

BENT BAR DETAILS

#5 BAR

1'-10

MIN. LAP

2'-8

90°

ROTATE LAP 90° EVERY LAYER WHEN PLACING BAR.

R=1'-9 11/16 TO CL BAR

ALTERNATE COLUMN TIE

11a1

5c1

5c2

9d2

















8g1

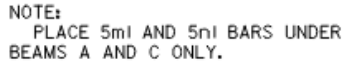
5n1 & 5n2

NOTE:
ALL DIMENSIONS ARE OUT TO OUT.
D = PIN DIAMETER.

REINFORCING BAR LIST - ONE PIER

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
11a1	CAP, TOP, LONGITUDINAL		8	35'-6	1,509
5a2	CAP, SIDE, LONGITUDINAL		10	28'-8	299
8a3	CAP, TOP, LONGITUDINAL		6	16'-6	264
8a4	CAP TO DIAPHRAGM DOWEL		12	6'-0	192
8b1	CAP, BOTTOM, LONGITUDINAL		8	28'-8	612
5c1	CAP, HOOPS		88	14'-3	1,308
5c2	CAP, ENDS		10	5'-9	60
9d1	COLUMN, VERTICAL		36	26'-3	3,213
9d2	FOOTING TO COLUMN DOWEL		36	7'-11	969
6f1	FOOTING, TOP		40	9'-8	581
8g1	FOOTING, BOTTOM		40	12'-4	1,317
5m1	CAP, PEDESTAL, LONGITUDINAL		10	3'-8	38
5n1	CAP, PEDESTAL, TRANSVERSE		8	6'-11	58
5n2	CAP, PEDESTAL, TRANSVERSE		21	7'-9	170
#5	COLUMN SPIRAL		2	298'-2	622
	COLUMN SPIRAL SPACERS L 7/8 x 7/8 x 1/8		8	23'-2	130
REINFORCING STEEL - TOTAL (LBS.)					11,342

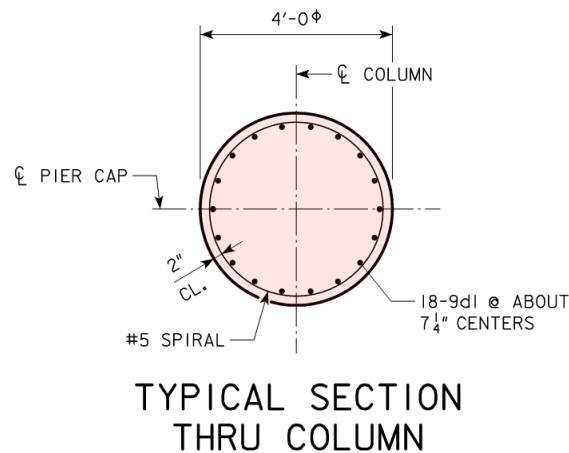
REINFORCING BAR LIST - ONE PIER					
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
11a1	CAP, TOP, LONGITUDINAL		8	35'-6"	1,509
5a2	CAP, SIDE, LONGITUDINAL		10	28'-8"	299
8a3	CAP, TOP, LONGITUDINAL		6	16'-6"	264
8a4	CAP TO DIAPHRAGM DOWEL		12	6'-0"	192
8b1	CAP, BOTTOM, LONGITUDINAL		8	28'-8"	612
5c1	CAP, HOOPS		88	14'-3"	1,308
5c2	CAP, ENDS		10	5'-9"	60
9d1	COLUMN, VERTICAL		36	26'-3"	3,213
9d2	FOOTING TO COLUMN DOWEL		36	7'-11"	969
6f1	FOOTING, TOP		40	9'-8"	581
8g1	FOOTING, BOTTOM		40	12'-4"	1,317
5m1	CAP, PEDESTAL, LONGITUDINAL		10	3'-8"	38
5n1	CAP, PEDESTAL, TRANSVERSE		8	6'-11"	58
5n2	CAP, PEDESTAL, TRANSVERSE		21	7'-9"	170
#5	COLUMN SPIRAL		2	298'-2"	622
	COLUMN SPIRAL SPACERS $L \frac{7}{8} \times \frac{7}{8} \times \frac{1}{8}$		8	23'-2"	130
REINFORCING STEEL - TOTAL (LBS.)					11,342



CONCRETE PLACEMENT QUANTITIES			
LOCATION	PIER NO.1	PIER NO.2	QUANTITY
CAP & STEPS (HIGH PERFORMANCE CONCRETE)	21.3	21.3	42.6
COLUMNS (HIGH PERFORMANCE CONCRETE)	21.9	21.9	43.8
FOOTINGS	29.6	29.6	59.2
TOTAL CU. YDS.	72.8	72.8	145.6

CONCRETE PLACEMENT QUANTITIES			
LOCATION	PIER NO.1	PIER NO.2	QUANTITY
CAP & STEPS (HIGH PERFORMANCE CONCRETE)	21.3	21.3	42.6
COLUMNS (HIGH PERFORMANCE CONCRETE)	21.9	21.9	43.8
FOOTINGS	29.6	29.6	59.2
TOTAL CU. YDS.	72.8	72.8	145.6

NOTE:
CONCRETE AND REINFORCING STEEL QUANTITIES ARE INCLUDED ON
THE SUMMARY OF ITEMIZED QUANTITIES SHEET.



PIER NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.




SPIRAL REINFORCING IS TO BE NO. 5 BAR WITH 3'-7 $\frac{3}{8}$ " DIAMETER, 12" PITCH WITH 4 EQUALLY SPACED $\frac{1}{8}$ " \times $\frac{1}{8}$ " SPACERS PUNCHED TO HOLD SPIRALS. SPIRALS ARE TO HAVE 1 $\frac{1}{2}$ EXTRA TURNS AT TOP AND BOTTOM COLUMNS.

THE SPIRAL REINFORCING MAY BE SPLICED BY LAPPING 22". THE LENGTH OF THE SPIRAL SHOWN DOES NOT INCLUDE THE LAPPED LENGTH OF THE SPLICES. THE COST OF THE LAPS AT SPLICES IS TO BE INCLUDED IN THE PRICE BID FOR OTHER REINFORCEMENT.

COLUMN TIES SPACED AT 12" CENTERS MAY BE SUBSTITUTED FOR THE SPIRAL REINFORCEMENT. PAYMENT WILL BE BASED ON THE WEIGHT OF SPIRAL REINFORCEMENT. NO ADJUSTMENTS IN REINFORCING STEEL PAY WEIGHT WILL BE ALLOWED. SEE BENT BAR DETAILS FOR SPLICE LAP LENGTH.

NOTES:

1. For the full plan set and additional structure information, see Br1-Precast and Cast Concrete-Iowa DOT.pdf.
2. Unit test is for Column No. 1 only. Column No. 2 highlighted to show steel reinforcing details for Column No. 1.

Unit Test Instruction for the Design-to-Construction Data Exchange			
. . . 1	. . . 12/13/23	
No.	Date	Issue / Revision Notes	 
Unit Test Description Level 1 Pier Column			Unit Test / Sheet No. L1-Br01-PierColumn01 / 01
Drawn By AMN		Reviewed By .	