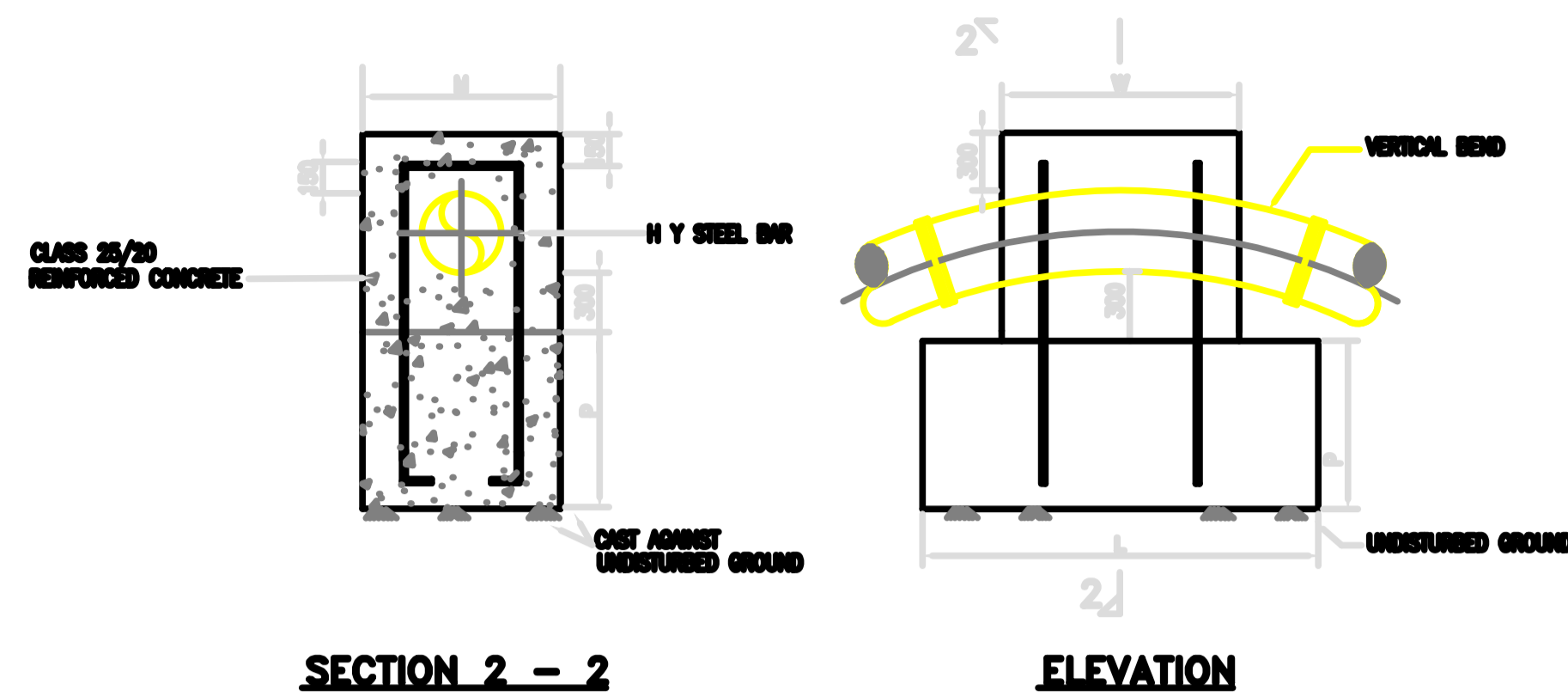
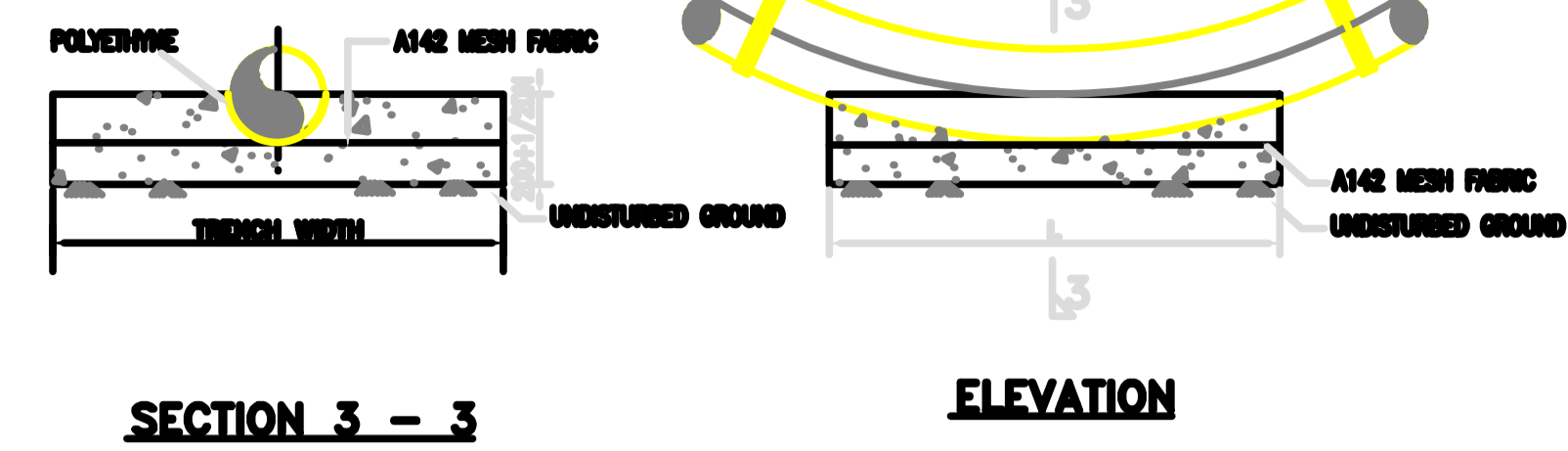


