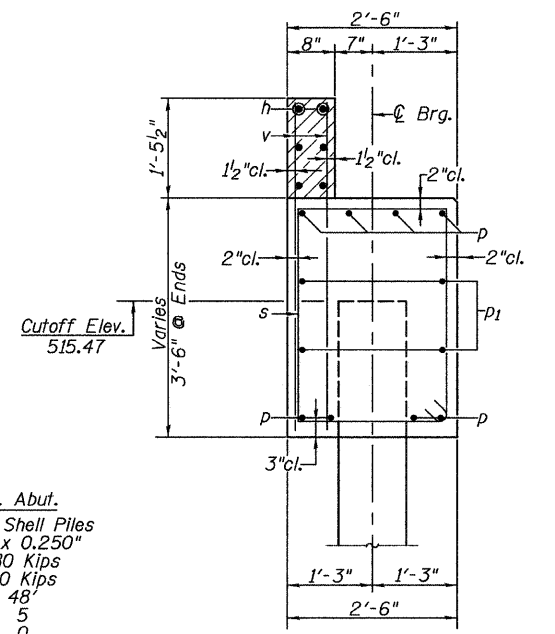


ELEVATION
(S. Abut. Looking South)
(N. Abut. Looking North)

PILE DATA

Type:	S. Abut.	N. Abut.
	Metal Shell Piles	Metal Shell Piles
	12" x 0.250"	12" x 0.250"
Nominal Required Bearing:	180 Kips	180 Kips
Factored Resistance Available:	90 Kips	90 Kips
Estimated Pile Length:	54'	48'
Number of Production:	4	5
Number of Test Piles:	1	0



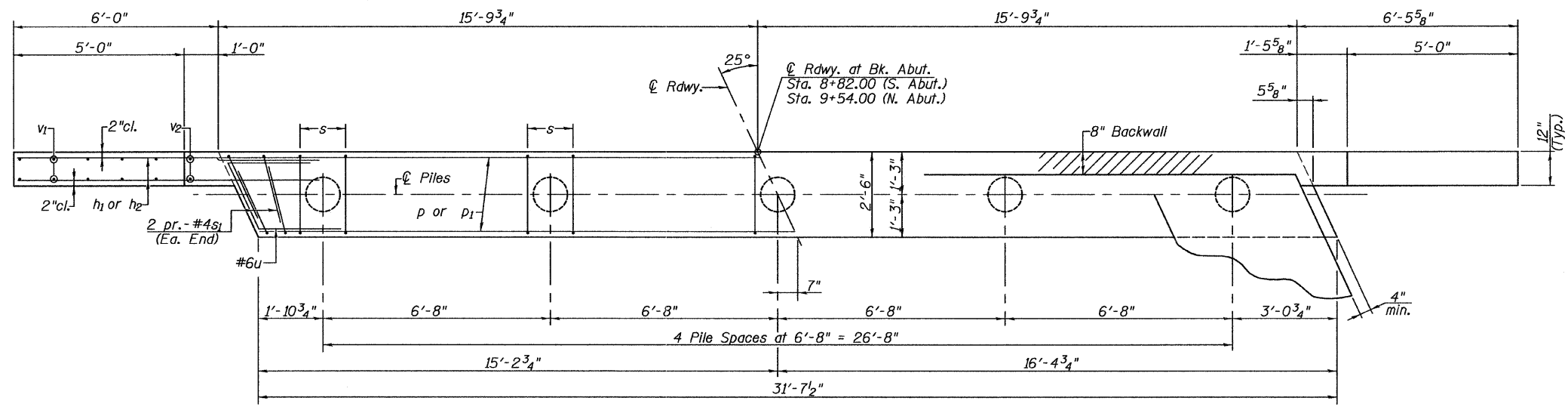
SECTION THRU ABUTMENT

NOTES

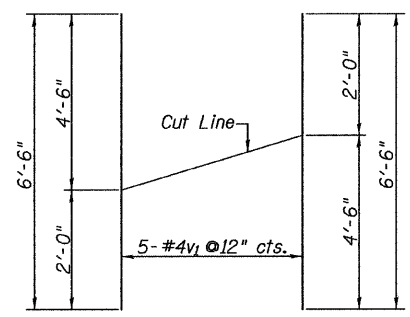
All exposed edges shall have standard 3/4" chamfer.
Space reinforcement in cap to miss beam anchor dowels.
Wingwalls and Backwalls may, at the contractor's option, be cast monolithically.
Hatched area and wingwalls shall be poured after deck beams are anchored in place.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

**BILL OF MATERIAL
TWO ABUTMENTS**

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	#4	32'-8"	—
h1	32	#4	9'-0"	—
h2	16	#4	6'-10"	—
p	16	#8	31'-3"	—
p1	8	#5	31'-3"	—
s	76	#4	11'-3"	□
s1	16	#4	7'-5"	□
u	16	#6	10'-3"	□
v	128	#4	2'-8"	—
v1	20	#4	6'-6"	—
v2	8	#4	4'-7"	—
Concrete Structures			Cu. Yd.	26.6
Reinforcement Bars			Pound	3360
Structure Excavation			Cu. Yd.	106
Furnishing Metal Shell			Foot	456
Piles 12" x 0.250"			Foot	456
Test Pile Metal Shells			Each	1

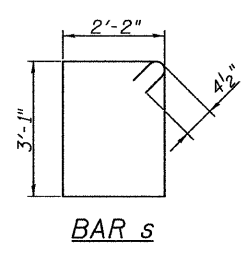


PLAN

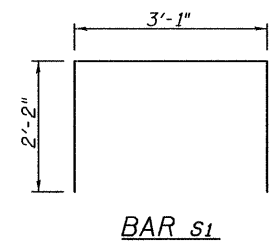


v1 - BAR CUT DIAGRAM

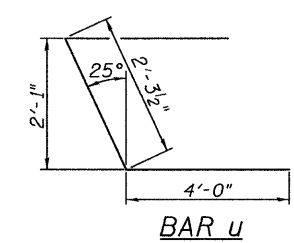
Order v1 bars full length: Layout in field according to diagram. Cut v1 bars along cut line. Use remainder of each bar in opposite face.



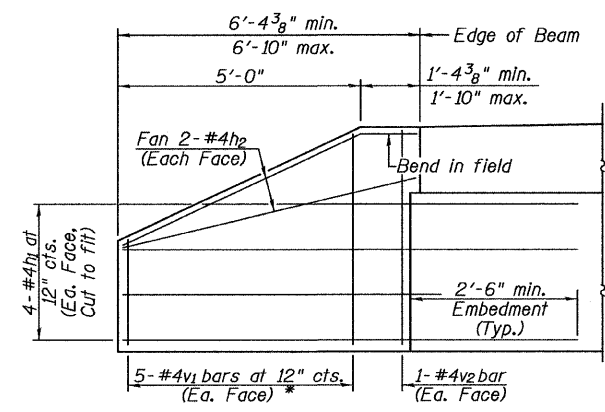
BAR s



BAR s1



BAR u



WINGWALL ELEVATION

(Showing Reinforcement)
* See v1 - bar cut diagram