

PLAN: 90° BEND AND END CAP

THRUST BLOCK FOR 90° BEND

	DIA Ø (mm)	MAXIMUM TESTING PRESSUI					
		900	kPa	1350 kPa			
		W	Α	W	Α		
		(mm)	(m²)	(mm)	(m²		
	50	160	0.03	200	0.0		
	75	240	0.06	290	0.0		
	100	320	0.10	390	0.1		
	150	480	0.23	590	0.3		
	200	640	0.40	780	0.6		

1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING CAPACITY. 2. THE REQUIRED AREA CAN BE REDUCED FOR HIGHER EARTH BEARING CAPACITIES. (TO BE APPROVED BY

3. HALF THE DEPTH OF THE BLOCK SHALL B BELOW THE PIPE AXIS 4. KEEP FLANGES AND COUPLINGS CLEAR FROM CONCRETE.

CLASS 25/19 CONCRETE

PLAN: 45° BEND AND EQUAL TEE-PIECE

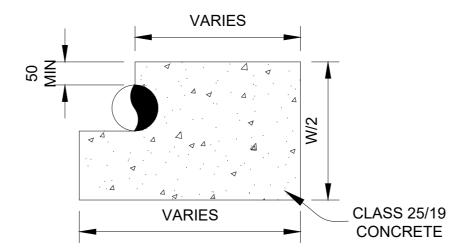
THRUST BLOCK FOR 45° BEND

		MAXIMUM TESTING PRESSURE			
	DIA	900 kPa		1350 kPa	
	Ø (mm)	W	Α	W	Α
		(mm)	(m²)	(mm)	(m²)
	50	130	0.02	130	0.02
	75	180	0.03	680	0.46
	100	240	0.06	290	0.08
	150	370	0.13	430	0.18
	200	470	0.22	580	0.33

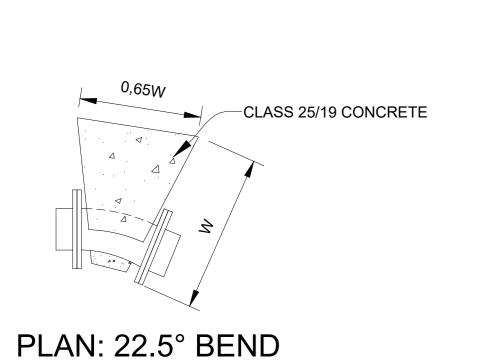
- 1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING CAPACITY. 2. THE REQUIRED AREA CAN BE REDUCED FOR HIGHER EARTH BEARING CAPACITIES. (TO BE APPROVED BY
- 3. HALF THE DEPTH OF THE BLOCK SHALL B BELOW THE PIPE AXIS
- 4. KEEP FLANGES AND COUPLINGS CLEAR FROM CONCRETE.

NOTE:

1.) ALL CONCRETE THRUST BLOCKS AND ANCHOR BLOCKS TO BE CLASS 25MpA, 19mm STONE.



