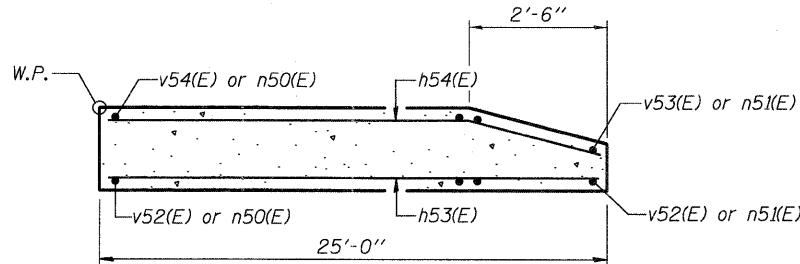
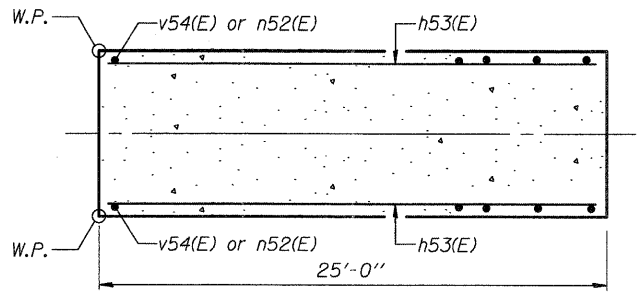


**SECTION THRU ABUTMENTS**

Note: Abutments shall have all exposed surfaces of backwalls, bridge seats, and front faces of pile caps treated with Concrete Sealer.



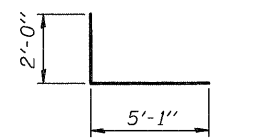
**SECTION B-B**



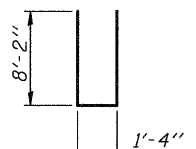
**SECTION E-E**

**MINIMUM BAR LAP**  
(Abutment and Wingwalls)

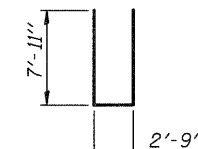
- |                   |                 |
|-------------------|-----------------|
| <i>Other bars</i> | <i>Top bars</i> |
| #4 bar = 2'-7"    | #5 bar = 3'-8"  |
| #5 bar = 3'-3"    | #7 bar = 5'-10" |
| #6 bar = 3'-10"   |                 |
| #7 bar = 5'-2"    |                 |



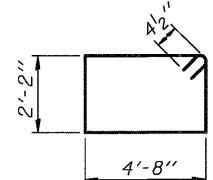
**BAR h52(E)**



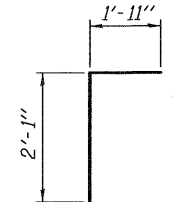
**BAR n50(E)**



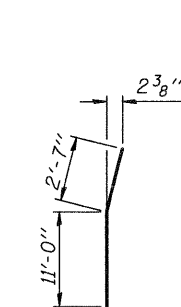
**BAR n52(E)**



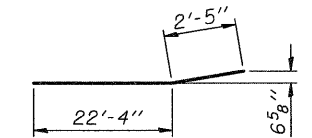
**BARS s52(E)**



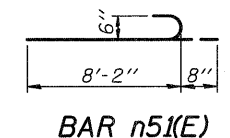
**BAR v50(E)**



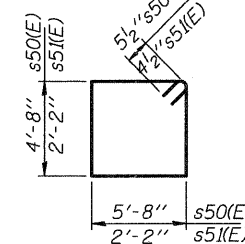
**BAR v53(E)**



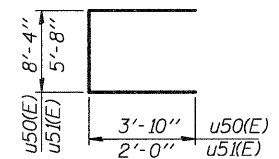
**BAR h54(E) & h56(E)**



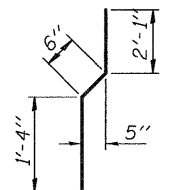
**BAR n51(E)**



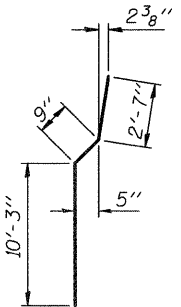
**BARS s50(E) & s51(E)**



**BARS u50(E) & u51(E)**



**BAR v51(E)**



**BAR v54(E)**

**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h50(E)	72	#5	24'-6"	—
h51(E)	20	#6	24'-1"	—
h52(E)	88	#5	7'-1"	—
h53(E)	72	#4	24'-8"	—
h54(E)	48	#7	24'-9"	—
h55(E)	12	#5	18'-10"	—
h56(E)	2	#4	24'-9"	—
n50(E)	90	#6	17'-8"	—
n51(E)	20	#6	8'-10"	—
n52(E)	26	#6	18'-7"	—
p50(E)	48	#7	35'-6"	—
p51(E)	16	#6	28'-9"	—
p52(E)	18	#5	34'-7"	—
p53(E)	10	#7	28'-9"	—
s50(E)	159	#5	21'-7"	—
s51(E)	52	#4	9'-5"	—
s52(E)	26	#4	14'-5"	—
u50(E)	10	#6	16'-0"	—
u51(E)	38	#5	9'-8"	—
v50(E)	86	#5	4'-0"	—
v51(E)	86	#4	3'-11"	—
v52(E)	52	#6	13'-6"	—
v53(E)	6	#6	13'-7"	—
v54(E)	98	#6	13'-7"	—
v55(E)	86	#6	13'-0"	—
v56(E)	86	#6	11'-0"	—
Concrete Structures		Cu. Yd.	326.4	
Reinforcement Bars, Epoxy Coated		Pound	27,710	
Furnishing Metal Shell Piles 14" X 0.312"		Foot	1,895	
Driving Piles		Foot	1,895	
Test Pile Metal Shells		Each	1	
Concrete Sealer		Sq. Ft.	1,839	

For details of Bar Splicers, see sheet 104 of 133.  
For details of metal shell piles see sheet 100 of 133.