



MIDVAAL LOCAL MUNICIPALITY

CONTRACT No. : 8/2/2/434 (2025-2028)

FOR

CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY

TENDER DRAWINGS

JUNE 2024

ISSUED TO:

MIDVAAL LOCAL MUNICIPALITY

**P. o. Box 9
Meyerton
1960**

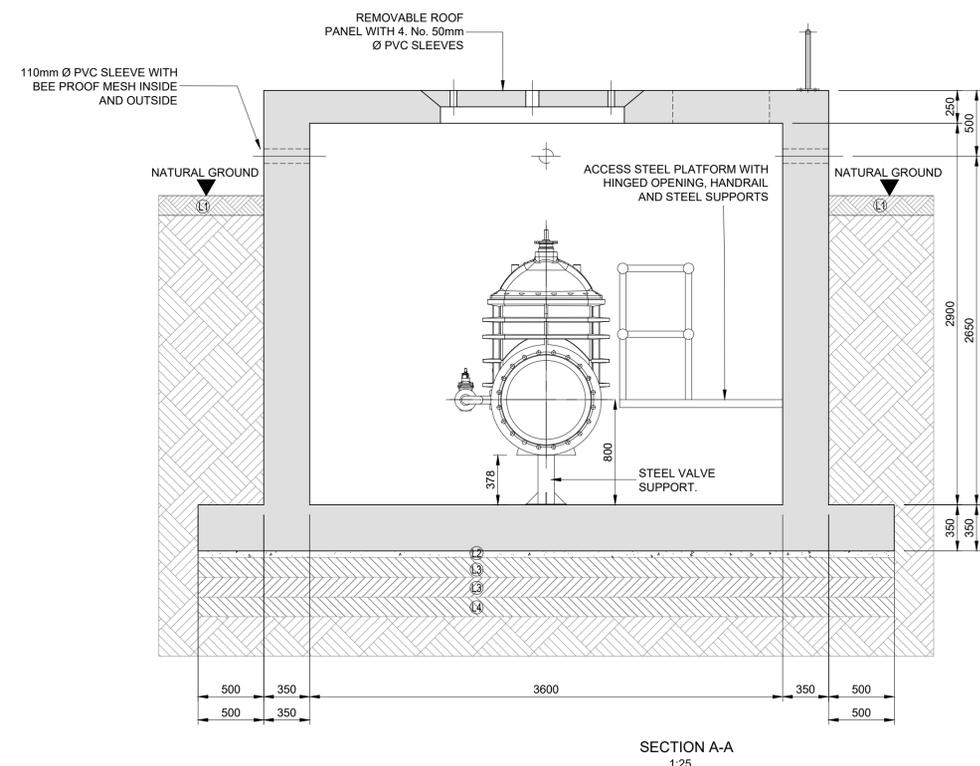
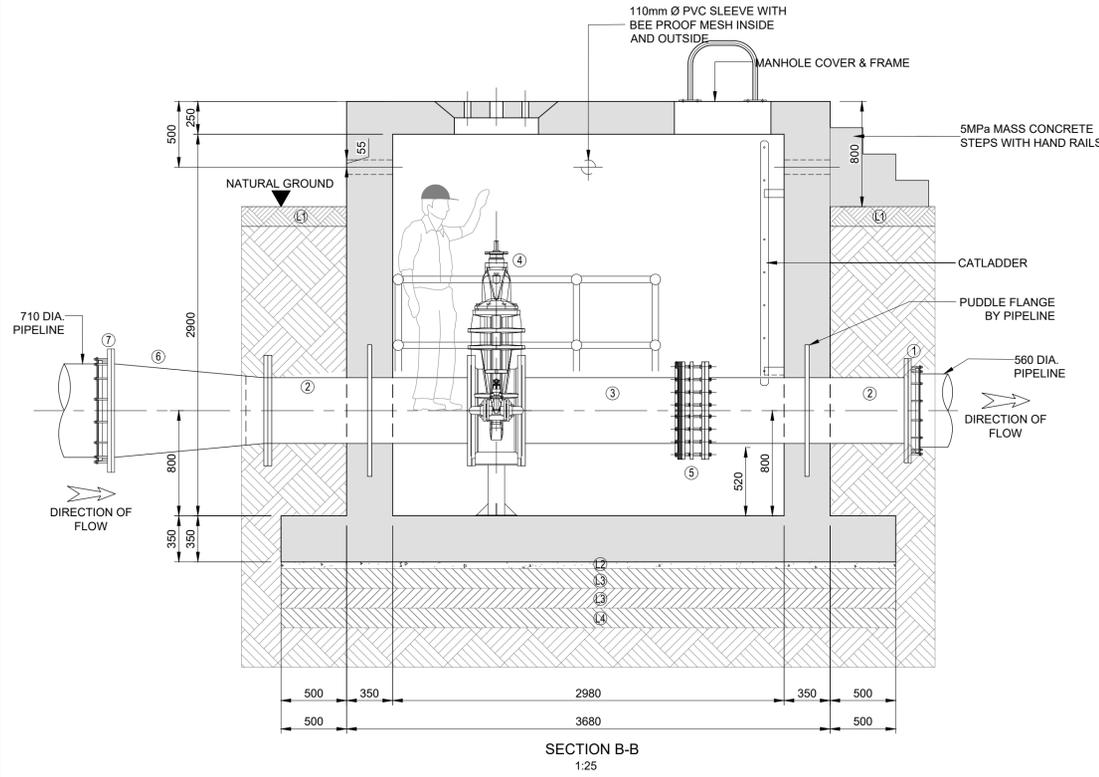
**Tel: (016) 360 7400
Fax: (016) 360 7519**

ISSUED BY:

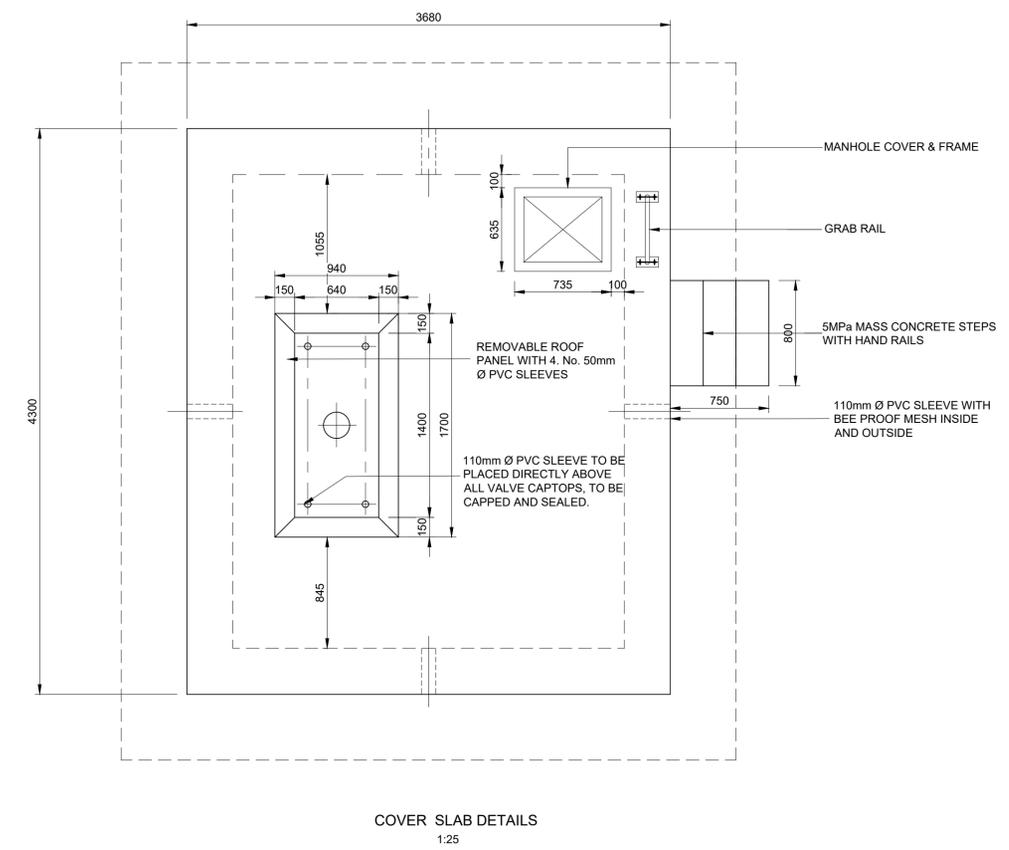
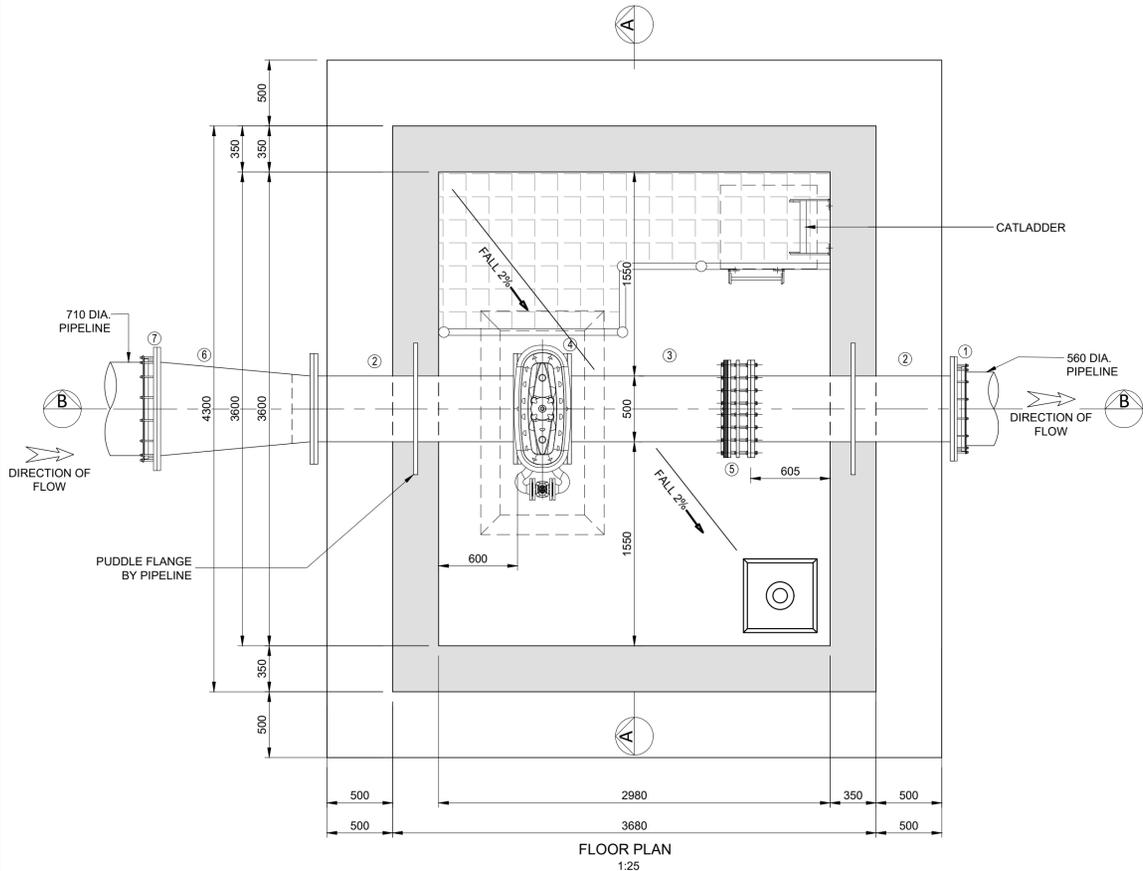


**P.O. BOX 19964
Sunward Park
1470**

**Tel: (011) 9076 700
Fax: (011) 876 7434**



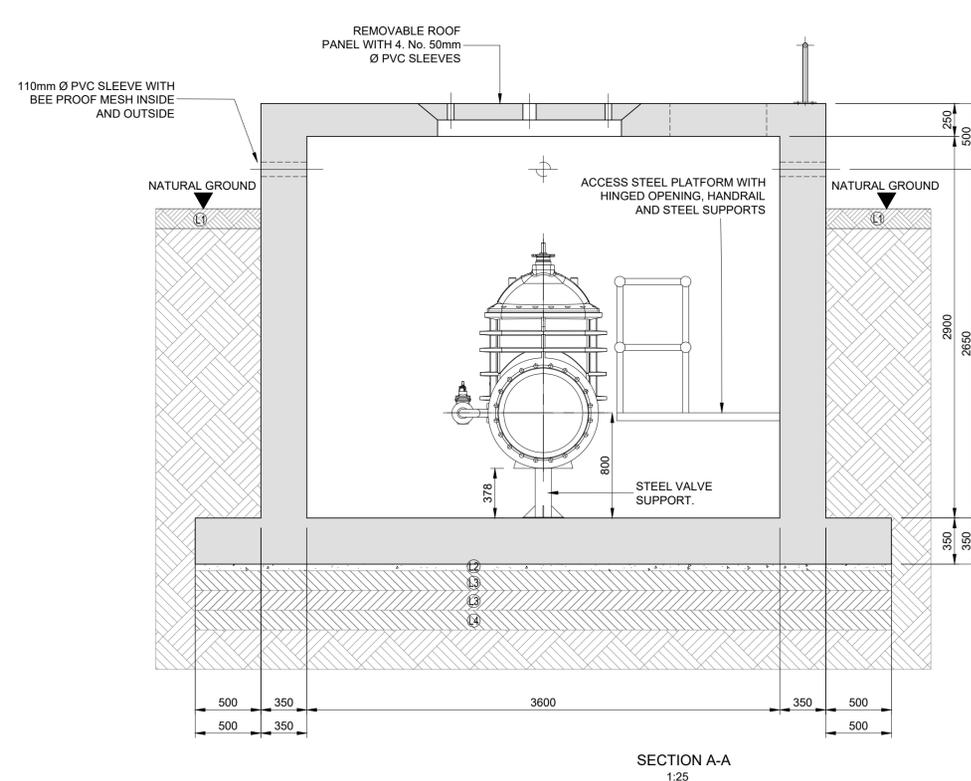
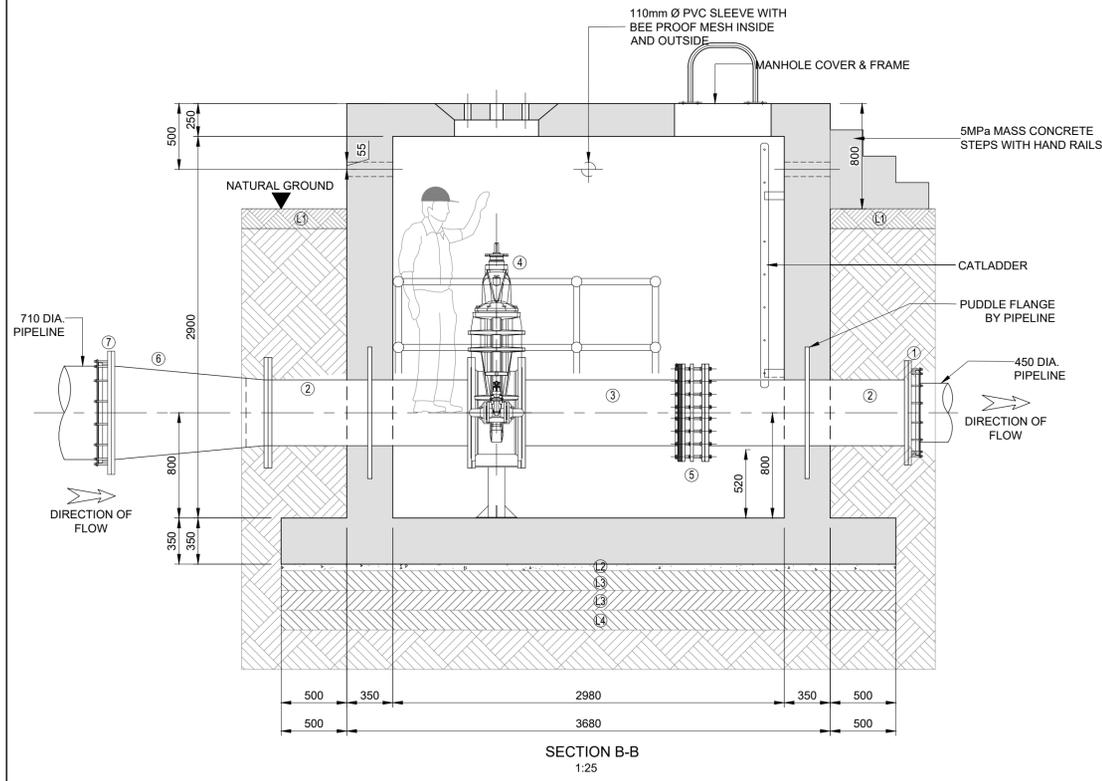
TYPICAL STEEL PIPE FITTINGS AND ITEM LIST (560ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)				
ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
①	560mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	1	STEEL GRADE 300 WA	
②	500Ø x 1550mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
③	500Ø x 1220mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3 AND OTHER END PAIR ENDED.	1	STEEL GRADE 300 WA	
④	500Ø FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE ACCORDING TO SANS 664:1999, PN 25, BOTH ENDS FLANGED TO SANS 1123 TABLE 2500/3	1	STEEL GRADE 300 WA	
⑤	500Ø DISMANTLING JOINT	1	STEEL GRADE 300 WA	
⑥	710Ø x 500mmØ STEEL REDUCER, BOTH ENDS FLANGED TABLE 2500/3	1	STEEL GRADE 300 WA	
⑦	710mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	1	STEEL GRADE 300 WA	



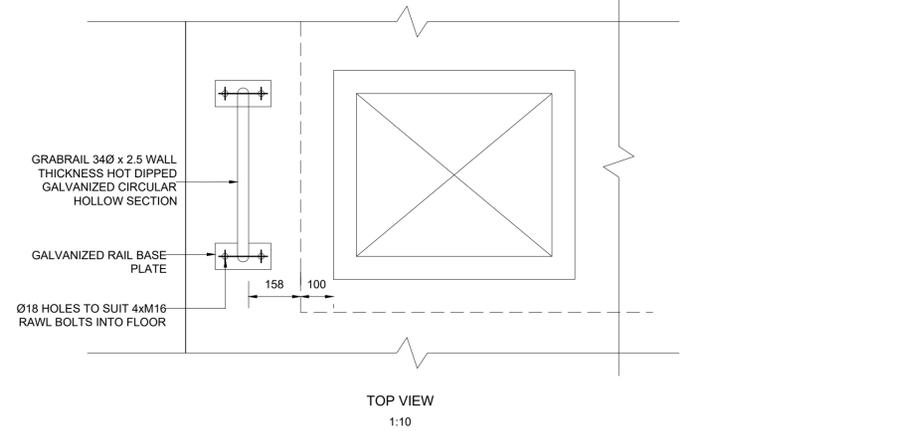
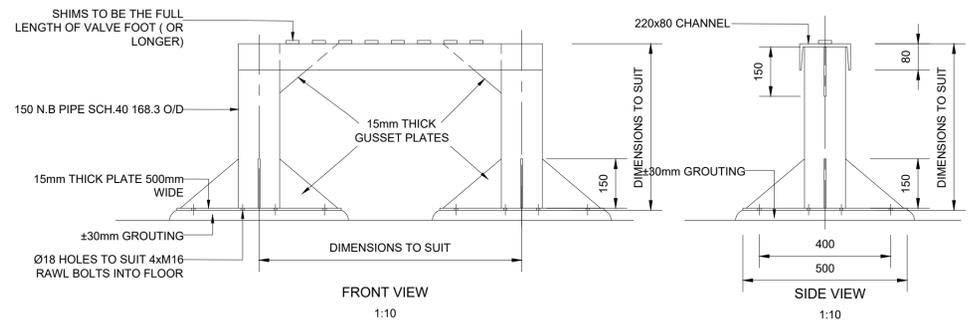
LAYER WORKS		
No.	LAYER DESCRIPTION	THICKNESS
L1.	TOP SOIL TO BE REINSTATED	150mm
L2.	50mm BLINDING (CONCRETE)	50mm
L3.	IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4.	IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm

SCHEDULE OF MECHANICAL EQUIPMENT PIPEWORK & FITTINGS	
THESE NOTES APPLY TO ALL THE SCHEDULES HEREFOLLOWING:	
1)	PIPE WALL THICKNESSES SHALL BE AS SPECIFIED IN THE TABLE ON THE SCHEDULE OF FITTINGS
2)	ALL FLANGES TO BE DRILLED SANS 1123-2003 (EDITION 3) TABLES 1000/3; 2500/3; 2500/3; 4000/3 AS DETAILED AND REFERRED TO AS 1000/3; 2500/3; 2500/3 AND 4000/3 IN THE SCHEDULE OF FITTINGS
3)	MAKE OF ALL VALVES TO BE APPROVED BY ENGINEER IN WRITING
4)	THE LENGTHS OF PIPES AND FITTINGS ARE APPROXIMATE ONLY - ACTUAL LENGTH TO BE ADVISED ONLY AFTER APPROVAL OF VALVES BY ENGINEER
5)	NO ALLOWANCES HAVE BEEN MADE IN PIPE AND FITTING DIMENSIONS FOR PACKINGS, GASKETS AND GAPS BETWEEN PIPEWORK - PROVISION FOR THESE TO BE MADE BY SUPPLIERS
6)	FLANGE HOLES TO BE DRILLED TO ALLOW EXACT ALIGNMENT VERTICALLY AND HORIZONTALLY, AS DETAILED ON THE DRAWINGS. OF ALL PIPEWORK AND EQUIPMENT
7)	WHERE PLAIN ENDS, FOR FLEXIBLE COUPLINGS, ARE CALLED FOR ON STEEL PIPES, THE DIMENSIONS OF SUCH PLAIN ENDS AND THE CORRESPONDING FLEXIBLE COUPLINGS ARE TO BE MATCHED
8)	ALL WELDING TO BE FULL STRENGTH, FULL PENETRATION

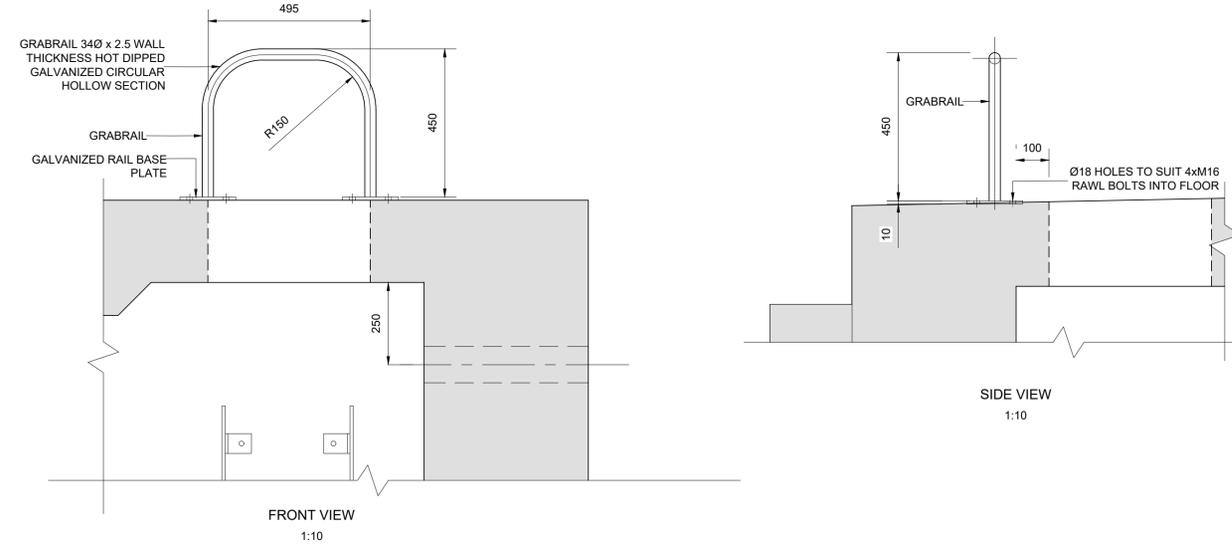
DESIGNED BY 	T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS: PO Box 9 Meyerton 1960	CLIENT MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/434 (2025-2028)	SCALE AS SHOWN	TYPE OF PLANNING TENDER DRAWINGS
	T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	MIDVAAL LOCAL MUNICIPALITY TEL: (016) 360 7400 FAX: (016) 360 7519	PROJECT TITLE CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		REVISION 0	PLAN No. AC345/19/CD01
No.	DATE	REVISIONS	BY	CHECKED BY	M. MATSHINYATSIMBI CHECKED	DATE:		DRAWING TITLE DN560 CHAMBER ARRANGEMENTS