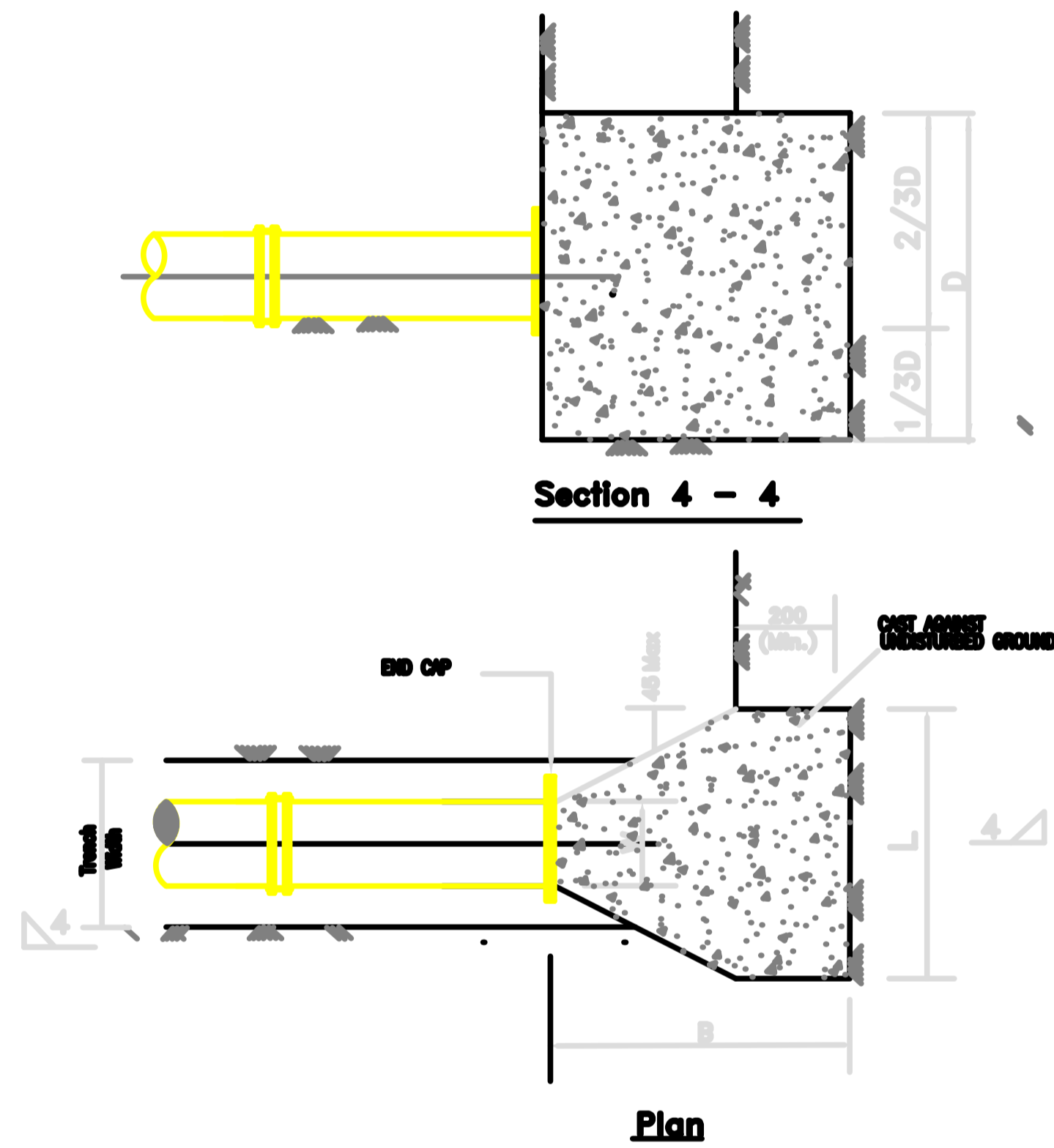
**ELEVATION
ANCHOR BLOCK
FOR GATE VALVES**



