

DIMENSION 'E'

GRADE	'D'=25°		'D'=30°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 1/2"	2 1/2"	2 3/8"	2 3/8"
Over 0% to 1%	2 1/8"	2 7/8"	2"	2 7/8"
Over 1% to 2%	1 3/8"	3 5/8"	1"	3 3/4"
Over 2% to 3%	5/8"	4 3/8"	1/8"	4 5/8"
Over 3% to 4%	0"	5/8"		

NOTES

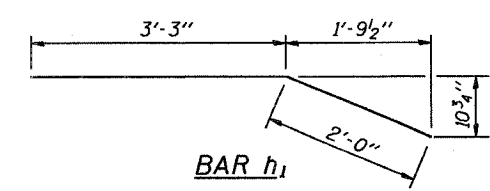
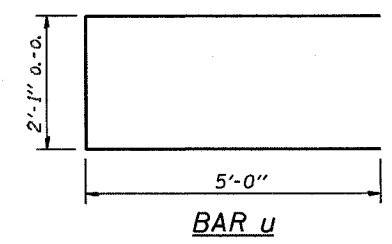
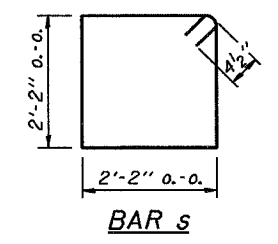
- The Backwall and the portion of the Wingwall above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.

MAXIMUM PILE LOADS

SPAN	TONS
30'	27
35'	30
40'	32
45'	34

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi



BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	16	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	29'-2"	—
p	10	#7	29'-2"	—
s	30	#4	9'-5"	□
u	8	#6	12'-1"	□
v	8	#4	2'-8"	—
v1	8	#4	3'-8"	—
v2	58	#4	3'-5"	—
Concrete Structures			10.1 Cu. Yds.	
Reinforcement Bars			1280 Lb.	

**P.P.C. DECK BEAMS
PILE BENT ABUTMENT**

24' RDWY.	21" BMS.	'D'=25° OR 30°
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STANDARD CA-2421-30

Illinois Department of Transportation

PASSED APRIL 4, 2005
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APPROVED APRIL 4, 2005
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1987-1-1 GEN/SL