

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**PIER 1 - SOUTHBOUND
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h20(E)	20	#6	43'-2"	—
h21(E)	28	#5	40'-4"	—
h22(E)	12	#7	41'-7"	—
h23(E)	3	#4	32'-1"	—
n4(E)	96	#9	8'-6"	U
n5(E)	3	#6	7'-9"	U
p6(E)	24	#9	46'-1"	—
p7(E)	12	#8	39'-5"	—
p8(E)	12	#8	13'-7"	—
s11(E)	214	#5	13'-1"	□
s12(E)	64	#5	6'-6"	U
s13(E)	34	#4	8'-4"	U
s14(E)	78	#6	14'-0"	U
s15(E)	78	#6	17'-4"	U
sp(E)	6	#4	9'-0"	W
t(E)	104	#6	7'-2"	—
u5(E)	10	#6	12'-7"	U
u6(E)	8	#5	10'-8"	U
u7(E)	8	#5	9'-2"	U
v6(E)	96	#9	11'-6"	—
v7(E)	3	#6	5'-8"	—
w(E)	16	#6	41'-9"	—
Concrete Structures			Cu. Yd.	176.3
Reinforcement Bars, Epoxy Coated			Pound	26,360
Furnishing Steel Piles HP 12x53			Foot	1081
Driving Piles			Foot	1081
Test Pile Steel HP 12x53			Each	1
Pile Shoes			Each	48
Braced Excavation			Cu. Yd.	190

** Length is height of spiral.

**PIER 1 - NORTHBOUND
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h24(E)	20	#6	44'-2"	—
h25(E)	28	#5	42'-4"	—
h26(E)	12	#7	43'-7"	—
n4(E)	96	#9	8'-6"	U
n5(E)	3	#6	7'-9"	U
p8(E)	12	#8	13'-7"	—
p9(E)	24	#9	47'-1"	—
p10(E)	12	#8	40'-5"	—
s11(E)	218	#5	13'-1"	□
s12(E)	64	#5	6'-6"	U
s14(E)	82	#6	14'-0"	U
s15(E)	82	#6	17'-4"	U
sp1(E)	6	#4	9'-7"	W
t(E)	108	#6	7'-2"	—
u5(E)	10	#6	12'-7"	U
u6(E)	8	#5	10'-8"	U
u7(E)	8	#5	9'-2"	U
v7(E)	3	#6	5'-8"	—
v8(E)	96	#9	12'-1"	—
w1(E)	16	#6	43'-9"	—
Concrete Structures			Cu. Yd.	182.6
Reinforcement Bars, Epoxy Coated			Pound	26,950
Furnishing Steel Piles HP 12x53			Foot	1104
Driving Piles			Foot	1104
Pile Shoes			Each	48
Braced Excavation			Cu. Yd.	199

** Length is height of spiral.

**PIER 2 - SOUTHBOUND
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h27(E)	20	#6	40'-2"	—
h28(E)	28	#5	37'-7"	—
h29(E)	12	#7	38'-10"	—
n4(E)	96	#9	8'-6"	U
n5(E)	3	#6	7'-9"	U
p8(E)	12	#8	13'-7"	—
p11(E)	24	#9	43'-1"	—
p12(E)	12	#8	36'-5"	—
s11(E)	196	#5	13'-1"	□
s12(E)	64	#5	6'-6"	U
s14(E)	72	#6	14'-0"	U
s15(E)	72	#6	17'-4"	U
sp2(E)	6	#4	7'-10"	W
t(E)	95	#6	7'-2"	—
u5(E)	10	#6	12'-7"	U
u6(E)	8	#5	10'-8"	U
u7(E)	8	#5	9'-2"	U
v7(E)	3	#6	5'-8"	—
v9(E)	96	#9	10'-4"	—
w2(E)	16	#6	39'-0"	—
Concrete Structures			Cu. Yd.	160.7
Reinforcement Bars, Epoxy Coated			Pound	24,330
Furnishing Steel Piles HP 12x53			Foot	1075
Driving Piles			Foot	1075
Test Pile Steel HP 12x53			Each	1
Pile Shoes			Each	44
Braced Excavation			Cu. Yd.	181

** Length is height of spiral.

**PIER 2 - NORTHBOUND
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h30(E)	20	#6	41'-2"	—
h31(E)	28	#5	38'-11"	—
h32(E)	12	#7	40'-3"	—
n4(E)	96	#9	8'-6"	U
n5(E)	3	#6	7'-9"	U
p8(E)	12	#8	13'-7"	—
p13(E)	24	#9	44'-1"	—
p14(E)	12	#8	37'-5"	—
s11(E)	198	#5	13'-1"	□
s12(E)	64	#5	6'-6"	U
s14(E)	75	#6	14'-0"	U
s15(E)	75	#6	17'-4"	U
sp3(E)	6	#4	8'-0"	W
t(E)	99	#6	7'-2"	—
u5(E)	10	#6	12'-7"	U
u6(E)	8	#5	10'-8"	U
u7(E)	8	#5	9'-2"	U
v7(E)	3	#6	5'-8"	—
v10(E)	96	#9	10'-6"	—
w3(E)	16	#6	40'-6"	—
Concrete Structures			Cu. Yd.	165.7
Reinforcement Bars, Epoxy Coated			Pound	24,870
Furnishing Steel Piles HP 12x53			Foot	1100
Driving Piles			Foot	1100
Pile Shoes			Each	44
Braced Excavation			Cu. Yd.	188