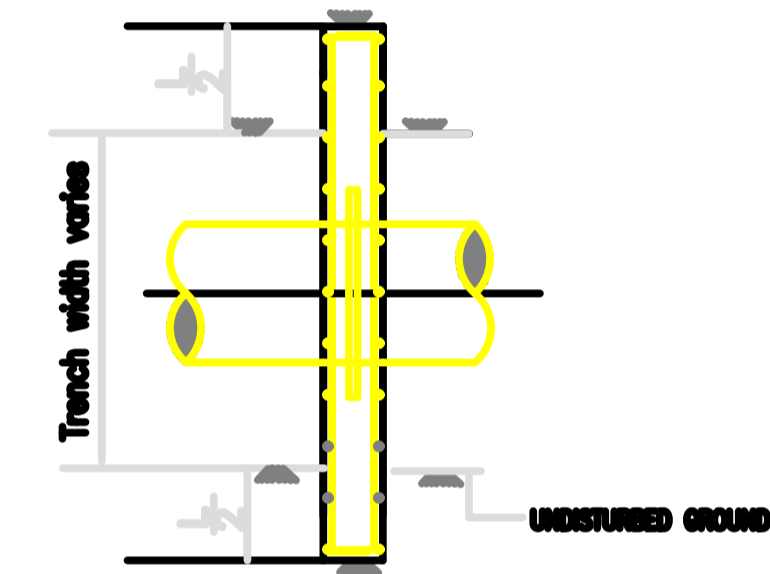
**SECTION 2 - 2
ELEVATION
UPTHRUST THRUST
UPVERTICAL BENDS - TYPICAL
(SEE NOTE 7)**



