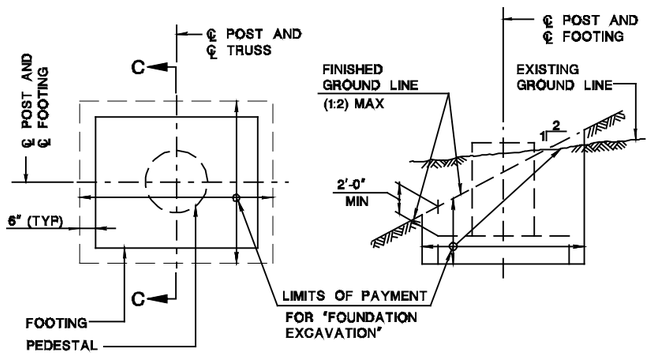
SPREAD FOOTINGS			PILE FOOTINGS					FOOTING REINFORCEMENT				
SIZE FLxFW	CONCRETE VOLUME	EXCAV* VOLUME	CONCRETE VOLUME	EXCAV** VOLUME	No. OF PILES IN ROW "X" LONG	"Y" TRANS	TOTAL	No. AND SIZE OF BARS				TOTAL WEIGHT
	(C.Y.)	(C.Y.)	(C.Y.)	(C.Y.)			No.	FLB	FWB	FLT	FWT	(LBS)
11'-6"X8'	6.8	33.3	8.5	35.4	4	3	12	10-#16	8-#16	6-#16	8-#16	317.5
12'-6"X8'	7.4	36.0	9.3	38.2	4	3	12	13-#16	9-#16	6-#16	9-#16	385.2
13'X8'	7.7	37.3	9.6	39.6	4	3	12	10-#19	9-#16	6-#19	9-#16	455.3
13'X9'	8.7	41.5	10.8	44.1	4	3	12	12-#19	9-#16	7-#19	9-#16	528.2
14'X9'	9.3	44.4	11.7	47.2	4	3	12	14-#19	10-#16	7-#19	10-#16	610.7
14'X10'	10.4	48.9	13.0	51.9	4	3	12	15-#19	10-#16	7-#19	10-#16	648.4
15'X10'	11.1	52.1	13.9	55.3	4	3	12	17-#19	11-#16	7-#19	11-#16	738.6
15'X10'-6"	11.7	54.5	14.6	57.9	4	4	16	19-#19	14-#16	8-#19	11-#16	854.7
15'-6"X10'-6"	12.1	56.2	15.1	59.7	4	4	16	15-#22	11-#19	8-#22	11-#19	1,056.7
16'-6""X10'-6"	12.8	59.6	15.3	63.3	4	4	16	17-#22	12-#19	8-#22	12-#19	1194.0
16'-6"X11'-6"	14.1	64.8	17.6	68.8	4	4	16	19-#22	13-#19	8-#22	12-#19	1306.0
17'X11'-6"	14.5	66.7	18.1	70.8	4	4	16	17-#25	13-#19	8-#25	12-#19	1,546.5
17'X12'-6"	15.7	72.0	19.7	76.5	4	4	16	18-#25	15-#19	9-#25	12-#19	1,703.5
18'X12'-6"	16.7	76.0	20.8	80.7	4	4	16	20-#25	15-#19	9-#25	13-#19	1,875.3
18'X13'	17.3	78.8	21.7	83.7	4	4	16	20-#25	17-#19	9-#25	13-#19	1,948.2
19'X13'	18.3	83.0	22.9	88.1	5	4	20	22-#25	17-#19	9-#25	13-#19	2,110.7

* SPREAD FOOTING EXCAVATION VOLUME BASED ON 8'-0" TOTAL DEPTH OF EXCAVATION.

** PILE FOOTING EXCAVATION VOLUME BASED ON 8'-6" TOTAL DEPTH OF EXCAVATION.

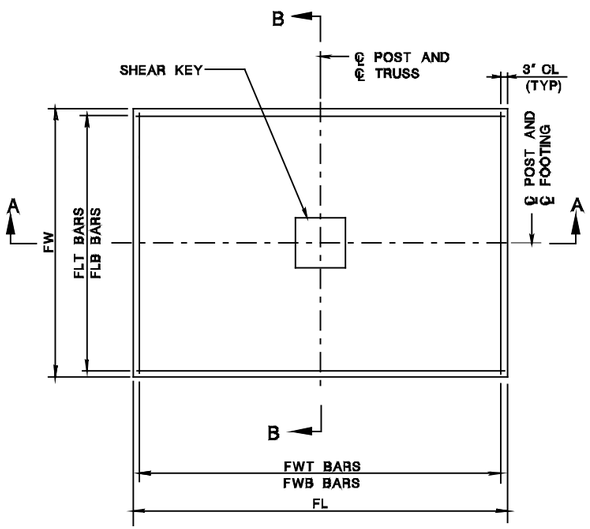
LEGEND:

FL : FOOTING LENGTH
FW : FOOTING WIDTH
FLB : No. AND SIZE OF BOTTOM BARS IN DIRECTION FL
FWB: No. AND SIZE OF BOTTOM BARS IN DIRECTION FW
FLT : No. AND SIZE OF TOP BARS IN DIRECTION FL
FWT: No. AND SIZE OF TOP BARS IN DIRECTION FW
PD : PEDESTAL DIAMETER
BWT: BARRIER WIDTH AT TOP

