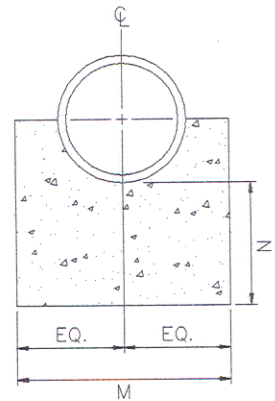


ELEVATION



SECTION A-A

BUTTRESS FOR LOWER VERTICAL BENDS											
BEND	SIZE										
		3"	4"	6"	8"	10"	12"	16"	20"	24"	30"
11 1/4°	L	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"	1'-6"	2'-0"	3'-0"	3'-6"	5'-0"
	M	2'-0"	2'-0"	2'-6"	2'-6"	3'-0"	4'-0"	5'-0"	5'-0"	6'-0"	7'-0"
	N	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	2'-0"	2'-6"
22 1/2°	L	1'-0"	1'-6"	1'-6"	2'-0"	2'-6"	3'-0"	4'-0"	5'-6"	7'-0"	10'-6"
	M	2'-0"	2'-0"	2'-6"	3'-0"	3'-0"	4'-0"	5'-0"	5'-6"	6'-0"	6'-6"
	N	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	2'-0"	2'-6"	3'-0"	3'-0"
45°	L	2'-0"	2'-0"	2'-6"	3'-6"	5'-0"	5'-6"	8'-0"	10'-0"	12'-0"	16'-0"
	M	2'-0"	2'-0"	2'-6"	3'-0"	3'-0"	4'-0"	5'-6"	6'-0"	7'-0"	8'-0"
	N	1'-6"	1'-6"	1'-6"	1'-6"	2'-0"	2'-6"	3'-0"	4'-0"	5'-0"	6'-0"

NOTES:

1. $f'_c = 3000\text{psi}$ AT 28 DAYS.
2. CARRY ALL BEARING SURFACES TO UNDISTURBED EARTH OR FIRM SUBGRADE.
3. THE BUTTRESS DIMENSIONS ARE BASED ON THE TOTAL PRESSURE OF 300psi AND SOIL BEARING PRESSURE OF 2500psi. WHERE THE WATER PRESSURE AND SOIL BEARING PRESSURE IS DIFFERENT, THE AREA OF CONCRETE BLOCK (i.e. L&M) SHALL BE PROPORTIONED ACCORDINGLY. AREA ADJUSTMENT FOR REQUIRED PRESSURE SHALL BE MADE FIRST BEFORE MAKING ADJUSTMENT FOR SOIL BEARING PRESSURE.
4. USE A HIGH-EARLY MIX AND ALLOW TO CURE A MINIMUM OF 4 HOURS PRIOR TO BACKFILLING.

CHARLES COUNTY GOVERNMENT
 DEPARTMENT OF PLANNING & GROWTH MANAGEMENT
 APPROVED: *[Signature]* 6/29/95
DIRECTOR OF DEVELOPMENT SERVICES DATE
[Signature] 6/29/95
WATER / SEWER ENGINEER DATE

STANDARD DETAIL
 BUTTRESSES FOR
 11 1/4°, 22 1/2°
 & 45° LOWER
 VERTICAL BENDS

REVISIONS:

B
 1.06

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