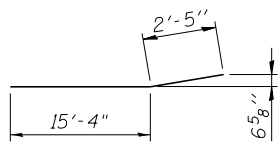


**ABUTMENT
BILL OF MATERIAL**

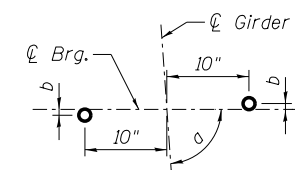
Bar	No.	Size	Length	Shape
d305(E)	8	#5	3'-6"	—
d306(E)	8	#5	3'-0"	—
h300(E)	32	#5	5'-6"	—
h301(E)	24	#5	24'-0"	—
h302(E)	8	#6	24'-3"	—
h303(E)	30	#4	17'-6"	—
h304(E)	22	#4	17'-9"	—
n300(E)	32	#6	14'-4"	—
n301(E)	12	#6	7'-2"	—
p300(E)	8	#7	9'-6"	—
p301(E)	9	#7	20'-5"	—
p302(E)	3	#7	16'-0"	—
s300(E)	12	#4	15'-11"	—
s301(E)	38	#4	9'-5"	—
s302(E)	5	#4	9'-5"	—
u300(E)	5	#6	12'-1"	—
v300(E)	45	#5	3'-9"	—
v301(E)	45	#4	3'-5"	—
v302(E)	9	#5	7'-3"	—
v303(E)	9	#5	9'-0"	—
v304(E)	36	#5	11'-11"	—
v305(E)	36	#5	7'-4"	—
v306(E)	19	#6	9'-0"	—
v307(E)	3	#6	9'-0"	—
v308(E)	16	#6	9'-2"	—
v309(E)	19	#6	9'-8"	—
v310(E)	3	#6	9'-8"	—
v311(E)	16	#6	9'-10"	—
Structure Excavation	Cu. Yd.		173	
Concrete Structures	Cu. Yd.		45.0	
Concrete Superstructure	Cu. Yd.		4.0	
Concrete Encasement	Cu. Yd.		1.8	
Reinforcement Bars, Epoxy Coated	Pound		5,910	
Furnishing Steel Piles HP12x53	Foot		132	
Driving Piles	Foot		132	
Test Pile Steel HP12x53	Each		1	
Pile Shoes	Each		5	
Concrete Sealer	Sq. Ft.		397	
Granular Backfill for Structures	Cu. Yd.		97	

PILE DATA

Type: HP12x53 with Pile Shoes
 Nominal Required Bearing: 255 kips
 Allowable Resistance Available: 85 kips
 Est. Length: 33 ft.
 No. Production Piles: 4
 No. Test Piles: 1

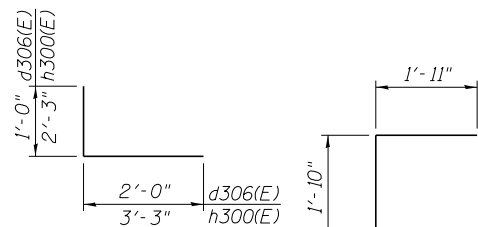


BAR h304(E)

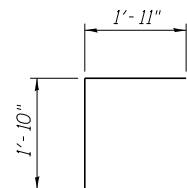


ANCHOR BOLT DETAIL

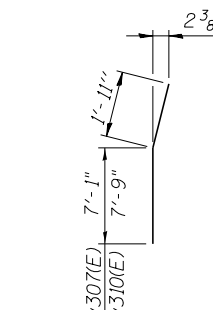
Dimension	Girder 1	Girder 2
a	88°51'15"	89°25'39"
b	1/4"	1/8"



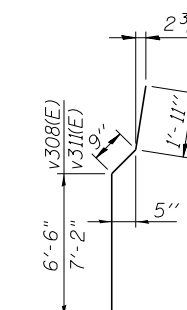
**BARS d306(E)
AND h300(E)**



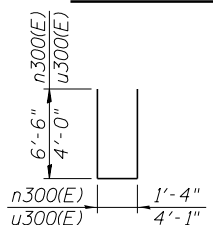
BAR v300(E)