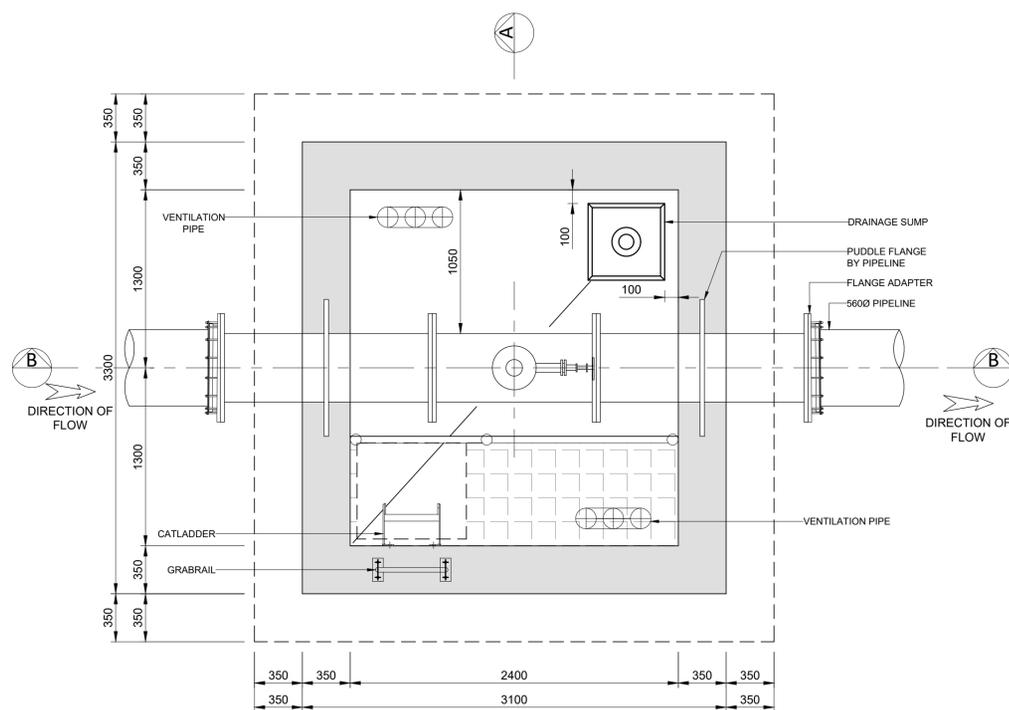
TYPICAL STEEL PIPE FITTINGS AND ITEM LIST (450ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)				
ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
①	560mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	1	STEEL GRADE 300 WA	
②	500Ø x 1550mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
③	500Ø x 1220mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3 AND OTHER END PAIN ENDED.	1	STEEL GRADE 300 WA	
④	500Ø FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE ACCORDING TO SANS 664:1999, PN 25, BOTH ENDS FLANGED TO SANS 1123 TABLE 2500/3	1	STEEL GRADE 300 WA	
⑤	500Ø DISMANTLING JOINT	1	STEEL GRADE 300 WA	
⑥	710Ø x 500mmØ STEEL REDUCER. BOTH ENDS FLANGED TABLE 2500/3	1	STEEL GRADE 300 WA	
⑦	710mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	1	STEEL GRADE 300 WA	



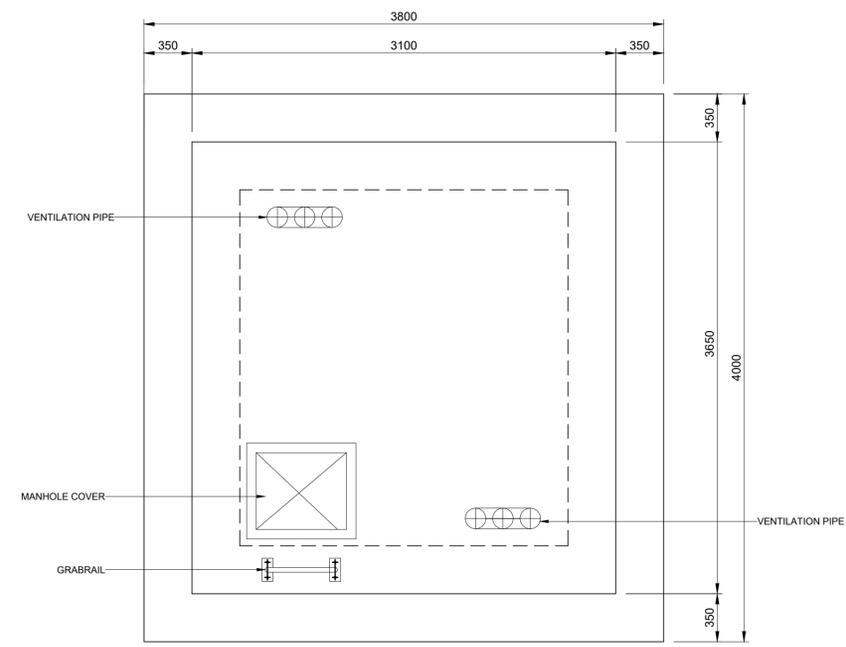
LAYER WORKS		
No.	LAYER DESCRIPTION	THICKNESS
L1.	TOP SOIL TO BE REINSTATED	150mm
L2.	50mm BLINDING (CONCRETE)	50mm
L3.	IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4.	IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm



DESIGNED BY				T. MONONYANE DESIGNED T. MONONYANE DRAWN M MATSHINYATSIMBI CHECKED		CONSULTANT RECOMMENDED for CONSULTING ENGINEER DATE:		CLIENT ADDRESS: PO Box 9 Meyerton 1960 TEL: (016) 360 7400 FAX: (016) 360 7519		CLIENT MIDVAAL LOCAL MUNICIPALITY PROJECT TITLE CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY DRAWING TITLE DN450 CHAMBER ARRANGEMENTS		CONTRACT No. 8/2/434 (2025-2028) SCALE AS SHOWN REVISION 0		TYPE OF PLANNING TENDER DRAWINGS PLAN No. AC345/19/CD02	
No.	DATE	REVISIONS		BY	CHECKED BY										

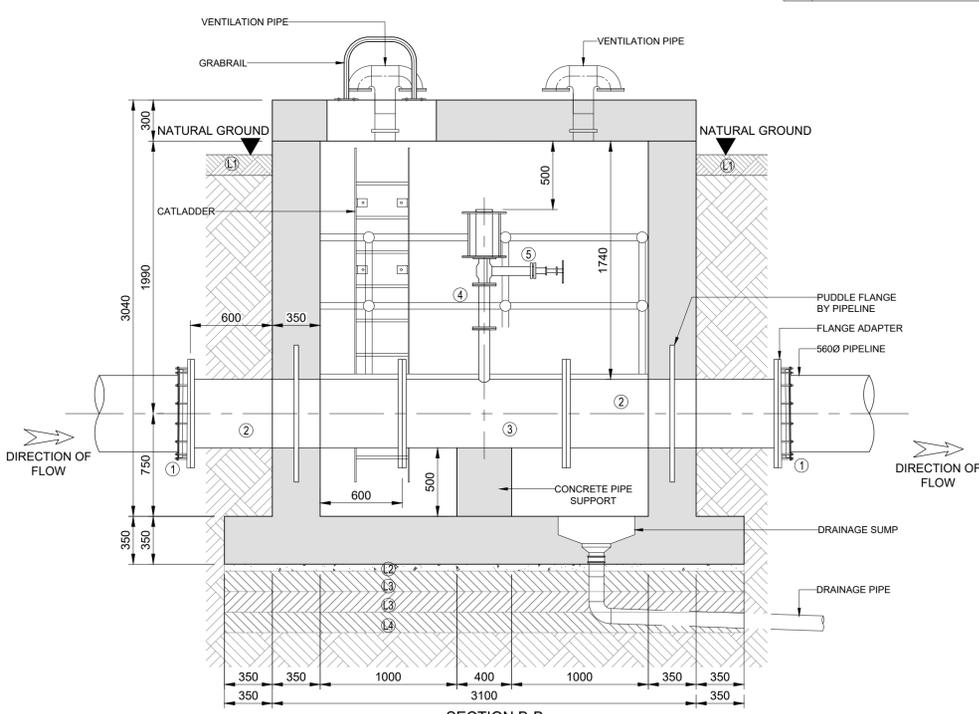


FLOOR PLAN
1:25

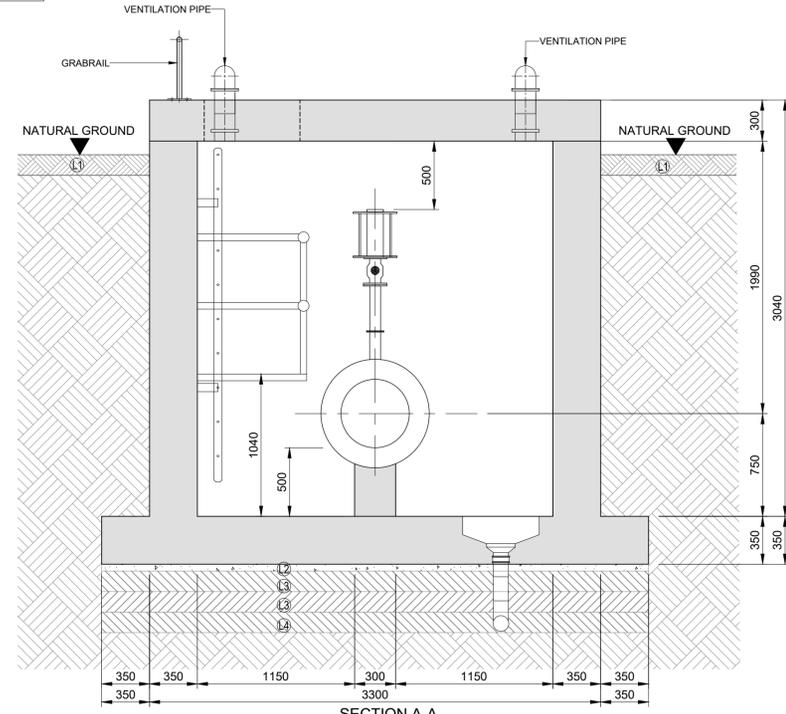


ROOF PLAN
1:25

LAYER WORKS		
No.	LAYER DESCRIPTION	THICKNESS
L1.	TOP SOIL TO BE REINSTATED	150mm
L2.	50mm BLINDING (CONCRETE)	50mm
L3.	IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4.	IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm

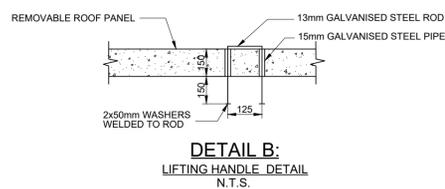


SECTION B-B
1:25

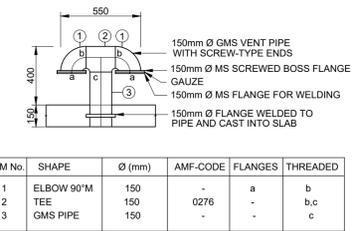


SECTION A-A
1:25

TYPICAL STEEL PIPE FITTINGS AND ITEM LIST (560ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)				
ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
①	560mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	2	STEEL GRADE 300 WA	
②	500Ø x 1550mm LONG STEEL PIPE WITH PUDDLE FLANGE, ONE END PLAIN AND FLANGED TO SABS 1123 - 2500/3	2	STEEL GRADE 300 WA	
③	500x 500 x 80 ND FLANGED MILD STEEL EQUAL TEE. BOTH ENDS FLANGED TO SABS 1123 - 2500/3	1	STEEL GRADE 300 WA	
④	80 x 320 mm LONG FLANGED MILD STEEL PIPE PN25. BOTH ENDS FLANGED TO SABS 1123 - 2500/3.	1	STEEL GRADE 300 WA	
⑤	80Ømm FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE, NON-RISING SPINDLE, CLOCKWISE CLOSING, BALL THRUST COLLAR AND HANDWHEEL ACCORDING TO SANS 664:1999, PN25. BOTH ENDS FLANGED TO SABS 1123 - 2500/3.	1	SPHEROIDAL GRAPHITE IRON	
⑥	'VENT-O-MAT' (OR APPROVED SIMILAR) MODEL 080 RBX 1601 LARGE ORIFICE AIR. RELEASE AND VACUUM BREAK VALVE WITH ANTI-SHOCK ORIFICE MECHANISM AND TEST COCK. VALVE TO BE SUPPLIED COMPLETE WITH MATING FLANGE FOR COUPLING TO FITTING '3'	1		



DETAIL B:
LIFTING HANDLE DETAIL
N.T.S.



DETAIL A:
AIR BREATHER DETAIL - 150mm Ø GMS VENT PIPE
N.T.S.

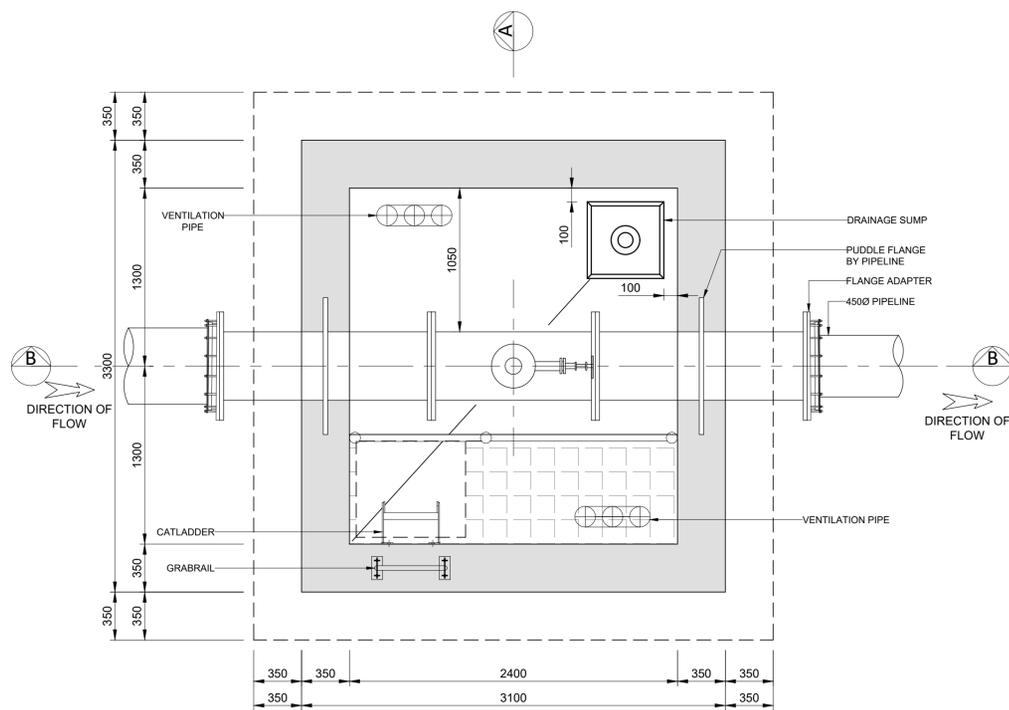
ITEM No.	SHAPE	Ø (mm)	AMF-CODE	FLANGES	THREADED
1	ELBOW 90°M	150	-	a	b
2	TEE	150	0276	-	b,c
3	GMS PIPE	150	-	-	c

SCHEDULE OF MECHANICAL EQUIPMENT PIPEWORK & FITTINGS	
THESE NOTES APPLY TO ALL THE SCHEDULES HEREFOLLOWING:	
1)	PIPE WALL THICKNESSES SHALL BE AS SPECIFIED IN THE TABLE ON THE SCHEDULE OF FITTINGS
2)	ALL FLANGES TO BE DRILLED SANS 1123-2003 (EDITION 3) TABLES 1000/3, 2500/3, 2500/3, 4000/3 AS DETAILED AND REFERRED TO AS 1000/3, 2500/3, 2500/3 AND 4000/3 IN THE SCHEDULE OF FITTINGS
3)	MAKE OF ALL VALVES TO BE APPROVED BY ENGINEER IN WRITING
4)	THE LENGTHS OF PIPES AND FITTINGS ARE APPROXIMATE ONLY - ACTUAL LENGTH TO BE ADVISED ONLY AFTER APPROVAL OF VALVES BY ENGINEER
5)	NO ALLOWANCES HAVE BEEN MADE IN PIPE AND FITTING DIMENSIONS FOR PACKINGS, GASKETS AND GAPS BETWEEN PIPEWORK - PROVISION FOR THESE TO BE MADE BY SUPPLIERS
6)	FLANGE HOLES TO BE DRILLED TO ALLOW EXACT ALIGNMENT VERTICALLY AND HORIZONTALLY, AS DETAILED ON THE DRAWINGS, OF ALL PIPEWORK AND EQUIPMENT
7)	WHERE PLAIN ENDS, FOR FLEXIBLE COUPLINGS, ARE CALLED FOR ON STEEL PIPES, THE DIMENSIONS OF SUCH PLAIN ENDS AND THE CORRESPONDING FLEXIBLE COUPLINGS ARE TO BE MATCHED
8)	ALL WELDING TO BE FULL STRENGTH, FULL PENETRATION

DESIGNED BY		CONSULTANT		RECOMMENDED		CLIENT ADDRESS:		CLIENT		CONTRACT No. 8/2/434 (2025-2028)		SCALE		TYPE OF PLANNING	
T. MONONYANE		MIDVAAL LOCAL MUNICIPALITY		MIDVAAL LOCAL MUNICIPALITY		PO Box 9 Meyerton 1960		MIDVAAL LOCAL MUNICIPALITY		PROJECT TITLE		AS SHOWN		TENDER DRAWINGS	
T. MONONYANE		MIDVAAL LOCAL MUNICIPALITY		MIDVAAL LOCAL MUNICIPALITY		TEL: (016) 360 7400 FAX: (016) 360 7519		MIDVAAL LOCAL MUNICIPALITY		DRAWING TITLE		REVISION		PLAN No.	
M MATSHINYATSIMBI		MIDVAAL LOCAL MUNICIPALITY		MIDVAAL LOCAL MUNICIPALITY				MIDVAAL LOCAL MUNICIPALITY		AIR VALVE CHAMBER 560Ø		0		AC345/19/SD01	
CHECKED BY		DATE:		DATE:											

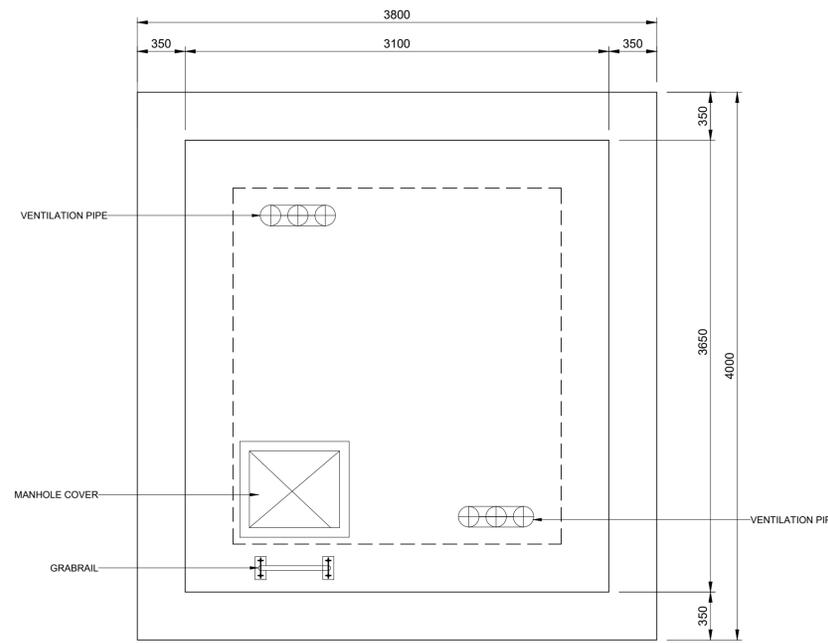


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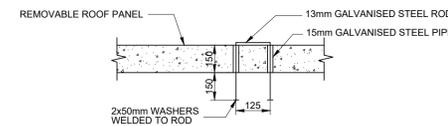


FLOOR PLAN
1:25

LAYER WORKS		
No.	LAYER DESCRIPTION	THICKNESS
L1.	TOP SOIL TO BE REINSTATED	150mm
L2.	50mm BLINDING (CONCRETE)	50mm
L3.	IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4.	IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm

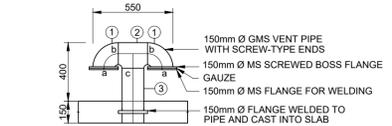


ROOF PLAN
1:25



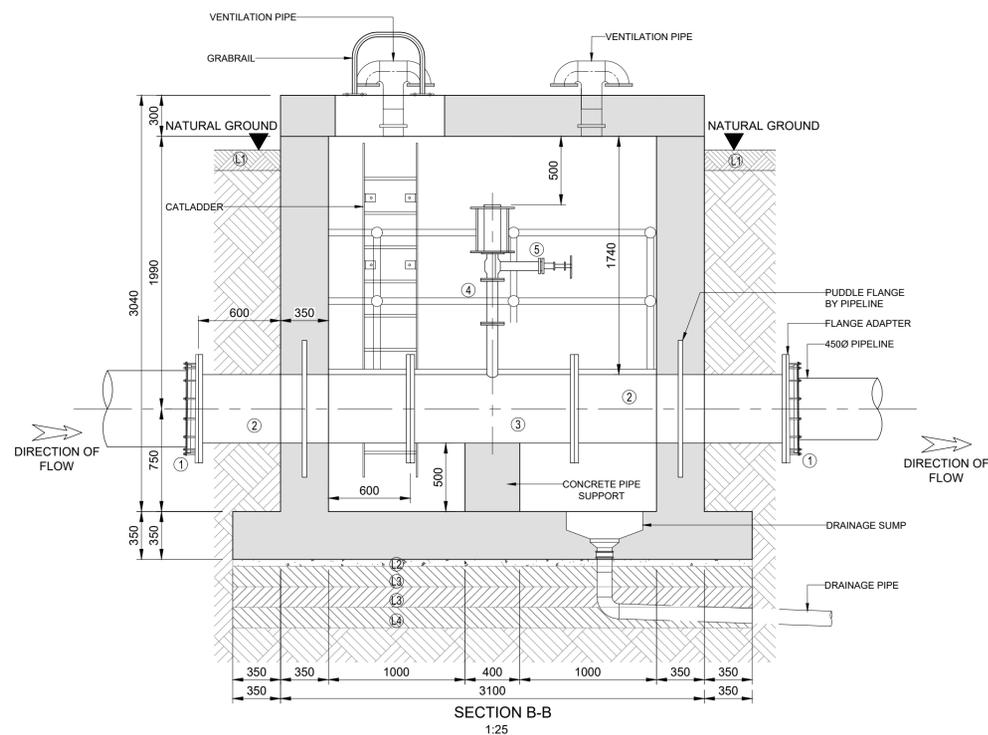
DETAIL B:
LIFTING HANDLE DETAIL
N.T.S.

TYPICAL STEEL PIPE FITTINGS AND ITEM LIST (450ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)				
ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
①	450mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	2	STEEL GRADE 300 WA	
②	500Ø x 1550mm LONG STEEL PIPE WITH PUDDLE FLANGE, ONE END PLAIN AND FLANGED TO SABS 1123 - 2500/3	2	STEEL GRADE 300 WA	
③	500x 500 x 80 ND FLANGED MILD STEEL EQUAL TEE. BOTH ENDS FLANGED TO SABS 1123 - 2500/3	1	STEEL GRADE 300 WA	
④	80 x 320 mm LONG FLANGED MILD STEEL PIPE, PN25. BOTH ENDS FLANGED TO SABS 1123 - 2500/3.	1	STEEL GRADE 300 WA	
⑤	80Ømm FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE, NON-RISING SPINDLE, CLOCKWISE CLOSING, BALL THRUST COLLAR AND HANDWHEEL ACCORDING TO SANS 664:1999, PN25. BOTH ENDS FLANGED TO SABS 1123 - 2500/3.	1	SPHEROIDAL GRAPHITE IRON	
⑥	'VENT-O-MAT' (OR APPROVED SIMILAR) MODEL 080 RBX 1601 LARGE ORIFICE AIR. RELEASE AND VACUUM BREAK VALVE WITH ANTI-SHOCK ORIFICE MECHANISM AND TEST COCK. VALVE TO BE SUPPLIED COMPLETE WITH MATING FLANGE FOR COUPLING TO FITTING 3'	1		

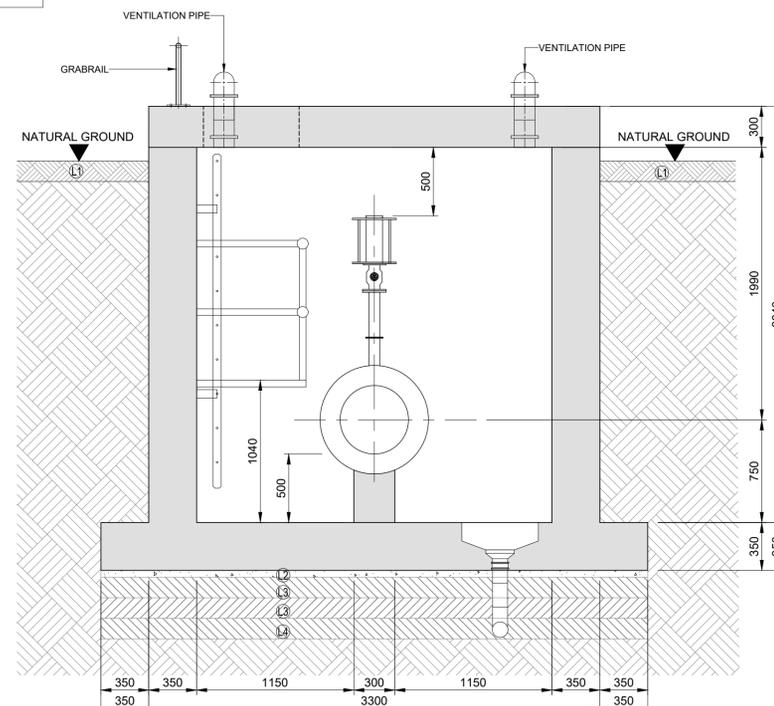


ITEM No.	SHAPE	Ø (mm)	AMF-CODE	FLANGES	THREADED
1	ELBOW 90°M	150	-	a	b
2	TEE	150	0276	-	b,c
3	GMS PIPE	150	-	-	c

DETAIL A:
AIR BREATHER DETAIL - 150mm Ø GMS VENT PIPE
N.T.S.