** Length is height of spiral.

**PIER 3 - SOUTHBOUND
BILL OF MATERIAL**

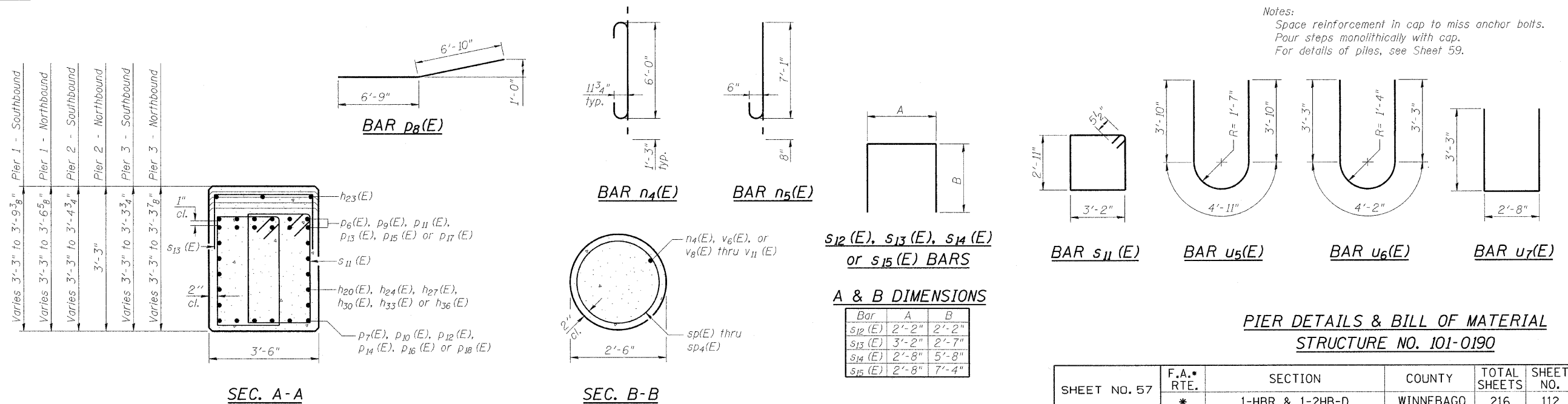
Bar	No.	Size	Length	Shape
h33(E)	20	#6	37'-8"	—
h34(E)	28	#5	35'-1"	—
h35(E)	12	#7	36'-4"	—
n4(E)	80	#9	8'-6"	U
n5(E)	3	#6	7'-9"	U
p8(E)	12	#8	13'-7"	—
p15(E)	24	#9	40'-7"	—
p16(E)	12	#8	33'-11"	—
s11(E)	180	#5	13'-1"	□
s12(E)	64	#5	6'-6"	U
s14(E)	68	#6	14'-0"	U
s15(E)	68	#6	17'-4"	U
sp4(E)	5	#4	6'-2"	W
t(E)	90	#6	7'-2"	—
u5(E)	10	#6	12'-7"	U
u6(E)	8	#5	10'-8"	U
u7(E)	8	#5	9'-2"	U
v7(E)	3	#6	5'-8"	—
v11(E)	80	#9	8'-8"	—
w4(E)	16	#6	36'-6"	—
Concrete Structures			Cu. Yd.	147.1
Reinforcement Bars, Epoxy Coated			Pound	21,530
Furnishing Steel Piles HP 12x53			Foot	1189
Driving Piles			Foot	1189
Test Pile Steel HP 12x53			Each	1
Pile Shoes			Each	42
Braced Excavation			Cu. Yd.	151

** Length is height of spiral.

**PIER 3 - NORTHBOUND
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h36(E)	20	#6	39'-2"	—
h37(E)	28	#5	36'-10"	—
h38(E)	12	#7	38'-2"	—
n4(E)	96	#9	8'-6"	U
n5(E)	3	#6	7'-9"	U
p8(E)	12	#8	13'-7"	—
p17(E)	24	#9	42'-1"	—
p18(E)	12	#8	35'-5"	—
s11(E)	188	#5	13'-1"	□
s12(E)	64	#5	6'-6"	U
s14(E)	71	#6	14'-0"	U
s15(E)	71	#6	17'-4"	U
sp4(E)	6	#4	6'-2"	W
t(E)	93	#6	7'-2"	—
u5(E)	10	#6	12'-7"	U
u6(E)	8	#5	10'-8"	U
u7(E)	8	#5	9'-2"	U
v7(E)	3	#6	5'-8"	—
v11(E)	96	#9	8'-8"	—
w5(E)	16	#6	38'-4"	—
Concrete Structures			Cu. Yd.	155.2
Reinforcement Bars, Epoxy Coated			Pound	23,230
Furnishing Steel Piles HP 12x53			Foot	1218
Driving Piles			Foot	1218
Pile Shoes			Each	42
Braced Excavation			Cu. Yd.	158

** Length is height of spiral.



DESIGNED - JY
CHECKED - GSP
DRAWN - MJB
CHECKED - JY

**PIER DETAILS & BILL OF MATERIAL
STRUCTURE NO. 101-0190**

SHEET NO. 57 61 SHEETS	F.A.* RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	1-HBR & 1-2HB-D	WINNEBAGO	216	112
IL RTE 251 & FOREST HILLS RD CONTRACT NO. 64B79					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

* F.A.P. 303 & F.A.U. 5146