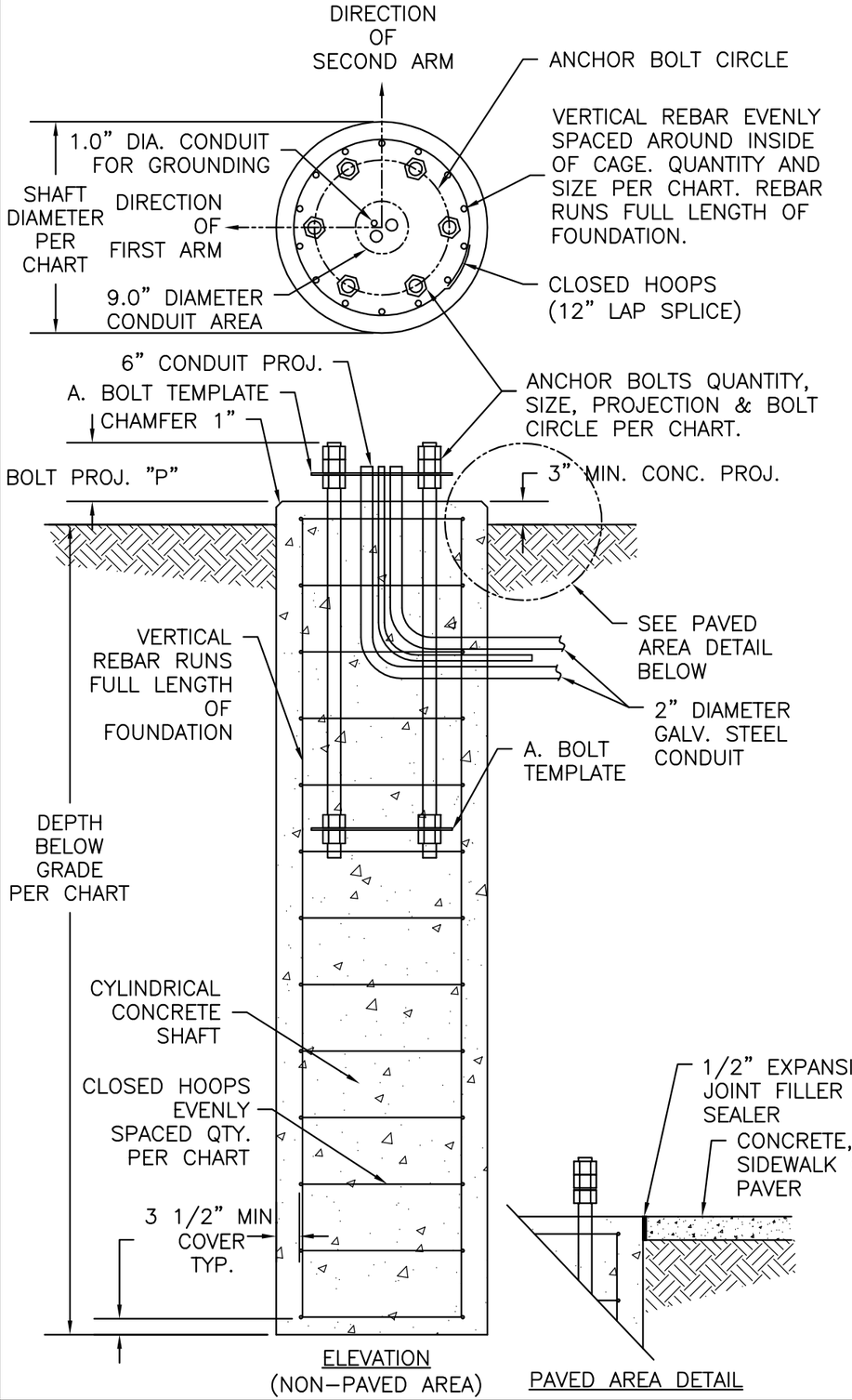

STANDARD FOUNDATION DATA					
FOUNDATION STANDARD DESIGN NUMBER	SHAFT DIAMETER (FT)	DEPTH BELOW GRADE (FT)	APPROX. CONC. VOLUME (CY)	VERTICAL REBAR	CLOSED HOOPS
#1	3.0	16.0	6	13-#8	22-#4
#2	3.0	19.0	6	13-#8	38-#4
#3	3.0	20.0	7	13-#8	40-#4
#4	4.0	12.0	7	15-#10	13-#4
#5	4.0	14.0	8	15-#10	15-#4
#6	4.0	15.0	8	15-#10	16-#4
#7	4.0	17.5	10	15-#10	24-#4
#8	4.0	19.5	11	15-#10	39-#4
#9	4.0	21.0	11	15-#10	42-#4
#10	4.0	23.0	12	15-#10	55-#4