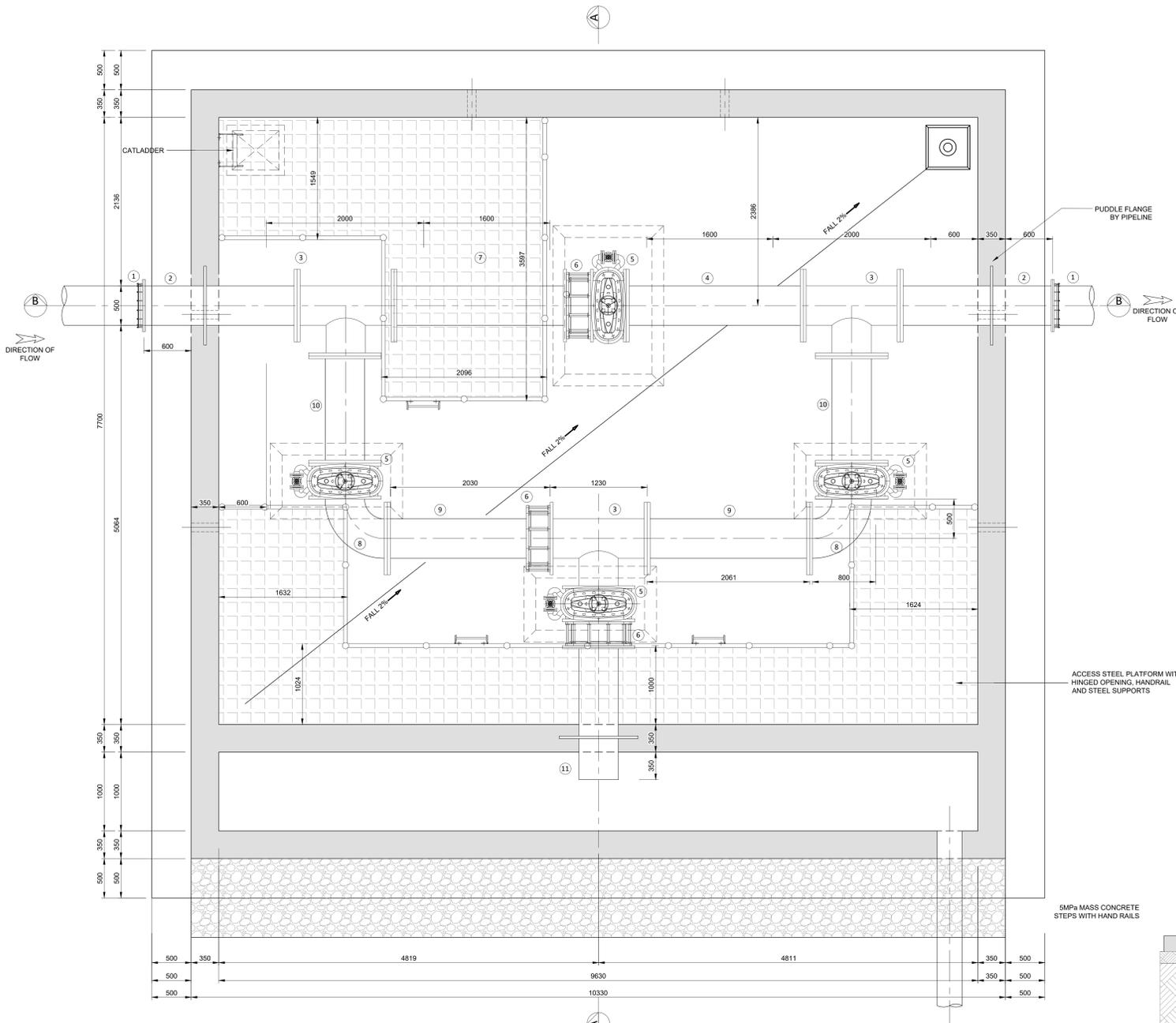
SECTION B-B
1:25



SECTION A-A
1:25

SCHEDULE OF MECHANICAL EQUIPMENT PIPEWORK & FITTINGS	
THESE NOTES APPLY TO ALL THE SCHEDULES HEREFOLLOWING:	
1)	PIPE WALL THICKNESSES SHALL BE AS SPECIFIED IN THE TABLE ON THE SCHEDULE OF FITTINGS
2)	ALL FLANGES TO BE DRILLED SANS 1123-2003 (EDITION 3) TABLES 1000/3, 2500/3, 2500/3, 4000/3 AS DETAILED AND REFERRED TO AS 1000/3, 2500/3, 2500/3 AND 4000/3 IN THE SCHEDULE OF FITTINGS
3)	MAKE OF ALL VALVES TO BE APPROVED BY ENGINEER IN WRITING
4)	THE LENGTHS OF PIPES AND FITTINGS ARE APPROXIMATE ONLY - ACTUAL LENGTH TO BE ADVISED ONLY AFTER APPROVAL OF VALVES BY ENGINEER
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6)	FLANGE HOLES TO BE DRILLED TO ALLOW EXACT ALIGNMENT VERTICALLY AND HORIZONTALLY, AS DETAILED ON THE DRAWINGS. OF ALL PIPEWORK AND EQUIPMENT
7)	WHERE PLAIN ENDS, FOR FLEXIBLE COUPLINGS, ARE CALLED FOR ON STEEL PIPES, THE DIMENSIONS OF SUCH PLAIN ENDS AND THE CORRESPONDING FLEXIBLE COUPLINGS ARE TO BE MATCHED
8)	ALL WELDING TO BE FULL STRENGTH, FULL PENETRATION

DESIGNED BY		T. MONONYANE DESIGNED		CONSULTANT	RECOMMENDED	CLIENT ADDRESS:	CLIENT MIDVAAL LOCAL MUNICIPALITY		CONTRACT No. 8/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
DRAWN		T. MONONYANE DRAWN		for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	MIDVAAL LOCAL MUNICIPALITY	PROJECT TITLE			AS SHOWN	TENDER DRAWINGS
CHECKED		M. MATSHINYATSIMBI CHECKED		DATE:	DATE:	PO Box 9 Meyerton 1960 TEL: (016) 360 7400 FAX: (016) 360 7519	DRAWING TITLE			REVISION	PLAN No.
REVISIONS							CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY			0	AC345/19/SD02
BY							AIR VALVE CHAMBER 450Ø				



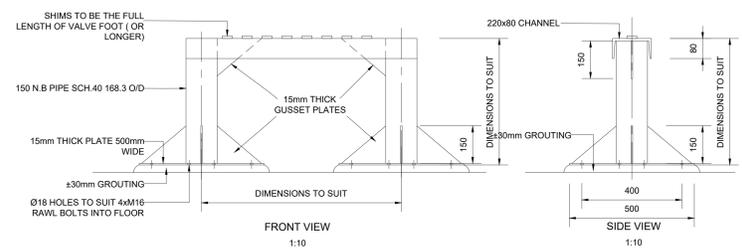
FLOOR PLAN
1:25

**TYPICAL STEEL PIPE FITTINGS AND ITEM LIST
(1000ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)**

ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
1	560mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	2	STEEL GRADE 300 WA	
2	500Ø x 1235mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
3	500mmØ x 500mmØ EQUAL TEE FLANGED TO SANS 1123 TABLE 2500/3	3	STEEL GRADE 300 WA	
4	500Ø x 2245mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	1	STEEL GRADE 300 WA	
5	500Ø FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE ACCORDING TO SANS 664:1999, PN 25, BOTH ENDS FLANGED TO SANS 1123 TABLE 2500/3	4	STEEL GRADE 300 WA	
6	500Ø DISMANTLING JOINT	3	STEEL GRADE 300 WA	
7	500Ø x 2190mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA	
8	600Ø 90° MILD STEEL PIPE BEND, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
9	500Ø x 2060mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
10	500Ø x 1360mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
11	500Ø x 1720mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA	

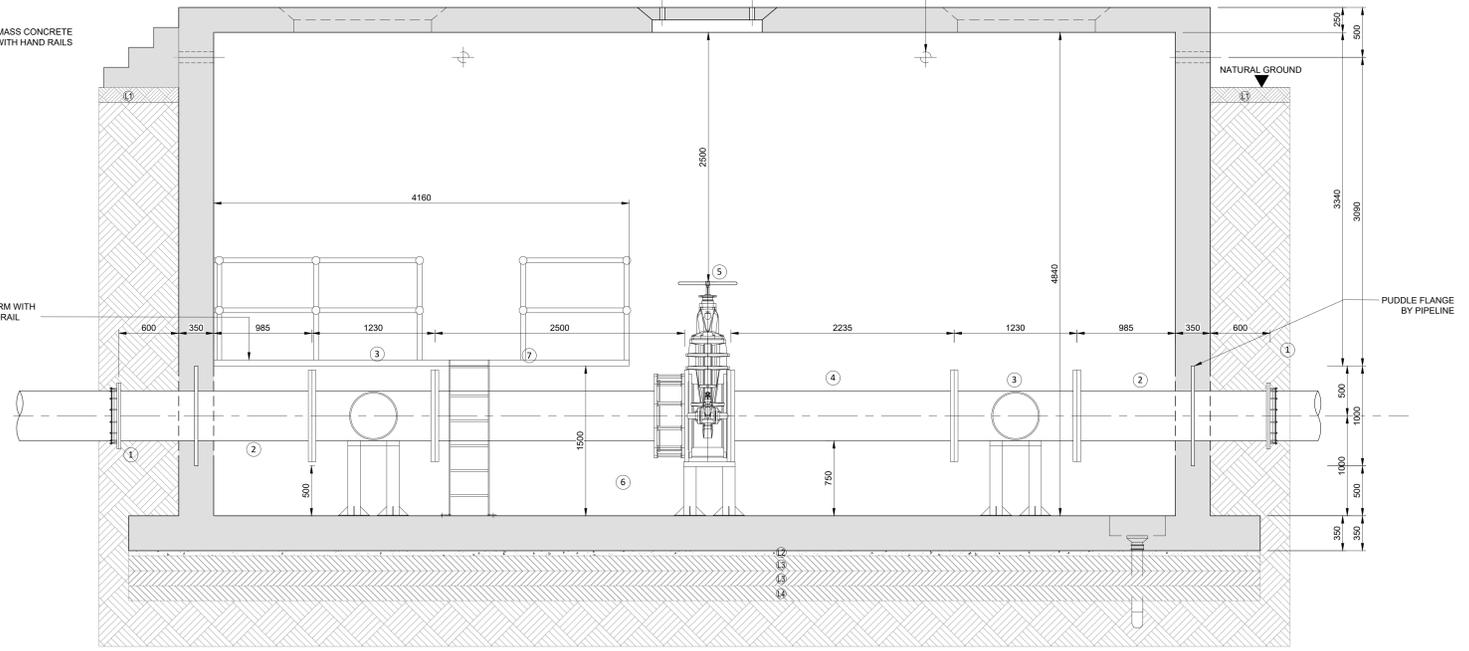
- CONCRETE NOTES:**
- CONCRETE
 - STRUCTURAL TO BE GRADE 25/19
 - BLINDING TO BE 15/19
 - BENCHING TO BE 1:4 CEMENT : SAND SCREED
 - CHAMBER TO BE WATERTIGHT
 - 75mm BLINDING UNDER ALL FOUNDATIONS
 - CONCRETE FINISHES
 - ALL EXPOSED CONCRETE EDGES TO HAVE 30x30mm CHAMFER
 - SMOOTH OFF-SHUTTER TO EXPOSE VERTICAL FACES
 - ROUGH OFF-SHUTTER TO UNEXPOSED VERTICAL FACES
 - WOOD FLOAT TO TOP OF WALLS AND ROOF SLAB
 - STEEL FLOAT TO TOP OF FLOOR BENCHING
 - 6mm RUBBER INSERTION BETWEEN VALVE FEET & CONCRETE PLINTH
 - ALL METALWORK TO BE CARBOLINE/CARBOLGUARD 891 EPOXY COATED

- PIPEWORK NOTES:**
- STEEL PIPES UP TO 200 NB TO BE IN ACCORDANCE WITH SABS 62 - HEAVY DUTY STEEL PIPES
 - OVER 200 NB TO BE IN ACCORDANCE WITH SABS 719 IN GRADE C STEEL
 - PIPE CORROSION PROTECTION
 - INTERNAL: EPOXY OR CEMENT MORTAR LINED (AS SPECIFIED)
 - EXTERNAL (IN CHAMBERS): EPOXY COATING (MINIMUM 250 MICRON DFT)
 - EXTERNAL (BURIED): BITUMEN FIBREGLASS
 - THE FOLLOWING ABBREVIATIONS APPLY:
 - PE - PLAIN-ENDED
 - FLG/PE - FLANGED AND PLAIN-ENDED
 - CF - CENTRE TO PLAIN END
 - C/F - CENTRE TO FACE
 - FF - FACE TO FACE
 - OD - OUTSIDE DIAMETER
 - FLANGES TO BE IN ACCORDANCE WITH TABLE 2500/3 FLANGES TO BE AS SPECIFIED ON LONGITUDINAL SECTIONS
 - JOINTING GASKETS TO BE CAF FULL FACE 3mm THICK. BOLTS TO BE GRADE 4.5 HOT-DIP GALVANISED
 - FITTINGS TO BE REINFORCED AS NECESSARY



FRONT VIEW
1:10

SIDE VIEW
1:10



SECTION B-B
1:25

No.	DATE	REVISIONS	BY	CHECKED

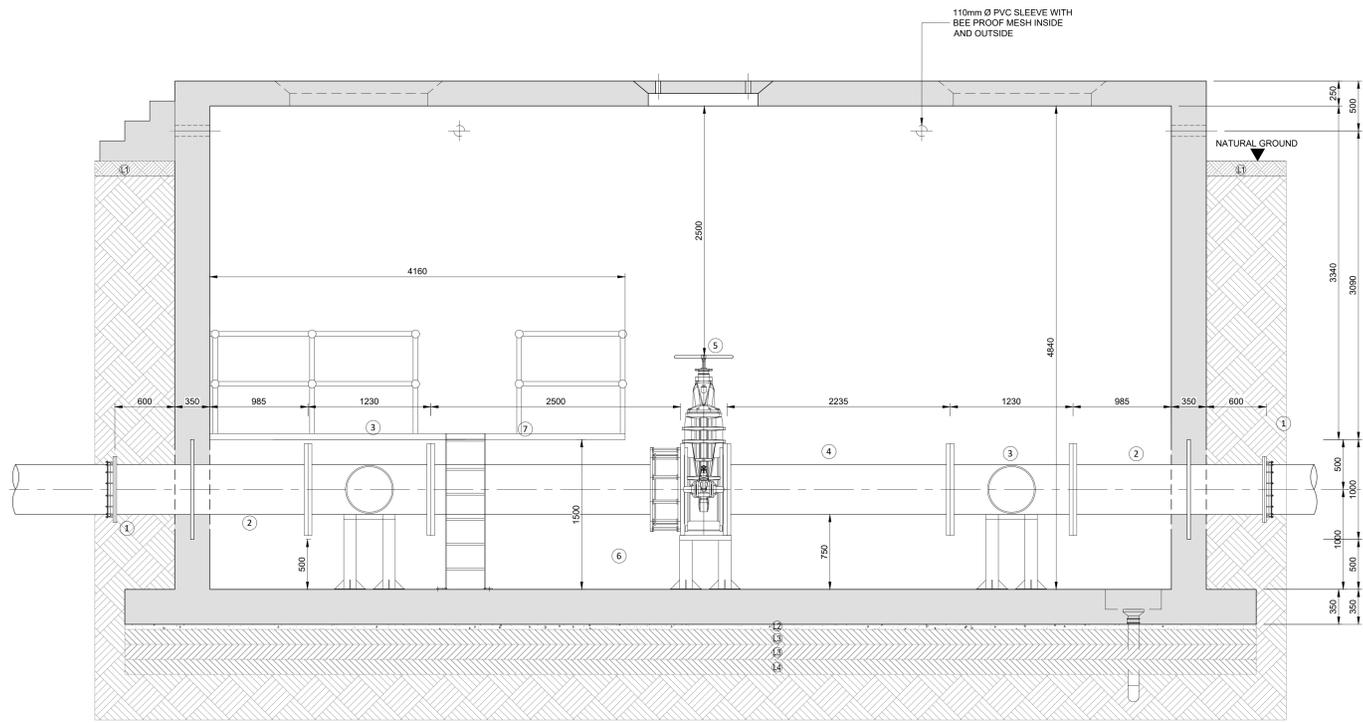
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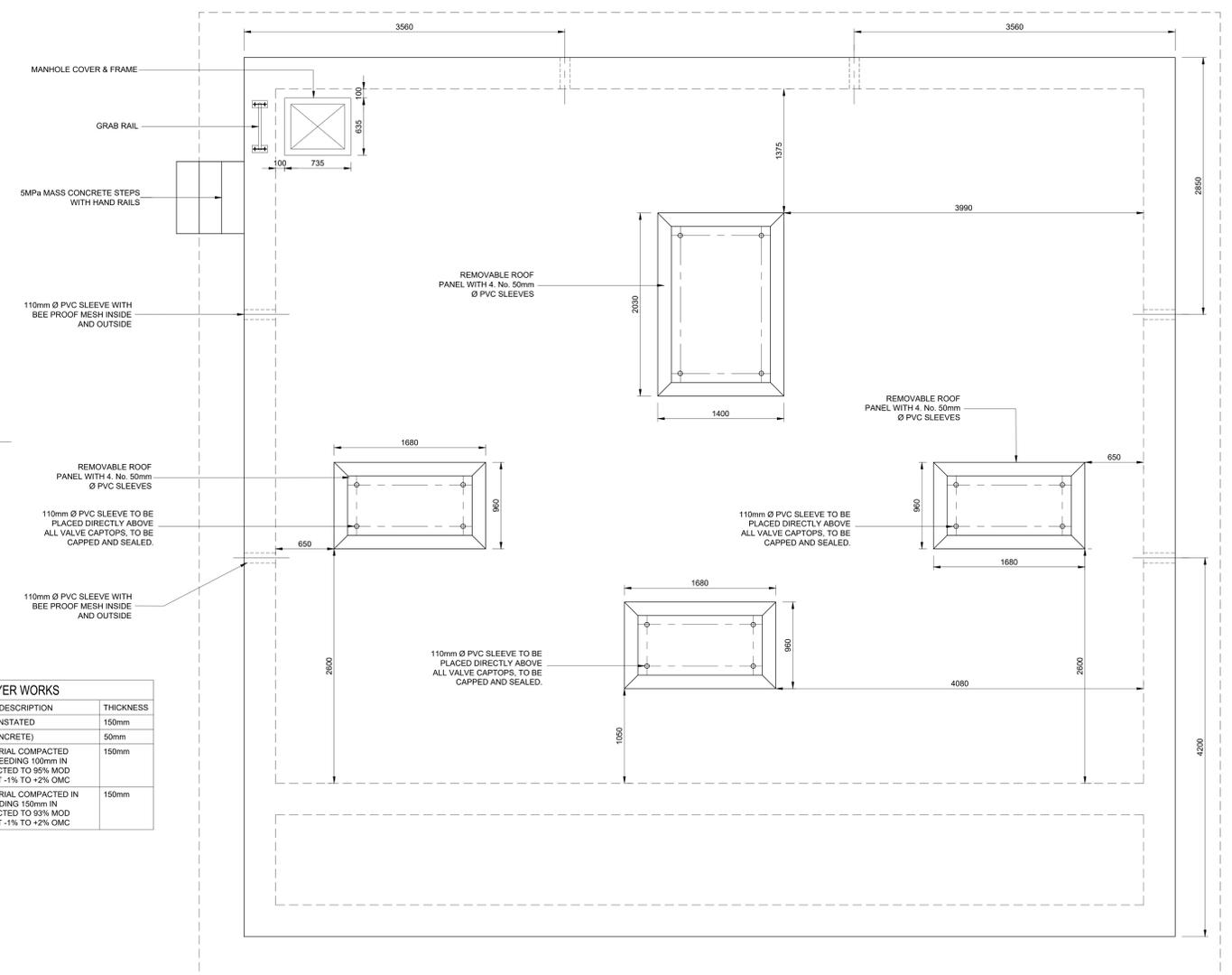
P.O. BOX 19964
SUNWARD PARK
1470
Tel: (011) 8076720
Fax: (011) 876 7434

T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960
M. MATSHINYATSIMBI CHECKED	DATE:	DATE:	TEL: (016) 360 7400 FAX: (016) 360 7519

MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY	AS SHOWN	TENDER DRAWINGS
DRAWING TITLE	SCOUR VALVE CHAMBER DN560 (SHEET 1 OF 2)	REVISION	PLAN No.
		0	AC345/19/SD03

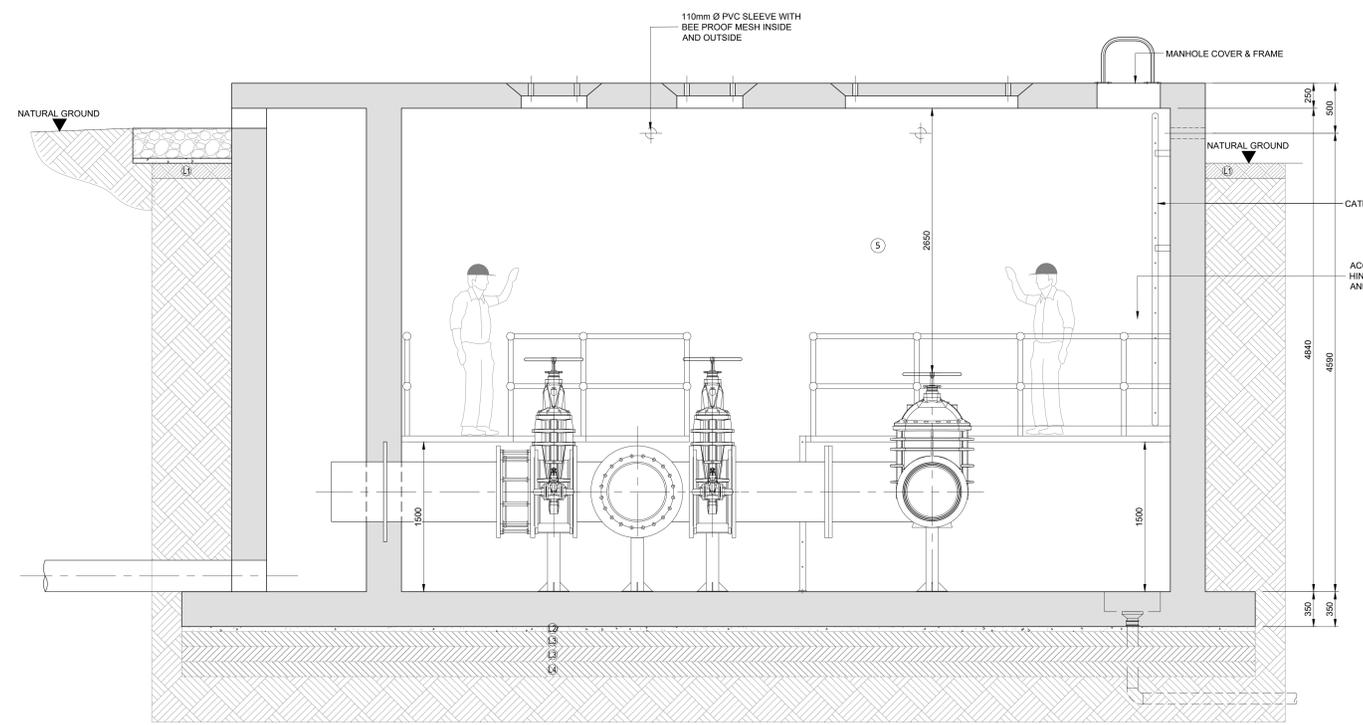
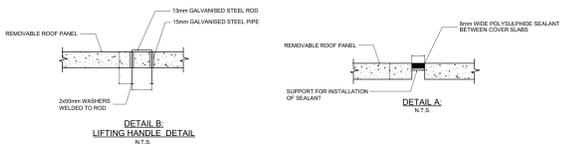