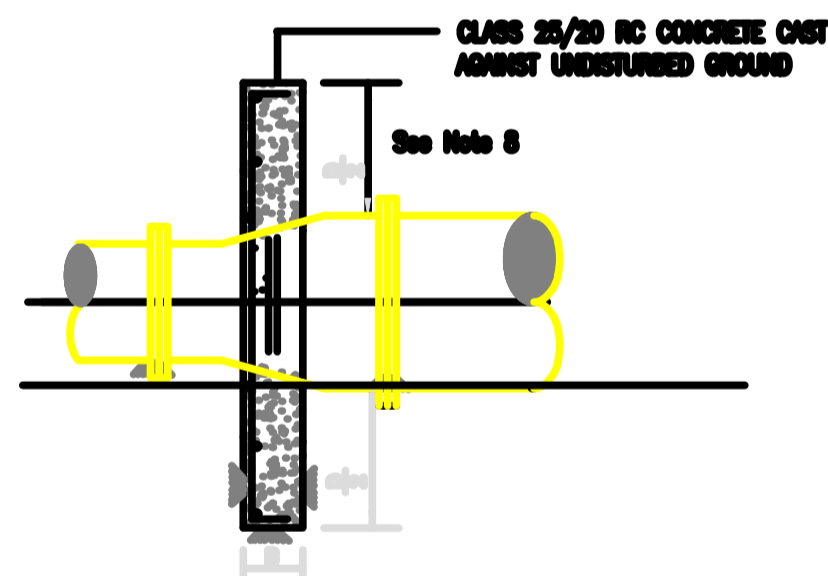
**SECTION 3 - 3
ELEVATION
DOWNTHRUST VERTICAL
BENDS - TYPICAL
(SEE NOTE 7)**



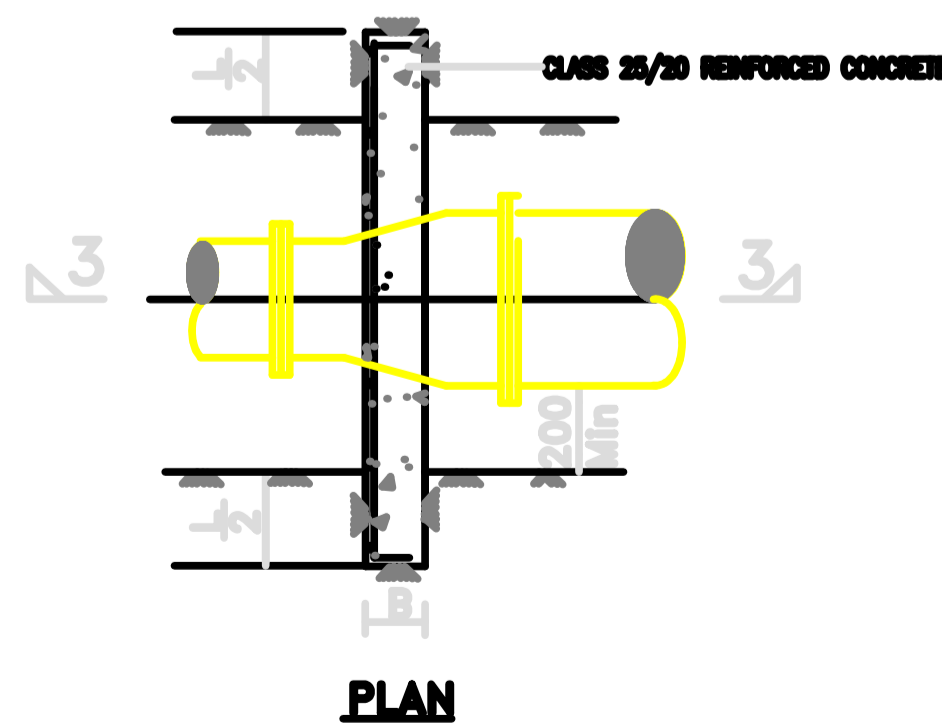
Thrust Block for Blank Ends



SECTION 1 - 1



**SECTION 3 - 3
THRUST BLOCKS FOR TAPERS**



PLAN

TEST HEAD (m)	MAIN (mm)	D (m)	L (m)	B (m)	VOLUME, V (m ³)
125	1000	3.0	4.0	1.5	18.00
	900	2.8	3.8	1.4	14.90
	800	2.5	3.5	1.4	12.30
	700	2.2	3.3	1.3	9.44
	600	2.0	2.9	1.2	6.96
	500	1.7	2.5	1.2	5.10
	400	1.5	2.5	1.1	4.13
	300	1.4	2.2	1.0	3.08
	200	1.2	2.1	1.0	2.52
	100	1.0	2.0	0.9	1.80
	100	0.8	1.8	0.8	1.15
	100	0.7	1.4	0.8	0.78
	100	0.6	1.0	0.7	0.42
	100	0.6	0.6	0.5	0.15

TABLE OF ANCHOR BLOCKS FOR BLANK ENDS

TEST HEAD (m)	MAIN SIZE (mm)	D (m)	L (m)	B (m)	V (m ³)	MAIN STEEL	DISTRIBUTION STEEL
125	1000	2.8	4.0	0.8	11.84	Y25 - 200	Y16 - 200
	900	2.6	3.8	0.5	8.61	Y25 - 200	Y16 - 200
	800	2.4	3.5	0.5	7.27	Y20 - 200	Y16 - 200
	700	2.2	3.3	0.4	4.85	Y20 - 200	Y16 - 200
	600	2.0	3.0	0.4	4.05	Y20 - 200	Y16 - 200
	500	1.7	2.9	0.4	3.27	Y16 - 200	Y12 - 200
	400	1.6	2.9	0.4	2.80	Y16 - 200	Y12 - 200
	400	1.5	2.5	0.3	1.84	Y12 - 200	Y10 - 200
	300	1.4	2.4	0.3	1.85	Y12 - 200	Y10 - 200
	300	1.2	2.2	0.3	1.28	Y12 - 200	Y10 - 200
	200	1.2	1.8	0.3	0.80	Y10 - 200	Y10 - 200
	200	1.0	1.4	0.2	0.47	Y10 - 200	Y10 - 200
	100	0.9	1.0	0.2	0.30	Y8 - 200	Y8 - 200
	100	0.6	0.6	0.2	0.15	Y8 - 200	Y8 - 200

**DETAILS OF ANCHOR BLOCKS FOR GATE VALVES
(CLASS '25/20' CONCRETE)**

BLOCK THICKNESS B (mm)	REINFORCEMENT STEEL	
	MIN STEEL	DISTRIBUTION STEEL
600	Y25 - 200	Y16 - 200
500	Y25 - 200	Y16 - 200
400	Y20 - 200	Y16 - 200
300	Y12 - 200	Y10 - 200
200	Y10 - 200	Y10 - 200

