



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.

REVISIONS:	CALVERT COUNTY		STANDARD DETAILS	<u>B</u> 1.03
	DEPARTMENT OF PUBLIC WORKS—BUREAU OF UTILITIES			
	APPROVED:	 _____ BUREAU CHIEF		
	DATE:	DECEMBER 15, 2004		
	THRUST BLOCKS FOR VERTICAL BENDS			