ROUND DESIGNS (UMC DRG. 50700-B1991)				
POLE ARM LENGTH	ANCHOR BOLT DATA			SELECTED STANDARD FOUNDATION DESIGN NUMBER
	BOLT QTY /DIA. (IN)	BOLT CIRCLE (IN)	PROJ. "P" (IN)	
SINGLE 40'	(6)1.50	19	9.00	#1 OR #4
TWIN 40'	(8)1.50	21	9.00	#2 OR #5
SINGLE 48	(6)1.75	21	9.00	#3 OR #6
TWIN 48'	(8)1.50	23	9.00	#7
SINGLE 60'	(6)1.75	25	10.00	#8
TWIN 60'	(8)1.75	27	10.00	#10
SINGLE 66'	(6)2.00	27.5	11.00	#9

GENERAL NOTES:

1. MINIMUM 15'-0" CLEARANCE SHALL BE MAINTAINED BETWEEN FINISHED ROADWAY LEVEL AND LOWEST POINT OF SIGNAL HEAD ASSEMBLY WHEN ARM IS FULLY LOADED.
2. CONCRETE STRENGTH (f'c) AT 28 DAYS = 3000 PSI MIN.
3. CONCRETE IS AIR ENTRAINED.
4. ALL EXPOSED CONCRETE SURFACES SHALL BE FINISHED SMOOTH.
5. ALL REINFORCEMENT IS DEFORMED BAR PER ASTM A615 GRADE 60.
6. NO GROUT, MORTAR OR CONCRETE SHALL BE PLACED BETWEEN THE BASE PLATE AND THE TOP OF THE FOUNDATION.
7. MAXIMUM HEIGHT BETWEEN THE BASE PLATE AND THE TOP OF THE FOUNDATION IS ONE ANCHOR BOLT DIAMETER PLUS 1.0 INCH.
8. MAXIMUM VERTICAL MISALIGNMENT OF ANCHOR BOLTS SHALL BE 1H:40V.
9. FOUNDATION TO BE CAST AGAINST UNDISTURBED SOIL.
10. ASSUMED SOIL PROPERTIES USED IN THE DESIGN:
    100 PCF DENSITY/27 DEG. FRICTION ANGLE/400 PSF COHESION
    WATER TABLE BELOW BOTTOM OF FOUNDATION
11. IF ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED ARE WORSE THAN THOSE DEFINED ABOVE THEN THE FOUNDATION DESIGN MUST BE REVIEWED BY THE ENGINEER PRIOR TO CONCRETE PLACEMENT.
12. TABULATED BOLT PROJECTION "P" IS BASED UPON THE MAXIMUM ALLOWED GAP BENEATH BASE PLATE. IF A SPECIFIC PROJECT REQUIRES A DIFFERING CONFIGURATION (SUCH AS NO LEVELING NUTS OR BEARING DIRECTLY ONTO THE TOP OF THE FOUNDATION) THEN THE PROJECTION WILL HAVE TO BE ADJUSTED.
13. POLE AND FOUNDATION CENTERLINES ARE INTENDED TO COINCIDE. WHEN OFFSET IS REQUIRED BY SPECIAL CIRCUMSTANCES THEN REFER TO POLE OFFSET REQUIREMENTS BELOW.

POLE OFFSET REQUIREMENTS:

1. IT IS ALWAYS PREFERRED FOR THE POLE AND FOUNDATION CENTERLINES TO COINCIDE. WHEN THIS IS NOT POSSIBLE THEN THE FOLLOWING REQUIREMENTS ARE APPLICABLE.
2. HOOP REINFORCING MUST STAY CENTERED ON THE FOUNDATION.
3. VERTICAL REINFORCING MUST STILL BE LOCATED AROUND THE INSIDE PERIMETER OF THE HOOPS.
4. NO PORTION OF THE EMBEDDED ANCHOR BOLTS MAY BE PLACED CLOSER THAN 1.0 INCH FROM THE HOOP REINFORCING.
5. IF SHIFTED ANCHOR BOLT(S) ARE WITHIN 1.5" OF A VERTICAL STEEL BAR THEN THE VERTICAL BAR IS TO BE ADJUSTED JUST ENOUGH TO AVOID THIS INTERFERENCE.
6. THE ABILITY OF ANY PARTICULAR FOUNDATION AND POLE COMBINATION TO ACCOMMODATE AN ANCHOR BOLT SHIFT VARIES (SOME COMBINATIONS CAN ONLY ACHIEVE 1.75"). EVEN WHEN PHYSICALLY POSSIBLE, NO CENTERLINE OFFSETS ARE TO EXCEED 9.0".
7. NO PORTION OF A POLE BASE PLATE IS TO EXTEND PAST THE EDGE OF THE CONCRETE FOUNDATION.

COMMONWEALTH OF VIRGINIA
DAVID N. FRITZ
Lic. No. 040948
5/16/23
PROFESSIONAL ENGINEER

TRAFFIC SIGNAL POLE FOUNDATION DESIGN
ARLINGTON COUNTY, VIRGINIA
DRAWING NO. 17782-37108