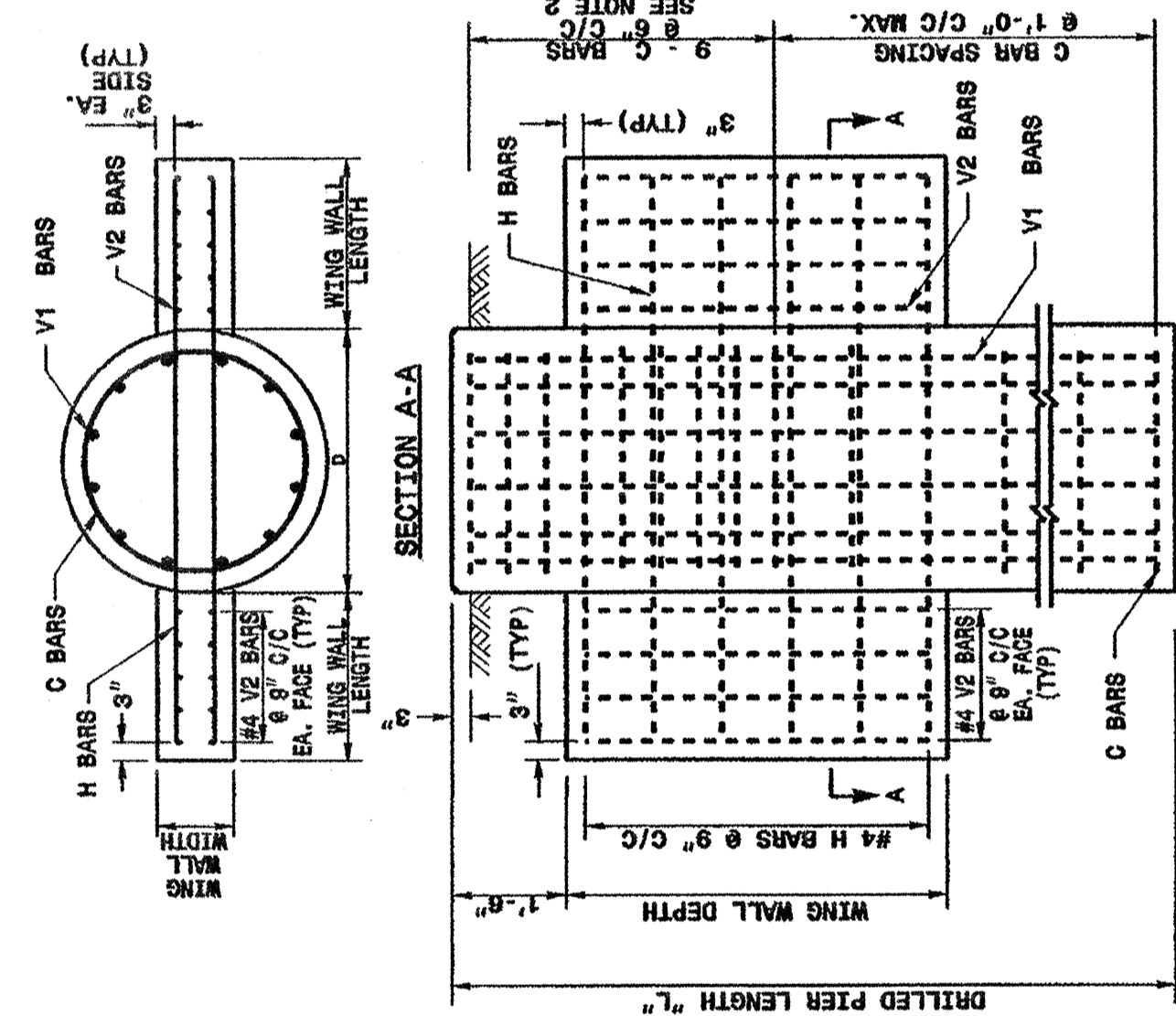
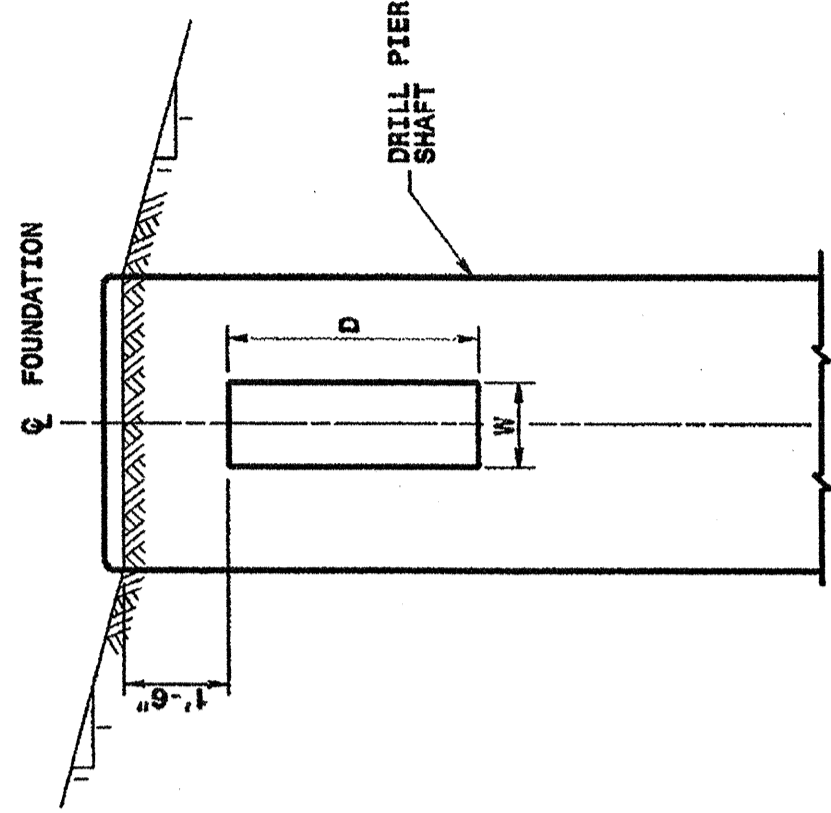