SECTION B-B
1:25

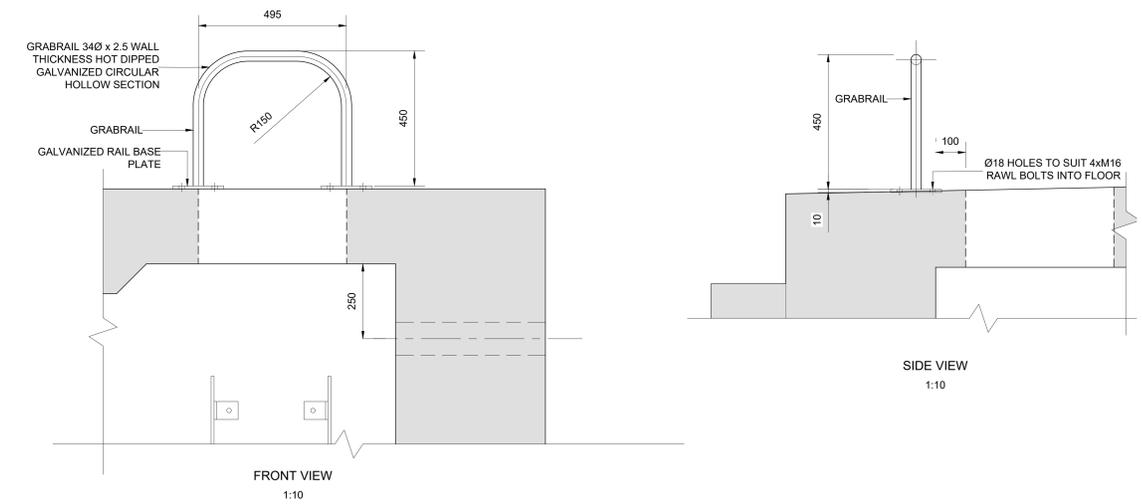


COVER SLAB DETAILS
1:25

LAYER WORKS	
No.	THICKNESS
L1. TOP SOIL TO BE REINSTATED	150mm
L2. 50mm BLINDING (CONCRETE)	50mm
L3. IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4. IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm



SECTION A-A
1:25



FRONT VIEW
1:10

SIDE VIEW
1:10

No.	DATE	REVISIONS	BY	CHECKED BY

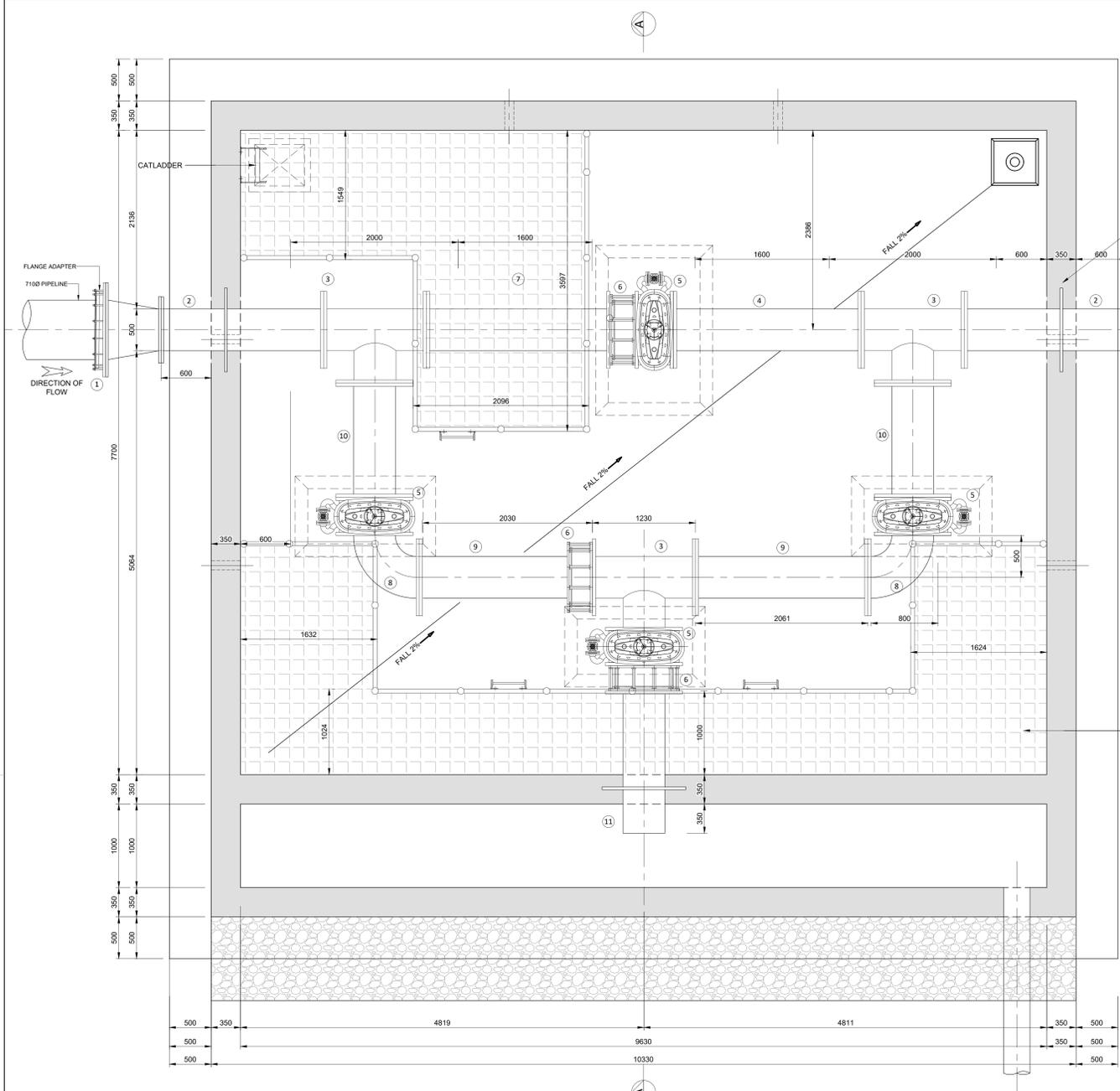
DESIGNED BY

P.O. BOX 19964
SUNWARD PARK
1470

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Fax: (011) 876 7434

T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960
M MATSHINYATSIMBI CHECKED	DATE:	DATE:	TEL: (016) 360 7400 FAX: (016) 360 7519

CLIENT	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		AS SHOWN	TENDER DRAWINGS
DRAWING TITLE	SCOUR VALVE CHAMBER DN560 (SHEET 2 OF 2)		REVISION	PLAN No.
			0	AC345/19/SD04

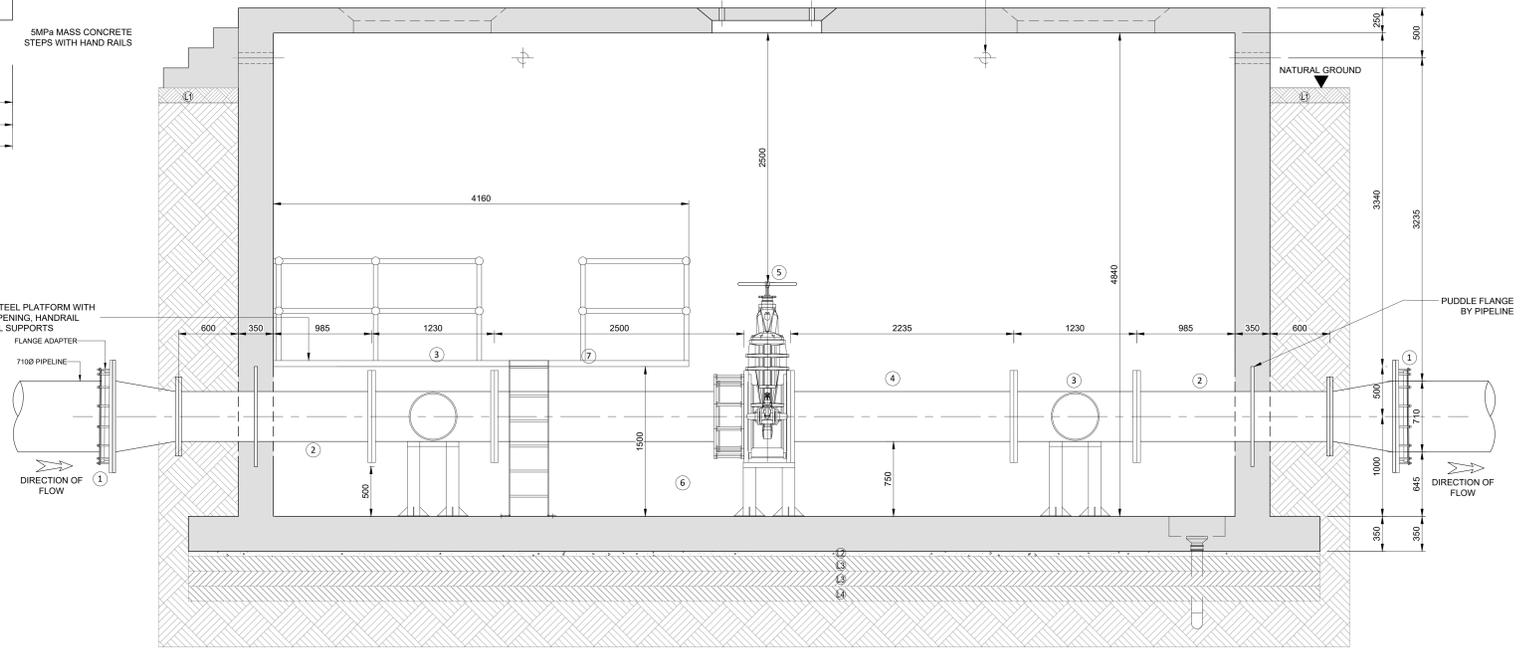
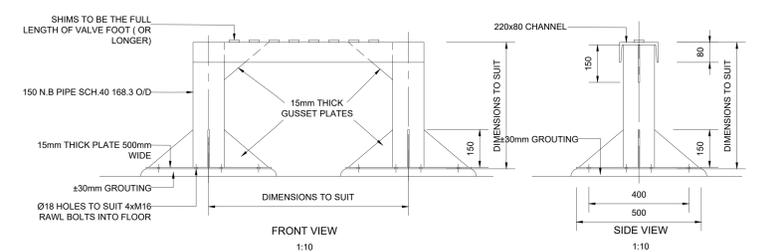


TYPICAL STEEL PIPE FITTINGS AND ITEM LIST
(1000ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)

ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
1	560mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	2	STEEL GRADE 300 WA	
2	500Ø x 1935mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
3	500mmØ x 500mmØ EQUAL TEE FLANGED TO SANS 1123 TABLE 2500/3	3	STEEL GRADE 300 WA	
4	500Ø x 2245mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	1	STEEL GRADE 300 WA	
5	500Ø FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE ACCORDING TO SANS 664:1999, PN 25, BOTH ENDS FLANGED TO SANS 1123 TABLE 2500/3	4	STEEL GRADE 300 WA	
6	500Ø DISMANTLING JOINT	3	STEEL GRADE 300 WA	
7	500Ø x 2190mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA	
8	600Ø 90° MILD STEEL PIPE BEND, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
9	500Ø x 2060mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
10	500Ø x 1360mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
11	500Ø x 1720mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA	
12	710 x 500 mm FLANGED MILD STEEL PIPE REDUCER, PN25, BOTH ENDS FLANGED TO SANS 1123 - 2500/3.	2	STEEL GRADE 300 WA	

- CONCRETE NOTES:**
- CONCRETE
 - STRUCTURAL TO BE GRADE 25/19
 - BENCHING TO BE 15/19
 - BENCHING TO BE 1:4 CEMENT : SAND SCREED
 - CHAMBER TO BE WATERTIGHT
 - 75mm BLINDING UNDER ALL FOUNDATIONS
 - CONCRETE FINISHES:
 - ALL EXPOSED CONCRETE EDGES TO HAVE 30x30mm CHAMFER
 - SMOOTH OFF-SHUTTER TO EXPOSE VERTICAL FACES
 - ROUGH OFF-SHUTTER TO UNEXPOSED VERTICAL FACES
 - WOOD FLOAT TO TOP OF WALLS AND ROOF SLAB
 - STEEL FLOAT TO TOP OF FLOOR BENCHING
 - 6mm RUBBER INSERTION BETWEEN VALVE FEET & CONCRETE PLINTH
 - ALL METALWORK TO BE CARBOLINE/CARBOGUARD 891 EPOXY COATED

- PIPEWORK NOTES:**
- STEEL PIPES UP TO 200 NB TO BE IN ACCORDANCE WITH SABS 62 - HEAVY DUTY STEEL PIPES
 - OVER 200 NB TO BE IN ACCORDANCE WITH SABS 719 IN GRADE C STEEL
 - PIPE CORROSION PROTECTION
 - INTERNAL: EPOXY OR CEMENT MORTAR LINED (AS SPECIFIED)
 - EXTERNAL (IN CHAMBERS): EPOXY COATING (MINIMUM 250 MICRON DFT)
 - EXTERNAL (BURIED): BITUMEN FIBREGLASS
 - THE FOLLOWING ABBREVIATIONS APPLY:
 - PE - PLAIN ENDED
 - FLGPE - FLANGED AND PLAIN ENDED
 - CFE - CENTRE TO PLAIN END
 - CF - CENTRE TO FACE
 - FF - FACE TO FACE
 - OD - OUTSIDE DIAMETER
 - FLANGES TO BE IN ACCORDANCE WITH TABLE 2500/3 FLANGES TO BE AS SPECIFIED ON LONGITUDINAL SECTIONS
 - JOINTING GASKETS TO BE CAF FULL FACE 3mm THICK. BOLTS TO BE GRADE 4.5 HOT-DIP GALVANISED
 - FITTINGS TO BE REINFORCED AS NECESSARY



No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY



T. MONONYANE
DESIGNED
T. MONONYANE
DRAWN
M. MATSHINYATSIMBI
CHECKED

P.O. BOX 19964
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Fax: (011) 876 7434

CONSULTANT
RECOMMENDED
CLIENT ADDRESS:

T. MONONYANE
DESIGNED
T. MONONYANE
DRAWN
M. MATSHINYATSIMBI
CHECKED

for CONSULTING ENGINEER
for HEAD OF DEPARTMENT

DATE:.....
DATE:.....

CLIENT
PROJECT TITLE
DRAWING TITLE

MIDVAAL LOCAL MUNICIPALITY
PO Box 9
Meyerton
1960
TEL: (016) 360 7400
FAX: (016) 360 7519

CONTRACT No. 8/2/2/434 (2025-2028)

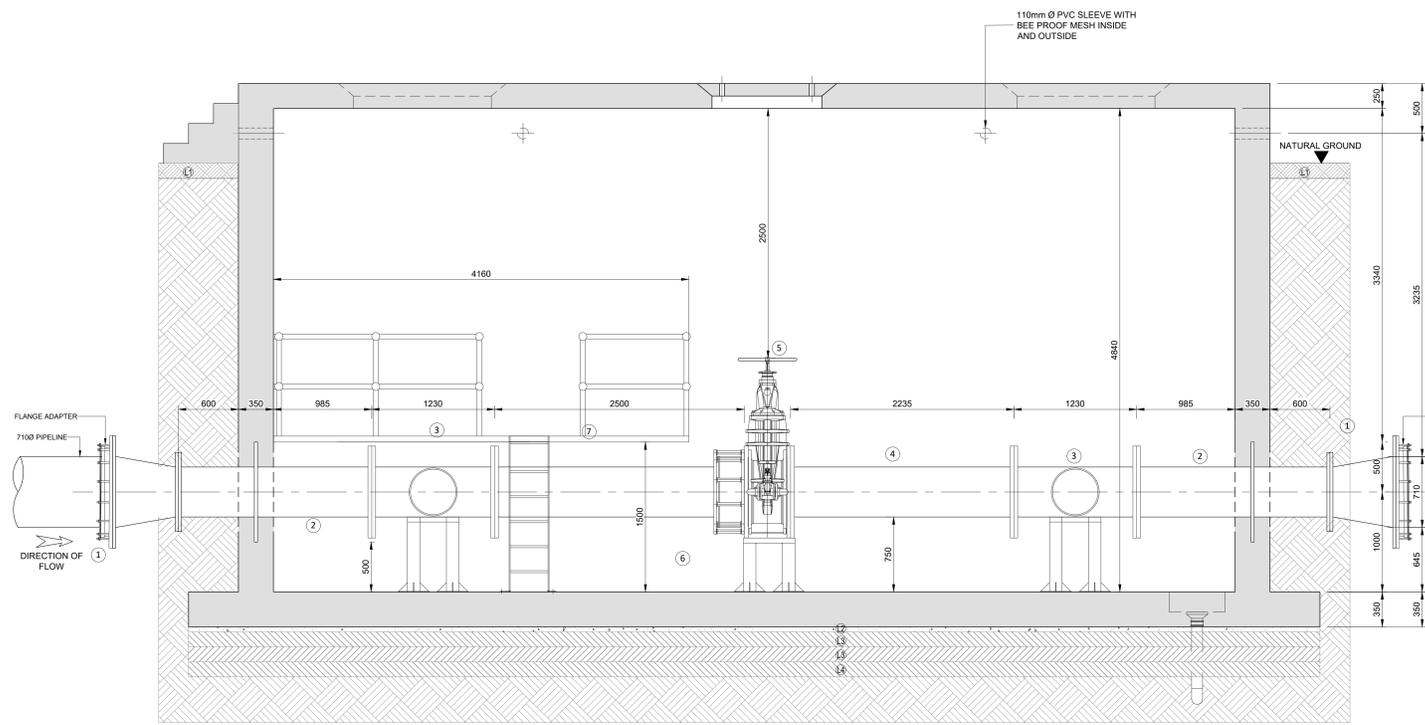
MIDVAAL LOCAL MUNICIPALITY
CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY

SCALE
AS SHOWN

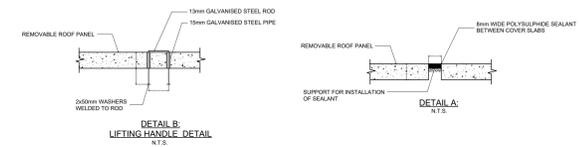
REVISION
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TYPE OF PLANNING
TENDER DRAWINGS
PLAN No.
AC345/19/SD05

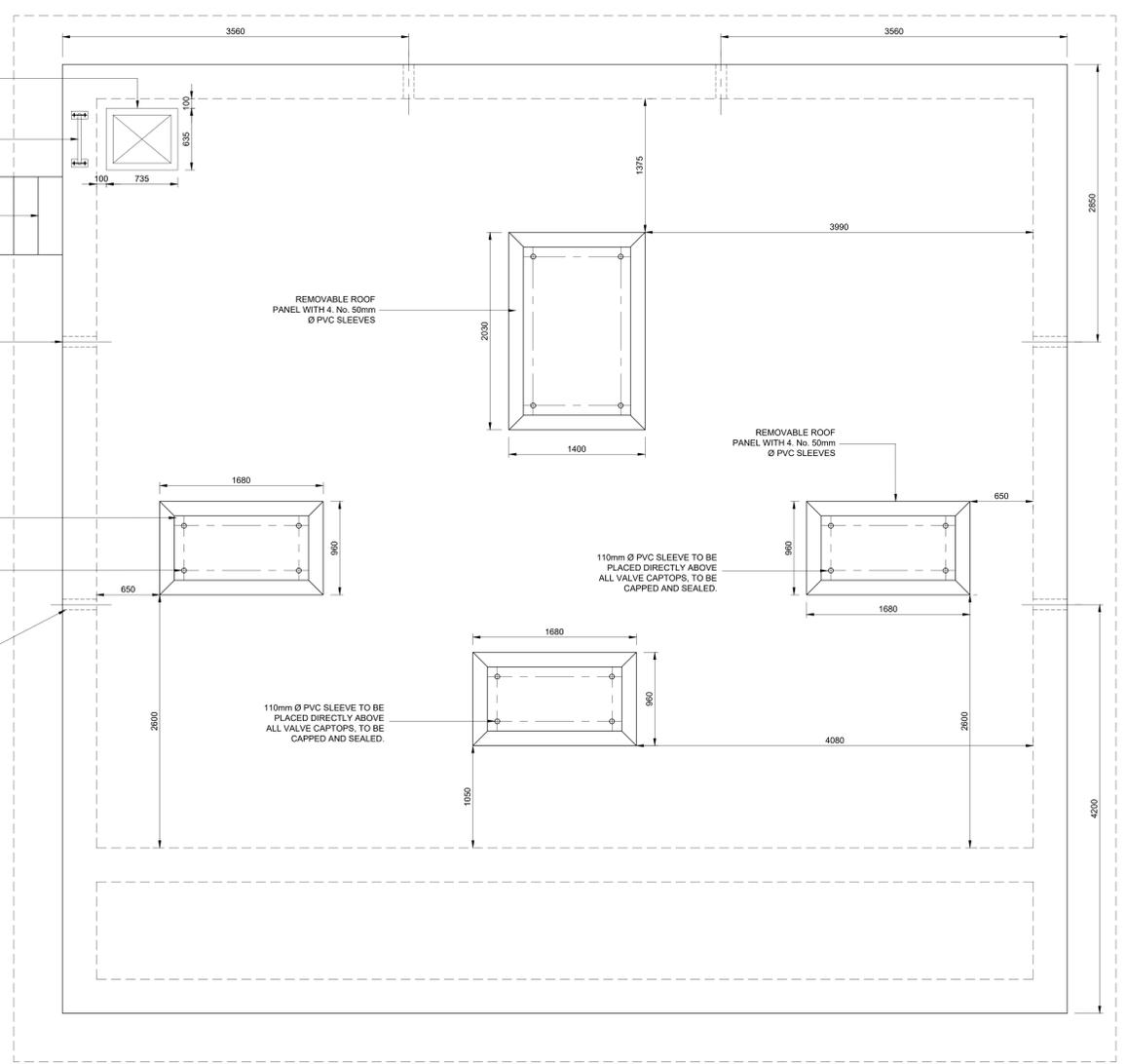
SCOUR VALVE CHAMBER DN710 (SHEET 1 OF 2)



