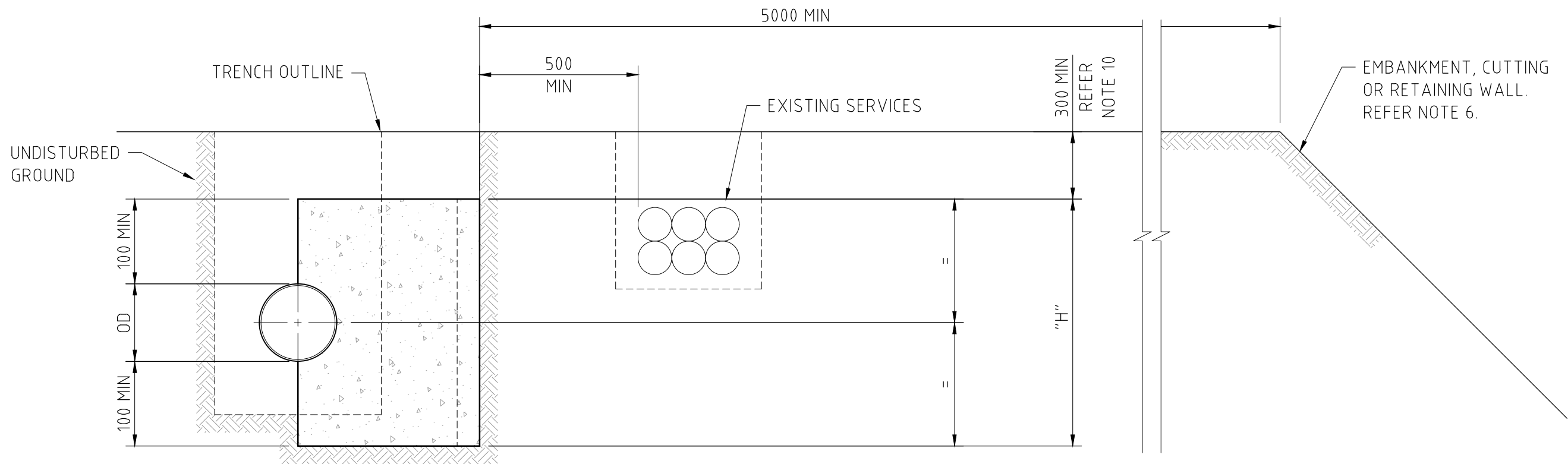


HORIZONTAL BEND THRUST BLOCK TYPE 1

PLAN

SCALE 1:20



HORIZONTAL BEND THRUST BLOCK TYPE 1

ELEVATION

SCALE 1:20

NOTES:

1. THIS DRAWING MUST BE READ IN CONJUNCTION WITH DTC/1100.
2. THRUST BLOCKS DESIGNED TO WITHSTAND A DESIGN PRESSURE OF 120m AND A TEST PRESSURE OF 150m HEAD OF WATER.
3. REFER TO DTC/1111 FOR TYPE 2 THRUST BLOCKS FOR HORIZONTAL BENDS.
4. CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL.
5. DO NOT USE THRUST BLOCKS SPECIFIED IN THIS DRAWING IN SOILS WHERE THE NATURAL SOIL DOES NOT MEET THE MINIMUM REQUIREMENTS IN TABLE F6 ON DTC/1100.
6. DO NOT USE THRUST BLOCKS SPECIFIED IN THIS DRAWING. WITHIN 5m OF AN EMBANKMENT, CUTTING OR RETAINING WALL.
7. DICL BEND TO BE WRAPPED IN PE SLEEVING. WHEN CONNECTING TO PVC OR GRP PIPE (WITHOUT PE SLEEVE), PE SLEEVE TO BE TAPED TO PIPE 500mm PAST JOINT TO DICL SOCKET.
8. DO NOT APPLY ANY THRUST LOADS FOR AT LEAST 14 DAYS AFTER POURING CONCRETE.
9. REFER TO TABLE F6 ON DTC/1100 FOR SOIL TYPES.
10. MINIMUM COVER OF 750mm MUST BE PROVIDED WHERE A THRUST BLOCK SIZED FOR SOIL TYPE S2 IS INSTALLED IN THE CORRESPONDING SAND MATERIAL (REFER TO NOTE 9). ALTERNATIVELY, USE A THRUST BLOCK SIZED FOR SOIL TYPE S1.
11. CONCRETE FOR UNREINFORCED THRUST BLOCKS MUST BE CLASS N25