STATE OF NORTH CAROLINA  
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RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR  
METAL POLE FOUNDATIONS  
REINFORCING CAGE DETAILS

SHEET 1 OF 2  
1742.01

- NOTES**
1. THE NUMBER OF C-BARS IS BASED ON FOUNDATION DEPTH. SEE FOUNDATION SELECTION TABLES.
  2. CIRCULAR TIE REINFORCING RINGS MAY BE VERTICALLY ADJUSTED BY 1/4" TO 3/4" AT A DEPTH BETWEEN 2'-0" AND 3'-0" TO FACILITATE THE INSTALLATION OF ELECTRICAL CONDUIT ENTERING IN THE CAGE.
  3. THE LENGTH OF V1-BARS IS BASED ON FOUNDATION DEPTH. SEE FOUNDATION SELECTION TABLES.
  4. THE QUANTITIES FOR STEEL AND CONCRETE SHOWN IN THE WING WALL DETAILS CHART REFLECT THE AMOUNT OF MATERIAL FOR 1 PAIR OF WING WALLS (2 WING WALLS PER DRILL PIER SHAFT).
  5. CONCRETE DRILL PIER SHAFT VOLUME (CU. YDS.):  
FOR 42" DIA. = .386X L  
FOR 48" DIA. = .486X L
  6. DEFORM REINFORCING STEEL TO CONFORM TO ASTM A615 GRADE 60. TIES MAY BE DEFORMED OR PLAIN.
  7. CAST CONCRETE AGAINST UNDISTURBED SOIL.
  8. DO NOT ERECT TRAFFIC SIGNAL STRUCTURES BEFORE THE CONCRETE IN THE FOUNDATION HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
  9. MAKE PROVISIONS FOR DRAINAGE OF WATER FROM INSIDE OF THE METAL SUPPORT.
  10. FOR OTHER DETAILS REGARDING CONSTRUCTION OF CONCRETE FOUNDATION SEE PROJECT SPECIAL PROVISIONS.
  11. IN CASE OF ANY CROSS SLOPES, GRADE AROUND THE FOUNDATION AS FOLLOWS:



