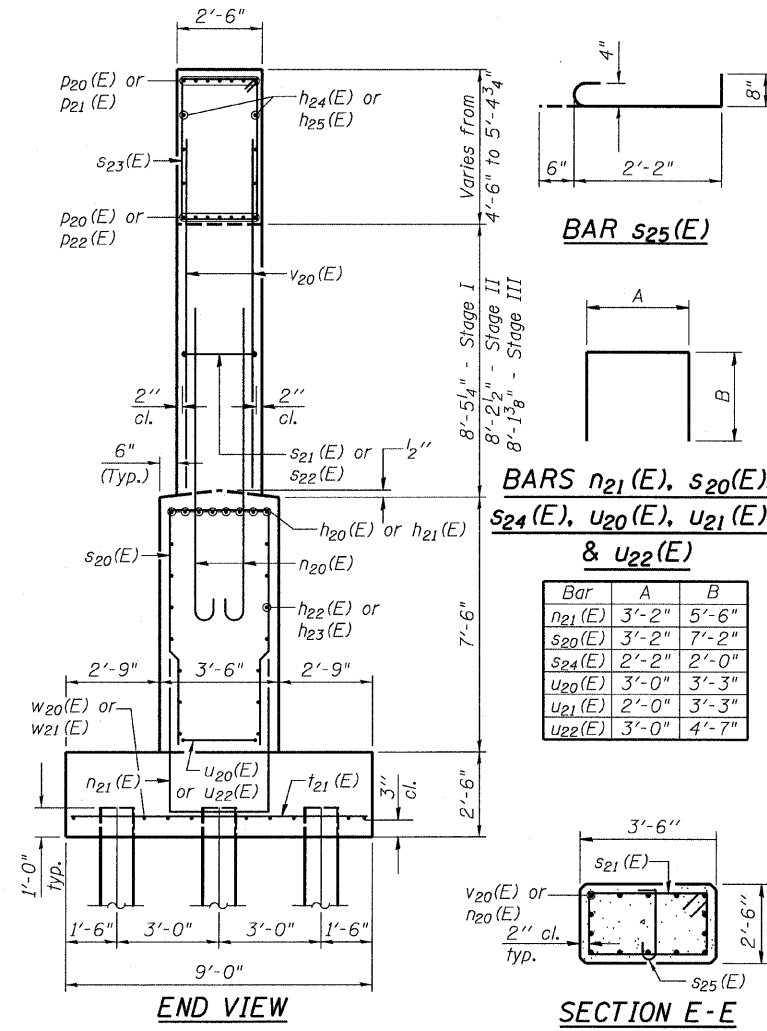


PIER 1 - BILL OF MATERIAL

PIER 2 - BILL OF MATERIAL



Bar	No.	Size	Length	Shape
h20(E)	8	#8	46'-2"	
h21(E)	32	#8	44'-10"	
h22(E)	14	#5	46'-2"	
h23(E)	56	#5	42'-8"	
h24(E)	6	#5	46'-0"	
h25(E)	24	#5	41'-10"	
h26(E)	4	#5	13'-0"	
h27(E)	4	#5	40'-2"	
h28(E)	8	#5	32'-1"	
h29(E)	4	#5	19'-11"	
n20(E)	224	#8	11'-8"	
n21(E)	315	#5	14'-2"	
p20(E)	14	#8	46'-0"	
p21(E)	28	#9	45'-1"	
p22(E)	12	#9	51'-8"	
p23(E)	12	#9	37'-6"	
p27(E)	14	#9	18'-8"	
p28(E)	28	#9	18'-6"	
s20(E)	315	#5	17'-6"	
s21(E)	126	#4	11'-5"	
s22(E)	36	#4	10'-3"	
s23(E)	303	#5	13'-7"	
s24(E)	123	#4	6'-2"	
s25(E)	144	#4	3'-4"	
t21(E)	277	#8	8'-9"	
u20(E)	8	#5	9'-6"	
u21(E)	30	#5	8'-6"	
u22(E)	8	#5	12'-2"	
v20(E)	224	#8	12'-3"	
w20(E)	18	#7	27'-5"	
w21(E)	54	#7	31'-9"	
Structure Excavation		Cu. Yd.	570	
Concrete Structures		Cu. Yd.	519.7	
Reinforcement Bars, Epoxy Coated		Pound	64,660	
Furnishing Steel Piles, HP12x53		Foot	3,601	
Driving Piles		Foot	3,601	
Test Pile Steel HP12x53		Each	1	

