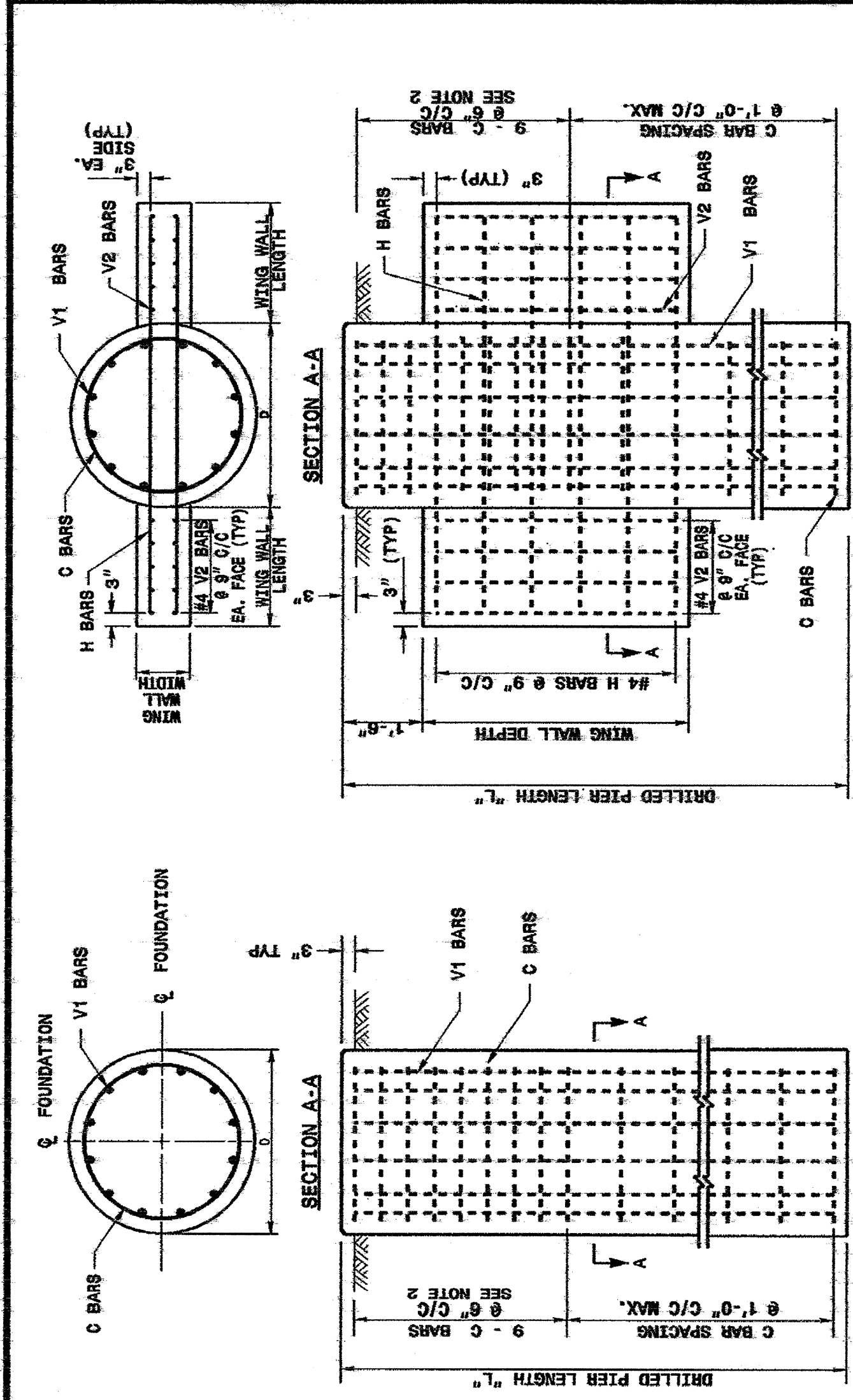


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STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
METAL POLE FOUNDATIONS
 REINFORCING CAGE DETAILS

