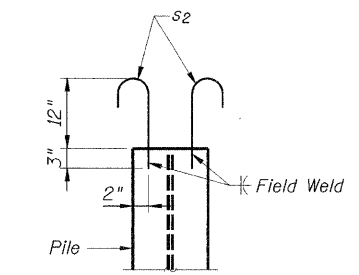
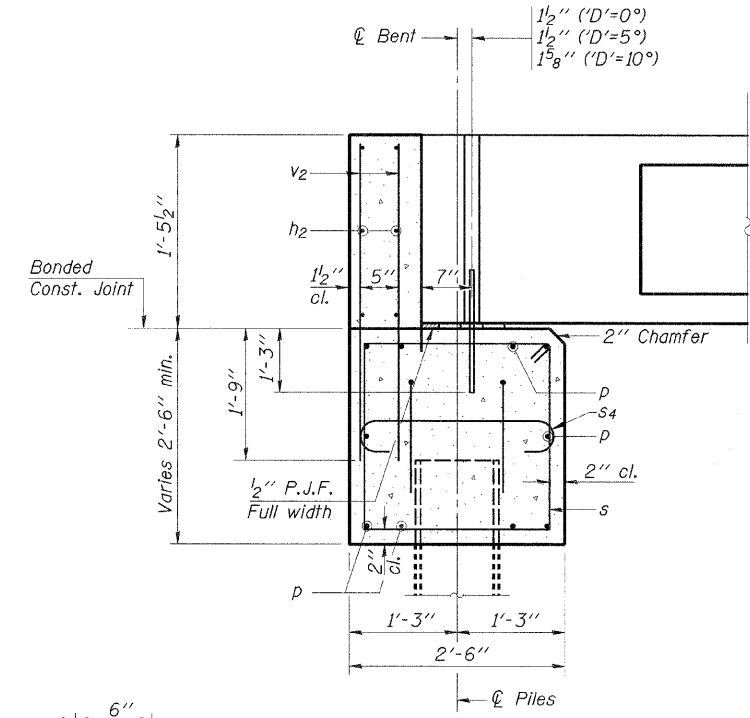


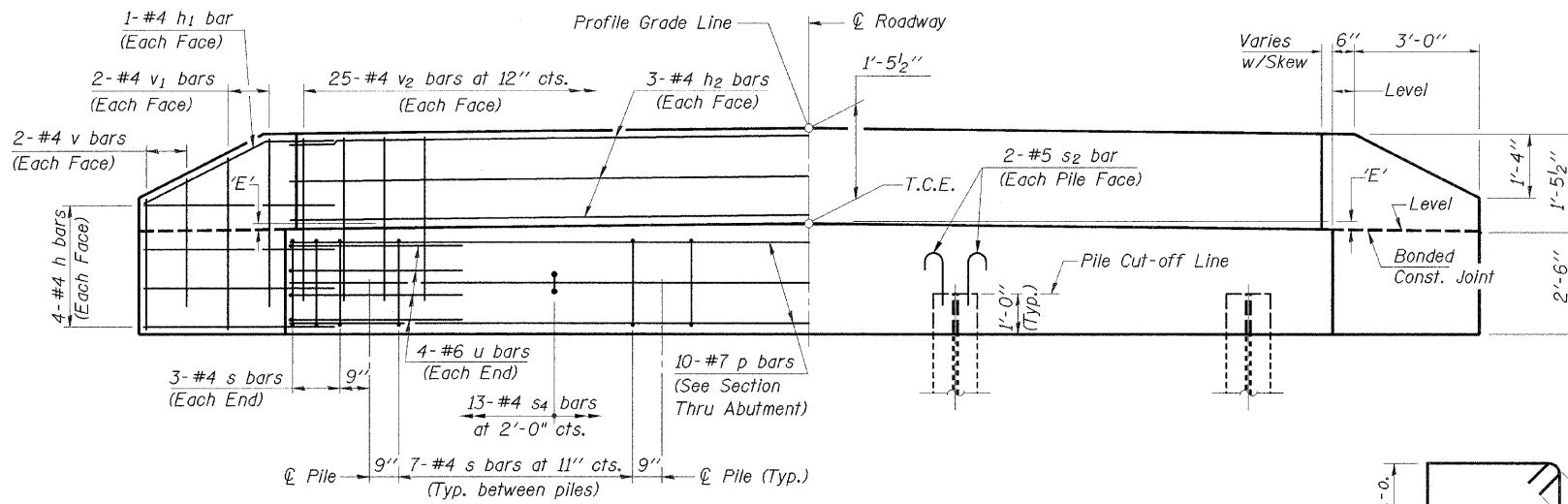
PLAN
(D' = Designated Skew Angle)



