

REINFORCEMENT SHALL BE PROVIDED AS FOLLOWS

6"-12" PIPE	1#5
14"-30" PIPE	2#5'S
36"-48" PIPE	2#7'S

VERTICAL DOWN BEND

TABLE A
UPWARD THRUST GRAVITY BLOCKS

PIPE DIA.	MIN. TOP WIDTH W1	ANGLE (degrees)	BOTTOM WIDTH-W2 (in)
6"	6"	0-5	NOTE 2
		5-15	24
		15-25	48
		► 25	NOTE 1
8"	6"	0-5	NOTE 2
		5-9	30
		9-15	36
		► 15	NOTE 1
12"	6"	0-5	NOTE 2
		5-15	48
		► 15	NOTE 1
16"	12"	0-5	NOTE 2
		5-10	60
		10-15	96
		► 15	NOTE 1
24" THRU 36" DIA.		► 5.0	NOTE 1
42" THRU 48" DIA.		► 3.0	NOTE 1

NOTES:

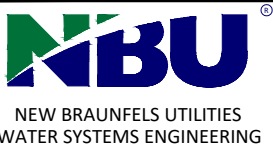
- FOR ANGLES GREATER THAN THOSE INDICATED RESTRAINED JOINTS SHALL BE INSTALLED.
- FOR JOINT DEFLECTIONS LESS THAN 5 DEGREES, NO HORIZONTAL OR VERTICAL THRUST RESTRAINT IS REQUIRED FOR PIPES LESS THAN 42" IN DIAMETER.
- THRUST BLOCK SHALL NOT BE INSTALLED WITHOUT APPROVAL FROM NBU WATER ENGINEERING.

THRUST BLOCK DESIGN AS FOLLOWS

A. PRESSURE OF 150 P.S.I.
(ACTUAL IF HIGHER)
+ 50 % SURGE ALLOWANCE

B. MAXIMUM SOIL BEARING
SEE TABLE BELOW

SOIL TYPES	PRESSURE
LOOSE OR SPONGY SOIL	1500 Lb/Sq.Ft.
UNDISTURBED SOIL, CALICHE	2000 Lb/Sq.Ft.
LIMESTONE ROCK	4000 Lb/Sq.Ft.



DRAWN BY:
EWL
APPROVED BY:
A. WILLARD
DRAWING DATE:
2/1/24

STANDARD DRAWING:

CONCRETE THRUST BLOCKING

UPDATED: SCALE: SHEET: DRAWING NO.
N.T.S. 1 OF 2 221