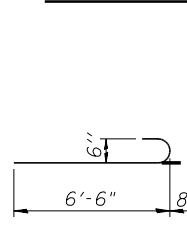
**BARS v307(E)
AND v310(E)**



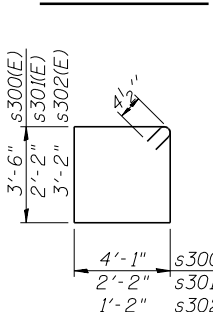
**BARS v308(E)
AND v311(E)**



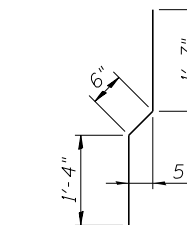
**BARS n300(E)
AND u300(E)**



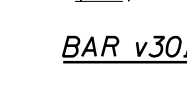
BAR n301(E)



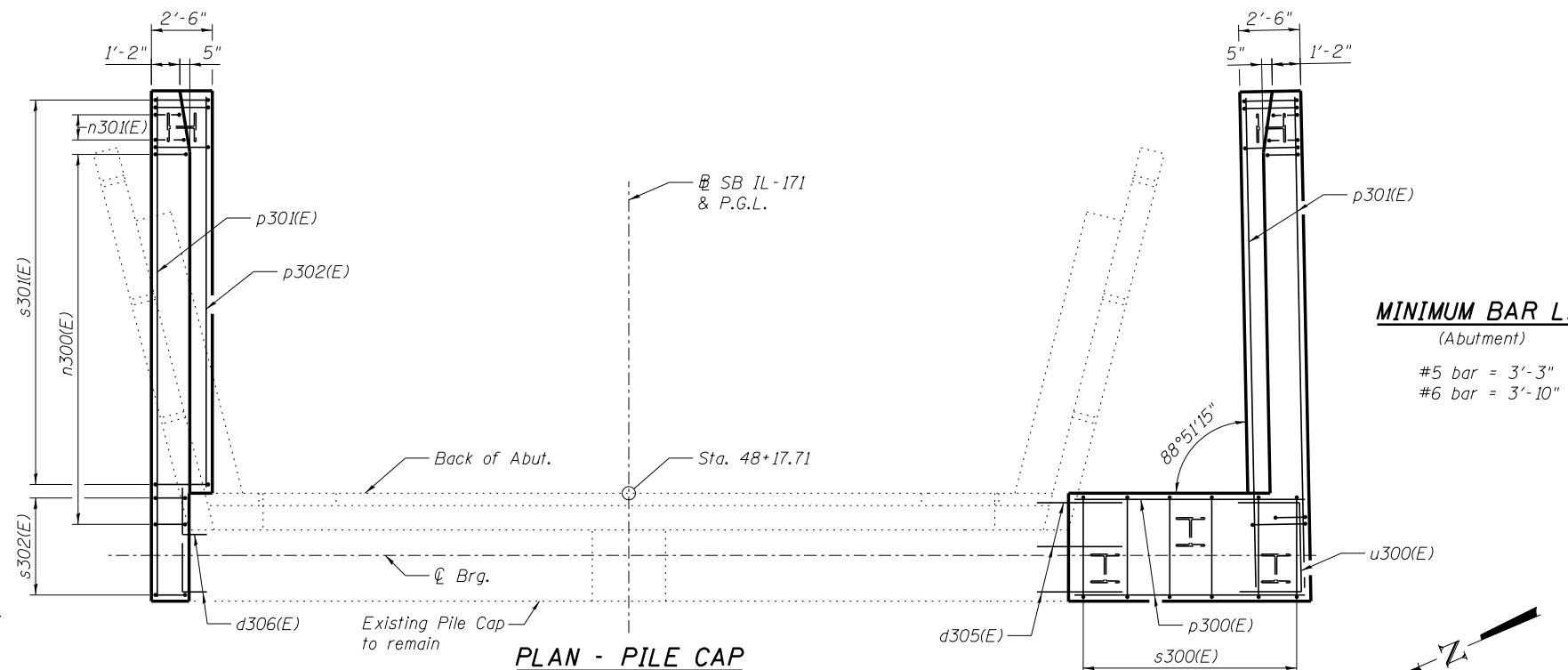
**BARS s300(E), s301(E)
AND s302(E)**



