	82-1-2HB	ST. CLAIR	345	243
CONTRACT NO. 76C49					
ILLINOIS FED. AID PROJECT					
Revised 4/15/2010					

Note: Space proposed piles to miss existing piles