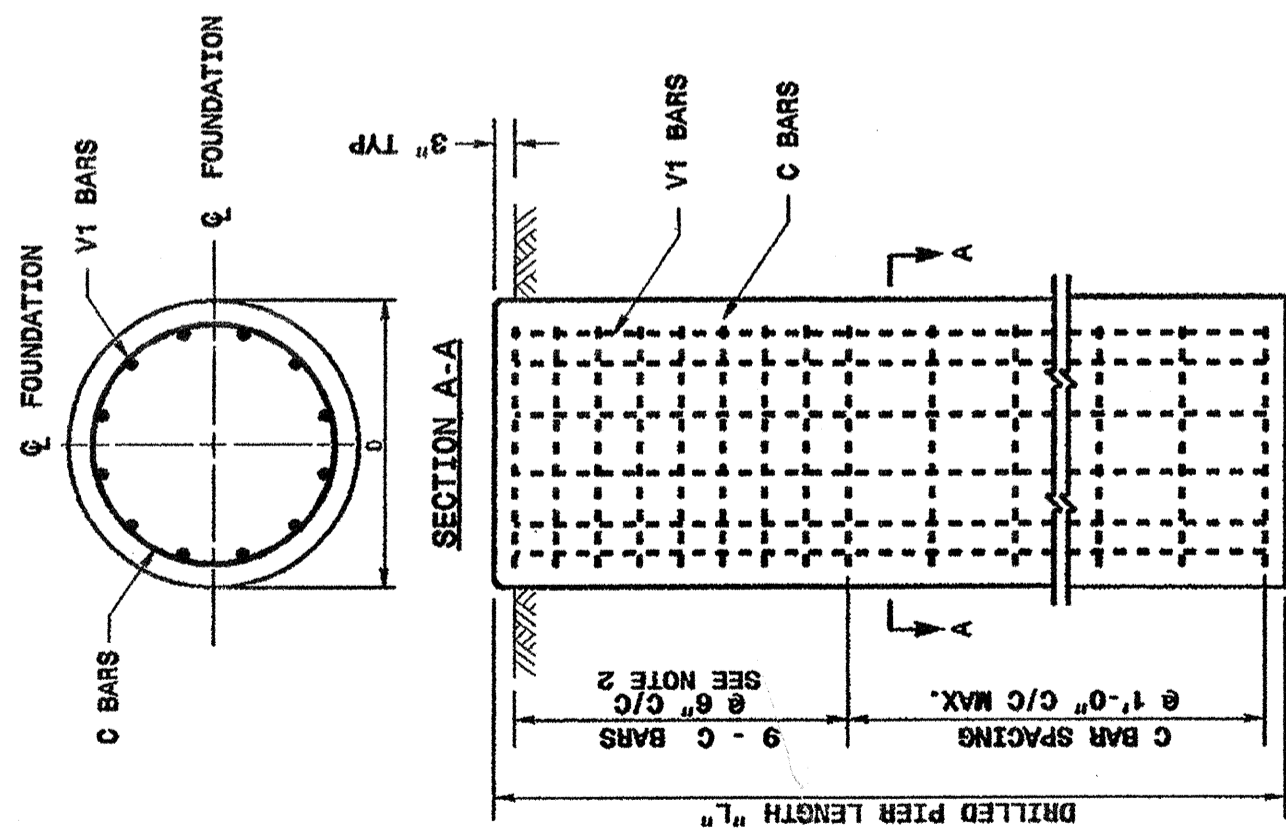
REINFORCING STEEL TABLE FOR STANDARD 42" DIA DRILL PIER SHAFT WITH TYPE 1 AND TYPE 2 WING WALLS

Wing Wall Type	Wing Wall Depth (ft)	Wing Wall Width (ft)	Reinforcing Steel	Length (ft)
TYPE 1	42"	42"	V1	#8 STR. 3'-2"
			V2	#4 STR. 2'-8"
			H	#4 STR. 9'-0"
TYPE 2	42"	42"	V1	#8 STR. 3'-2"
			V2	#4 STR. 2'-8"
			H	#4 STR. 10'-9"
TYPE 2	48"	48"	V1	#8 STR. 4'-8"
			V2	#4 STR. 9'-0"
			H	#4 STR. 10'-9"
TYPE 2	48"	48"	V1	#8 STR. 4'-8"
			V2	#4 STR. 9'-0"
			H	#4 STR. 12'-9"