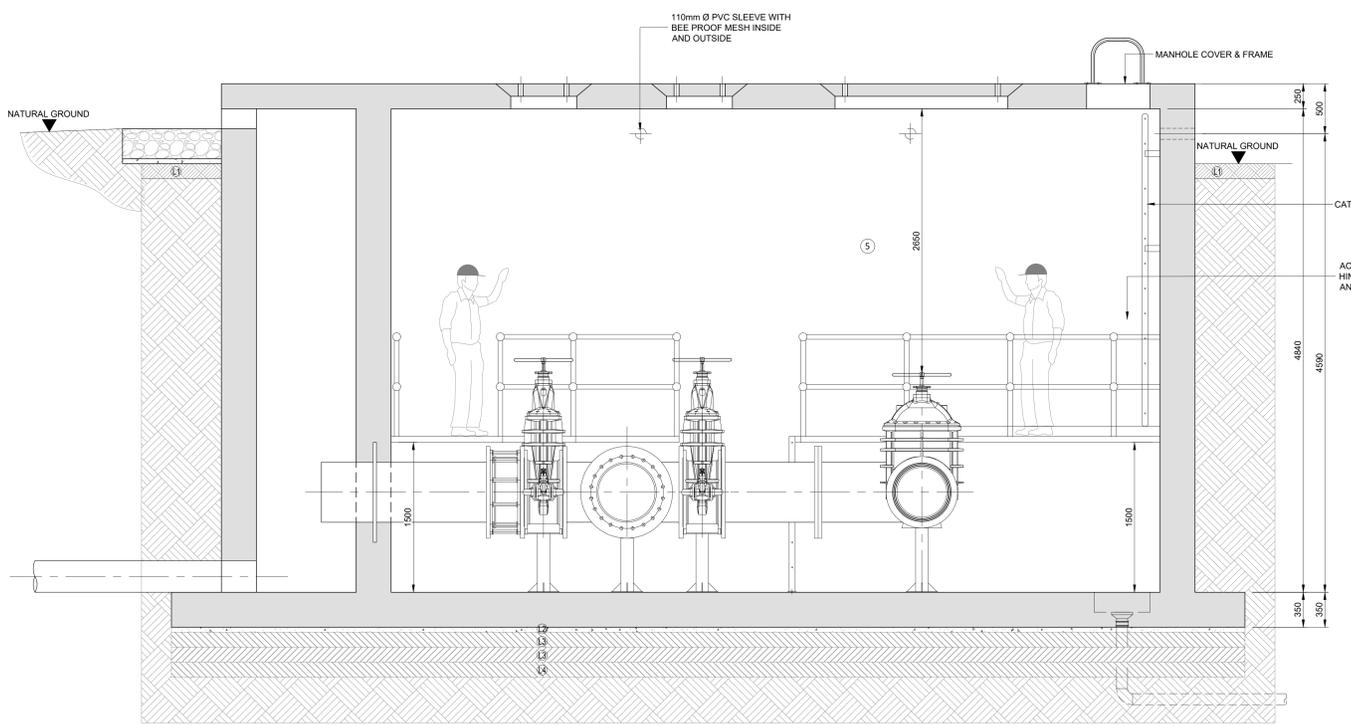
SECTION B-B
1:25



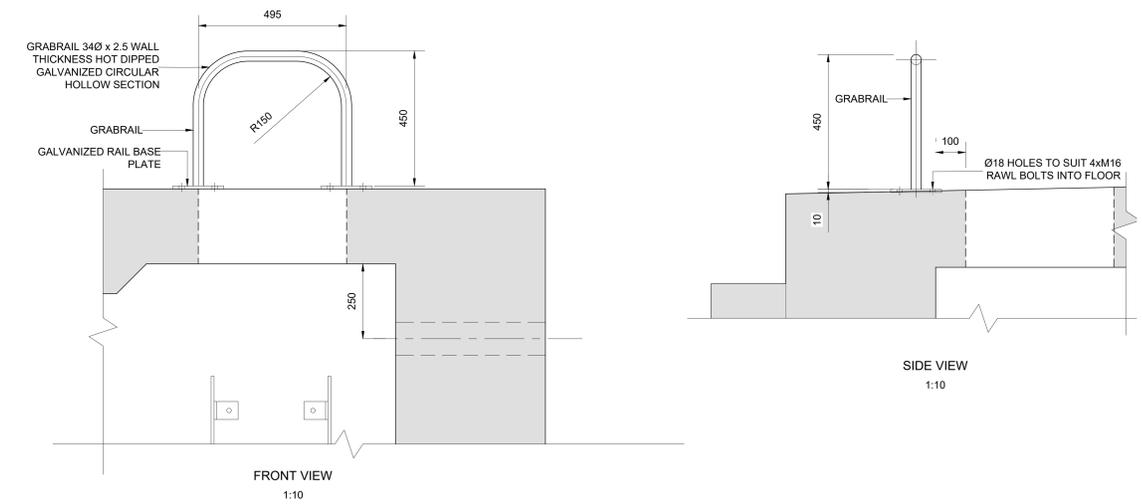
LAYER WORKS		
No.	LAYER DESCRIPTION	THICKNESS
L1.	TOP SOIL TO BE REINSTATED	150mm
L2.	50mm BLINDING (CONCRETE)	50mm
L3.	IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4.	IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm



COVER SLAB DETAILS
1:25



SECTION A-A
1:25



FRONT VIEW
1:10

SIDE VIEW
1:10

No.	DATE	REVISIONS	BY	CHECKED BY

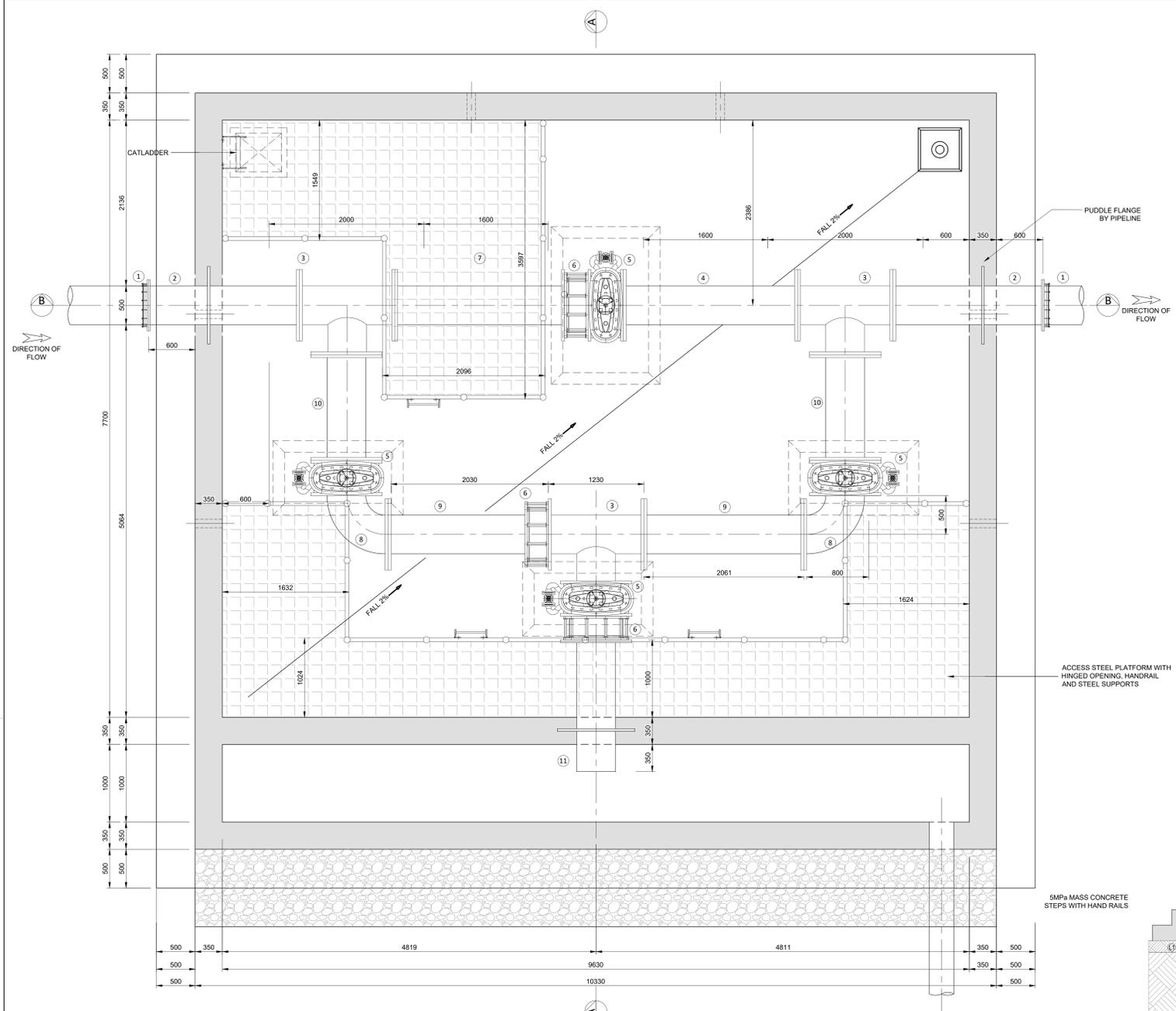
DESIGNED BY

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Fax: (011) 876 7434

T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960
M MATSHINYATSIMBI CHECKED	DATE:	DATE:	TEL: (016) 360 7400 FAX: (016) 360 7519

CLIENT	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		AS SHOWN	TENDER DRAWINGS
DRAWING TITLE	SCOUR VALVE CHAMBER DN710 (SHEET 2 OF 2)		REVISION	PLAN No.
			0	AC345/19/SD06

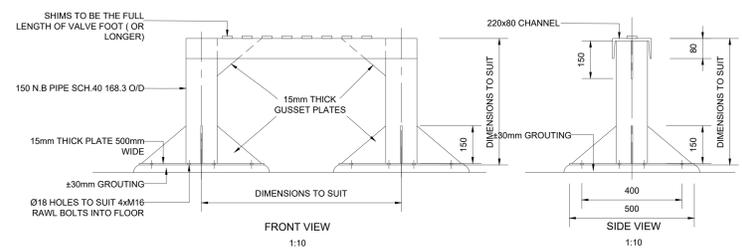


FLOOR PLAN
1:25

TYPICAL STEEL PIPE FITTINGS AND ITEM LIST (1000ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)			
ITEM	DESCRIPTION	No. OFF	MATERIAL DESCRIPTION
1	450mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	2	STEEL GRADE 300 WA
2	500Ø x 1235mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA
3	500mmØ x 500mmØ EQUAL TEE FLANGED TO SANS 1123 TABLE 2500/3	3	STEEL GRADE 300 WA
4	500Ø x 2245mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	1	STEEL GRADE 300 WA
5	500Ø FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE ACCORDING TO SANS 664:1999, PN 25, BOTH ENDS FLANGED TO SANS 1123 TABLE 2500/3	4	STEEL GRADE 300 WA
6	500Ø DISMANTLING JOINT	3	STEEL GRADE 300 WA
7	500Ø x 2190mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA
8	600Ø 90° MILD STEEL PIPE BEND, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA
9	500Ø x 2060mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA
10	500Ø x 1360mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA
11	500Ø x 1720mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA

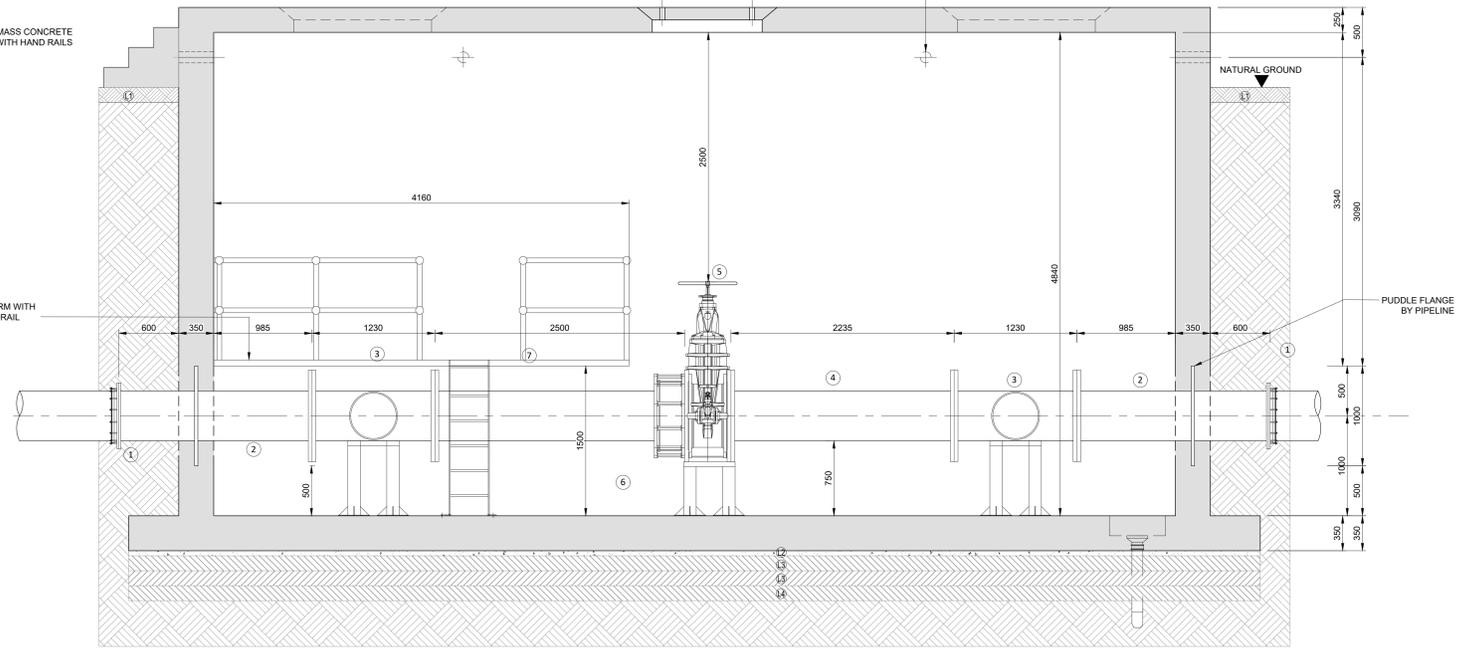
- CONCRETE NOTES:**
- CONCRETE
 - STRUCTURAL TO BE GRADE 25/19
 - BLINDING TO BE 15/19
 - BENCHING TO BE 1:4 CEMENT : SAND SCREED
 - CHAMBER TO BE WATERTIGHT
 - 75mm BLINDING UNDER ALL FOUNDATIONS
 - CONCRETE FINISHES
 - ALL EXPOSED CONCRETE EDGES TO HAVE 30x30mm CHAMFER
 - SMOOTH OFF-SHUTTER TO EXPOSE VERTICAL FACES
 - ROUGH OFF-SHUTTER TO UNEXPOSED VERTICAL FACES
 - WOOD FLOAT TO TOP OF WALLS AND ROOF SLAB
 - STEEL FLOAT TO TOP OF FLOOR BENCHING
 - 6mm RUBBER INSERTION BETWEEN VALVE FEET & CONCRETE PLINTH
 - ALL METALWORK TO BE CARBOLINE/CARBOLGUARD 891 EPOXY COATED

- PIPEWORK NOTES:**
- STEEL PIPES UP TO 200 NB TO BE IN ACCORDANCE WITH SABS 62 - HEAVY DUTY STEEL PIPES
 - OVER 200 NB TO BE IN ACCORDANCE WITH SABS 719 IN GRADE C STEEL
 - PIPE CORROSION PROTECTION
 - INTERNAL: EPOXY OR CEMENT MORTAR LINED (AS SPECIFIED)
 - EXTERNAL (IN CHAMBERS): EPOXY COATING (MINIMUM 250 MICRON DFT)
 - EXTERNAL (BURIED): BITUMEN FIBREGLASS
 - THE FOLLOWING ABBREVIATIONS APPLY:
 - PE - PLAIN-ENDED
 - FLG/PE - FLANGED AND PLAIN-ENDED
 - CF - CENTRE TO PLAIN END
 - C/F - CENTRE TO FACE
 - FF - FACE TO FACE
 - OD - OUTSIDE DIAMETER
 - FLANGES TO BE IN ACCORDANCE WITH TABLE 2500/3 FLANGES TO BE AS SPECIFIED ON LONGITUDINAL SECTIONS
 - JOINTING GASKETS TO BE CAF FULL FACE 3mm THICK. BOLTS TO BE GRADE 4.5 HOT-DIP GALVANISED
 - FITTINGS TO BE REINFORCED AS NECESSARY



FRONT VIEW
1:10

SIDE VIEW
1:10



SECTION B-B
1:25

No.	DATE	REVISIONS	BY	CHECKED BY

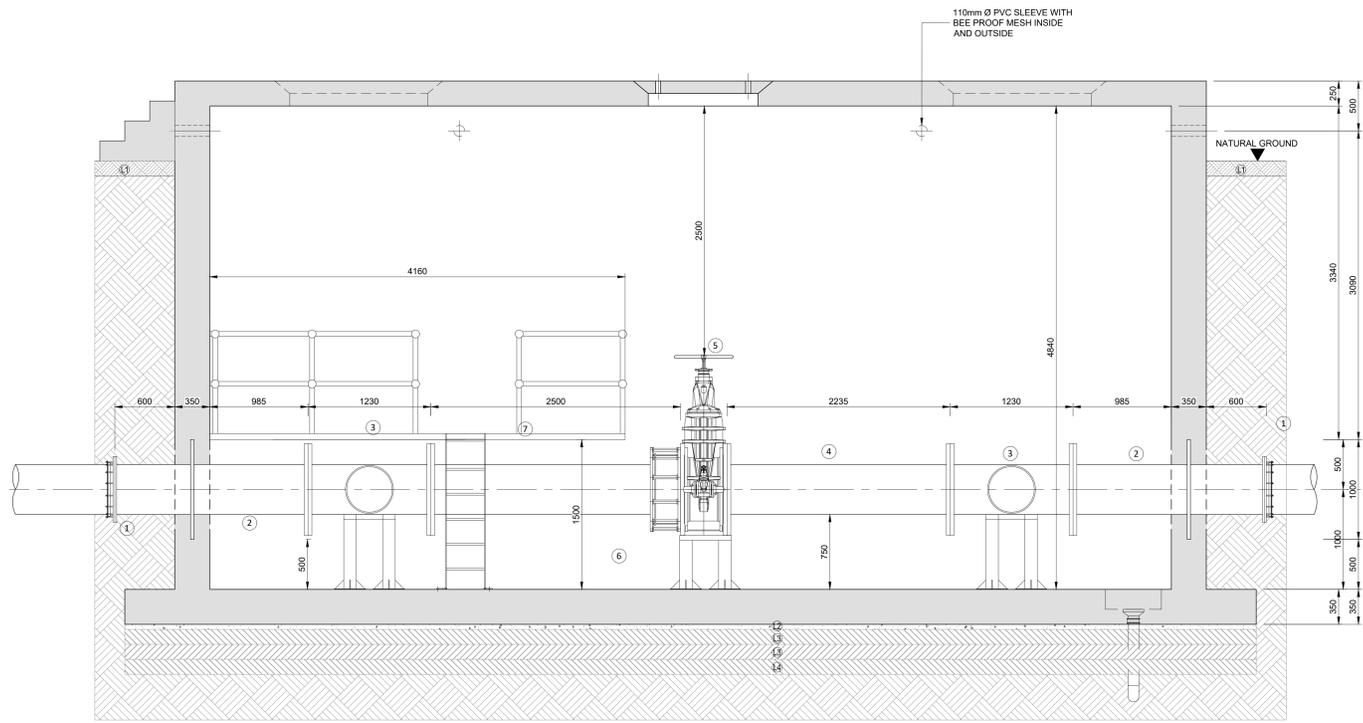
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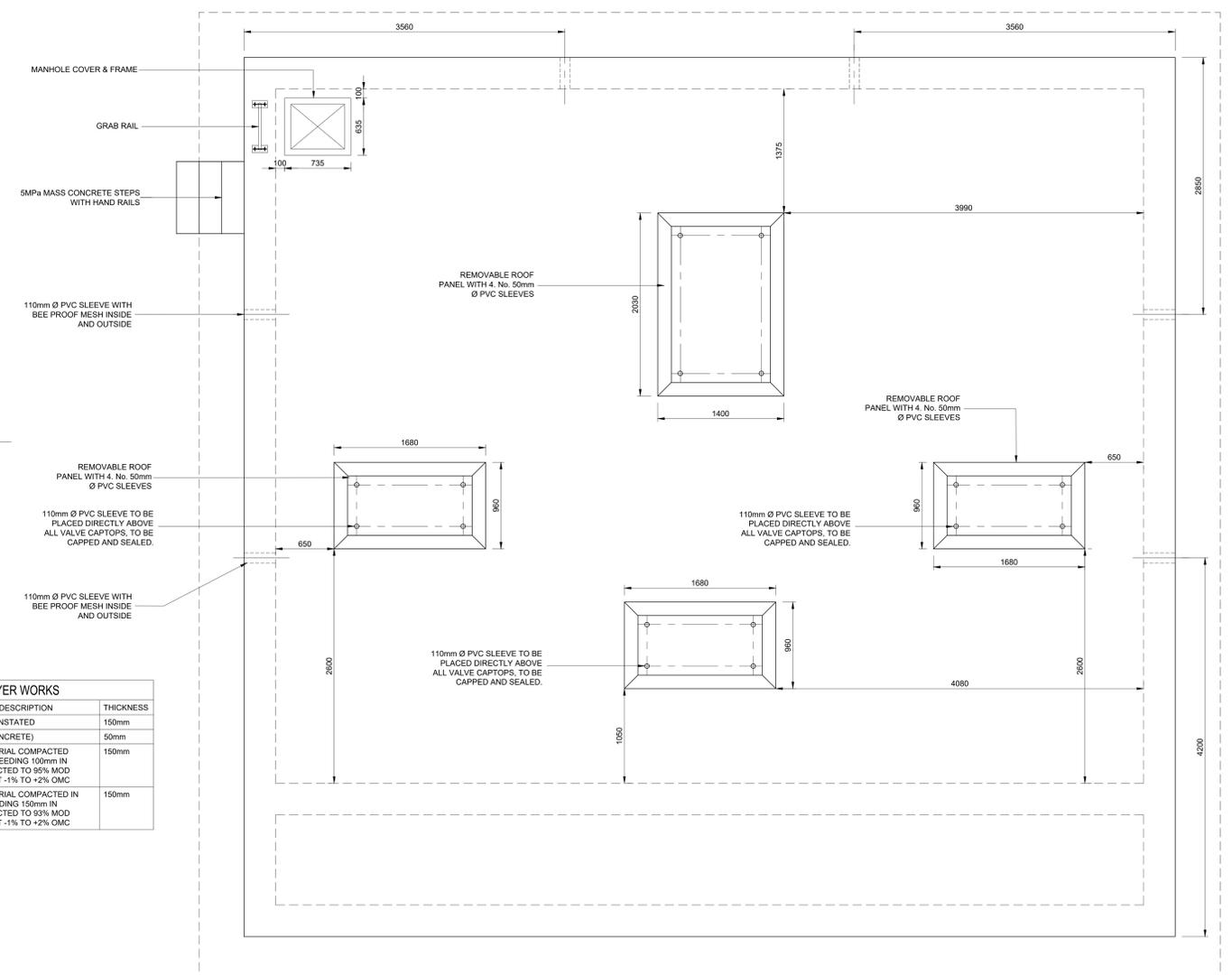
P.O. BOX 19964
SUNWARD PARK
1470
Tel: (011) 8076720
Fax: (011) 876 7434

T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960
M. MATSHINYATSIMBI CHECKED	DATE:	DATE:	TEL: (016) 360 7400 FAX: (016) 360 7519

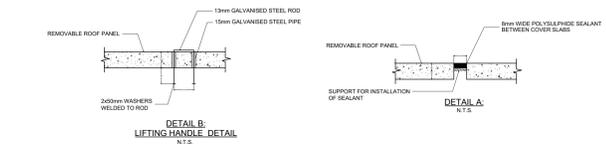
CLIENT	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		AS SHOWN	TENDER DRAWINGS
DRAWING TITLE	SCOUR VALVE CHAMBER DN450 (SHEET 1 OF 2)		REVISION	PLAN No.
			0	AC345/19/SD03a



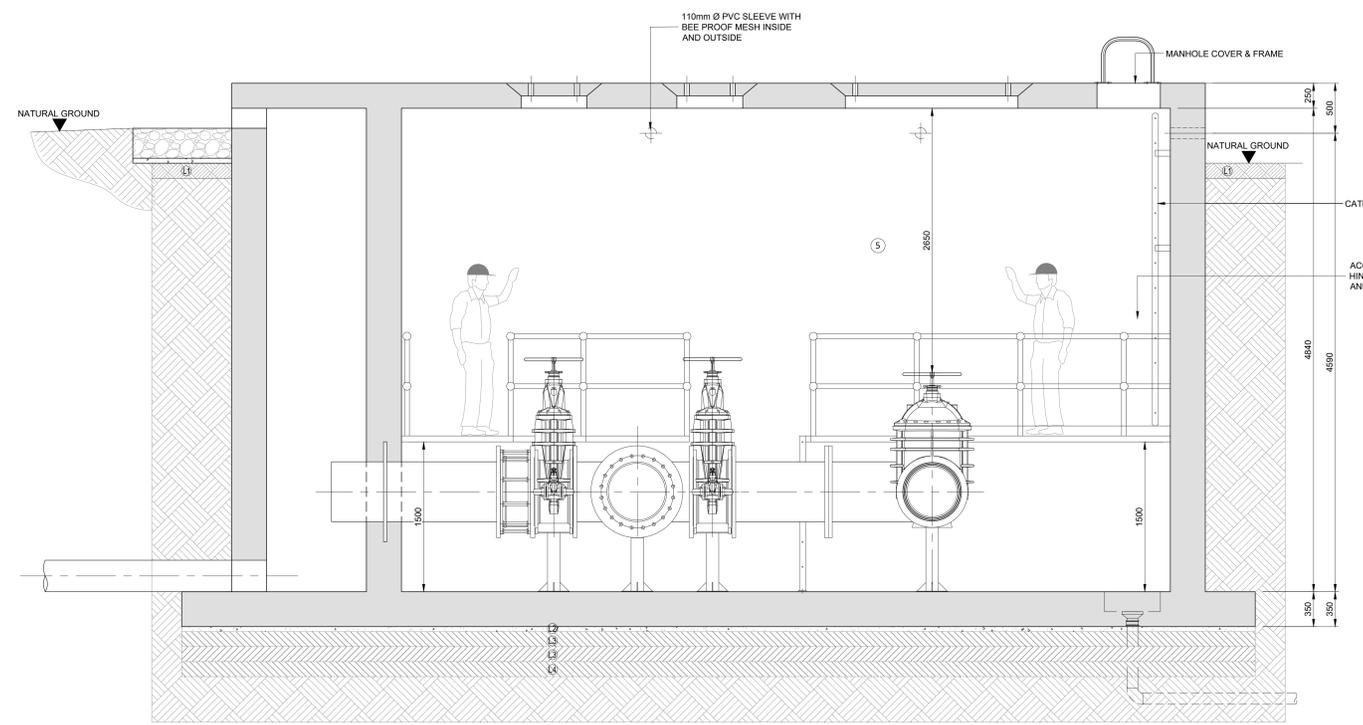
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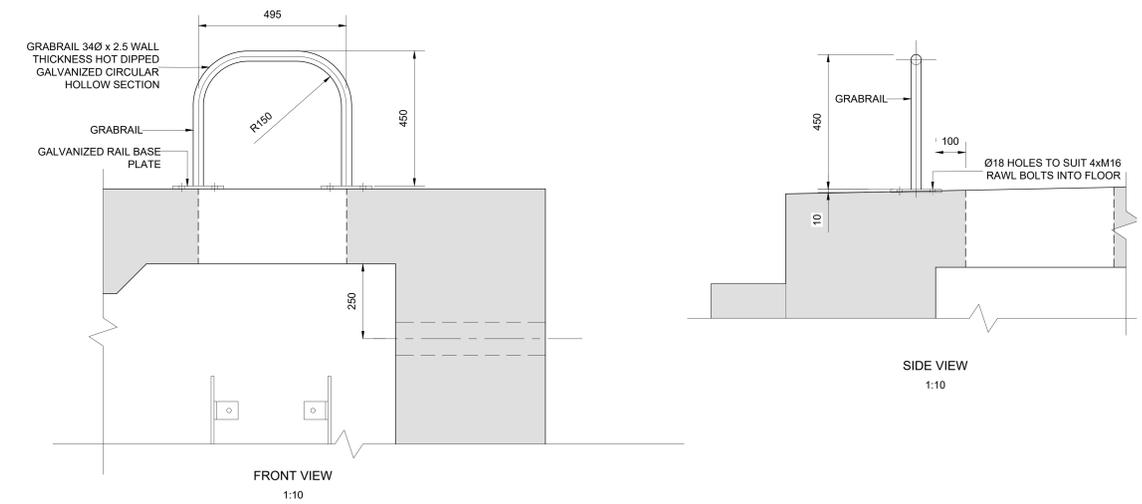
COVER SLAB DETAILS
1:25



