

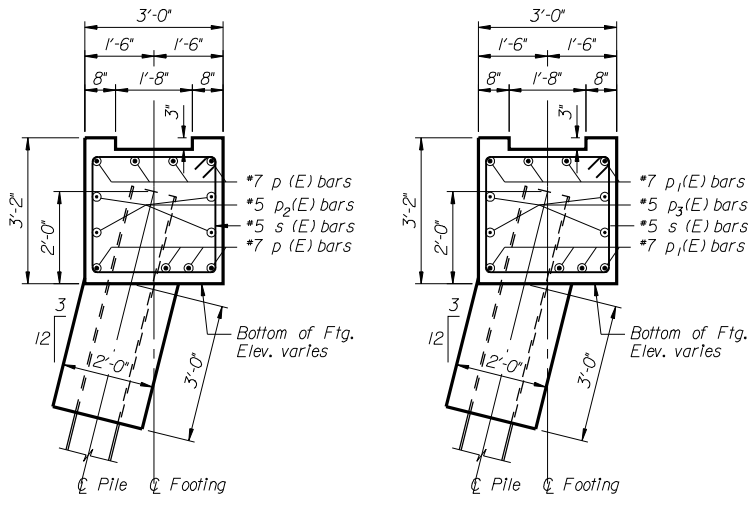
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	2(B-5,B-6)	PIKE	112	55
STA.		TO STA.		
FED. ROAD DIST. NO. 6		ILLINOIS FED. AID PROJECT		

SN075-2508 Sheet 6 of 11

**PILE DATA - SOUTH END**

	SW WW Ftg.	S. Footing	SE WW Ftg.
Type:	HPI0x42	HPI2x63	HPI0x42
Nominal Required Bearing:	335 kips	497 kips	335 kips
Allow. Resistance Available:	110 kips	164 kips	110 kips
Estimated Length:	65 Ft./Pile	65 Ft./Pile	65 Ft./Pile
Number Required:	6*	17**	6***

\* Incl. one test pile HPI0x42 driven in a perm. location at the SW WW Ftg.  
 \*\* Incl. one test pile HPI2x63 driven in a perm. location at the S. Footing near the stage construction line.  
 \*\*\* Incl. one test pile HPI0x42 driven in a perm. location at the SE WW Ftg.



**PILE DATA - NORTH END**

	NW WW Ftg.	N. Footing	NE WW Ftg.
Type:	HPI0x42	HPI2x63	HPI0x42
Nominal Required Bearing:	335 kips	497 kips	335 kips
Allow. Resistance Available:	104 kips	156 kips	104 kips
Estimated Length:	50 Ft./Pile	50 Ft./Pile	50 Ft./Pile
Number Required:	6*	17**	8***

\* Incl. one test pile HPI0x42 driven in a perm. location at the NW WW Ftg.  
 \*\* Incl. one test pile HPI2x63 driven in a perm. location at the N. Footing near the stage construction line.  
 \*\*\* Incl. one test pile HPI0x42 driven in a perm. location at the NE WW Ftg.

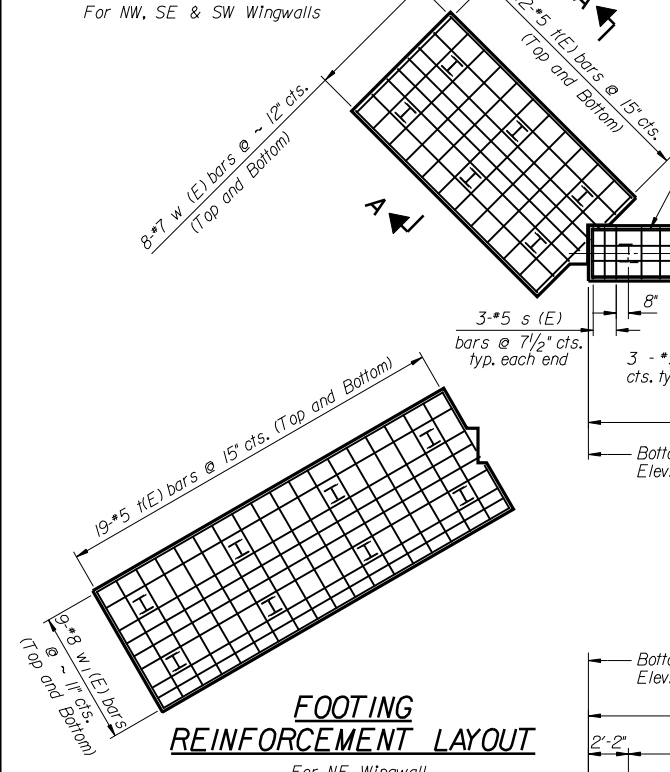
**BILL OF MATERIAL SOUTH FOOTING & WINGWALLS**