SHEET 1 OF 2
1742.01



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

SHAFT DIA. (in.)	NO. OF CONC. WALS	NO. OF V1 BARS	NO. OF V2 BARS	NO. OF H BARS	NO. OF C BARS	NO. OF WING WALLS	NO. OF WING WALL BARS	NO. OF WING WALL C/C	NO. OF WING WALL C/C MAX.
42"	2	8	8	8	8	2	8	8"	9"
48"	2	12	12	12	12	2	12	12"	13"

REINFORCING STEEL TABLE FOR STANDARD 42" and 48" DRILL PIER SHAFT WITH TYPE 1 AND TYPE 2 WING WALLS

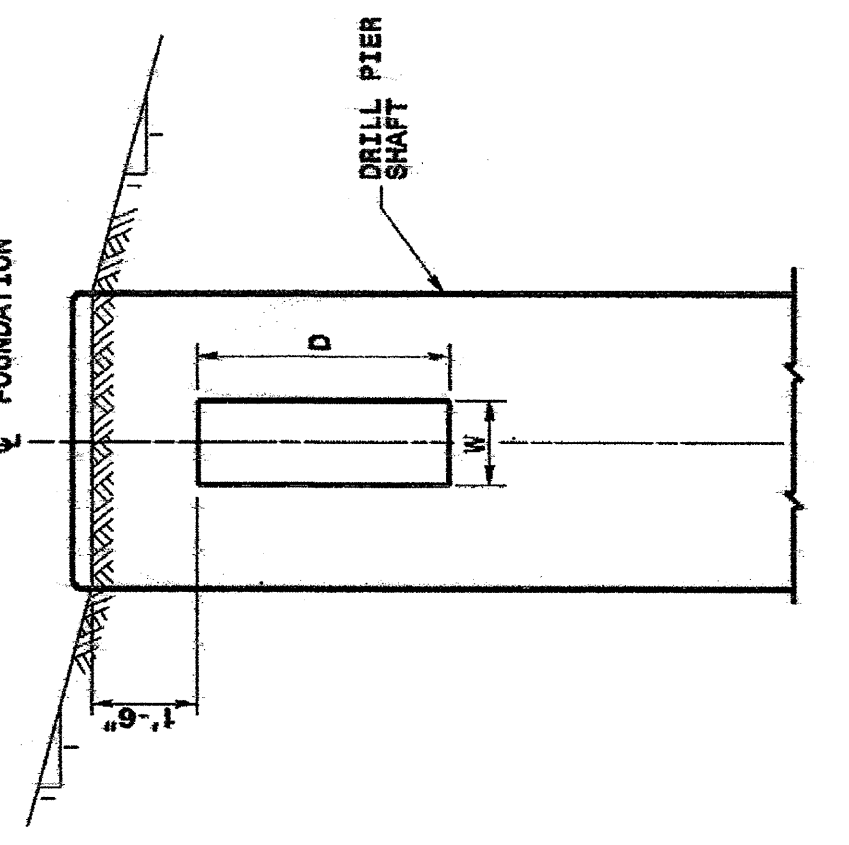
Wing Wall Type	Drill Dia. (in.)	Bar No.	Bar Size	Bar Length (ft.)	Concrete Volume (Cu. Yd.)
TYPE 1	42"	V1	#8	8'-0"	0.4
		V2	#8	8'-0"	0.4
TYPE 2	42"	H	#4	8'-0"	0.4
		C	#4	8'-0"	0.4
TYPE 2	48"	V1	#8	10'-0"	0.6
		V2	#8	10'-0"	0.6
TYPE 2	48"	H	#4	10'-0"	0.6
		C	#4	10'-0"	0.6

WING WALL DETAILS

Wing Wall Type	Wing Wall Length (ft.)	Wing Wall Concrete Volume (Cu. Yd.)
TYPE 1	1'-0"	0.4
TYPE 2	3'-0"	1.2