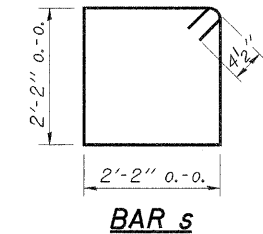
PILE ANCHOR DETAIL
(Welding included in cost of reinforcement)



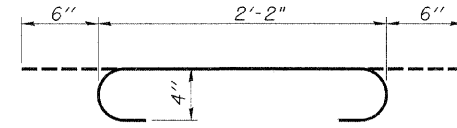
SECTION THRU ABUTMENT
(At Right Angles)



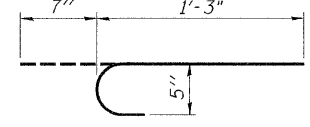
ELEVATION



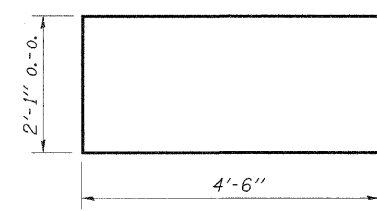
BAR s



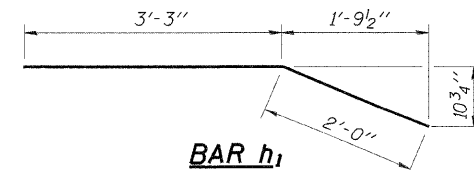
BAR s4



BAR s2



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	24'-9"	—
p	10	#7	24'-9"	—
s	27	#4	9'-5"	□
s2	16	#5	1'-10"	U
s4	13	#4	3'-2"	U
u	8	#6	11'-1"	□
v	8	#4	2'-6"	—
v1	8	#4	3'-5"	—
v2	50	#4	3'-1"	—
Concrete Structures			8.3 Cu. Yds.	
Reinforcement Bars			1170 Lb.	

DIMENSION 'E'

GRADE	'D'=0°		'D'=5°		'D'=10°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 3/8"	2 3/8"	2 3/8"	2 3/8"	2 3/8"	2 3/8"
Over 0% to 1%	2 3/8"	2 3/8"	2 1/4"	2 3/8"	2 1/8"	2 1/2"
Over 1% to 2%	2 3/8"	2 3/8"	2 1/8"	2 1/2"	1 7/8"	2 3/4"
Over 2% to 3%	2 3/8"	2 3/8"	2"	2 5/8"	1 5/8"	3"
Over 3% to 4%	2 3/8"	2 3/8"	1 7/8"	2 3/4"	1 3/8"	3 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.

DESIGN STRESSES

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

AECOM <small>2524 S. Broadway Salem, Illinois 62861 618.548.3500 IL Design Firm Reg. No. 184-000178 No. 184-003708 www.aecom.com</small>	SLM-CA-2417-10 P.P.C. DECK BEAMS PILE BENT ABUTMENT
	24' ROADWAY 17" BEAMS 'D'=0°, 5°, OR 10°
Date: 03/18/10 Design: WDL Drawn: JSD Job No.: 60097890	