Bar	No.	Size	Length	Shape	
h (E)	26	#4	14'-0"	—	
h1(E)	4	#4	14'-1"	—	
h2(E)	2	#4	14'-3"	—	
h3(E)	4	#4	14'-4"	—	
h4(E)	2	#4	14'-6"	—	
h5(E)	4	#4	14'-9"	—	
n (E)	32	#6	5'-10"	C	
n1(E)	30	#5	4'-0"	C	
p (E)	8	#7	27'-3"	—	
p1(E)	8	#7	31'-3"	—	
p2(E)	4	#5	27'-3"	—	
p3(E)	4	#5	31'-3"	—	
s (E)	55	#5	11'-3"	—	
t (E)	48	#5	7'-4"	—	
u (E)	8	#6	11'-8"	—	
v (E)	20	#4	7'-1"	—	
v1(E)	12	#5	7'-10"	—	
v2(E)	12	#5	9'-7"	—	
v3(E)	8	#5	10'-10"	—	
w (E)	32	#7	14'-0"	—	
Reinforcement Bars, Epoxy Coated				Pound	4490
Concrete Structures				Cu. Yd.	43.8
Structure Excavation				Cu. Yd.	481
Furnishing Steel Piles HPI0x42				Foot	650
Furnishing Steel Piles HPI2x63				Foot	1040
Driving Piles				Foot	1690
Test Pile Steel HPI0x42				Each	2
Test Pile Steel HPI2x63				Each	1
Pile Shoes				Each	29
Concrete Encasement				Cu. Yd.	5.7
Bar Splicers				Each	12

