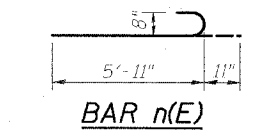


**BILL OF MATERIAL
NORTHBOUND PIER**

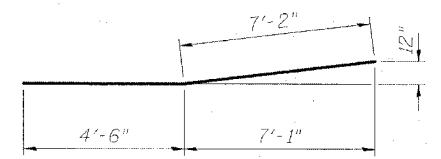
Bar	No.	Size	Length	Shape
h ₃ (E)	2	#5	21'-2"	
h ₁₀ (E)	2	#5	18'-1"	
h ₁₁ (E)	4	#5	36'-0"	
h ₁₂ (E)	6	#5	43'-3"	
h ₁₃ (E)	8	#5	29'-0"	
h ₁₄ (E)	8	#5	36'-4"	
h ₁₈ (E)	4	#9	29'-0"	
h ₁₉ (E)	4	#9	36'-4"	
n(E)	100	#8	6'-10"	
p ₄ (E)	6	#9	37'-7"	
p ₅ (E)	12	#9	17'-1"	
p ₆ (E)	12	#7	11'-8"	
p ₇ (E)	6	#9	28'-11"	
p ₈ (E)	6	#9	44'-10"	
p ₉ (E)	6	#9	36'-2"	
s ₃ (E)	40	#5	6'-3"	
s ₄ (E)	56	#5	6'-11"	
s ₅ (E)	98	#5	10'-5"	
s ₆ (E)	60	#6	10'-11"	
s ₇ (E)	90	#6	10'-4"	
s ₈ (E)	50	#6	9'-10"	
s ₉ (E)	40	#6	9'-5"	
s ₁₀ (E)	40	#6	8'-11"	
s ₁₁ (E)	70	#6	8'-7"	
s ₁₂ (E)	89	#5	6'-9"	
s ₁₃ (E)	79	#8	14'-5"	
s ₁₄ (E)	120	#4	3'-9"	
s ₁₅ (E)	120	#4	3'-9"	
s ₁₆ (E)	55	#4	3'-2"	
s ₁₇ (E)	55	#4	3'-2"	
t(E)	88	#9	13'-2"	
t ₁ (E)	69	#5	10'-0"	
u ₂ (E)	6	#6	7'-7"	
u ₃ (E)	85	#5	3'-9"	
v ₃ (E)	100	#7	13'-1"	
w(E)	20	#5	30'-4"	
w ₁ (E)	20	#5	37'-7"	
Concrete Structures			Cu. Yds.	131.3
Structure Excavation			Cu. Yds.	160
Reinforcement Bars, Epoxy Coated			Pound	28,270
Furnishing Steel Piles, HP12x53			Foot	500
Driving Piles			Foot	500
Test Pile Steel HP12x53			Each	1
Bar Splicers			Each	50



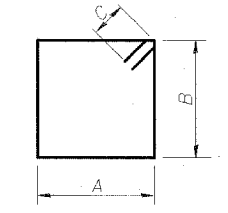
BARS s₃(E), s₄(E), s₆(E), s₁₃(E), u₂(E), u₃(E) or t(E)

A & B DIMENSIONS

Bar	A	B
s ₃ (E)	1'-7"	2'-4"
s ₄ (E)	1'-7"	2'-8"
s ₆ (E)	2'-5"	2'-2"
s ₁₃ (E)	2'-5"	6'-0"
u ₂ (E)	2'-5"	2'-7"
u ₃ (E)	2'-5"	9"



BARS p₄(E), p₈(E) or p₁₀(E)

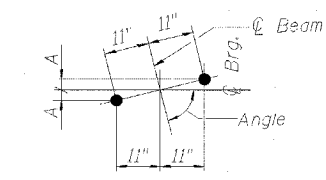


BAR s₅(E), s₆(E), s₇(E), s₈(E), s₉(E), s₁₀(E) or s₁₁(E)