NOTES

- THE NUMBER OF C-BARS IS BASED ON FOUNDATION DEPTH. SEE FOUNDATION SELECTION TABLES.
- CIRCULAR TIE REINFORCING RINGS MAY BE VERTICALLY ADJUSTED BY +/- 3" AT A DEPTH BETWEEN 2'-0" AND 3'-0" TO FACILITATE THE INSTALLATION OF ELECTRICAL CONDUIT ENTERING IN THE CAGE.
- THE LENGTH OF V1-BARS IS BASED ON FOUNDATION DEPTH. SEE FOUNDATION SELECTION TABLES.
- 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.)
- CONCRETE DRILL PIER SHAFT VOLUME (CU. YDS.):
 FOR 42" DIA. = .856X1
 FOR 48" DIA. = 1.468X1
- DEFORM REINFORCING STEEL TO CONFORM TO ASTM A615 GRADE 60. TIES MAY BE DEFORMED OR PLAIN.
- CAST CONCRETE AGAINST UNDISTURBED SOIL.
- DO NOT ERECT TRAFFIC SIGNAL STRUCTURES BEFORE THE CONCRETE IN THE FOUNDATION HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
- MAKE PROVISIONS FOR DRAINAGE OF WATER FROM INSIDE OF THE METAL SUPPORT.
- FOR OTHER DETAILS REGARDING CONSTRUCTION OF CONCRETE FOUNDATION SEE PROJECT SPECIAL PROVISIONS.
- IN CASE OF ANY CROSS SLOPES, GRADE AROUND THE FOUNDATION AS FOLLOWS:



ENGLISH STANDARD DRAWING FOR
METAL POLE FOUNDATIONS
 REINFORCING CAGE DETAILS

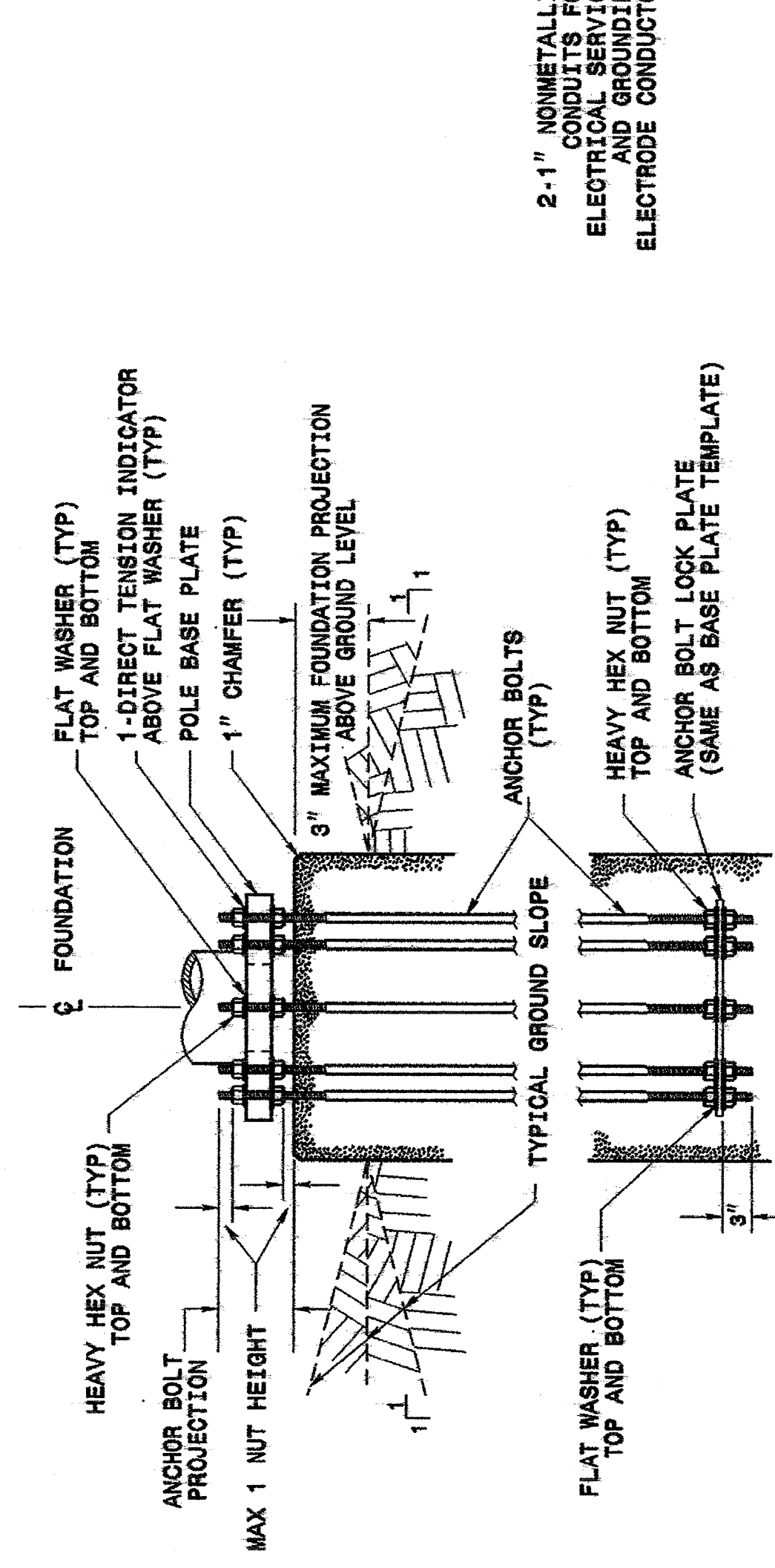
SHEET 1 OF 2
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ENGLISH STANDARD DRAWING FOR
METAL POLE FOUNDATIONS
 INSTALLATION DETAILS