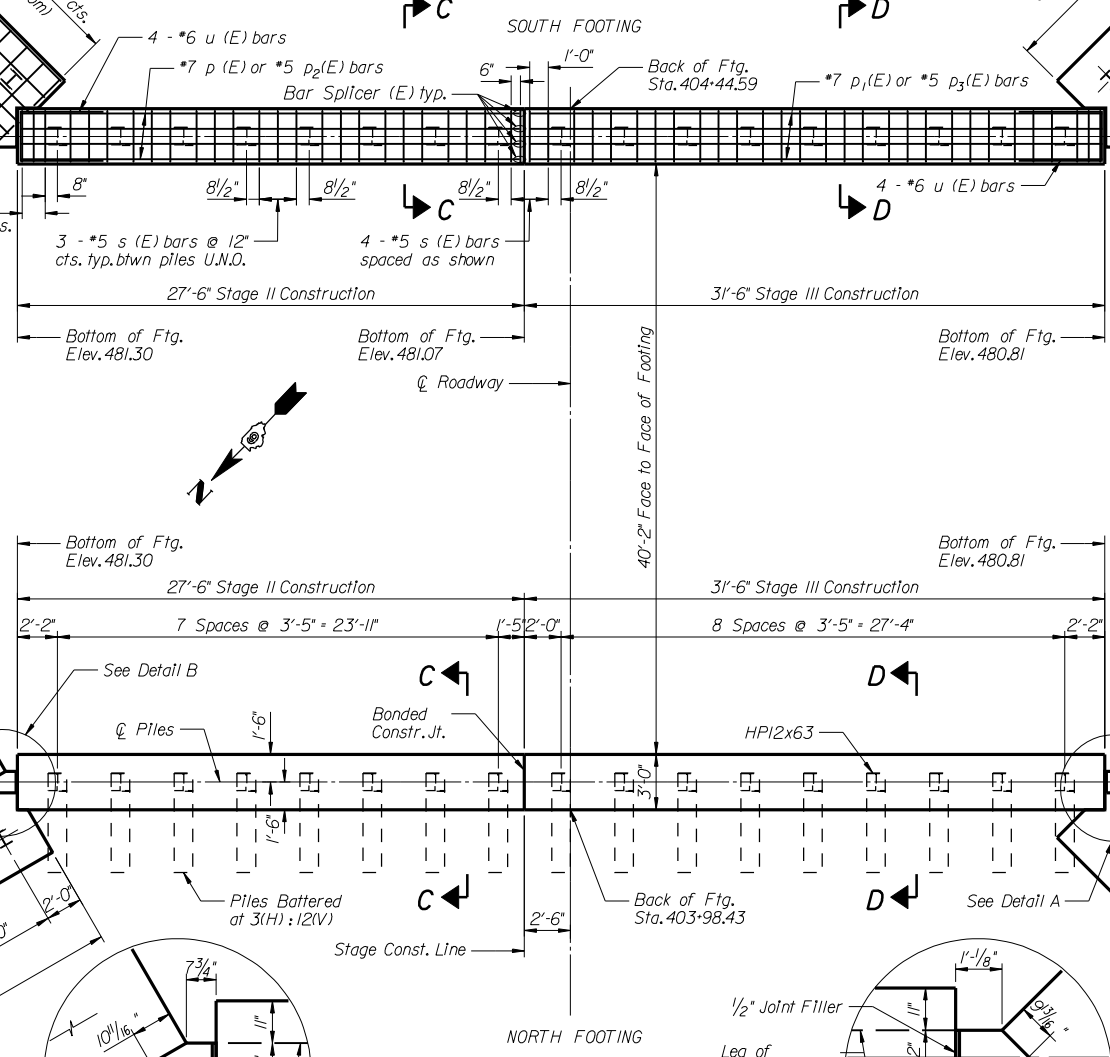
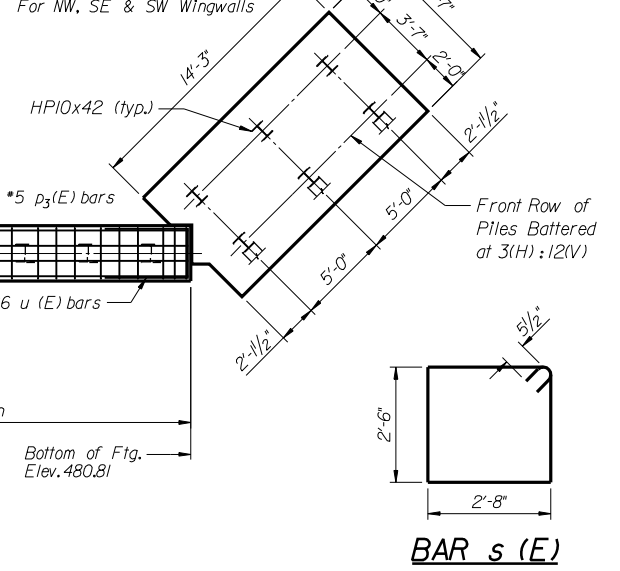
**BILL OF MATERIAL NORTH FOOTING & WINGWALLS**