WING WALL DETAILS

Wing Wall Type	Wing Wall Depth (ft)	Wing Wall Width (ft)	Concrete Depth (ft)	Concrete Volume (Cu. Yds.)
TYPE 1	1'-6"	1'-0"	3'-0"	.4
TYPE 2	3'-0"	1'-0"	6'-0"	1.2

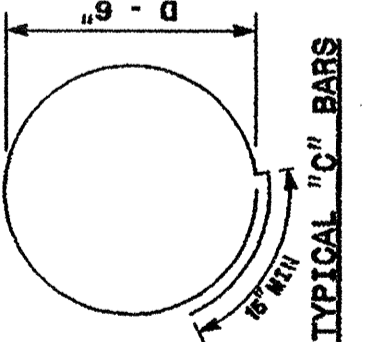
See Construction Note No. 1.  
\*\* See Construction Note No. 2.  
See Construction Note No. 3.



REINFORCING STEEL TABLE FOR STANDARD DRILL PIER SHAFT (42" & 48" DIAMETER)

SHAFT DIA. (ft)	BAR NAME (cu. yds.)	No.	Size	Type	Length
42"	V1	8	#8	STR.	3'-2"
	C	4	#4	STR.	10'-9"
48"	V1	12	#8	STR.	4'-8"
	C	4	#4	STR.	12'-9"

\* See Construction Note No. 1.  
\*\* See Construction Note No. 2.



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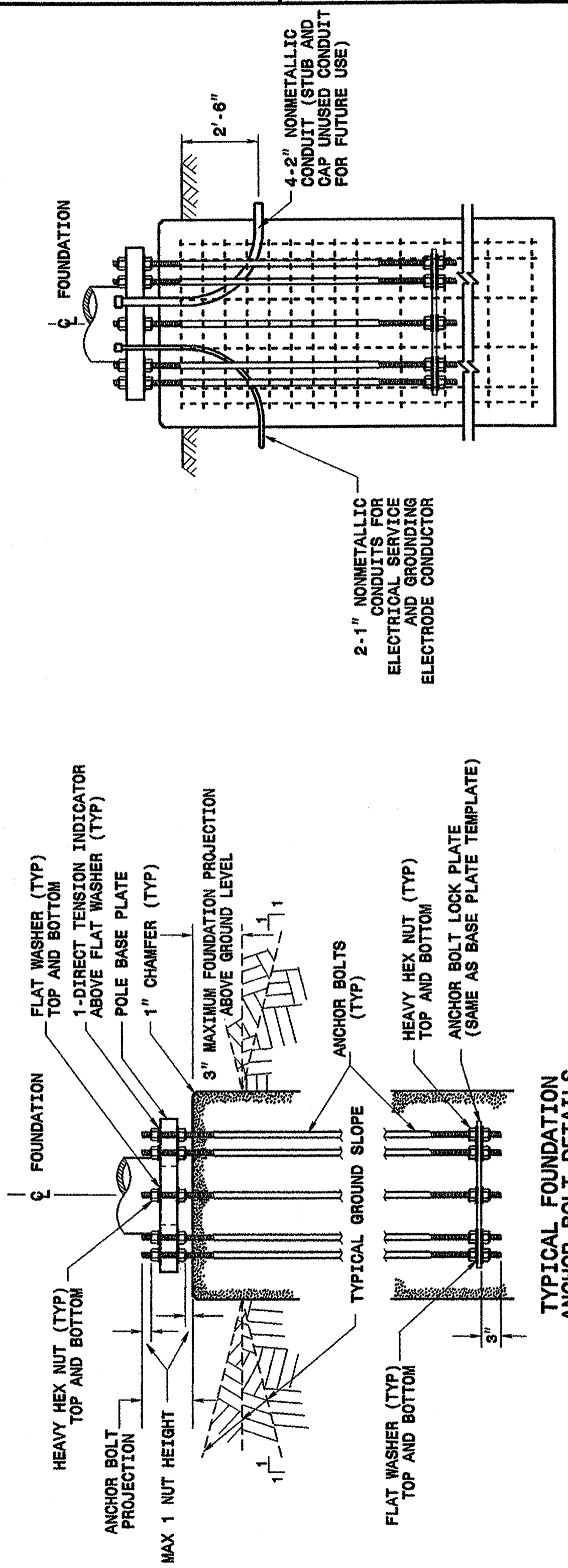
ENGLISH STANDARD DRAWING FOR  
METAL POLE FOUNDATIONS  
REINFORCING CAGE DETAILS