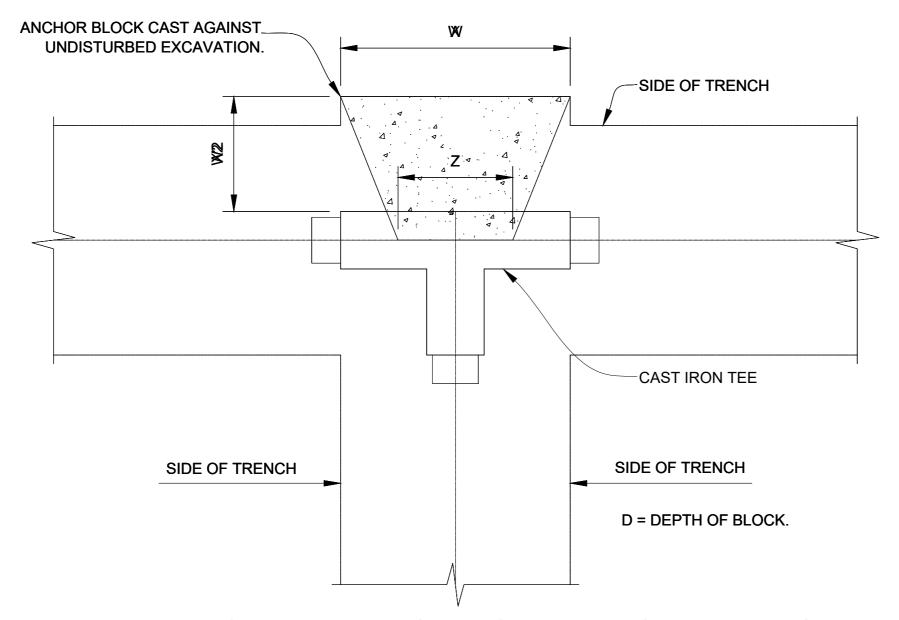
TYPICAL SECTION THROUGH THRUST BLOCK



THRUST BLOCK FOR 22.5° & 11.25° BEND

	MAXIMUM TESTING PRESSURE			
DIA	900 kPa		1350 kPa	
Ø	W	Α	W	Α
(mm)	(mm)	(m²)	(mm)	(m²)
50	90	0.01	100	0.01
75	130	0.02	160	0.02
100	170	0.03	210	0.04
150	250	0.06	310	0.09
200	340	0.11	410	0.17

- 1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING CAPACITY. 2. THE REQUIRED AREA CAN BE REDUCED FOR HIGHER EARTH BEARING CAPACITIES. (TO BE APPROVED BY
- 3. HALF THE DEPTH OF THE BLOCK SHALL B BELOW THE PIPE AXIS 4. KEEP FLANGES AND COUPLINGS CLEAR FROM CONCRETE.

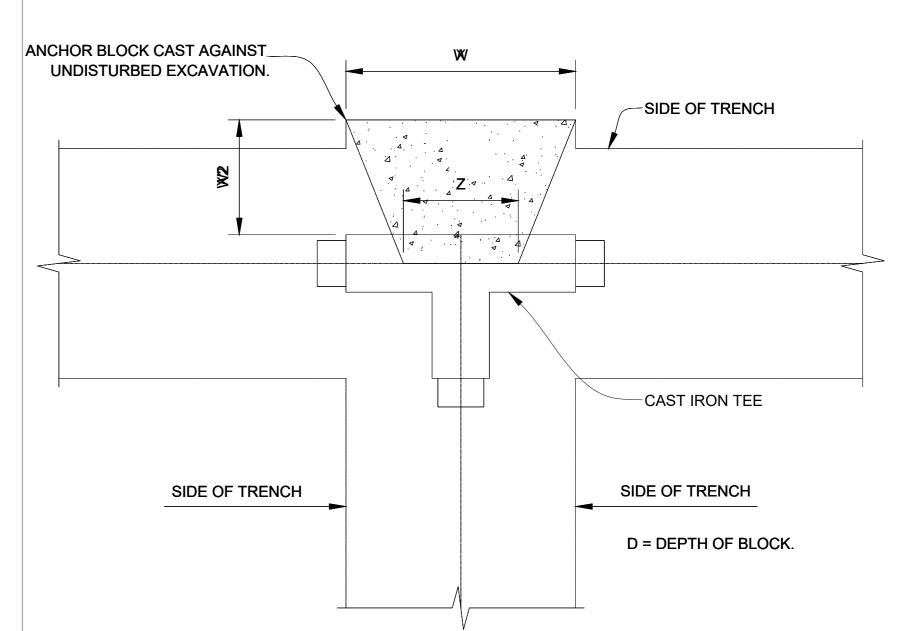


TYPICAL TEE-PIECE INSTALLATION DETAILS

THRUST BLOCK FOR TEE

	MAXIMUM TESTING PRESSURE				
DIA Ø	900 kPa		1350 kPa		
	W	Α	W	Α	
(mm)	(mm)	(m²)	(mm)	(m²)	
50	140	0.02	520	0.27	
75	200	0.04	250	0.06	
100	270	0.07	330	0.11	
150	400	0.16	490	0.24	
200	540	0.28	660	0.42	

