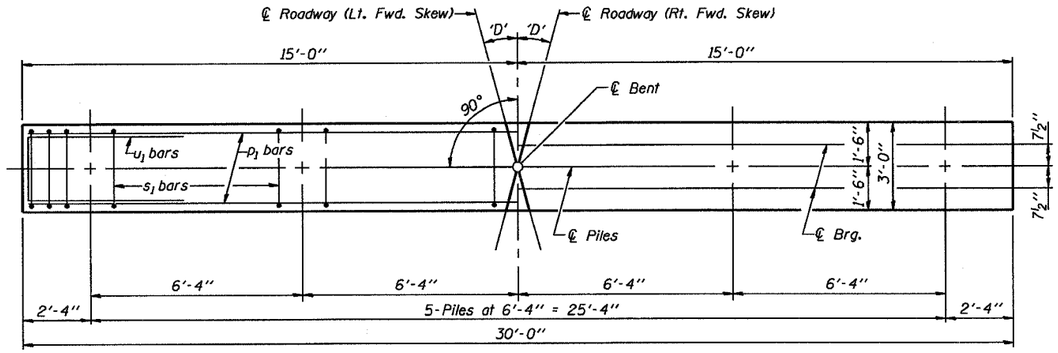
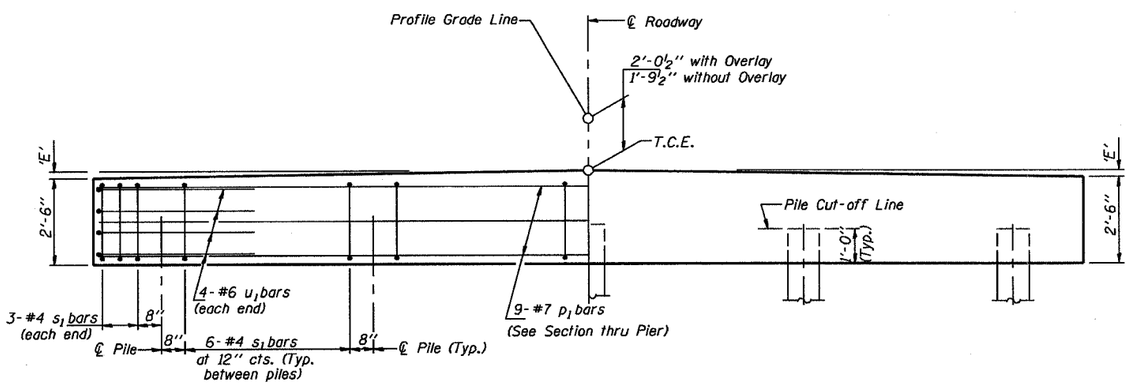
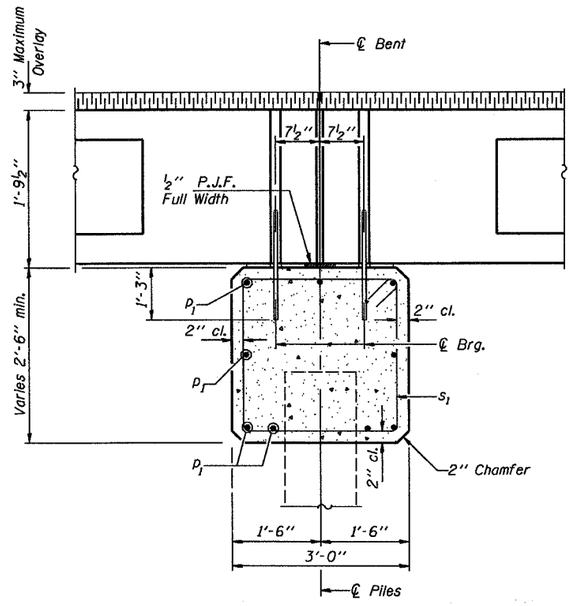


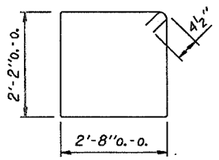
PLAN
('D'= Designated Skew Angle)



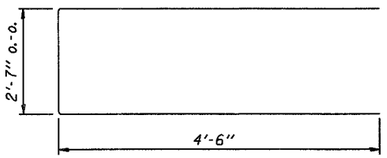
ELEVATION



SECTION THRU PIER
(At Right Angles)



BAR s_1



BAR u_1

BILL OF MATERIAL FOR ONE PIER

Bar	No.	Size	Length	Shape
p_1	9	#7	29'-8"	——
s_1	30	#4	10'-5"	□
u_1	8	#6	11'-7"	⊏
Concrete Structures			8.7	Cu. Yds.
Reinforcement Bars			890	Lb.

DIMENSION 'E'

GRADE	'D'=25°		'D'=30°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2½"	2½"	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 1/8"	——	——

MAXIMUM PILE LOADS

SPAN	TONS
30'	33
35'	36
40'	39
50'	48

Longer of Either Span Supported by Pier.

DESIGN STRESSES

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

NOTE

Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.

Illinois Department of Transportation

PASSED APRIL 4, 2005
Thomas J. Domagalski
Engineer of Bridge Design
APPROVED APRIL 4, 2005
Ralph E. Anderson
Engineer of Bridges and Structures

ISSUED 1-1-1981

P.P.C. DECK BEAMS PILE BENT PIER

24' RDWY.	21" BMS.	'D'=25° OR 30°

STANDARD CP-2421-30