LAYER WORKS	
No.	THICKNESS
L1. TOP SOIL TO BE REINSTATED	150mm
L2. 50mm BLINDING (CONCRETE)	50mm
L3. IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4. IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm



SECTION A-A
1:25



FRONT VIEW
1:10

SIDE VIEW
1:10

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY



T. MONONYANE
DESIGNED
T. MONONYANE
DRAWN
M MATSHINYATSIMBI
CHECKED

P.O. BOX 19964
SUNWARD PARK
1470
Tel: (011) 9076700
Fax: (011) 876 7434

CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DESIGNED T. MONONYANE DRAWN M MATSHINYATSIMBI CHECKED		PO Box 9 Meyerton 1960 TEL: (016) 360 7400 FAX: (016) 360 7519

CLIENT

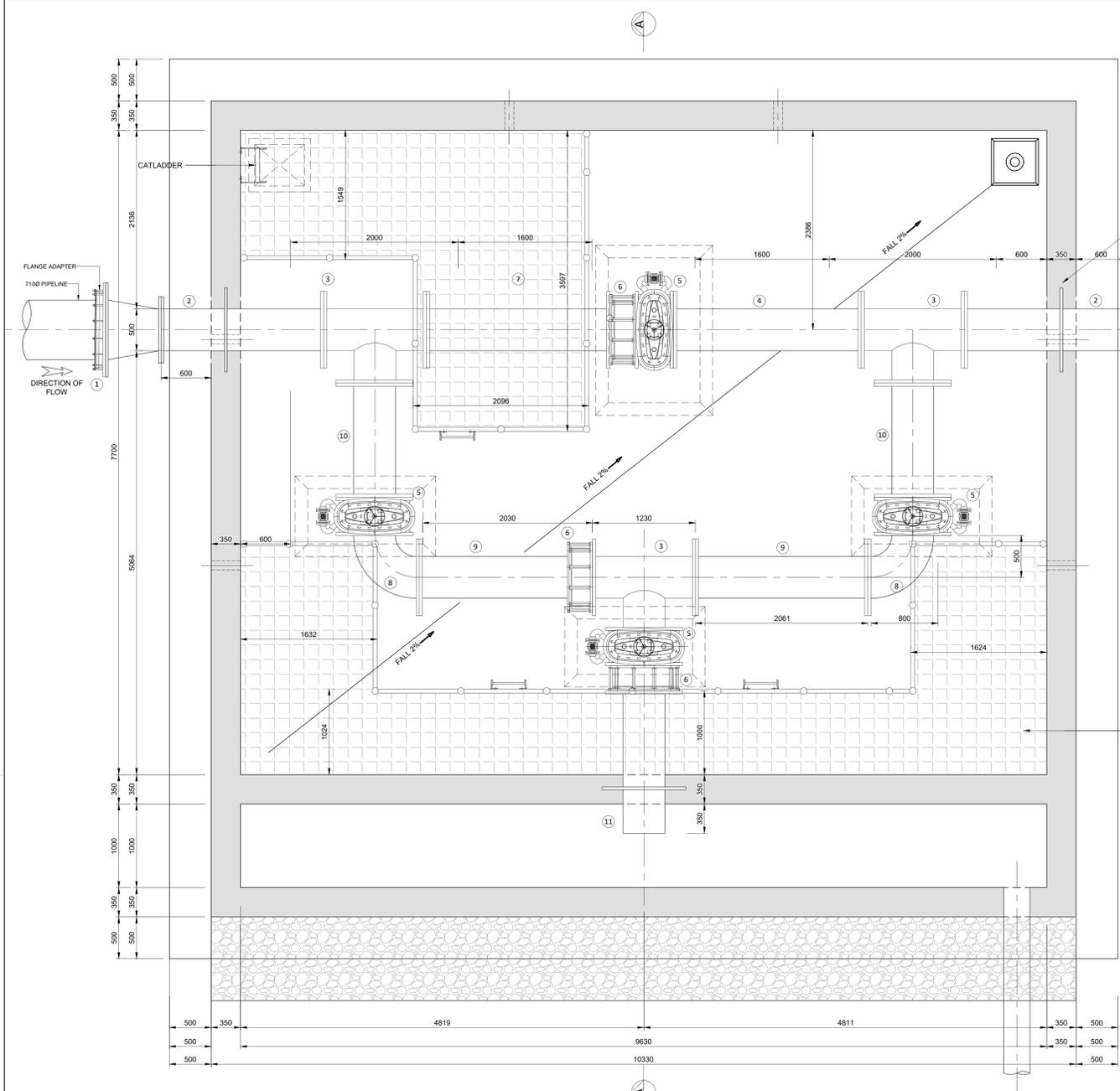


MIDVAAL LOCAL MUNICIPALITY

CLIENT	PROJECT TITLE	DRAWING TITLE
MIDVAAL LOCAL MUNICIPALITY	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY	SCOUR VALVE CHAMBER DN450 (SHEET 2 OF 2)

SCALE	TYPE OF PLANNING
AS SHOWN	TENDER DRAWINGS
REVISION	PLAN No.
0	AC345/19/SD04a

CONTRACT No. 8/2/2/434 (2025-2028)

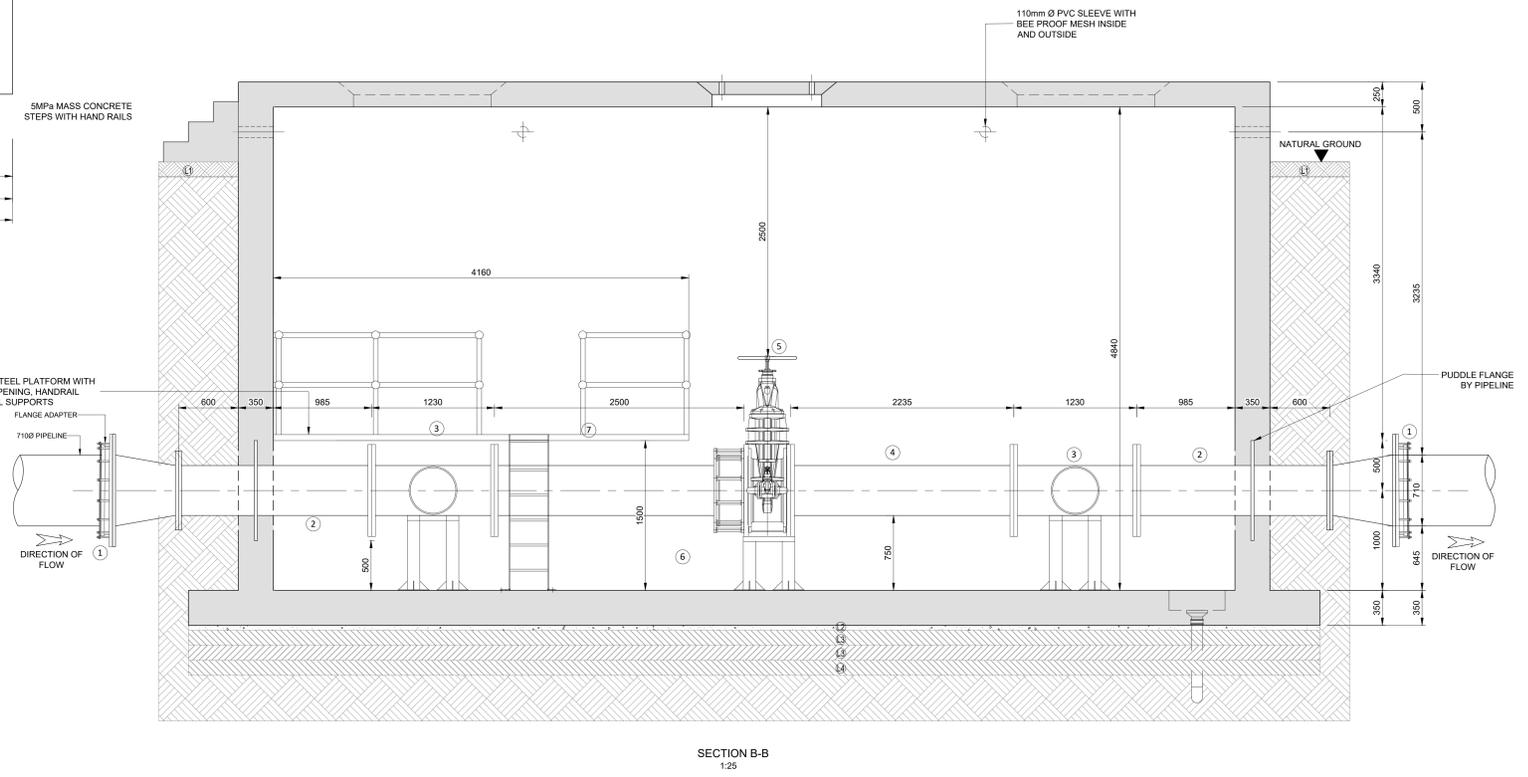
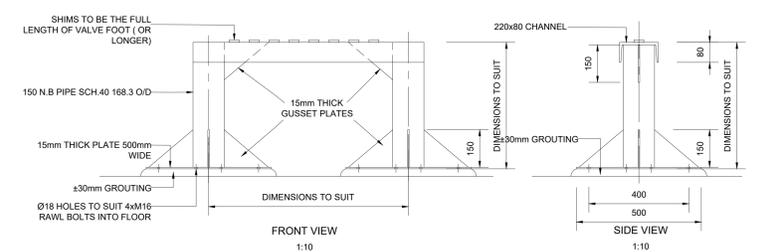


TYPICAL STEEL PIPE FITTINGS AND ITEM LIST
(1000ND PIPE LINE WITH 2500kPa MAX. WORKING PRESURE)

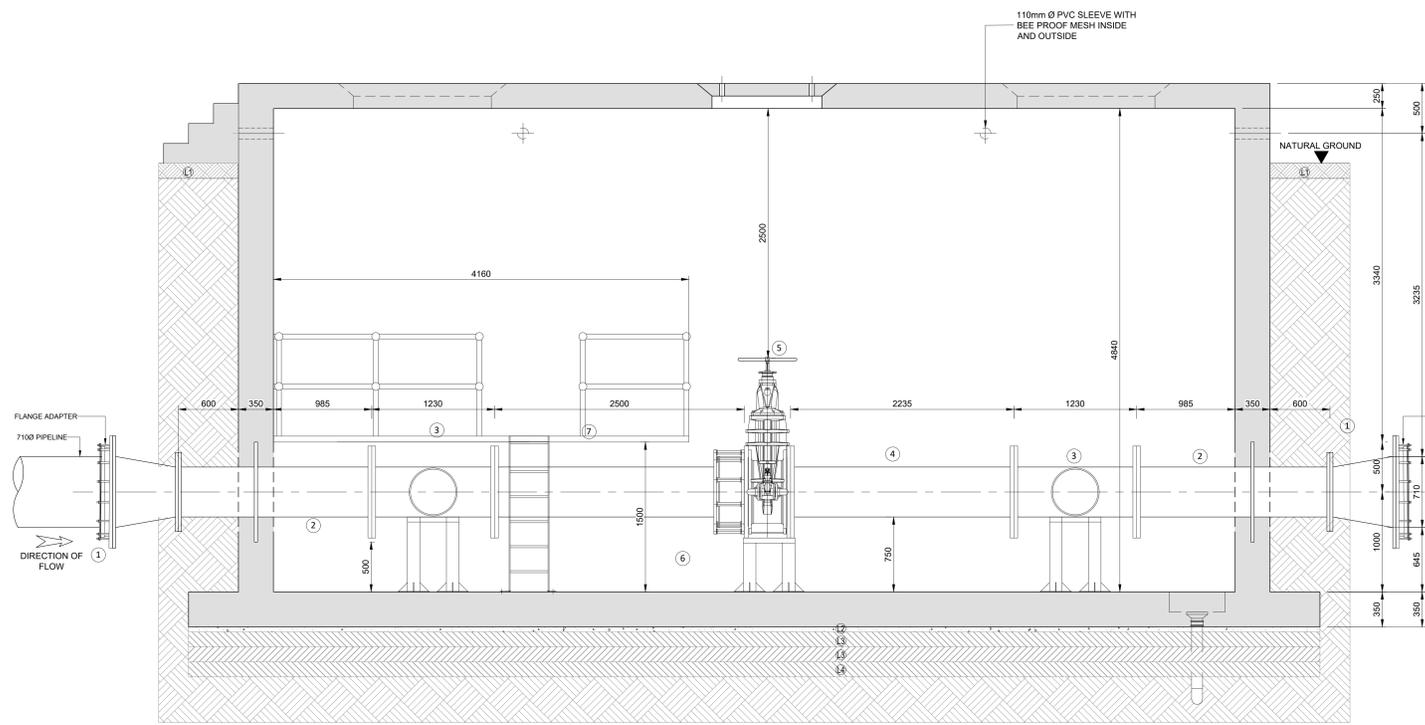
ITEM	DESCRIPTION	No. OFF	MATERIAL	DESCRIPTION
1	450mmØ LARGE DIAMETER FLANGE ADAPTOR 'VIKING JOHNSON' (OR APPROVED SIMILAR) FLANGE ADAPTOR TO TABLE 2500/3	2	STEEL GRADE 300 WA	
2	500Ø x 1935mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
3	500mmØ x 500mmØ EQUAL TEE FLANGED TO SANS 1123 TABLE 2500/3	3	STEEL GRADE 300 WA	
4	500Ø x 2245mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	1	STEEL GRADE 300 WA	
5	500Ø FLANGED, WATERWORKS PATTERN, RESILIENT SEAL GATE VALVE ACCORDING TO SANS 664:1999, PN 25, BOTH ENDS FLANGED TO SANS 1123 TABLE 2500/3	4	STEEL GRADE 300 WA	
6	500Ø DISMANTLING JOINT	3	STEEL GRADE 300 WA	
7	500Ø x 2190mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA	
8	600Ø 90° MILD STEEL PIPE BEND, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
9	500Ø x 2060mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
10	500Ø x 1360mm LONG MILD STEEL PIPE, BOTH END FLANGED TO TABLE 2500/3	2	STEEL GRADE 300 WA	
11	500Ø x 1720mm LONG MILD STEEL PIPE, ONE END FLANGED TO TABLE 2500/3, ONE PLAIN ENDED	1	STEEL GRADE 300 WA	
12	710 x 500 mm FLANGED MILD STEEL PIPE REDUCER, PN25, BOTH ENDS FLANGED TO SANS 1123 - 2500/3.	2	STEEL GRADE 300 WA	

- CONCRETE NOTES:**
- CONCRETE
 - STRUCTURAL TO BE GRADE 25/19
 - BINDING TO BE 15/19
 - BENCHING TO BE 1 : 4 CEMENT : SAND SCREED
 - CHAMBER TO BE WATERTIGHT
 - 75mm BLINDING UNDER ALL FOUNDATIONS
 - CONCRETE FINISHES:
 - ALL EXPOSED CONCRETE EDGES TO HAVE 30x30mm CHAMFER
 - SMOOTH OFF-SHUTTER TO EXPOSE VERTICAL FACES
 - ROUGH OFF-SHUTTER TO UNEXPOSED VERTICAL FACES
 - WOOD FLOAT TO TOP OF WALLS AND ROOF SLAB
 - STEEL FLOAT TO TOP OF FLOOR BENCHING
 - 6mm RUBBER INSERTION BETWEEN VALVE FEET & CONCRETE PLINTH
 - ALL METALWORK TO BE CARBOLINE/CARBOGUARD 891 EPOXY COATED

- PIPEWORK NOTES:**
- STEEL PIPES UP TO 200 NB TO BE IN ACCORDANCE WITH SABS 62 - HEAVY DUTY STEEL PIPES
 - OVER 200 NB TO BE IN ACCORDANCE WITH SABS 719 IN GRADE C STEEL
 - PIPE CORROSION PROTECTION
 - INTERNAL: EPOXY OR CEMENT MORTAR LINED (AS SPECIFIED)
 - EXTERNAL (IN CHAMBERS): EPOXY COATING (MINIMUM 250 MICRON DFT)
 - EXTERNAL (BURIED): BITUMEN FIBREGLASS
 - THE FOLLOWING ABBREVIATIONS APPLY:
 - PE - PLAIN ENDED
 - FLGPE - FLANGED AND PLAIN ENDED
 - CFE - CENTRE TO PLAIN END
 - CF - CENTRE TO FACE
 - FF - FACE TO FACE
 - OD - OUTSIDE DIAMETER
 - FLANGES TO BE IN ACCORDANCE WITH TABLE 2500/3 FLANGES TO BE AS SPECIFIED ON LONGITUDINAL SECTIONS
 - JOINTING GASKETS TO BE CAF FULL FACE 3mm THICK. BOLTS TO BE GRADE 4.5 HOT-DIP GALVANISED
 - FITTINGS TO BE REINFORCED AS NECESSARY



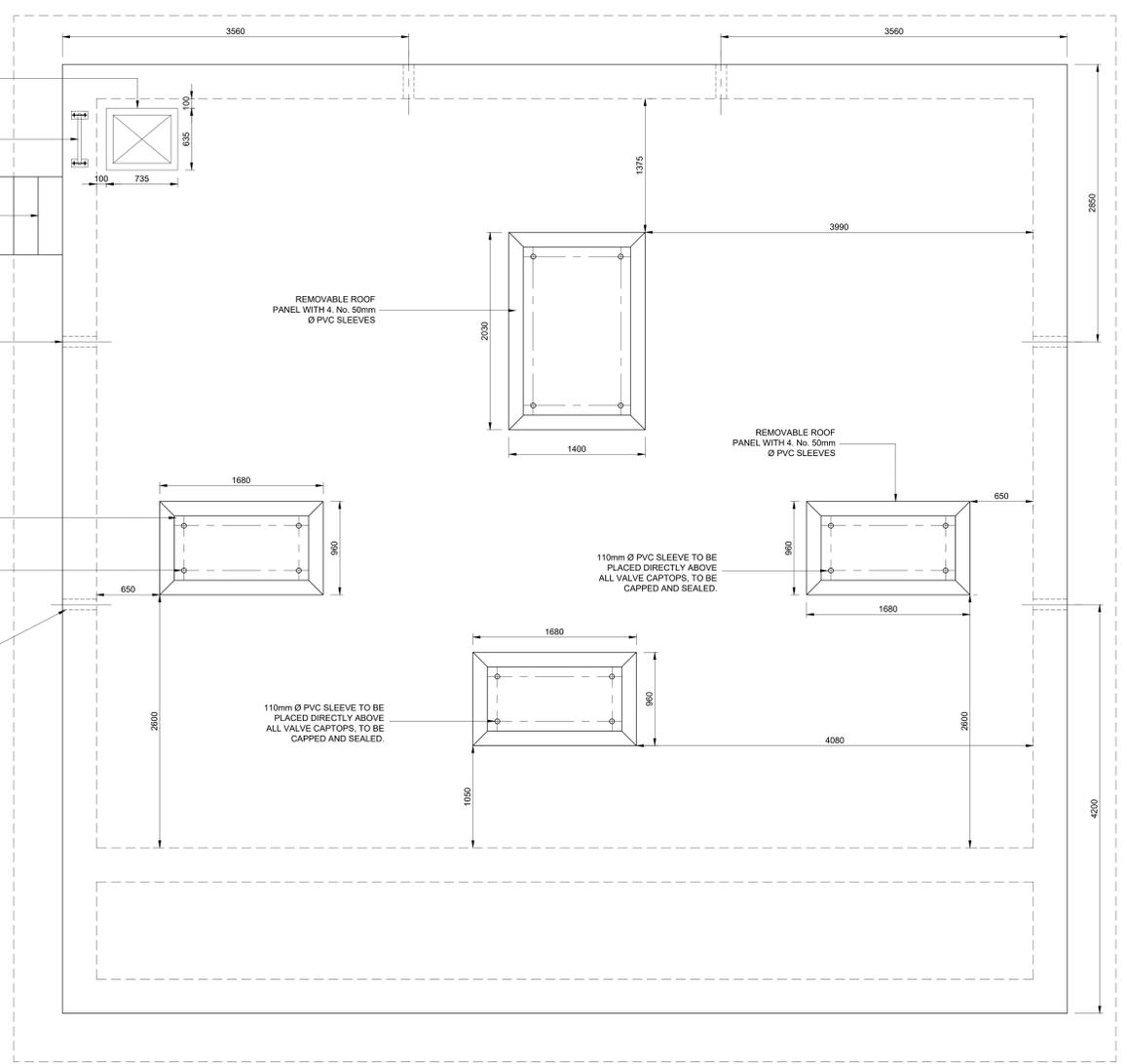
No.	DATE	REVISIONS	BY	CHECKED	DESIGNED BY	 T. MONONYANE DESIGNED T. MONONYANE DRAWN M. MATSHINYATSIMBI CHECKED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:	CLIENT	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
							for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960 TEL: (016) 360 7400 FAX: (016) 360 7519	MIDVAAL LOCAL MUNICIPALITY	AS SHOWN	TENDER DRAWINGS	
DRAWING TITLE										CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		REVISION	PLAN No.
SCOUR VALVE CHAMBER DN710 (SHEET 1 OF 2)										0		AC345/19/SD05a	