Bar	No.	Size	Length	Shape	
h (E)	13	#4	14'-0"	—	
h1(E)	2	#4	14'-1"	—	
h2(E)	1	#4	14'-3"	—	
h3(E)	2	#4	14'-4"	—	
h4(E)	1	#4	14'-6"	—	
h5(E)	2	#4	14'-9"	—	
h6(E)	15	#4	21'-9"	—	
h7(E)	1	#4	21'-10"	—	
h8(E)	2	#4	21'-11"	—	
h9(E)	1	#4	22'-0"	—	
h10(E)	2	#4	22'-1"	—	
n (E)	40	#6	5'-10"	C	
n1(E)	38	#5	4'-0"	C	
p (E)	8	#7	27'-3"	—	
p1(E)	8	#7	31'-3"	—	
p2(E)	4	#5	27'-3"	—	
p3(E)	4	#5	31'-3"	—	
s (E)	55	#5	11'-3"	—	
t (E)	62	#5	7'-4"	—	
u (E)	8	#6	11'-8"	—	
v (E)	22	#4	7'-1"	—	
v1(E)	11	#5	7'-10"	—	
v2(E)	17	#5	9'-7"	—	
v3(E)	12	#5	10'-10"	—	
w (E)	16	#7	14'-0"	—	
w1(E)	18	#8	21'-9"	—	
Reinforcement Bars, Epoxy Coated				Pound	5490
Concrete Structures				Cu. Yd.	50.2
Structure Excavation				Cu. Yd.	533
Furnishing Steel Piles HPI0x42				Foot	600
Furnishing Steel Piles HPI2x63				Foot	800
Driving Piles				Foot	1400
Test Pile Steel HPI0x42				Each	2
Test Pile Steel HPI2x63				Each	1
Pile Shoes				Each	31
Concrete Encasement				Cu. Yd.	5.7
Bar Splicers				Each	12

**FOOTING REINFORCEMENT LAYOUT**



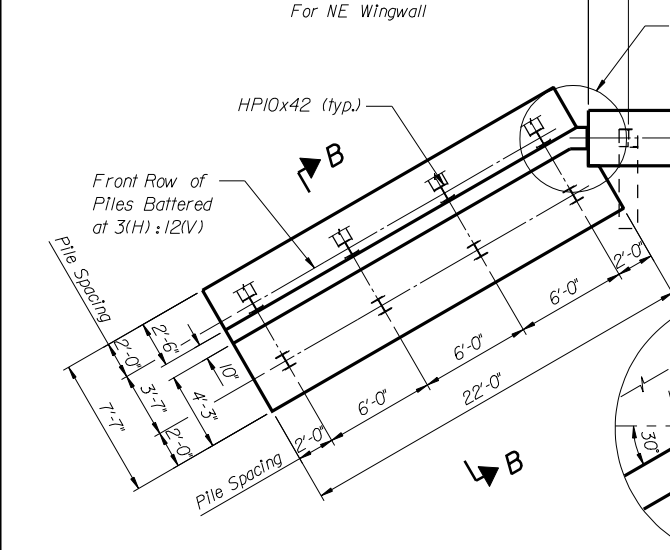
**FOOTING PILE LAYOUT**



**BAR s (E)**

**BAR u (E)**

**FOOTING REINFORCEMENT LAYOUT**



**FOOTING GEOMETRY & PILE LAYOUT**

For NE Wingwall

**DETAIL B**

For NE Wingwall

**FOOTING PLAN**

For NW, SE & SW Wingwalls

**DETAIL A**

For NW, SE & SW Wingwalls

**FOOTING GEOMETRY**

For NW, SE & SW Wingwalls

Notes:  
 See Sheet 7 of 11 for Sections A-A and B-B.  
 Space footing steel to miss piles.  
 Cut wingwall footing reinforcement in field where it interferes with three-sided box footing.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**FOOTING DETAILS**  
 ILLINOIS ROUTE 96 OVER  
 BREWSTER CREEK  
 FAP RTE 304 - SECT. 2(B-5,B-6)  
 PIKE COUNTY  
 STATION 404+21.51  
 STRUCTURE NO. 075-2508

SCALE: N/A  
 DATE: SEPT 2007  
 DRAWN BY: JLS  
 CHECKED BY: DSP

PLOT DATE: Sep-26-2007 02:41:18pm  
 FILE NAME: c:\projects\075-0508\181\breuster\_culvert\_plans\_09-26-2007.dgn  
 PLOT SCALE: 0.0833 1/12 IN.  
 USER NAME: jlaughlinr1