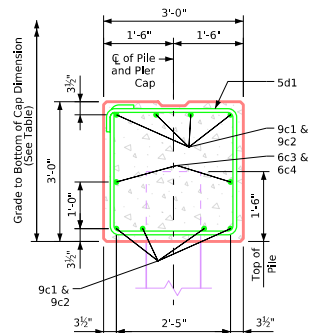


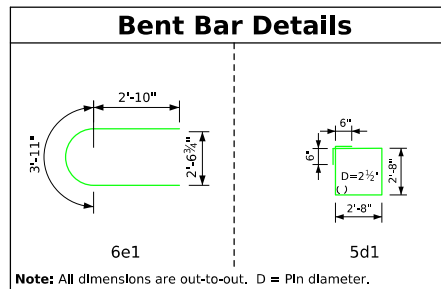
Typ. Half Elevation Pier Cap
(Looking Parallel to $\bar{C}$ of Roadway)



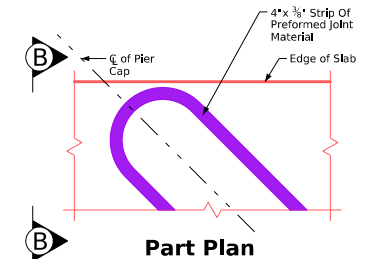
Typical Section

5d1 Hoop Steel Quantities - Non-Monolithic Pier Cap One Pier - 40' Roadway Width											
No. Piles	No. Pile Spaces	5d1 Hoop Shape	5d1 Hoop Length (ft)	0° Skew		15° Skew		30° Skew		45° Skew	
				No. Eq. Hoop Spaces	Total No. Hoops	No. Eq. Hoop Spaces	Total No. Hoops	No. Eq. Hoop Spaces	Total No. Hoops	No. Eq. Hoop Spaces	Total No. Hoops
7	6	□	11'-8"	5	36	5	36	6	42	N.A.	N.A.
8	7	□	11'-8"	4	35	4	35	5	42	6	49
9	8	□	11'-8"	3	32	3	32	4	40	5	48
10	9	□	11'-8"	3	36	3	36	3	36	5	54
11	10	□	11'-8"	2	30	2	30	3	40	4	50
12	11	□	11'-8"	2	33	2	33	3	44	3	44
13	12	□	11'-8"	2	36	2	36	2	36	3	48
14	13	□	11'-8"	1	26	2	39	2	39	3	52
15	14	□	11'-8"	1	28	1	28	2	42	2	42
16	15	□	11'-8"	1	30	1	30	1	30	2	45
17	16	□	11'-8"	N.A.	N.A.	N.A.	N.A.	1	32	2	48
18	17	□	11'-8"	N.A.	N.A.	N.A.	N.A.	1	34	2	51
19	18	□	11'-8"	N.A.	N.A.	N.A.	N.A.	1	36	2	52

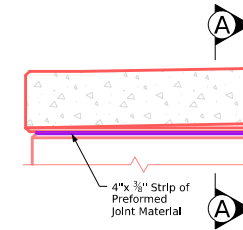
Epoxy Reinforcing Steel - Non-Monolithic 40' Roadway - One Pier											
Epoxy Reinforcing Steel - Non-Monolithic - 40' Roadway - One Pier											
Bar	Shape	No.	0° Skew			15° Skew			30° Skew		
			Length	Weight	No.	Length	Weight	No.	Length	Weight	No.
9c1	□	8	19'-11"	542	8	20'-7"	561	8	23'-0"	626	8
9c2	□	8	26'-7"	723	8	27'-3"	742	8	29'-8"	807	8
6c3	□	2	19'-11"	60	2	20'-7"	62	2	23'-0"	69	2
6c4	□	2	23'-2"	70	2	23'-10"	72	2	26'-4"	79	2
6e1	□	6	9'-7"	86	6	9'-7"	86	6	9'-7"	86	6



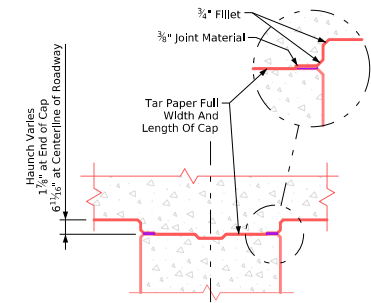
Bridge Grade to Bottom of Cap Dimension	
70'- Bridge	4'-9 1/2"
80'- Bridge	4'-9 1/2"
90'- Bridge	4'-10 1/2"
100'- Bridge	5'-0 1/2"
110'- Bridge	5'-1 1/2"
120'- Bridge	5'-2 1/2"
130'- Bridge	5'-3 1/2"
140'- Bridge	5'-5 1/2"
150'- Bridge	5'-6 1/2"



Part Plan
Showing treatment of 4' x 3/8" strip of preformed joint material at ends of pier cap. Note that joint material is to go all the way around pier cap for square and skewed bridges.



Part Section B-B



Part Section A-A

Note:
For Pile Spacing, See Sheet J40-27-25.

Est. Concrete Qty - Non-Monolithic One Pier 40' Roadway Width										
Skew	70'-0"	80'-0"	90'-0"	100'-0"	110'-0"	120'-0"	130'-0"	140'-0"	150'-0"	
Structural Concrete (Cu. Yds.)	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
0°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
15°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	
30°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	
45°	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	

Latest Revision Date Approved by Bridge Engineer <i>[Signature]</i>	IOWA DOT	
	Standard Design-40'-0" Roadway, 3 Span Bridge	
	Continuous Concrete Slab Bridge	
	July, 2025	
Pier Cap Non-Monolithic Details All Bridges (2 of 2)		J40-28-25