Bar	A	B
n21(E)	3'-2"	5'-6"
s20(E)	3'-2"	7'-2"
s24(E)	2'-2"	2'-0"
u20(E)	3'-0"	3'-3"
u21(E)	2'-0"	3'-3"
u22(E)	3'-0"	4'-7"

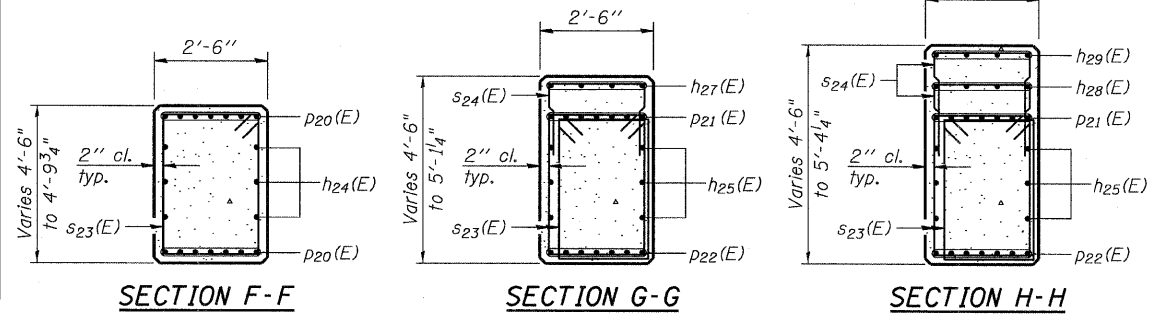
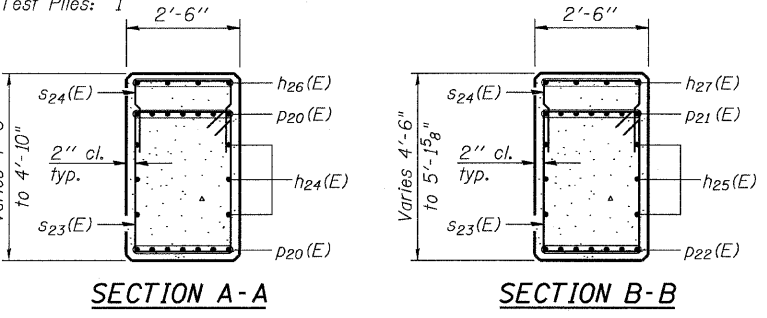
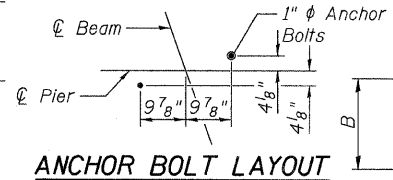
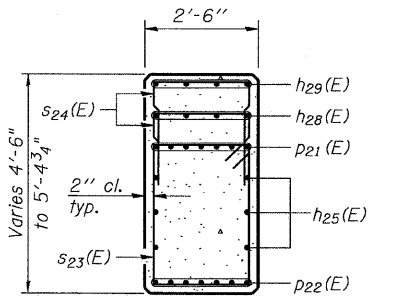
PILE DATA

Type: HP 12x53 with Pile Shoes
Nominal Req. Bearing: 378 kips (SB I-57)
Factored Resistance Available: 208 kips (SB I-57)
Est. Length: 32 ft (SB I-57)
Nominal Req. Bearing: 350 kips (NB I-57, C-D Road A)
Factored Resistance Available: 193 kips (NB I-57, C-D Road A)
Est. Length: 37 ft (NB I-57, C-D Road A)
No. Production Piles: 103
No. Test Piles: 1

PILE DATA

Type: HP 12x53 with Pile Shoes
Nominal Required Bearing: 394 kips
Factored Resistance Available: 217 kips
Est. Length: 30 ft
No. Production Piles: 135
No. Test Piles: 1

ANCHOR BOLT LAYOUT



BARS s21(E) THRU s23(E)

Bar	A	B	C
s21(E)	3'-2"	2'-2"	4 1/2"
s22(E)	2'-7"	2'-2"	4 1/2"
s23(E)	2'-2"	4'-2"	5 1/2"

PIER DETAILS
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL DESIGNED - PK CHECKED - SP, DRAWN - PK CHECKED - SP, PDF DATE - 03/18/10	REVISIONS NAME DATE		SHEET NO. 54 68 SHEETS	F.A.I. RTE. 57	SECTION 1414.2B	COUNTY COOK	TOTAL SHEETS 516	SHEET NO. 299
	CONTRACT NO. 60J27							
	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
	DATE 04/29/10							

4/28/2010 P:\60254057-234\STRUCTURAL\1-57 OVER 1294\0161251-60J27-054-PIER.DTL.dgn 2:41:20 PM