**REINFORCEMENT OF ANCHOR BLOCKS
FOR TAPERS
(CLASS '25/20' CONCRETE)**

TEST HEAD (m)	D (m) L (m) B (m) V (m ³)											
	TAPER (BLANK END) mm											
	1000	900	800	700	600	500	400	300	200	100	100	100
125	18.00	14.90	12.30	9.44	6.96	5.10	4.13	3.08	2.52	1.80	1.15	0.78
100	14.90	12.30	9.44	6.96	5.10	4.13	3.08	2.52	1.80	1.15	0.78	0.42
75	12.30	9.44	6.96	5.10	4.13	3.08	2.52	1.80	1.15	0.78	0.42	0.15
50	9.44	6.96	5.10	4.13	3.08	2.52	1.80	1.15	0.78	0.42	0.15	0.15
25	6.96	5.10	4.13	3.08	2.52	1.80	1.15	0.78	0.42	0.15	0.15	0.15
10	5.10	4.13	3.08	2.52	1.80	1.15	0.78	0.42	0.15	0.15	0.15	0.15
5	4.13	3.08	2.52	1.80	1.15	0.78	0.42	0.15	0.15	0.15	0.15	0.15
2.5	3.08	2.52	1.80	1.15	0.78	0.42	0.15	0.15	0.15	0.15	0.15	0.15
1.25	2.52	1.80	1.15	0.78	0.42	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0.625	1.80	1.15	0.78	0.42	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0.3125	1.15	0.78	0.42	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0.15625	0.78	0.42	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0.078125	0.42	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
0.0390625	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15

**TABLE OF ANCHOR BLOCKS FOR TAPERS
(CLASS '25' CONCRETE)
FOR DIMENSIONS (See table 4)**

NOTES:

1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE STATED
2. ALL CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED ON AND AGAINST FIRM GROUND DIRECTLY. THE THRUST OR ANCHOR BLOCKS SHALL NOT BE CAST AGAINST BLACK COTTON SOIL AND REFERENCE SHALL BE MADE TO THE ENGINEER'S REPRESENTATIVE FOR FURTHER INSTRUCTIONS
3. THE CONCRETE THRUST BLOCKS ARE DESIGNED TO BEAR ON THE ORIGINAL EARTH SURFACE SAFE BEARING PRESSURE OF 100 KN/M². LOWER BEARING PRESSURES MUST BE REFERRED BACK TO ENGINEER FOR REDESIGN OF BLOCK.
4. CONCRETE TO BE CLASS '20/20' UNLESS OTHERWISE STATED.
5. CONCRETE IN THRUST AND ANCHOR BLOCKS MUST BE CAST 50MM CLEAR OF JOINTS
6. DIMENSIONS 'W' FOR THRUST BLOCKS BENDS TO SUIT THE SIZE OF BEND AND CLEARANCE REQUIRED FOR JOINTS
7. THE STEEL ANCHORING REINFORCEMENT AND THE DIMENSIONS L_P AND M ARE TO BE DECIDED BY THE ENGINEER'S REPRESENTATIVE TO SUIT EACH INDIVIDUAL BEND.
8. WHERE D/2 EXCEEDS THE COVER, INCREASE THE DEPTH BELOW THE PIPE TO MAKE THE TOTAL = D.

LEGEND

- DN - NOMINAL DIAMETER
- BF - BLANK FLANGE
- FA - FLANGE ADAPTOR

REV	REVISIONS	Drg. No.	SIGN	DATE	APPROVED
C			BY CHECKED		
B			BY CHECKED		
A			BY CHECKED		
O			BY CHECKED		

CLIENT:



MATHIRA WATER AND SANITATION
COMPANY LTD
P.O BOX 1981 - 10101
KARATINA, NYERI

PROJECT:

IMPROVEMENT OF WATER SUPPLY TO
KIRIMUKUYU WARD MATHIRA WEST SUB -
CONTY

KIAMUCHERU_MUBERETHI
RAW WATER GRAVITY MAINLINE

Designed by: -- Drawn by: --
Checked by: -- Approved by: --

TITLE:
STANDARD DRAWINGS

THRUST BLOCKS FOR VERTICAL
BENDS, TAPERS, GATE VALVES AND
BLANK ENDS.

Scale	AS SHOWN	Date:	OCTOBER 2023
Job No.		CAD FILE No.	
T STATUS	MAWASCO/KM/04	REV	