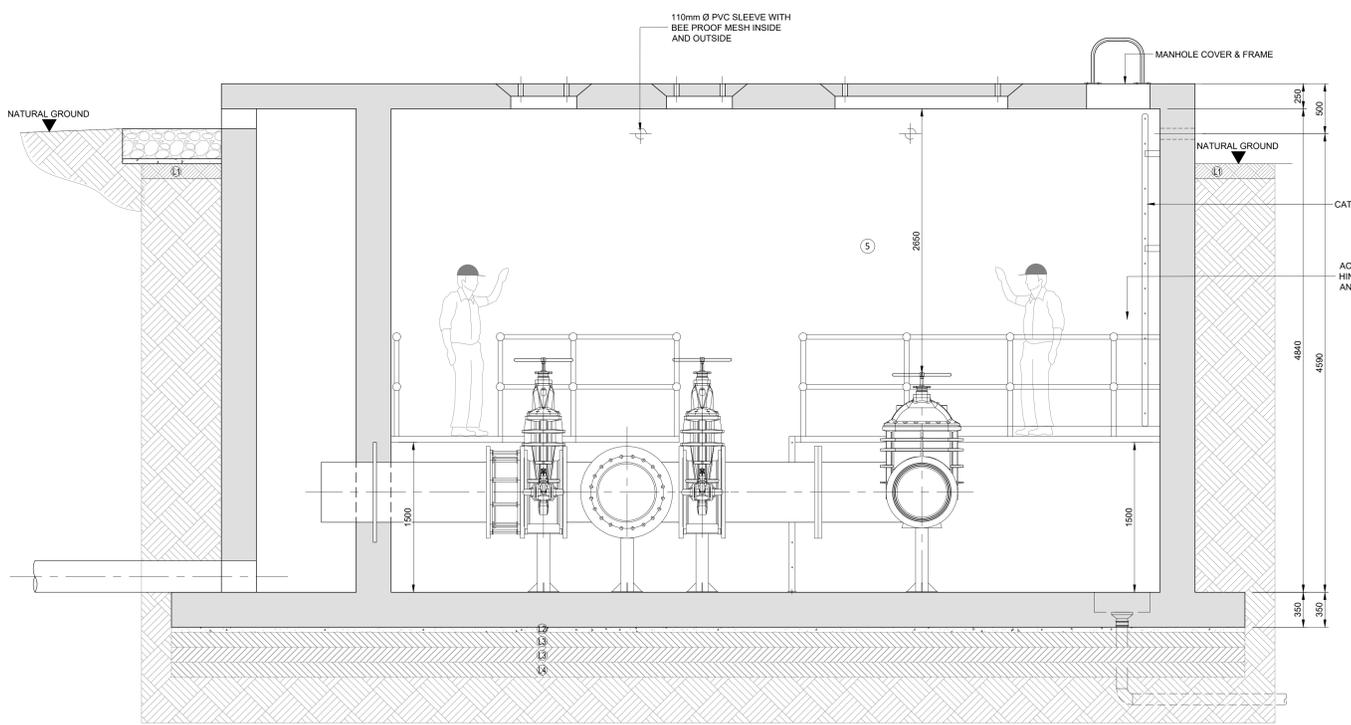
SECTION B-B
1:25



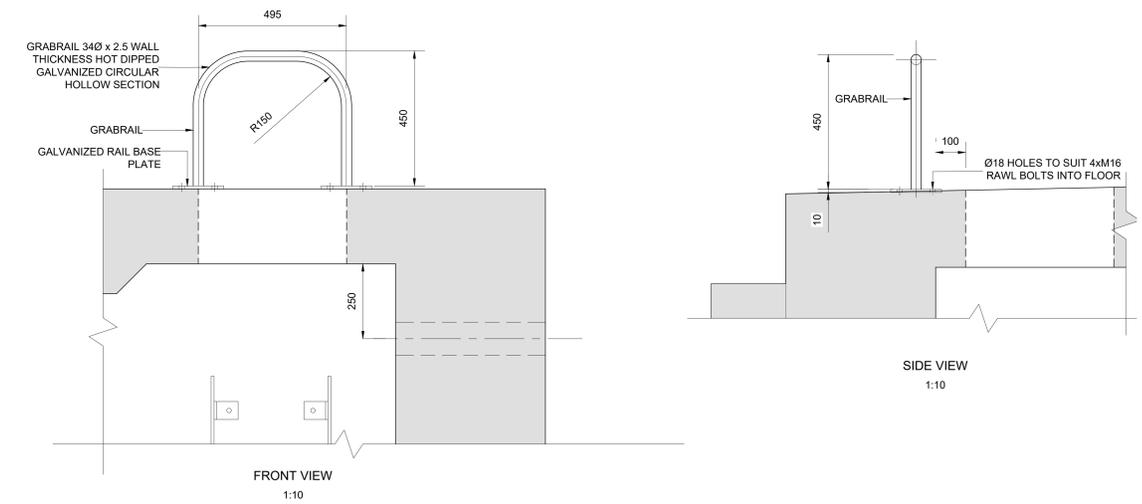
LAYER WORKS		
No.	LAYER DESCRIPTION	THICKNESS
L1.	TOP SOIL TO BE REINSTATED	150mm
L2.	50mm BLINDING (CONCRETE)	50mm
L3.	IMPORTED G5 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 100mm IN THICKNESS COMPACTED TO 95% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm
L4.	IMPORTED G7 MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS COMPACTED TO 93% MOD AASHTO DENSITY AT -1% TO +2% OMC	150mm



COVER SLAB DETAILS
1:25



SECTION A-A
1:25



FRONT VIEW
1:10

SIDE VIEW
1:10

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY

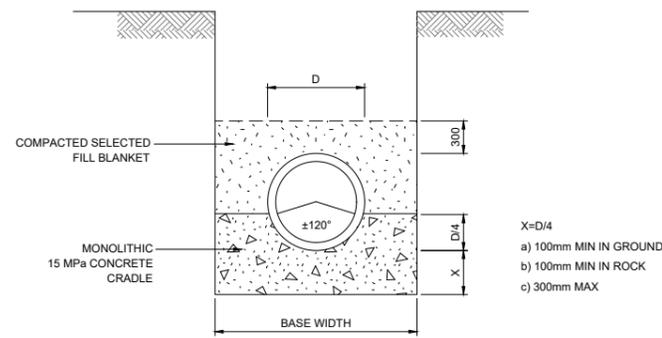


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1470

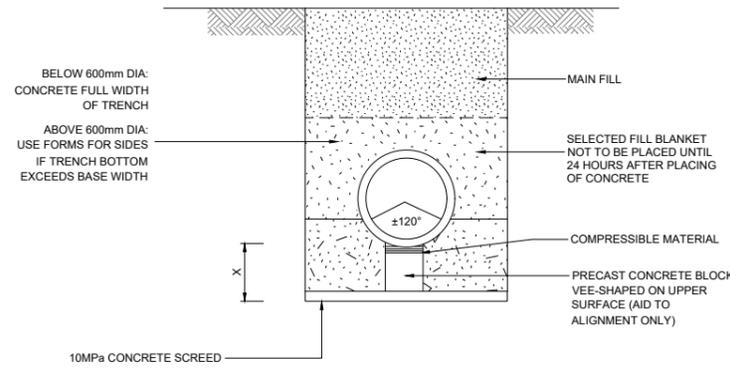
Tel: (011) 9076700
Fax: (011) 876 7434

T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960
M MATSHINYATSIMBI CHECKED	DATE:	DATE:	TEL: (016) 360 7400 FAX: (016) 360 7519

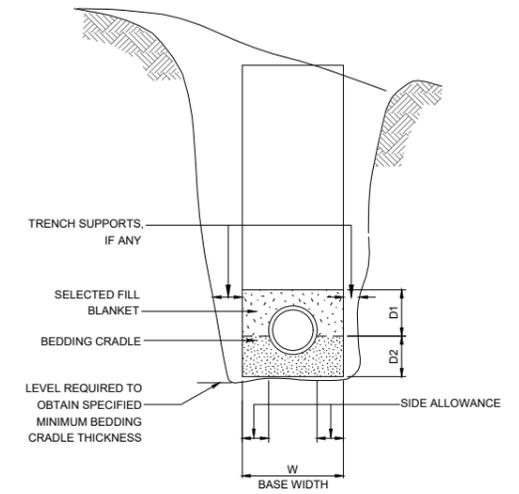
CLIENT	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		AS SHOWN	TENDER DRAWINGS
DRAWING TITLE	SCOUR VALVE CHAMBER DN710 (SHEET 2 OF 2)		REVISION	PLAN No.
			0	AC345/19/SD06a



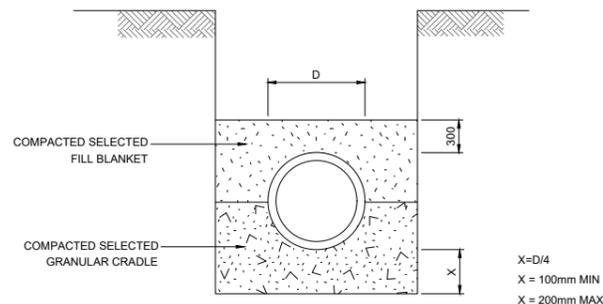
RIGID PIPE ON CLASS A BEDDING



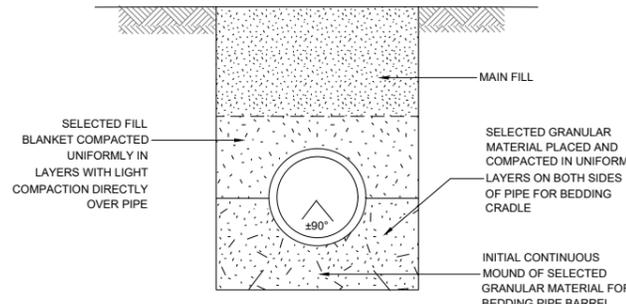
CONSTRUCTION OF RIGID PIPE ON CLASS A BEDDING



MEASUREMENT OF BEDDING



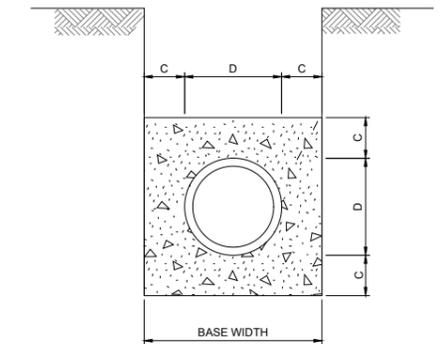
RIGID PIPE ON CLASS B BEDDING



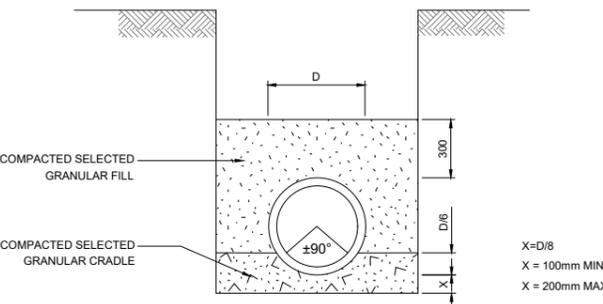
CONSTRUCTION OF RIGID PIPE ON CLASS B BEDDING

NOMINAL PIPE DIA (mm)	TRENCH BASE WIDTH, W(mm)
250mm	850
300mm	900
400mm	1000
450mm	1050
560mm	1160
710mm	1310

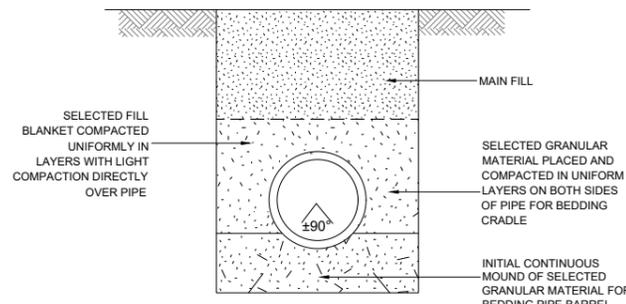
NOMINAL PIPE DIA (mm)	DIMENSION, C (mm)
250mm	300
300mm	300
450mm	300
560mm	300
710mm	300



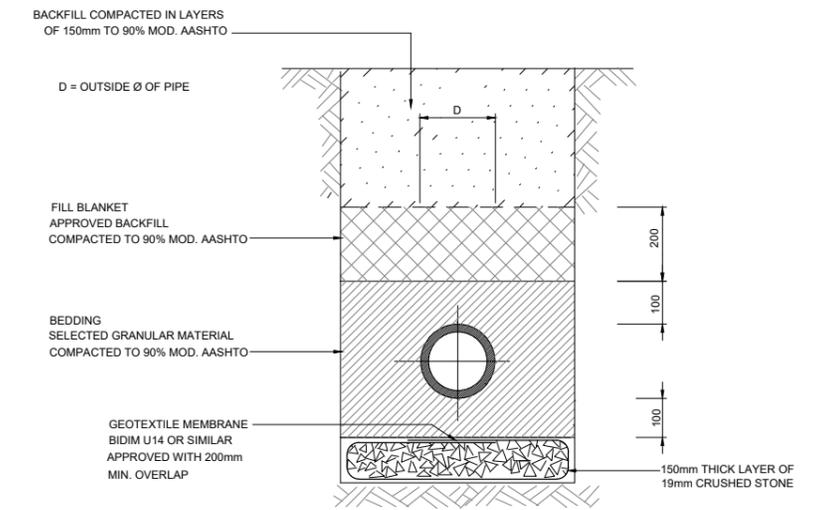
DETAIL OF CONCRETE ENCASUREMENT



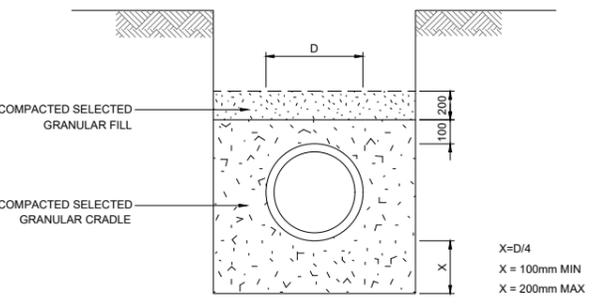
RIGID PIPE ON CLASS C-BEDDING



CONSTRUCTION OF RIGID PIPE ON CLASS C BEDDING



BEDDING FOR PIPE TRENCH DRAINAGE



DETAIL OF PIPE BEDDING FOR FLEXIBLE PIPE SUPPORTED ON SELECTED GRANULAR MATERIAL

CONSTRUCTION METHOD OF PIPE BEDDING FOR FLEXIBLE PIPE SUPPORTED ON SELECTED GRANULAR MATERIAL

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY



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T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	PO Box 9 Meyerton 1960
M. MATSHINYATSIMBI CHECKED	DATE: _____	DATE: _____	TEL: (016) 360 7400 FAX: (016) 360 7519

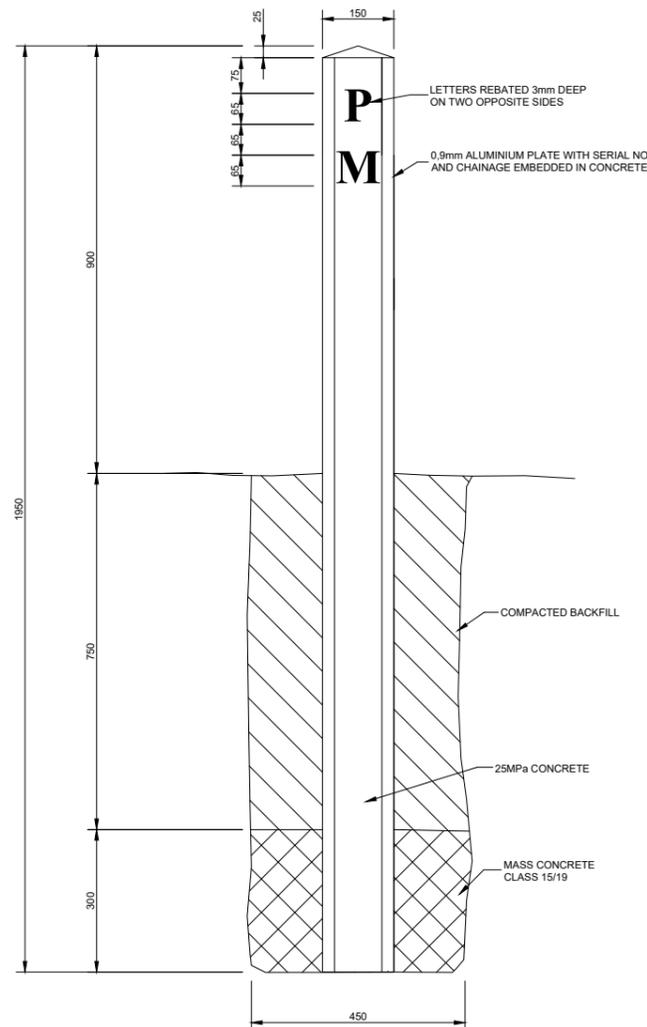


MIDVAAL LOCAL MUNICIPALITY

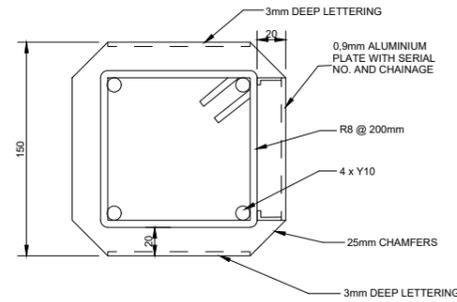
CLIENT	MIDVAAL LOCAL MUNICIPALITY
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY
DRAWING TITLE	PIPE BEDDING DETAILS

CONTRACT No.	8/2/2/434 (2025-2028)
SCALE	N.T.S.
REVISION	0

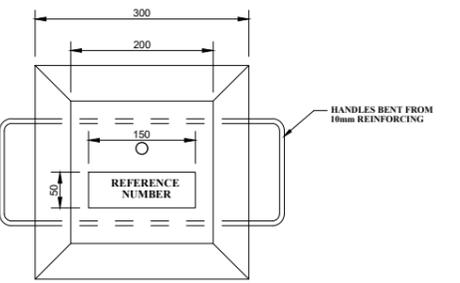
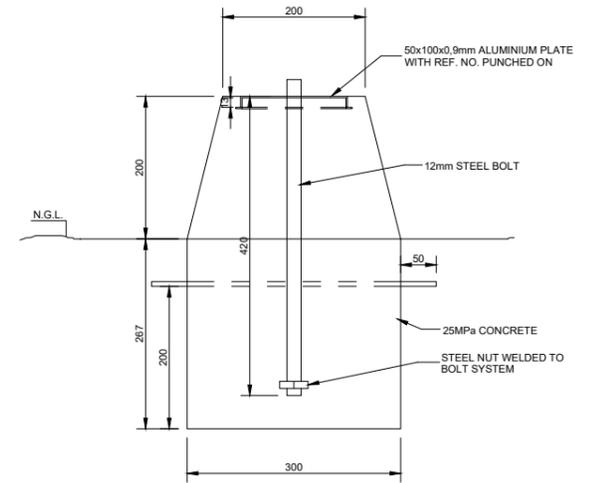
TYPE OF PLANNING DRAWINGS	TENDER DRAWINGS
PLAN No.	AC345/19/SD/07



PIPELINE PRECAST CONCRETE
MARKER BEACON
1 : 7.5



SECTION THROUGH
MARKER BEACON
1 : 2.5



COMBINED TRIANGULATION
BENCHMARK BEACON
1 : 5

NOTE:

1. VALVE CHAMBERS SHALL BE MARKED WITH LETTERING AS SHOWN.
2. LETTERING SHALL BE WRITTEN ON A BLACK BACKGROUND WITH THE LETTERING WIDTH 20mm.
3. REMOVE ALL TRACES OF SHUTTER OIL BEFORE PAINTING OF NUMBERS.
4. PAINT TO BE USED - PLASCON WALL AND ALL OR SIMILAR APPROVED.



VALVE CHAMBER MARKING
1 : 2.5

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY

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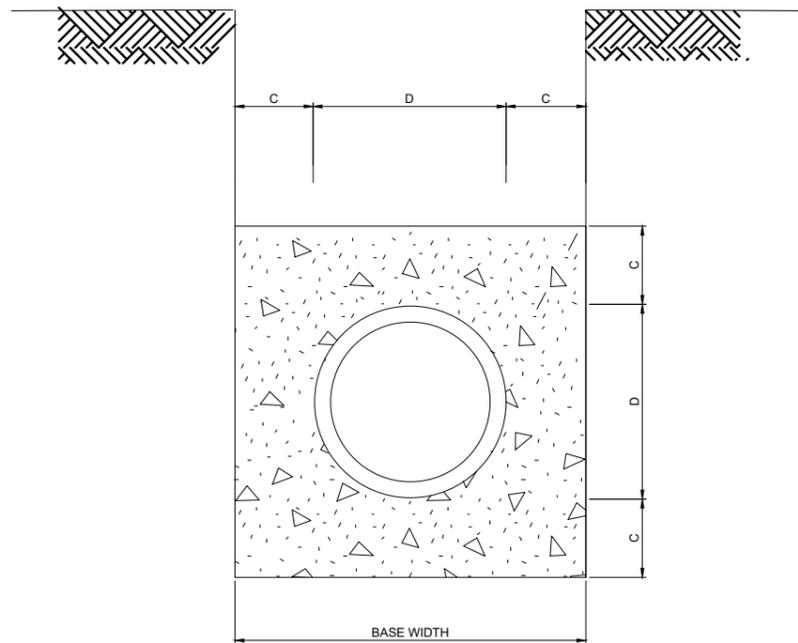
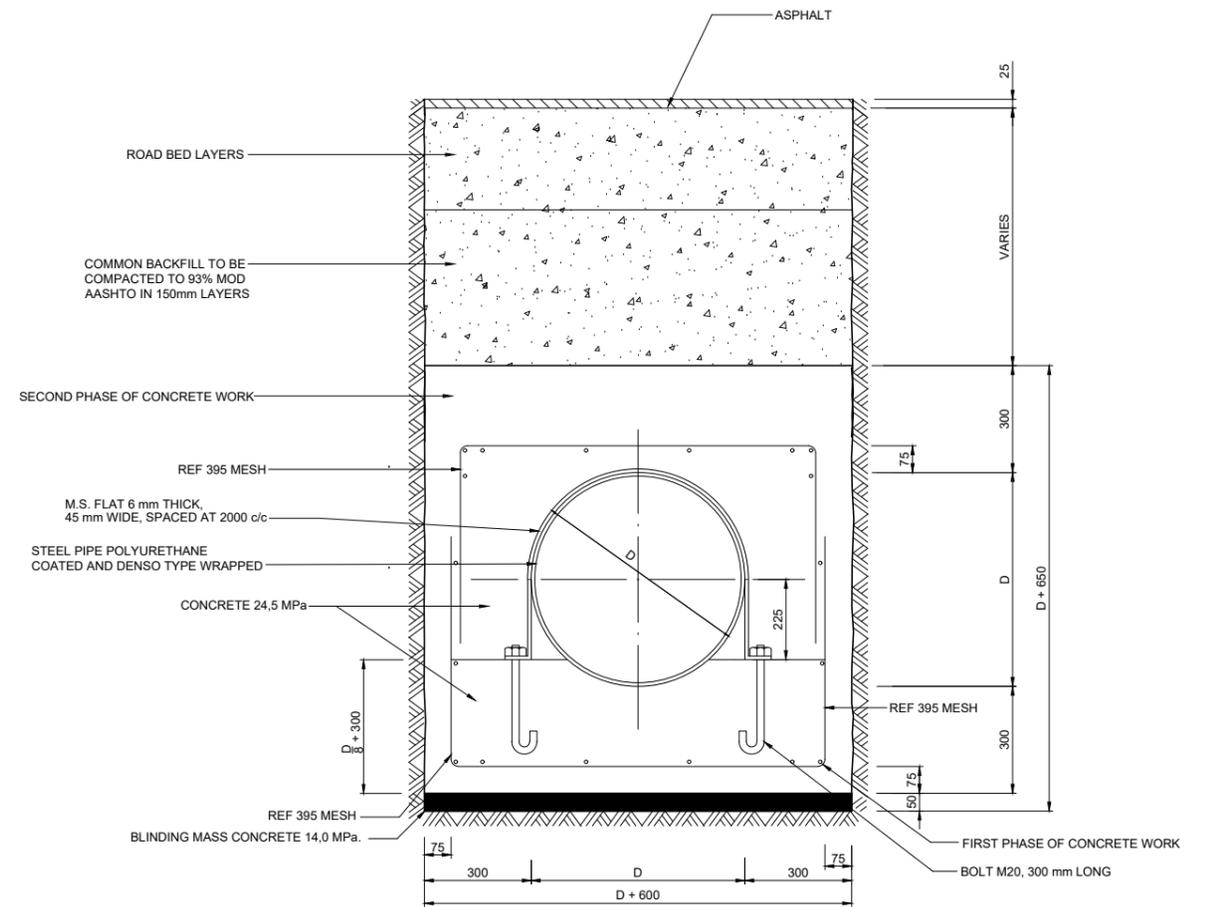
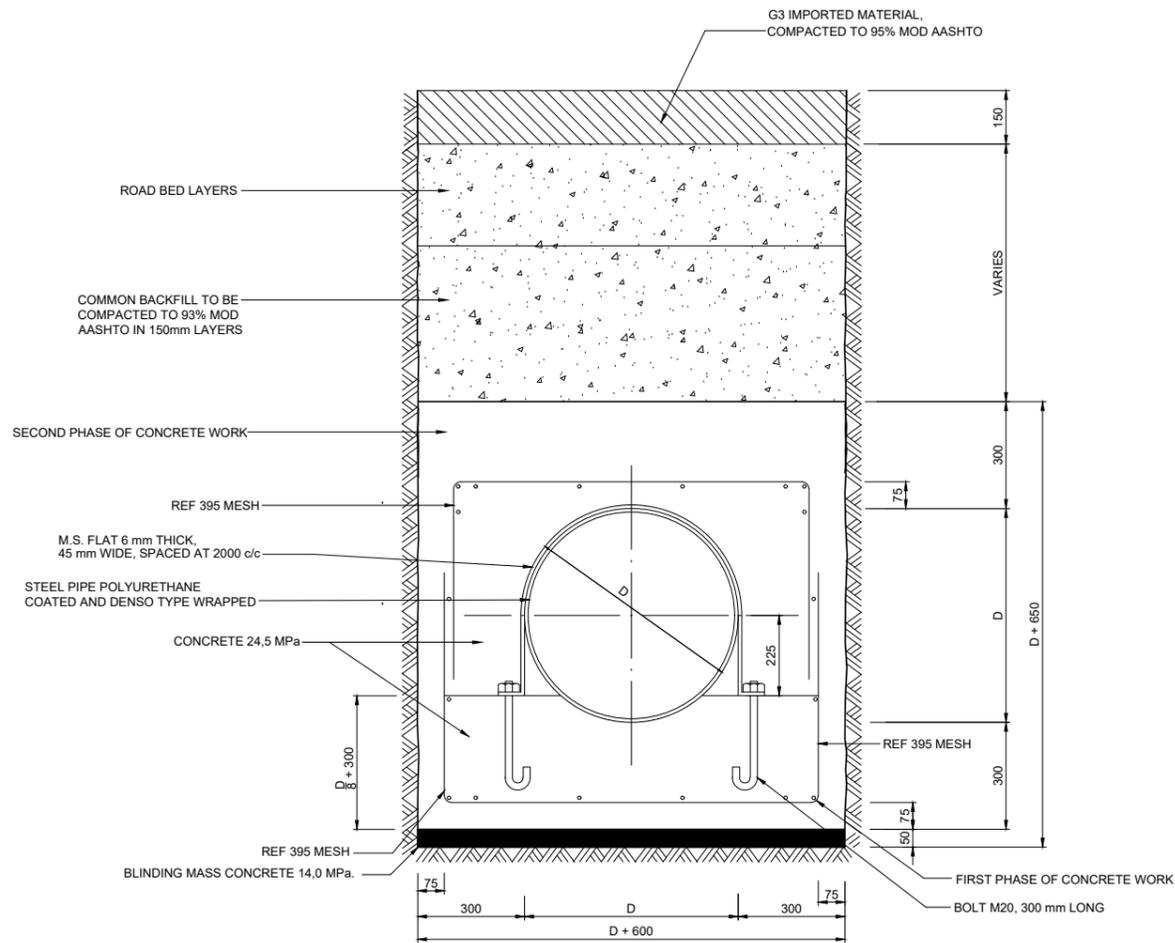
T. MONONYANE DESIGNED	CONSULTANT	RECOMMENDED
T. MONONYANE DRAWN	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT
M MATSHINYATSIMBI CHECKED	DATE: _____	DATE: _____