- 1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING CAPACITY. 2. THE REQUIRED AREA CAN BE REDUCED FOR HIGHER EARTH BEARING CAPACITIES. (TO BE APPROVED BY
- 3. z = 0.275 * W
- 4. HALF THE DEPTH OF THE BLOCK SHALL B BELOW THE PIPE AXIS 5. KEEP FLANGES AND COUPLINGS CLEAR FROM CONCRETE.



TYPICAL TEE-PIECE INSTALLATION DETAILS SC&CALE10:10

DIMENSIONS OF ANCHOR BLOCK FOR T-PIECE				
PIPE DIAMETER	х	D	Z	
300	1950	1200	550	
225	1475	900	425	
200	1300	800	350	
150	1000	600	275	
100	650	400	200	
75	500	300	150	
50	325	200	100	

STAND NO.1 STAND NO.2 ERF BOUNDARY —2m BUILDING LINE **STORMWATER**

TYPICAL SECTION FOR ALLOCATION OF SERVICES BETWEEN ERVEN 2m BUILDING LINES

SCALE 1:50

ALL SERVICES TO BE TYPICALLY ALLOCATED WITHIN THE ROAD SERVITUDE AS SHOWN ON THIS DRAWING UNLESS OTHER WISE

SERVICES THAT RUN BETWEEN 2 ERVEN TO BE TYPICALLY ALLOCATED AS

SHOWN ON THIS DRAWING WITHIN THE 2m BUILDING LINE OR UNLESS OTHER WISE SPECIFIED BY ENGINEER OR AS INSTRUCTED BY ENGINEER.

SPECIFIED BY ENGINEER OR AS INSTRUCTED BY ENGINEER.

3. THE MINIMUM DISTANCE BETWEEN SERVICES TO BE 300mm.

NOTES:

200MM DIA: 'W' = 0.8m MINIMUM 250MM DIA: 'W' = 0.85m MINIMUM

22.5° & 11° BENDS

FOR TENDER

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1.) ALL CONCRETE THRUST BLOCKS AND ANCHOR BLOCKS TO BE CLASS 25MpA, 19mm STONE.