SHEET 2 OF 2
1742.01

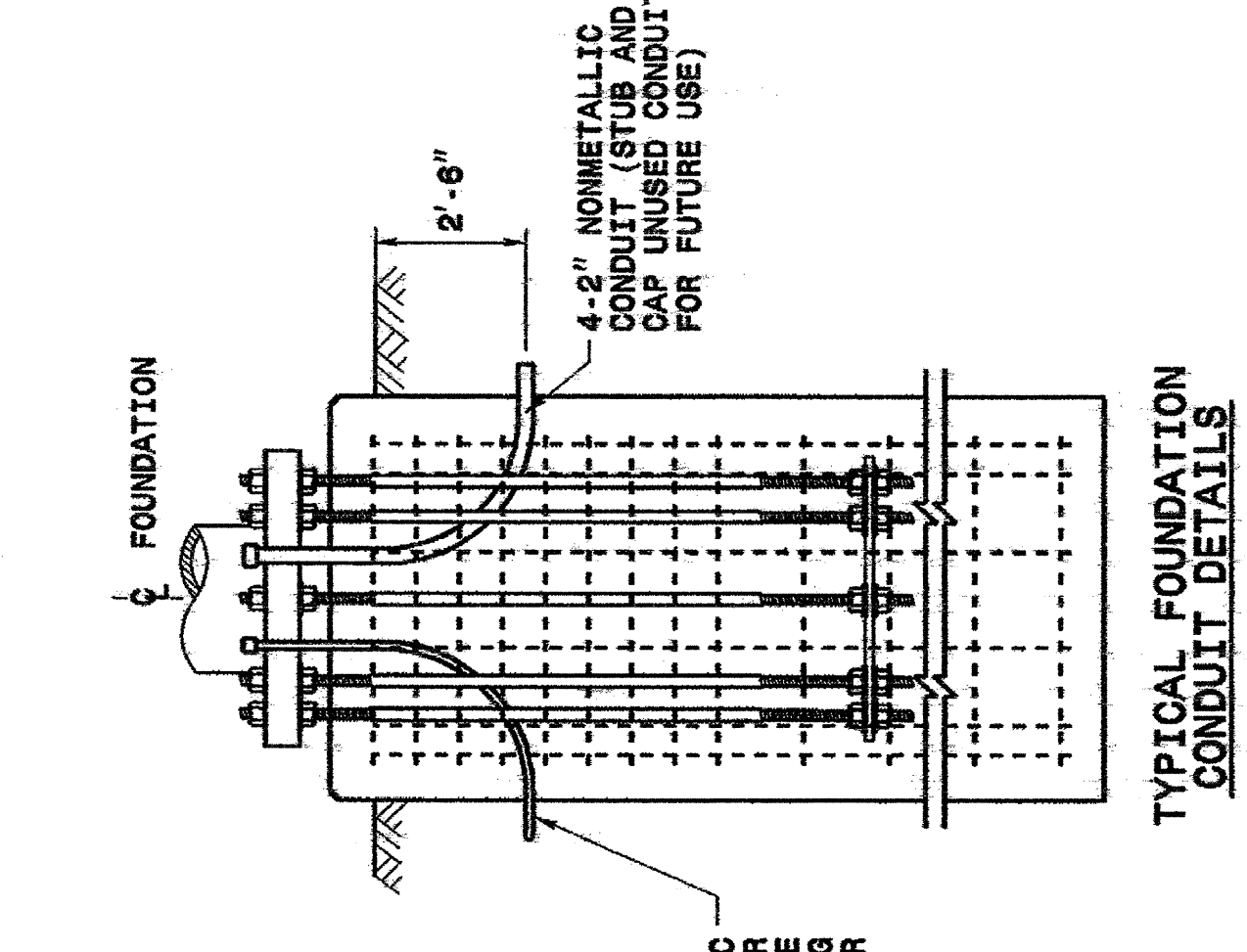


TYPICAL FOUNDATION ANCHOR BOLT DETAILS
 REINFORCING CAGE NOT SHOWN FOR CLARITY

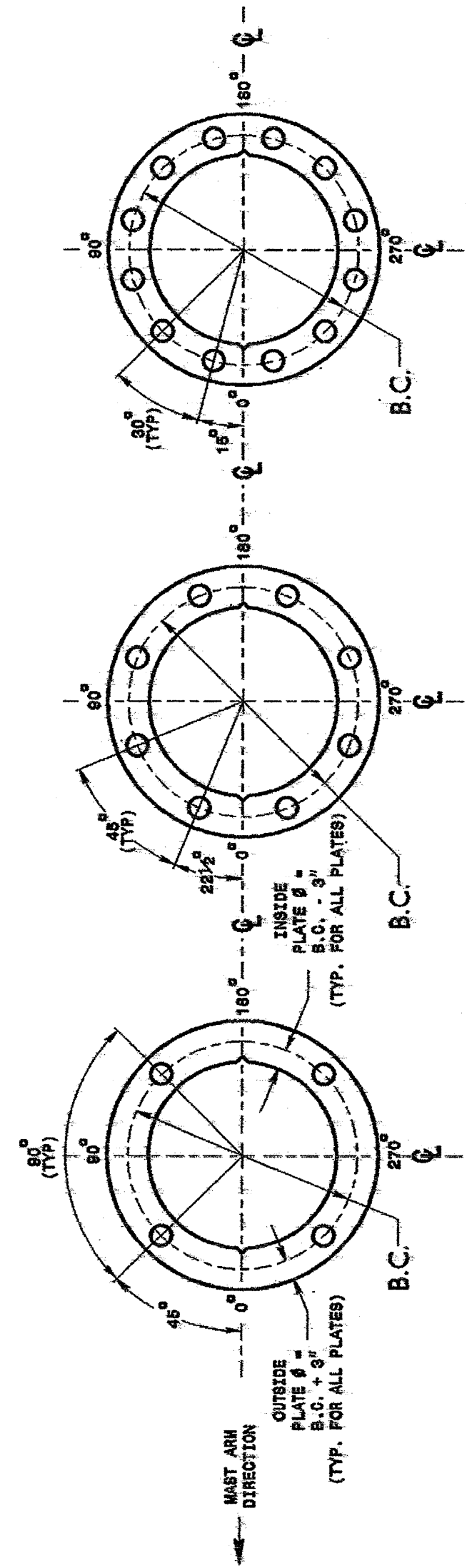
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ENGLISH STANDARD DRAWING FOR
METAL POLE FOUNDATIONS
 INSTALLATION DETAILS

SHEET 2 OF 2
1742.01



TYPICAL FOUNDATION CONDUIT DETAILS



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

Structural Engineer D. Sackler 9.12.03 SIGNATURE DATE	Electrical Engineer Milton J. Dean 9/18/03 SIGNATURE DATE
Standard Drawings Traffic Management and Signal Systems Unit 122 N. McDowell St., Raleigh, NC 27603	
<h1>See Plate for Title</h1>	
Original: 2002 Standards	