THRUST BLOCK AREAS & DIMENSIONS FOR 11.25° HORIZONTAL BENDS - TYPE 1 (m²)

DN	OD	DESIGN PRESSURE HEAD	TEST PRESSURE HEAD	THRUST T	SOIL TYPE (REFER TO NOTE 9)	REQUIRED BEARING AREA	W	H	L
(mm)	(mm)	(m)	(m)	(kN)		(m ²)	(mm)	(mm)	(mm)
100	122	120	150	3.4	S1	0.067	250	350	500
150	177	120	150	7.1	S1	0.142	300	400	600
200	232	120	150	12.2	S1	0.244	300	450	700
250	286	120	150	18.5	S1	0.370	300	500	800
300	345	120	150	26.9	S1	0.539	400	600	1000

THRUST BLOCK AREAS & DIMENSIONS FOR 22.5° HORIZONTAL BENDS - TYPE 1 (m²)

DN	OD	DESIGN PRESSURE HEAD	TEST PRESSURE HEAD	THRUST T	SOIL TYPE (REFER TO NOTE 9)	REQUIRED BEARING AREA	W	H	L
(mm)	(mm)	(m)	(m)	(kN)		(m ²)	(mm)	(mm)	(mm)
100	122	120	150	6.7	S1	0.134	250	350	500
150	177	120	150	14.1	S1	0.282	350	450	700
200	232	120	150	24.3	S1	0.485	450	500	1000
250	286	120	150	36.9	S1	0.737	450	700	1100
300	345	120	150	53.6	S1	1.073	500	900	1200

THRUST BLOCK AREAS & DIMENSIONS FOR 45° HORIZONTAL BENDS - TYPE 1 (m²)

DN	OD	DESIGN PRESSURE HEAD	TEST PRESSURE HEAD	THRUST T	SOIL TYPE (REFER TO NOTE 9)	REQUIRED BEARING AREA	W	H	L
(mm)	(mm)	(m)	(m)	(kN)		(m ²)	(mm)	(mm)	(mm)
100	122	120	150	13.2	S1	0.263	300	450	650
150	177	120	150	27.7	S1	0.554	400	600	950
150	177	120	150	27.7	S2	0.277	300	400	700
200	232	120	150	47.6	S1	0.952	500	800	1200
200	232	120	150	47.6	S2	0.476	400	500	1000
250	286	120	150	72.3	S1	1.446	600	1000	1500
250	286	120	150	72.3	S2	0.723	400	700	1100
300	345	120	150	105.2	S1	2.104	REFER TO TYPE 2		
300	345	120	150	105.2	S2	1.052	450	850	1250

THRUST BLOCK AREAS & DIMENSIONS FOR 90° HORIZONTAL BENDS - TYPE 1 (m²)

DN	OD	DESIGN PRESSURE HEAD	TEST PRESSURE HEAD	THRUST T	SOIL TYPE (REFER TO NOTE 9)	REQUIRED BEARING AREA	W	H	L
(mm)	(mm)	(m)	(m)	(kN)		(m ²)	(mm)	(mm)	(mm)
100	122	120	150	24.3	S1	0.486	400	600	900
100	122	120	150	24.3	S2	0.243	300	400	650
150	177	120	150	51.2	S1	1.023	550	800	1300
150	177	120	150	51.2	S2	0.512	350	600	900
200	232	120	150	87.9	S1	1.758	REFER TO TYPE 2		
200	232	120	150	87.9	S2	0.879	450	700	1300
200	232	120	150	87.9	S3	0.440	250	500	900
250	286	120	150	133.6	S1	2.672	REFER TO TYPE 2		
250	286	120	150	133.6	S2	1.336	REFER TO TYPE 2		
250	286	120	150	133.6	S3	0.668	300	650	1100
300	345	120	150	194.4	S1	3.888	REFER TO TYPE 2		
300	345	120	150	194.4	S2	1.944	REFER TO TYPE 2		
300	345	120	150	194.4	S3	0.972	350	750	1300