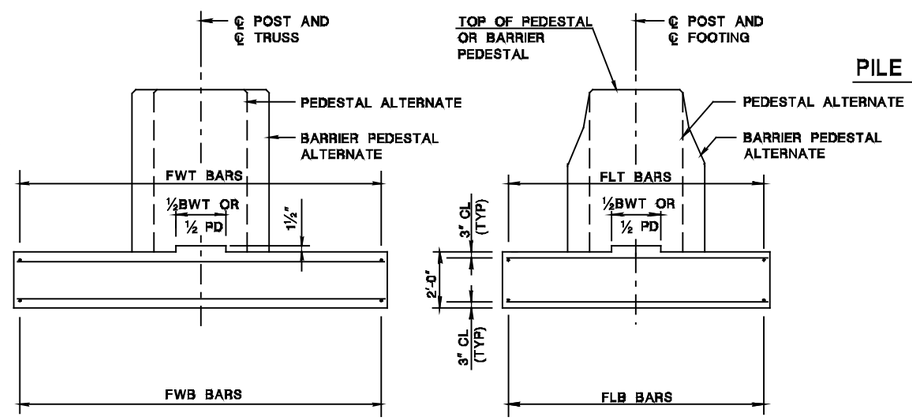


PLAN SECTION C-C

FOOTING EXCAVATION DETAILS

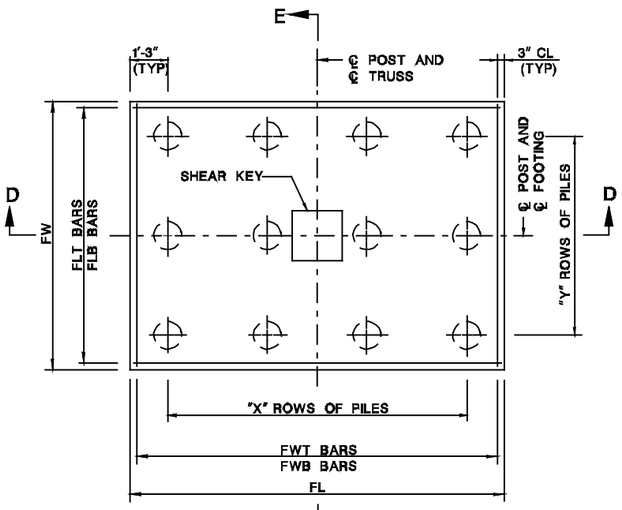


PLAN



SECTION A-A SECTION B-B

SPREAD FOOTING DETAILS



PLAN

PILE FOOTING DETAILS

NOTES:

1. FOUNDATION DESIGN CONFORMS TO THE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, SECTION 13.
2. FOR FOOTING DIMENSIONS, SEE DESIGN TABLES ON SIGN STRUCTURE DRG. CA-G3.
3. BARS SHALL NOT BE SPLICED EXCEPT AS PROVIDED ON THIS DRAWING OR AUTHORIZED BY THE RE. WHEN SPLICING IS APPROVED, THE REINFORCEMENT BARS SHALL BE LAPPED FOR A LENGTH OF AT LEAST 36 DIAMETERS AND SHALL BE SECURELY WIRED TOGETHER.
4. PILES SHALL BE CAST-IN-PLACE CONCRETE PILES WITH A MINIMUM BEARING CAPACITY EQUAL TO 50 KSI.
5. THE CASING OF THE CAST-IN-PLACE CONCRETE PILES SHALL BE LEFT IN PLACE AND SHALL BE DESIGNED TO RESIST BOTH DIRECT COMPRESSION AND BENDING. THE THICKNESS OF THE CASING SHALL BE NOT LESS THAN 5/16".
6. THE LONGITUDINAL REINFORCING STEEL OF THE CAST-IN-PLACE CONCRETE PILES SHALL BE A MINIMUM OF 6-#16 BARS AND SHALL EXTEND THROUGH THE UPPER THIRD OF THE PILE OR 15'-0" DOWN INTO THE CASING, WHICHEVER IS GREATER, EMBEDDED INTO THE FOOTING WITH STANDARD HOOKS AS SHOWN.
7. THE SPIRAL REINFORCING FOR THE CAST-IN-PLACE CONCRETE PILES SHALL BE #13 BARS AND SHALL EXTEND THROUGH THE UPPER THIRD OF THE PILE OR 15'-0" DOWN FROM THE TOP OF THE CASING.
8. ALTERNATE FOUNDATION DESIGNS MAY BE CONSIDERED BY THE DESIGNER WHERE APPROPRIATE. LOADS FOR THE DESIGN OF NON-STANDARD FOUNDATIONS ARE AVAILABLE IN THE NJDOT BRIDGES AND STRUCTURES DESIGN MANUAL.

THIS PLATE FOR DESIGN INFORMATION ONLY. DO NOT INCLUDE IN CONTRACT PLANS.

SIGN STRUCTURE DRG. CA-G5

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

CANTILEVER SIGN SUPPORT STANDARDS

FOOTING DESIGN TABLES AND DETAILS

SCALE : NONE

BRIDGE SHEET NO. 5 OF 5

BDC07S-03 - ORIGINAL SHEET