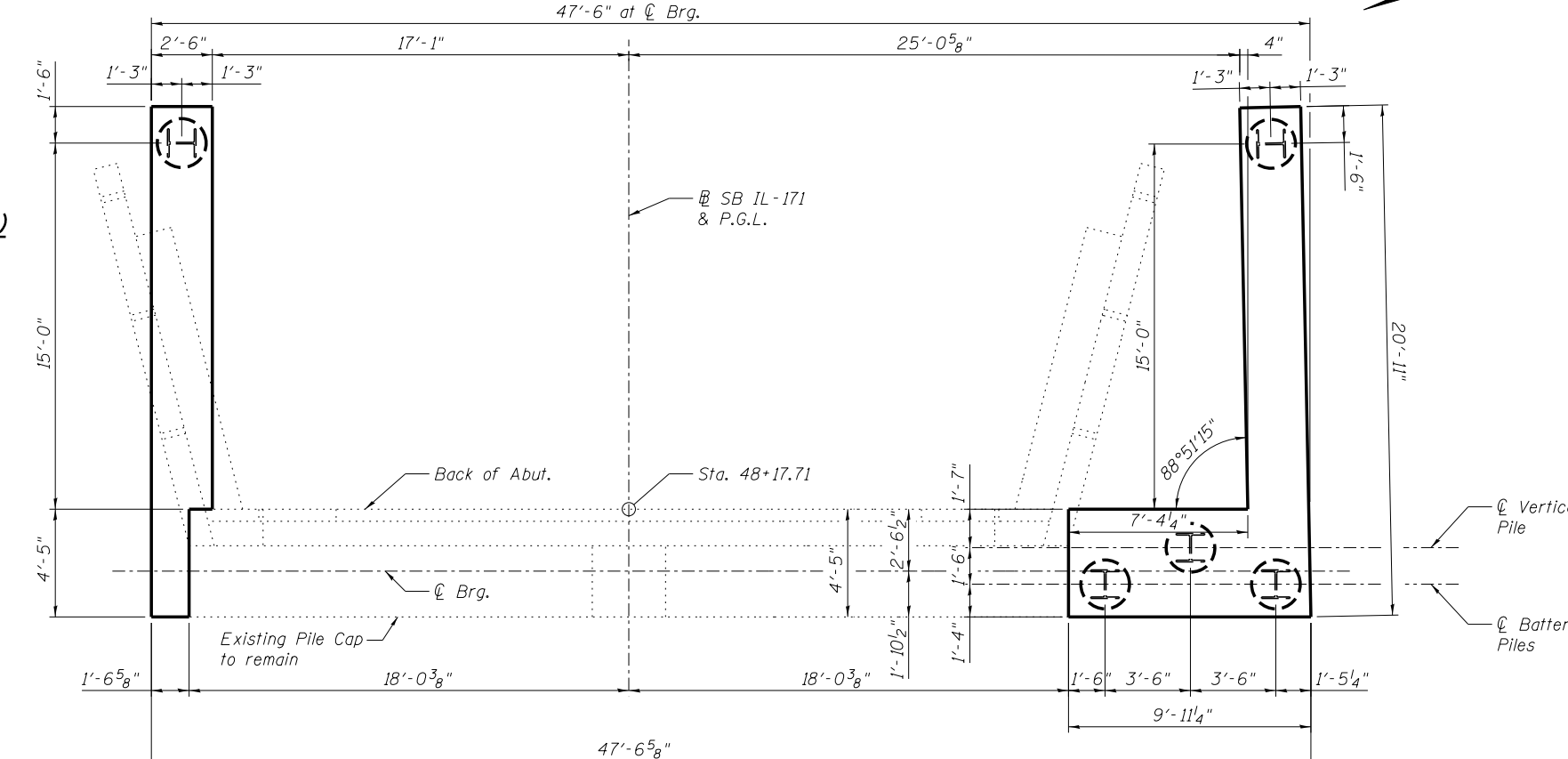
BAR v301(E)



BAR v304(E)



PLAN - PILE CAP



PLAN - PILE LAYOUT

MINIMUM BAR LAP

(Abutment)

- #5 bar = 3'-3"
- #6 bar = 3'-10"

NOTES:

- Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.
- Space reinforcement to miss anchor bolts.
- Bars indicated thus 6x2-#5 etc. indicates 6 lines of bars with 2 lengths per line.