SHEET 1 OF 2  
1742.01

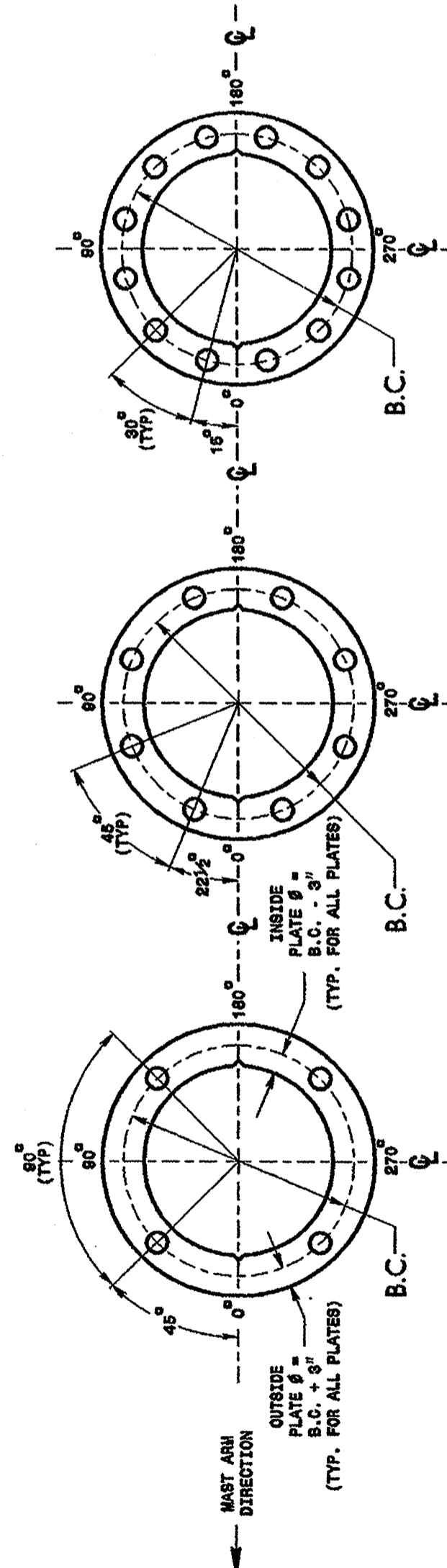
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ENGLISH STANDARD DRAWING FOR  
METAL POLE FOUNDATIONS  
INSTALLATION DETAILS

SHEET 2 OF 2  
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TYPICAL FOUNDATION ANCHOR BOLT DETAILS  
REINFORCING CAGE NOT SHOWN FOR CLARITY



FOR 4 BOLT BASE PLATE  
FOR 8 BOLT BASE PLATE  
FOR 12 BOLT BASE PLATE

CONSTRUCT TEMPLATES AND PLATES FROM 9/8" THICK STEEL. GALVANIZING IS NOT REQUIRED.  
BASE PLATE TEMPLATE AND ANCHOR BOLT LOCK PLATE DETAILS

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ENGLISH STANDARD DRAWING FOR  
METAL POLE FOUNDATIONS  
INSTALLATION DETAILS

SHEET 2 OF 2  
1742.01

Structural Engineer: **DEBESH C. SARKAR** (Professional Seal 028094)  
Electrical Engineer: **MILTON J. DEAN** (Professional Seal 16286)  
DATE: 9.12.03  
DATE: 9/18/03  
Standard Drawings  
Traffic Management and Signal Systems Unit  
122 N. McDowell St., Raleigh, NC 27603  
See Plate for Title  
Original: 2002 Standards

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