

2/13/2013 12:48:16 PM - G:\CH10\037\B-109\Cadd\Sheet\A\016521-63809-06-Pier-Details.dwg



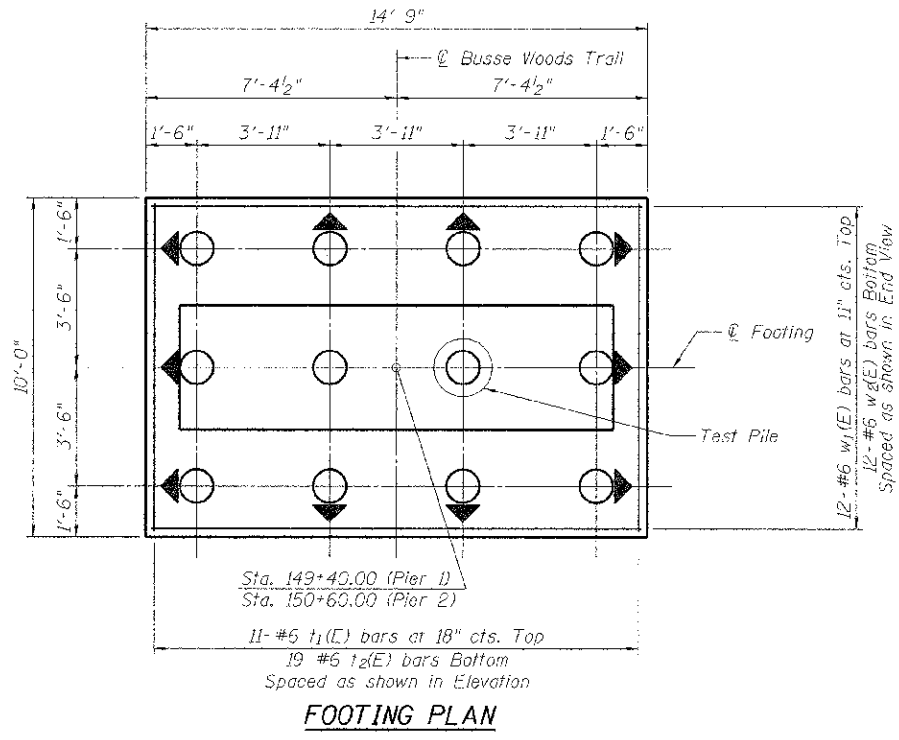
USER NAME = mdcanteFord	DESIGNED - WJC	REVISED -
PLDT SCALE = 2x5.0000 1" = 10'	CHECKED - JST	REVISED -
PLDT DATE = 2/13/2013	DRAWN - JDG	REVISED -
	CHECKED - MDS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER DETAILS
STRUCTURE NO. D16-6921**

SHEET NO. 6 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0341	09-00058-00-BT	COOK	43	23
CONTRACT NO. 63809			ILLINOIS FED. AID PROJECT	

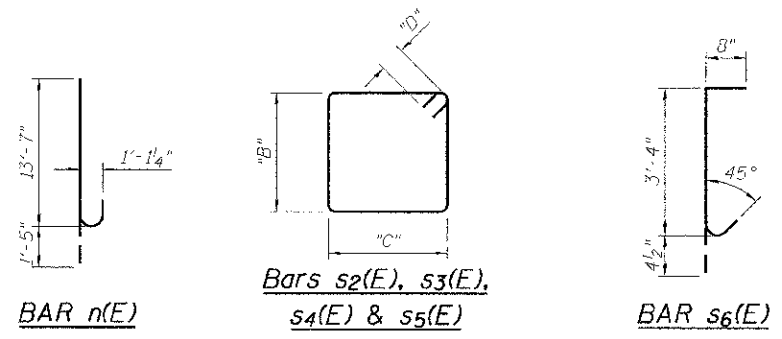
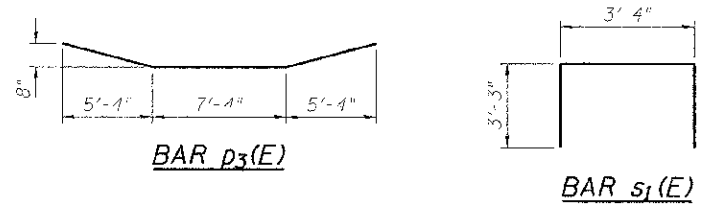