A, B & C DIMENSIONS

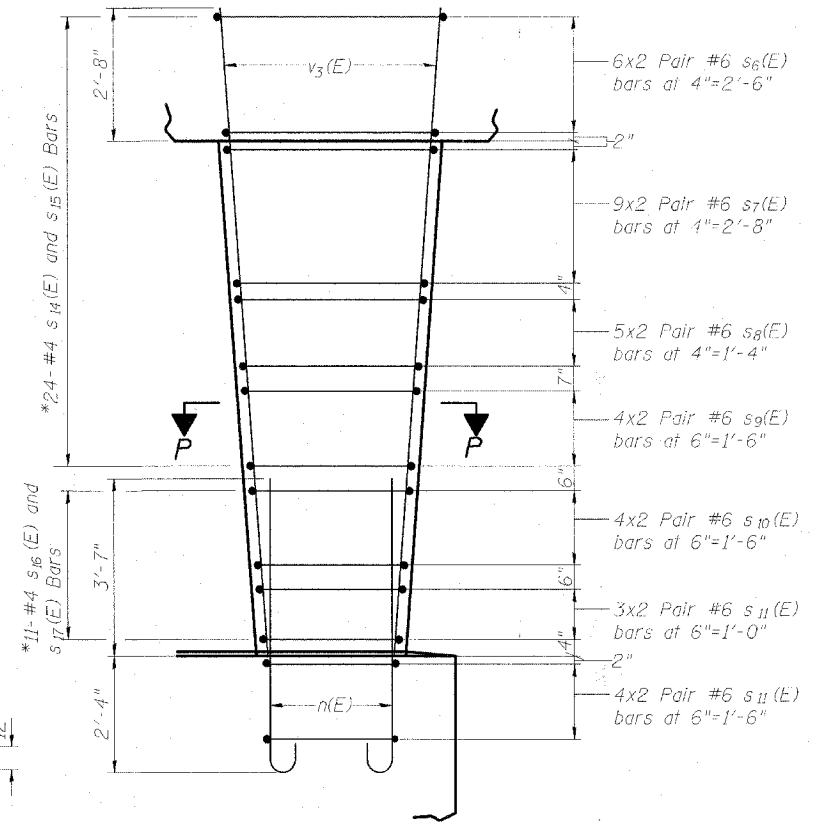
Bar	A	B	C
s ₅ (E)	1'-7"	3'-2"	5 1/2"
s ₆ (E)	1'-8"	3' 1 1/2"	8"
s ₇ (E)	1'-8"	2'-10"	8"
s ₈ (E)	1'-8"	2'-7"	8"
s ₉ (E)	1'-8"	2'-4 1/2"	8"
s ₁₀ (E)	1'-8"	2'-1 1/2"	8"
s ₁₁ (E)	1'-8"	1'-11 1/2"	8"

*Note: Space cross ties with closed stirrup ties.

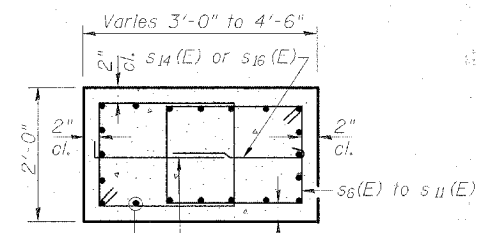


**ANCHOR BOLT LAYOUT
NORTH PIER**

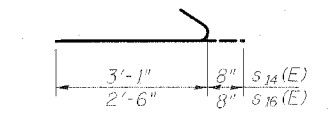
BEAMS	ANGLE	A
1	91°-04'-28"	3 1/16"
2	90°-18'-04"	6"
3	89°-31'-39"	1 1/16"
4	88°-45'-15"	4"
5 Thru 12	87°-58'-53"	3 3/8"



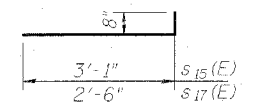
**NORTHBOUND PIER
COLUMN ELEVATION**



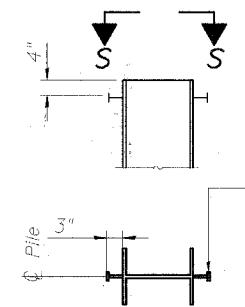
SECTION P-P



BAR s₁₄(E) or s₁₆(E)



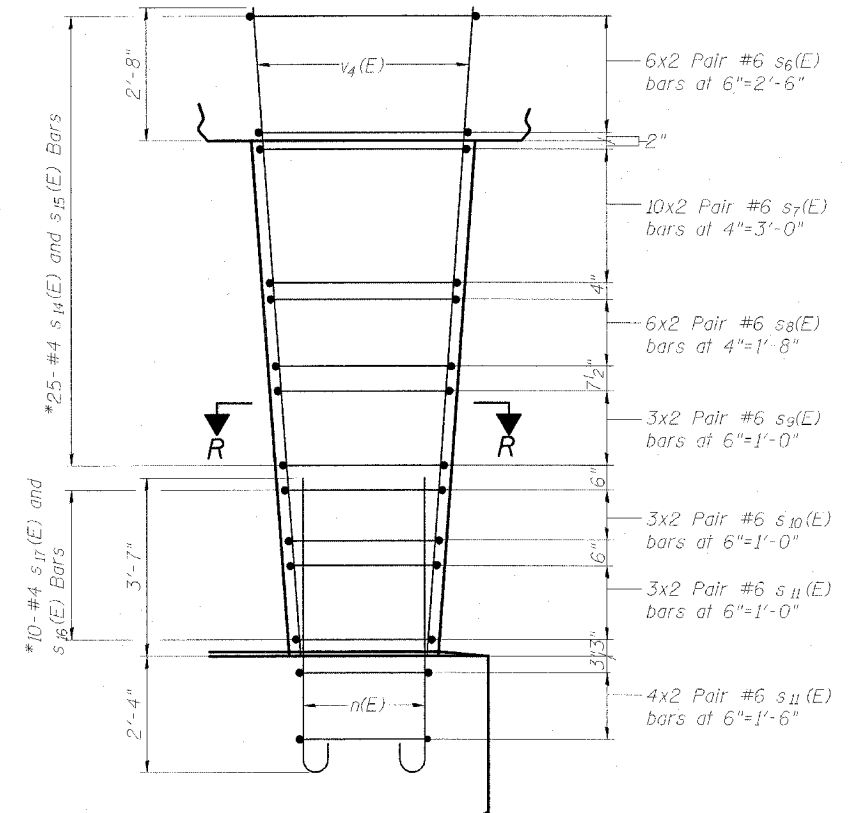
BAR s₁₅(E) or s₁₇(E)



