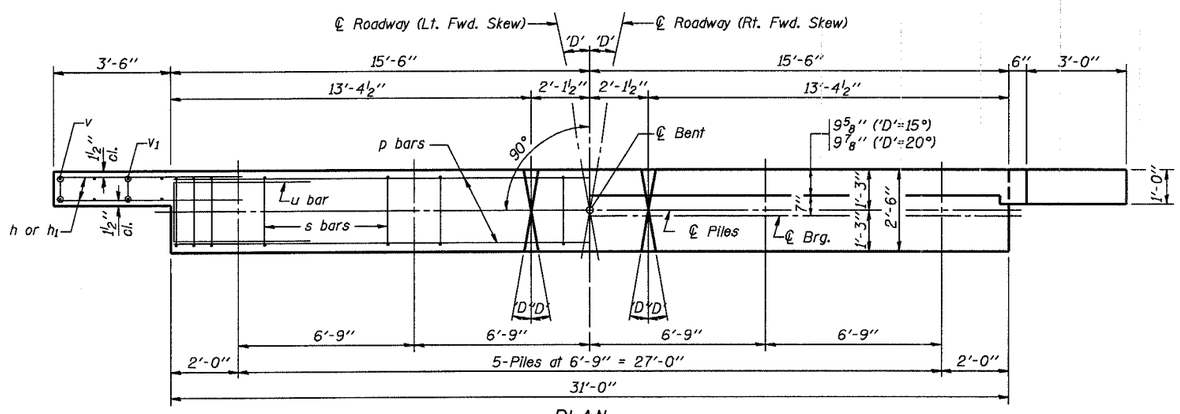
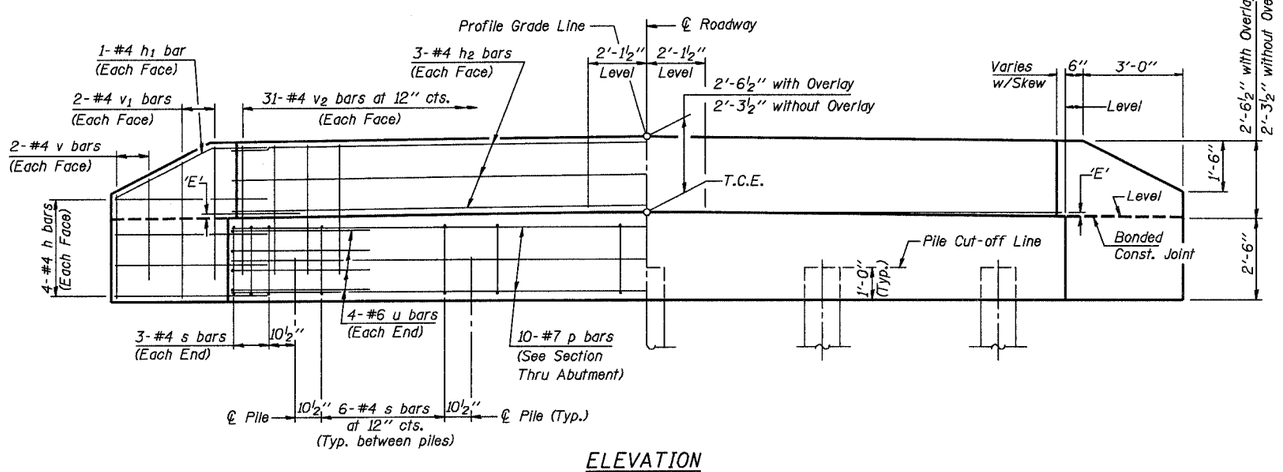
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 20	05-00124-00-BR	MARION	12	7
FEDERAL AID PROJECT		ILLINOIS	PROJECT	

CONTRACT NO. 97321

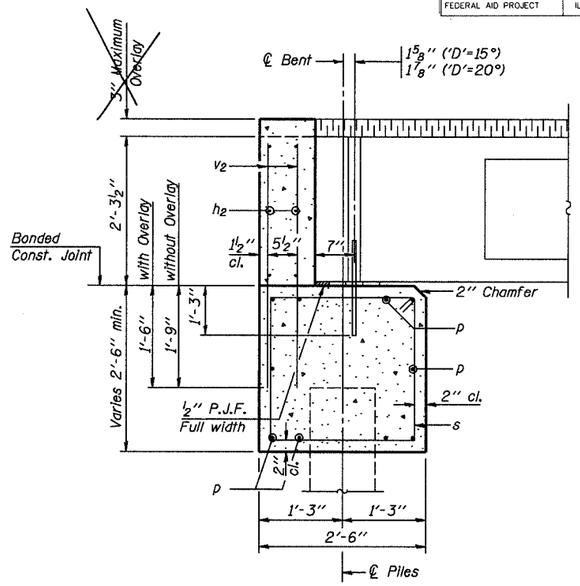


PLAN

('D'=Designated Skew Angle)



ELEVATION



SECTION THRU ABUTMENT

(At Right Angles)

DIMENSION 'E'

GRADE	'D'=15°		'D'=20°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2⅜"	2⅜"	2⅜"	2⅜"
Over 0% to 1%	2¼"	2⅝"	2⅛"	2⅝"
Over 1% to 2%	1¾"	3"	1½"	3⅛"
Over 2% to 3%	1⅜"	3½"	1"	3¾"
Over 3% to 4%	1"	3⅞"	⅜"	4¼"

NOTES

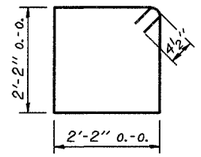
1. The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
2. Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
3. Space reinforcement in cap to miss anchor bolts.

MAXIMUM PILE LOADS

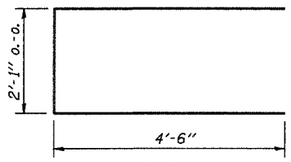
SPAN	TONS
40'	29
50'	33
60'	37

DESIGN STRESSES

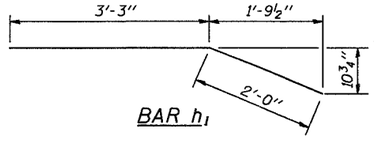
f'c = 3,500 psi
fy = 60,000 psi



BAR s



BAR u



BAR h1

BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	16	#4	5'-0"	
h1	4	#4	5'-3"	
h2	6	#4	30'-8"	
p	10	#7	30'-8"	
s	30	#4	9'-5"	
u	8	#6	11'-1"	
v	8	#4	3'-2"	
v1	8	#4	4'-2"	
v2	62	#4	3'-11"	
Concrete Structures			11.1 Cu. Yds.	
Reinforcement Bars			1340 Lb.	

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 1-1-98

P.P.C. DECK BEAMS
PILE BENT ABUTMENT

28' RDWY.	27" BMS.	'D'=15° OR 20°

STANDARD CA-2827-20