PILE DATA

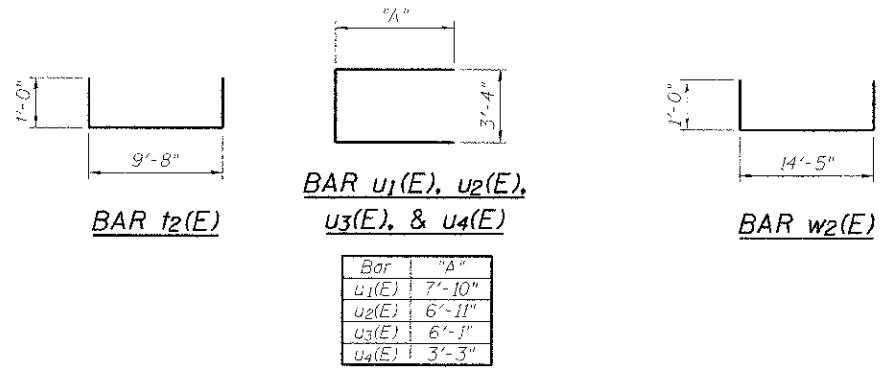
Type: Metal Shell-12 in. dia. x 0.250 in. walls
 Nominal Required Bearing: 255 Kips
 Factored Resistance Available: 140 Kips
 Est. Length: 33 ft (Pier 1)
 35 ft (Pier 1) 3V:1H
 41 ft (Pier 2)
 44 ft (Pier 2) 3V:1H
 No. Production Piles: 11 per Pier
 No. Test Piles: 1 per Pier

LEGEND

- Denotes direction of Metal Shell Pile battered 3:1
- Denotes Vertical Metal Shell Pile



Bar	"B"	"C"	"D"
s2(E)	2'-6"	3'-4"	5 1/2"
s3(E)	2'-4"	3'-4"	5 1/2"
s4(E)	2'-1"	3'-4"	5 1/2"
s5(E)	7'-0"	3'-4"	4 1/2"



Bar	"A"
u1(E)	7'-10"
u2(E)	6'-11"
u3(E)	6'-1"
u4(E)	3'-3"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
t5(E)	4	#5	18'-0"	—
n(E)	84	#10	15'-0"	—
p2(E)	14	#9	18'-0"	—
p3(E)	8	#6	18'-1"	—
s1(E)	22	#5	9'-10"	—
s2(E)	16	#5	12'-7"	—
s3(E)	16	#5	12'-3"	—
s4(E)	12	#5	11'-9"	—
s5(E)	44	#4	21'-5"	—
s6(E)	11	#4	4'-5"	—
t1(E)	22	#6	9'-8"	—
t2(E)	38	#6	11'-8"	—
u1(E)	28	#5	19'-0"	—
u2(E)	28	#5	17'-2"	—
u3(E)	32	#5	15'-6"	—
u4(E)	12	#5	9'-10"	—
v4(E)	68	#10	24'-1"	—
v5(E)	8	#10	16'-6"	—
w1(E)	24	#6	14'-5"	—
w2(E)	24	#6	16'-5"	—
Structure Excavation	Cu. Yd.	139		
Concrete Structures	Cu. Yd.	104.9		
Reinforcement Bars, Epoxy Coated	Pound	19,530		
Furnishing Metal Shell Piles, 12" x 0.250"	Foot	864		
Driving Piles	Foot	864		
Test Pile Metal Shells	Each	2		
Concrete Sealer	Sq Ft	1414		

Note:
See Sheet 5 of 13 for Elevation and End View of Pier.