TYPICAL DESCRIPTION

75MM DIA: 'W' = 0.5m MINIMUM 110MM DIA: 'W' = 0.6m MINIMUM 160MM DIA: 'W' = 0.75m MINIMUM

200MM DIA: 'W' = 0.8m MINIMUM

75MM DIA: 'W' = 0.5m MINIMUM 110MM DIA: 'W' = 0.6m MINIMUM

160MM DIA: 'W' = 0.75m MINIMUM

250MM DIA: 'W' = 0.85m MINIMUM

200MM DIA: 'W' = 0.8m MINIMUM

75MM DIA: 'W' = 0.5m MINIMUM 110MM DIA: 'W' = 0.6m MINIMUM 160MM DIA: 'W' = 0.75m MINIMUM

250MM DIA: 'W' = 0.85m MINIMUM

90 ° BEND & END CAP

45 ° BEND & T-PIECE

SERVICE WATER

Description

AMENDMENTS

Date

DESIGNED TM DRAWN CHECKED LSM APPROVED STN

CLIENT

PRIVATE BAG X45 MBOMBELA TEL: 013 759 9111 FAX: 013 759 2070

ENGINEEERING CONSULTANT



UNIT NO 45.2, CENTRAL PARK 12 SUIKKERIET STREET **NELSPRUIT 1200** 013 744 6070

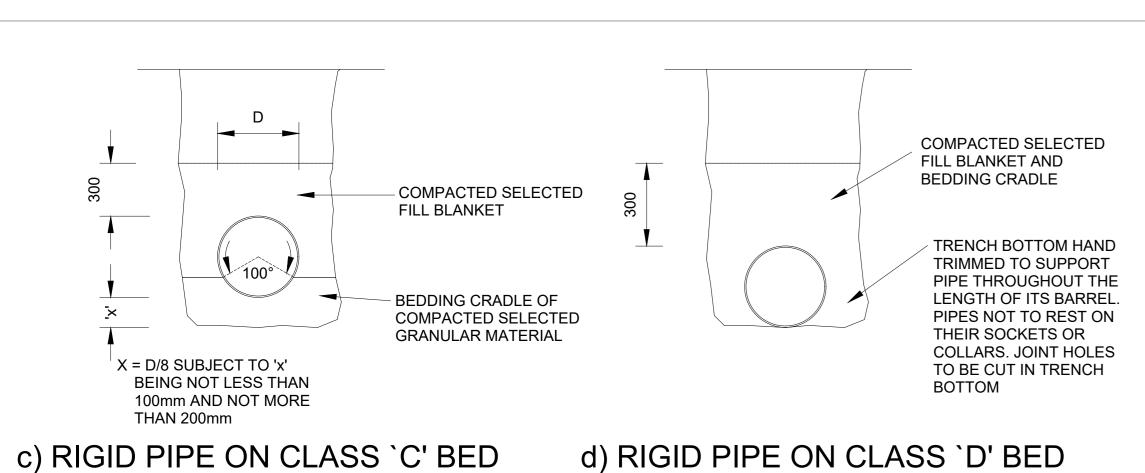
UPGRADE OF BULK WATER SCHEME AT UMJINDINI TRUST AND KAMADAKWA

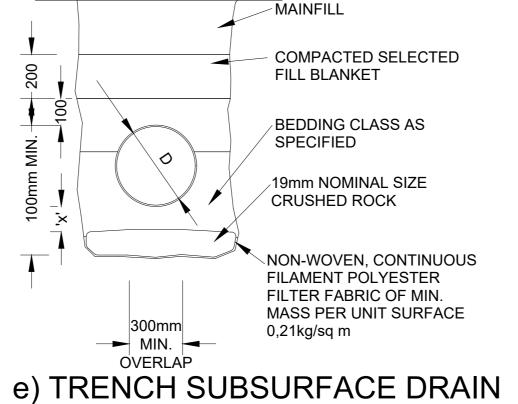
GENERAL DETAILS: SHEET 2 OF 2

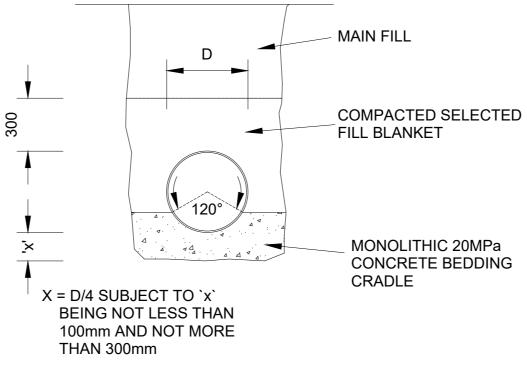
DATE FEBRUARY 2024 SCALE AS - SHOWN

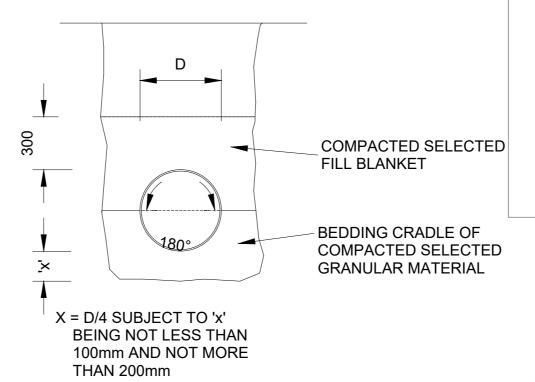
CONSULTANT DWG. NO.

LPS-202318-SD-002 1.0 meter 1.0









a) RIGID PIPE ON CLASS 'A' BED

b) RIGID PIPE ON CLASS 'B' BED