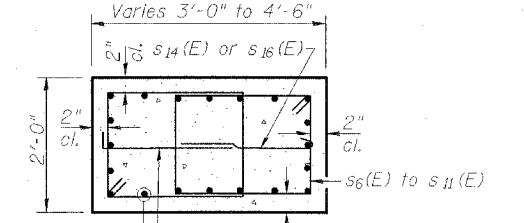
**SECTION S-S
PILE STUD DETAIL**

**BILL OF MATERIAL
SOUTHBOUND PIER**

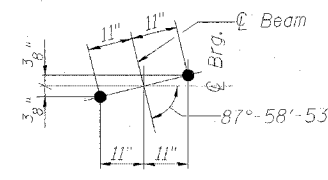
Bar	No.	Size	Length	Shape
h ₄ (E)	2	#5	18'-5"	
h ₅ (E)	2	#5	29'-11"	
h ₆ (E)	2	#5	4'-5"	
h ₁₂ (E)	6	#5	43'-4"	
h ₁₅ (E)	4	#5	31'-11"	
h ₁₆ (E)	8	#5	26'-8"	
h ₁₇ (E)	8	#5	34'-8"	
h ₂₀ (E)	4	#9	26'-8"	
h ₂₁ (E)	4	#9	34'-8"	
n(E)	100	#8	6'-10"	
p ₅ (E)	12	#9	17'-4"	
p ₆ (E)	12	#7	11'-8"	
p ₈ (E)	6	#9	44'-10"	
p ₉ (E)	6	#9	36'-2"	
p ₁₀ (E)	6	#9	33'-6"	
p ₁₁ (E)	6	#9	24'-10"	
s ₃ (E)	40	#5	6'-3"	
s ₄ (E)	56	#5	6'-11"	
s ₅ (E)	94	#5	10'-5"	
s ₆ (E)	60	#6	10'-11"	
s ₇ (E)	100	#6	10'-4"	
s ₈ (E)	60	#6	9'-10"	
s ₉ (E)	30	#6	9'-5"	
s ₁₀ (E)	30	#6	8'-11"	
s ₁₁ (E)	70	#6	8'-7"	
s ₁₂ (E)	85	#5	6'-9"	
s ₁₃ (E)	75	#8	14'-5"	
s ₁₄ (E)	125	#4	3'-9"	
s ₁₅ (E)	125	#4	3'-9"	
s ₁₆ (E)	50	#4	3'-2"	
s ₁₇ (E)	50	#4	3'-2"	
t(E)	89	#9	13'-2"	
t ₁ (E)	66	#5	10'-0"	
u ₂ (E)	6	#6	7'-7"	
u ₃ (E)	98	#5	3'-9"	
v ₄ (E)	100	#7	12'-10"	
w ₂ (E)	20	#5	28'-5"	
w ₃ (E)	20	#5	36'-5"	
Concrete Structures			Cu. Yd.	130.6
Structure Excavation			Cu. Yd.	153
Reinforcement Bars, Epoxy Coated			Pound	27,810
Furnishing Steel Piles, HP12x53			Foot	500
Driving Piles			Foot	500
Test Pile Steel HP12x53			Each	1
Bar Splicers			Each	52



**SOUTHBOUND PIER
COLUMN ELEVATION**



SECTION R-R



**ANCHOR BOLT LAYOUT
SOUTH PIER**

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAT 57	(X1-6) HBK-2	WILLIAMSON	917	909
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract #98990

**PIER DETAILS,
NORTHBOUND & SOUTHBOUND**

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

DESIGN FIRM REGISTRATION
No. 184-000450

Clark Dietz
ENGINEERS

1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

REVISIONS		DATE	DRAWING NUMBER
NAME			

DESIGNED BY: SMM PROJECT NO: 102314
DRAWN BY: MEW DATE: 05/20/06
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY INITIALS

S-25