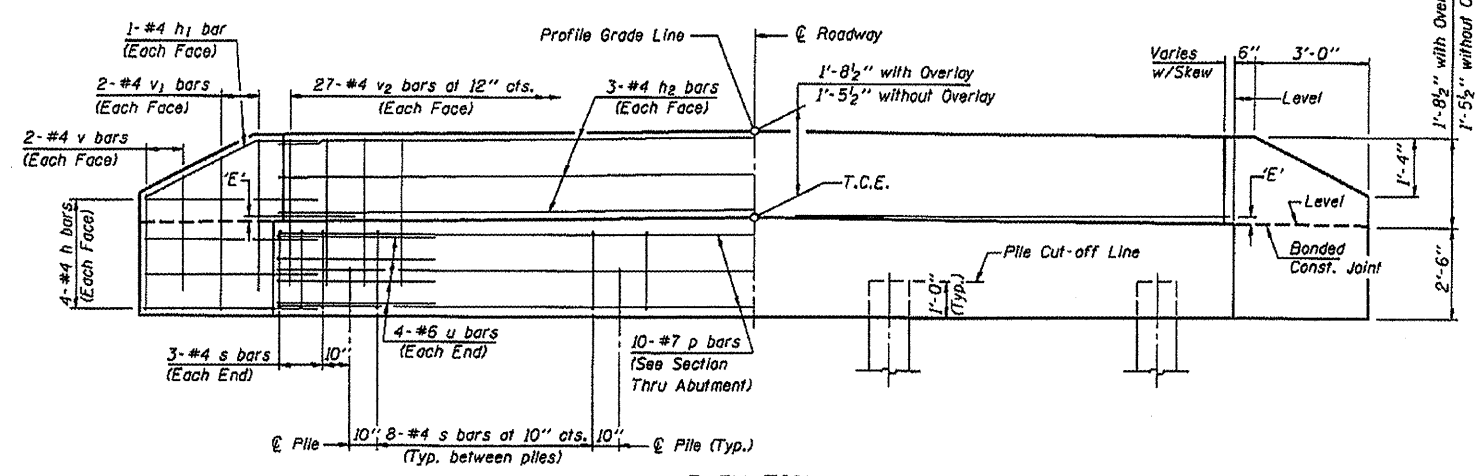


PLAN
(D=Designated Skew Angle)



ELEVATION

DIMENSION 'E'

GRADE	'D'=15°		'D'=20°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 3/8"	2 3/8"	2 3/8"	2 3/8"
Over 0% to 1%	2 1/4"	2 5/8"	2 1/2"	2 5/8"
Over 1% to 2%	1 3/4"	3"	1 1/2"	3 1/2"
Over 2% to 3%	1 3/8"	3 1/2"	1"	3 3/4"
Over 3% to 4%	1"	3 7/8"	3/8"	4 1/4"

NOTES

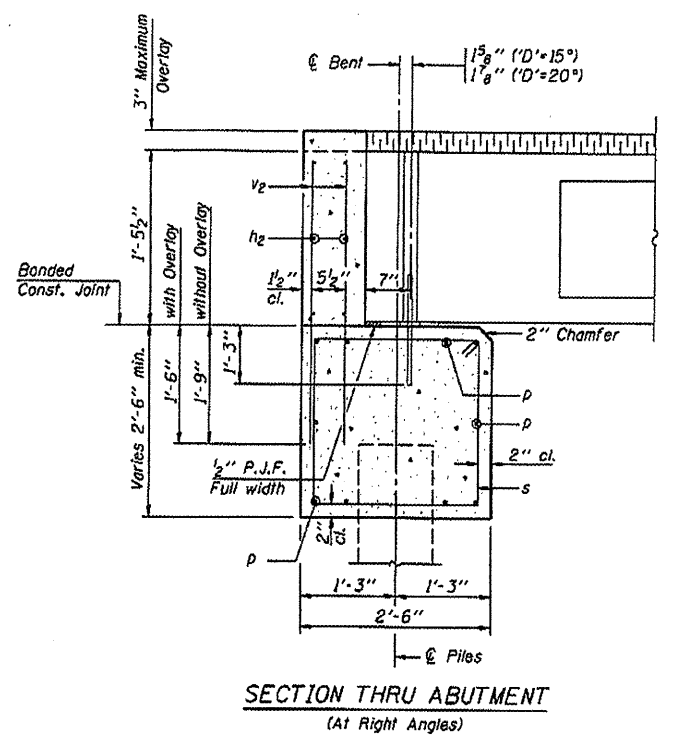
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.

MAXIMUM PILE LOADS

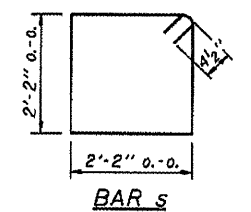
SPAN	TONS
25'	25
30'	26
35'	28
40'	30

DESIGN STRESSES

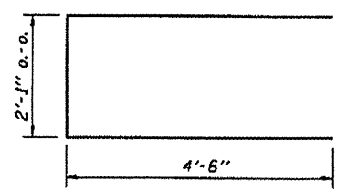
$f'_c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi}$



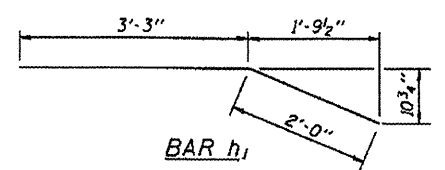
SECTION THRU ABUTMENT
(At Right Angles)



BAR s



BAR u



BAR h1

BILL OF MATERIAL FOR ONE ABUTMENT

Bar No.	Size	Length	Shape
h	#4	5'-0"	—
h1	#4	5'-3"	—
h2	#4	26'-5"	—
p	#7	26'-5"	—
s	#4	9'-5"	□
u	#6	11'-1"	—
v	#4	2'-6"	—
v1	#4	3'-5"	—
v2	#4	3'-1"	—
Concrete Structures		8.8 Cu. Yds.	
Reinforcement Bars		1180 Lb.	

P.P.C. DECK BEAMS PILE BENT ABUTMENT		
24' RDWY.	17" BMS.	'D'=15° OR 20°
STANDARD CA-2417-20		

Illinois Department of Transportation
PASSED APRIL 4, 2005
Thomas S. Noman (P.E.)
Engineer of Bridge Design
APPROVED APRIL 4, 2005
Robert E. Anderson
Engineer of Bridges and Structures