CLIENT ADDRESS:

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CLIENT	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)
PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY	
DRAWING TITLE	TYPICAL DETAILS FOR PIPELINE MARKERS AND BENCHMARKS	

SCALE	TYPE OF PLANNING
AS SHOWN	TENDER DRAWINGS
REVISION	PLAN No.
0	AC345/19/SD/08



PIPE NB (mm)	DIMENSION C (mm)
100	300
150	300
200	300
250	300
300	300
350	300
400	300
450	300
500	300
560	300
710	300

NOTE:

- PIPE WALL THICKNESS TO BE INCREASED BY 2 mm OVER ENTIRE LENGTH OF CROSSING
- THE PIPE COATING SHALL NOT BE REMOVED AND MUST BE AS PER THE STANDARD SPECIFICATION

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY

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Fax: (011) 876 7434

T. MONONYANE
DESIGNED

T. MONONYANE
DRAWN

M. MATSHINYATSIMBI
CHECKED

CONSULTANT

RECOMMENDED

CLIENT ADDRESS:

for CONSULTING ENGINEER

for HEAD OF DEPARTMENT

DATE: _____

DATE: _____

PO Box 9
Meyerton
1960
TEL: (016) 360 7400
FAX: (016) 360 7519

CLIENT: MIDVAAL LOCAL MUNICIPALITY

CONTRACT No. 8/2/2/434 (2025-2028)

PROJECT TITLE: CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY

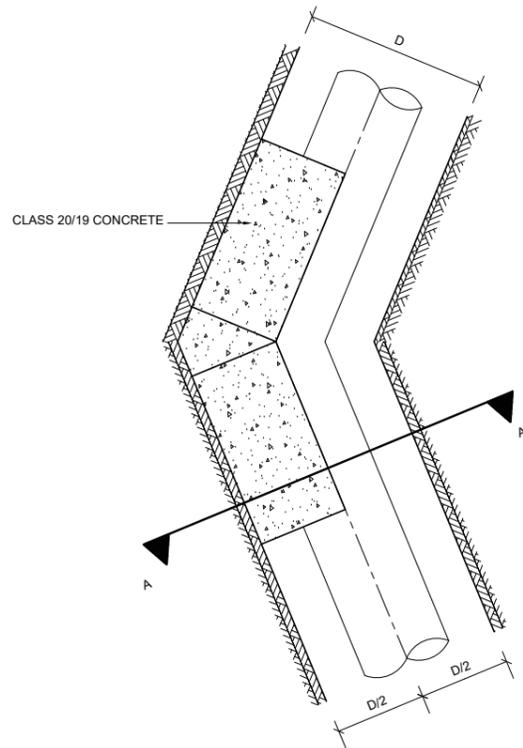
DRAWING TITLE: TYPICAL DETAILS FOR SECTION OF ROAD CROSSING

SCALE: 1:10

TYPE OF PLANNING: TENDER DRAWINGS

REVISION: 0

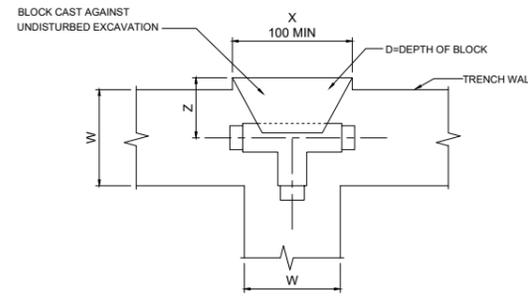
PLAN No.: AC345/19/SD/09



THRUST BLOCK FOR 45° BEND

NOMINAL DIAMETER Ø (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
		900 kPa		1350 kPa		1800 kPa	
		X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
300	1200	450	0.49	650	0.74	850	0.98
250	1000	350	0.34	550	0.51	700	0.68
200	800	300	0.22	450	0.33	550	0.44
150	600	250	0.13	350	0.21	450	0.25
100	400	150	0.06	250	0.09	300	0.11
75	300	100	0.03	150	0.05	200	0.06
50	200	100	0.02	100	0.02	150	0.03

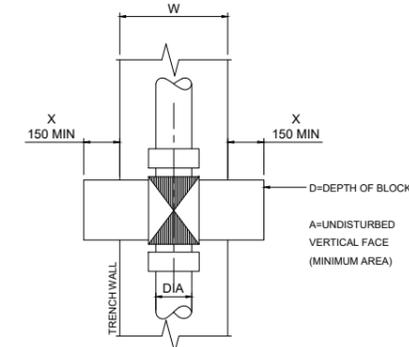
1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. Z SHALL BE THE MINIMUM OF X/2 OR W/2
4. HALF OF THE DEPTH OF THE BLOCK SHALL BE BELOW THE PIPE AXIS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR FROM CONCRETE



THRUST BLOCK FOR TEE

NOMINAL DIAMETER Ø (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
		900 kPa		1350 kPa		1800 kPa	
		X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
300	1200	550	0.64	800	0.96	1100	1.27
250	1000	450	0.44	700	0.67	900	0.89
200	800	350	0.29	550	0.43	700	0.57
150	600	300	0.16	400	0.24	550	0.32
100	400	200	0.07	300	0.11	350	0.14
75	300	150	0.04	200	0.06	300	0.08
50	200	100	0.02	150	0.03	200	0.04

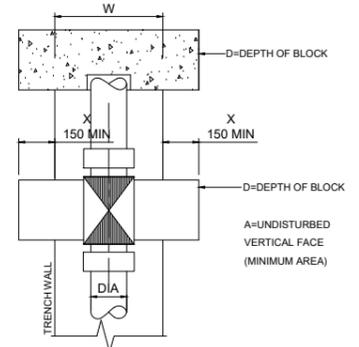
1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. Z SHALL BE THE MINIMUM OF X/2 OR W/2
4. HALF OF THE DEPTH OF THE BLOCK SHALL BE BELOW THE PIPE AXIS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR FROM CONCRETE



THRUST BLOCK FOR GATE VALVE

NOMINAL DIAMETER Ø (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
		900 kPa		1350 kPa		1800 kPa	
		X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
300	500	500	0.64	850	0.96	1150	1.27
250	450	350	0.45	600	0.67	850	0.89
200	400	250	0.29	400	0.43	600	0.57
150	350	150	0.16	200	0.24	350	0.32
100	300	150	0.07	150	0.11	150	0.14
75	250	150	0.04	150	0.06	150	0.08
50	200	150	0.02	150	0.03	150	0.04

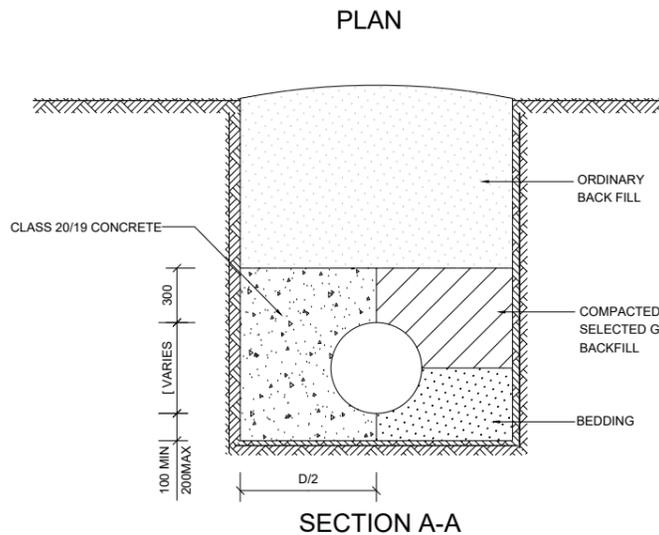
1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. X- DIMENSION SHALL BE 150mm MINIMUM
4. THE BLOCK DEPTH SHALL BE MEASURED FROM THE PIPE AXIS DOWNWARDS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR OF CONCRETE



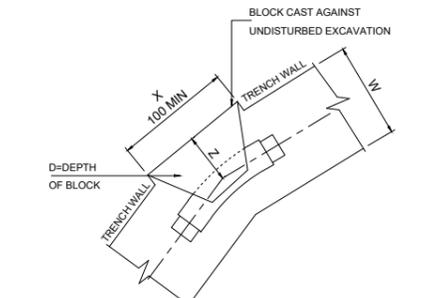
THRUST BLOCKS FOR GATE VALVE AND END CAP AT END CAP POSITIONS

NOMINAL DIAMETER Ø (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
		900 kPa		1350 kPa		1800 kPa	
		X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
300	500	500	0.64	850	0.96	1150	1.27
250	450	350	0.45	600	0.67	850	0.89
200	400	250	0.29	400	0.43	600	0.57
150	350	150	0.16	200	0.24	350	0.32
100	300	150	0.07	150	0.11	150	0.14
75	250	150	0.04	150	0.06	150	0.08
50	200	150	0.02	150	0.03	150	0.04

1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. X- DIMENSION SHALL BE 150mm MINIMUM
4. THE BLOCK DEPTH SHALL BE MEASURED FROM THE PIPE AXIS DOWNWARDS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR OF CONCRETE



CONCRETE THRUST BLOCKS AT ALL BENDS > 11.25° FOR PIPES > 300mm DIAMETER

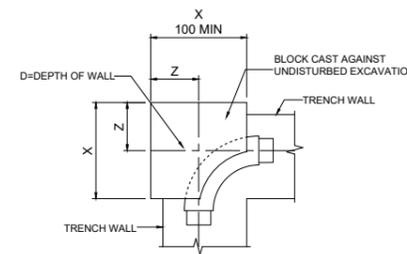


THRUST BLOCK FOR 22½° AND 11¼° BEND

(X AND A TO BE HALVED FOR 11¼° BENDS)

NOMINAL DIAMETER Ø (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
		900 kPa		1350 kPa		1800 kPa	
		X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
300	1200	250	0.25	350	0.38	450	0.50
250	1000	200	0.18	300	0.26	350	0.35
200	800	150	0.11	250	0.17	300	0.22
150	600	100	0.06	200	0.10	250	0.13
100	400	100	0.04	100	0.04	150	0.06
75	300	100	0.03	100	0.03	100	0.03
50	200	100	0.02	100	0.02	100	0.02

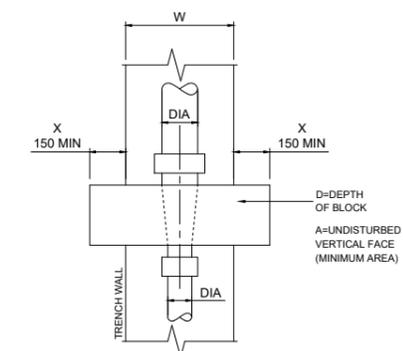
1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. Z SHALL BE THE MINIMUM OF X/2 OR W/2
4. HALF OF THE DEPTH OF THE BLOCK SHALL BE BELOW THE PIPE AXIS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR FROM CONCRETE



THRUST BLOCK FOR 90° BEND

NOMINAL DIAMETER Ø (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
		900 kPa		1350 kPa		1800 kPa	
		X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
300	1200	750	0.90	1150	1.35	1550	1.81
250	1000	650	0.63	950	0.94	1250	1.28
200	800	500	0.40	750	0.60	1000	0.81
150	600	400	0.23	600	0.34	750	0.46
100	400	250	0.10	400	0.15	500	0.20
75	300	200	0.06	300	0.09	400	0.12
50	200	150	0.03	200	0.04	250	0.05

1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. Z SHALL BE THE MINIMUM OF X/2 OR W/2
4. HALF OF THE DEPTH OF THE BLOCK SHALL BE BELOW THE PIPE AXIS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR FROM CONCRETE



THRUST BLOCK FOR REDUCER

NOMINAL DIAMETER Ø 1 (mm)	NOMINAL DIAMETER Ø 2 (mm)	DEPTH OF BLOCK D (mm)	MAXIMUM TESTING PRESSURE					
			900 kPa		1350 kPa		1800 kPa	
			X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)	X (mm)	A ₂ (m ²)
350	300/250	750	300	0.43	450	0.64	600	0.85
300	250/200	700	250	0.35	400	0.53	550	0.71
250	200/150	650	250	0.29	350	0.43	450	0.57
200	150/100	600	200	0.22	300	0.32	400	0.43
150	100/75	500	150	0.12	200	0.18	250	0.24
100	75/50	400	150	0.06	150	0.08	150	0.11
75	50	300	100	0.03	150	0.04	150	0.05

1. THIS TABLE IS VALID FOR 100 kPa EARTH BEARING PRESSURE
2. X- DIMENSION MAY BE REDUCED FOR HIGHER EARTH BEARING PRESSURES
3. X- DIMENSION SHALL BE 150mm MINIMUM
4. HALF OF THE DEPTH OF THE BLOCK SHALL BE BELOW THE PIPE AXIS
5. KEEP COUPLINGS AND FLANGES 25mm CLEAR OF CONCRETE

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY



P.O. BOX 19064
SUNWARD PARK
1470
Tel: (011) 9076700
Fax: (011) 876 7434

T. MONONYANE
DESIGNED
T. MONONYANE
DRAWN
M MASHINYATSIMBI
CHECKED

CONSULTANT

RECOMMENDED

CLIENT ADDRESS:



PO Box 9
Meyerton
1960
TEL: (016) 360 7400
FAX: (016) 360 7519

CLIENT

MIDVAAL LOCAL MUNICIPALITY

CONTRACT No. 0/2/2/434 (2025-2028)

SCALE

TYPE OF PLANNING

PROJECT TITLE

CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY

AS SHOWN

TENDER DRAWINGS

DRAWING TITLE

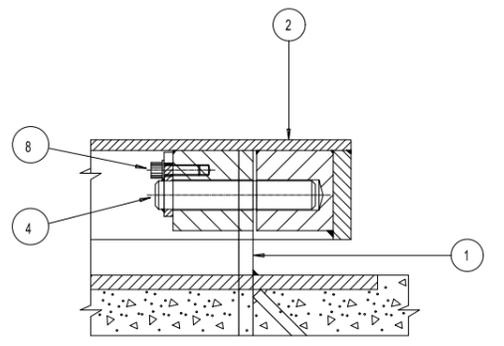
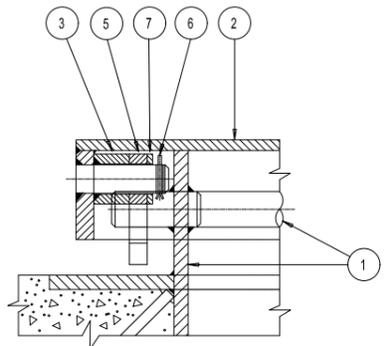
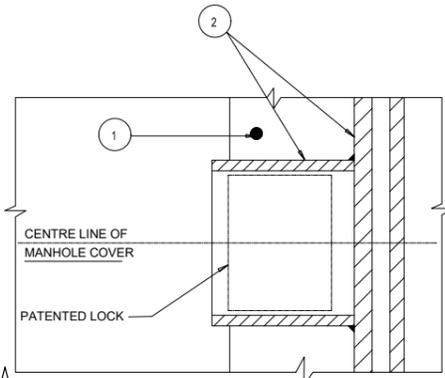
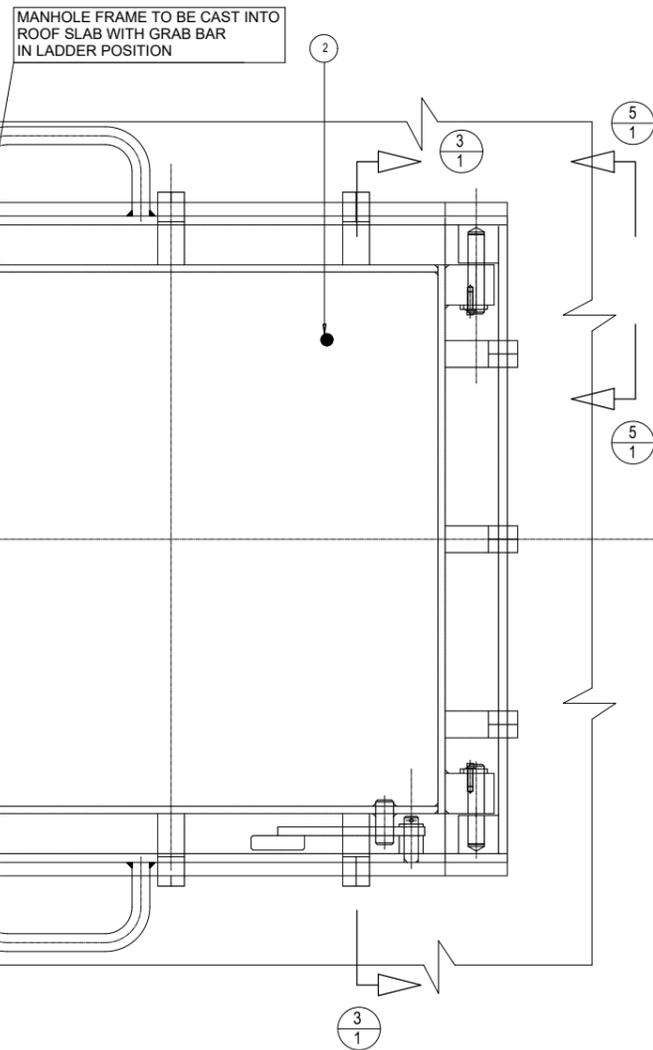
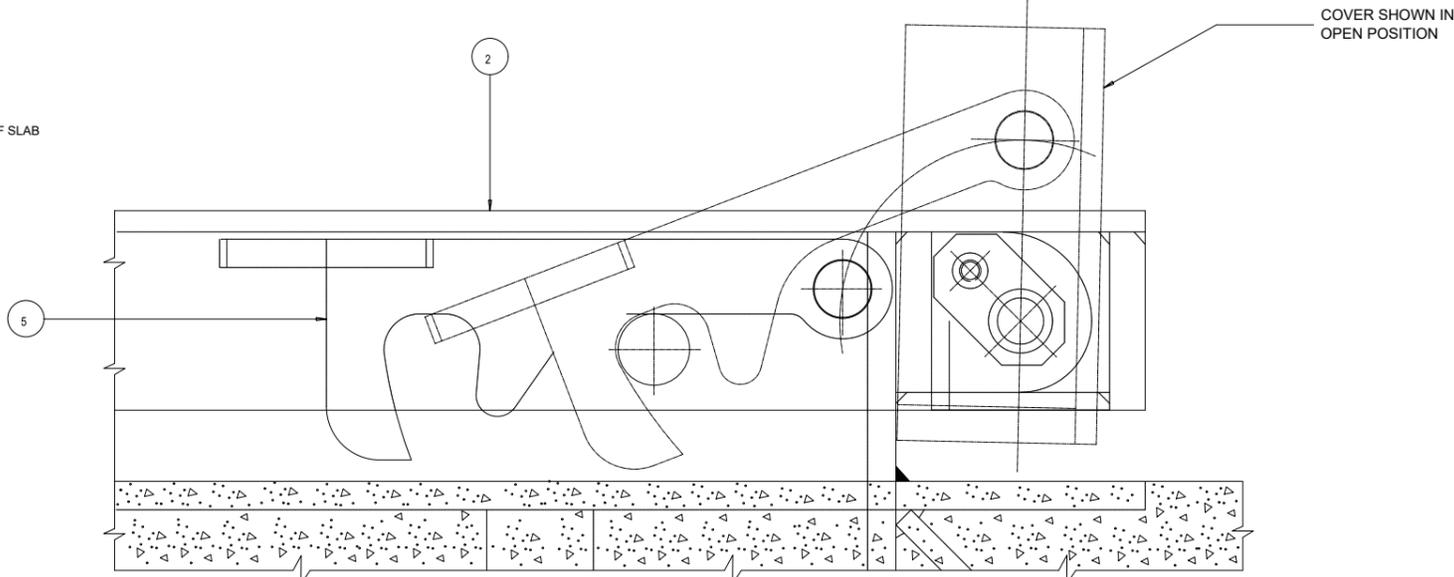
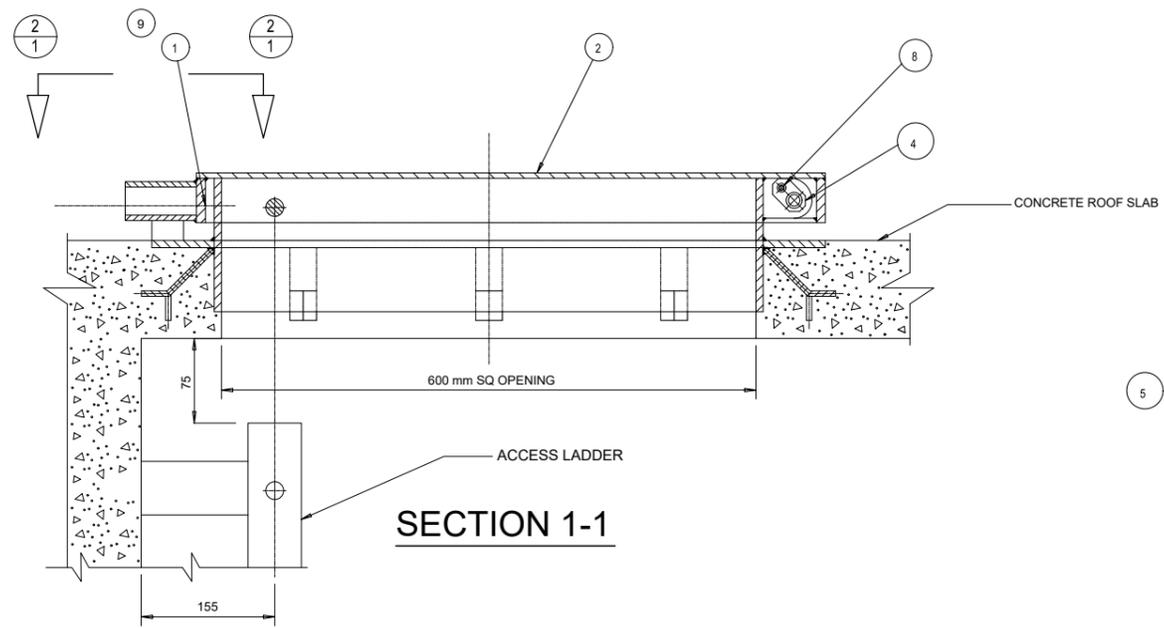
THRUST BLOCK DETAILS

REVISION

PLAN No.

0

AC345/19/SD/10



NOTE:
 QUANTITIES REFLECTED IN PARTS LIST
 ARE FOR ONE COMPLETE MANHOLE:
 600 X 600 mm OPENING

PARTS LIST			
ITEM	DESCRIPTION	QTY	MATERIAL
1	MANHOLE FRAME	1	MILD STEEL
2	MANHOLE COVER	1	MILD STEEL
3	SPACER	1	MILD STEEL
4	PIN	2	MILD STEEL
5	LOCKING DEVICE	1	MILD STEEL
6	SPLIT PIN TO SUIT Ø 4 HOLE	1	MILD STEEL
7	WASHER: 27 O/D X 17 I/D X 3 THICK	1	MILD STEEL
8	CAP SCREW: M6 X 20 LONG WITH WASHER	2	MILD STEEL
9	PATENTED LOCKING DEVICE	1	MILD STEEL

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY

 T. MONONYANE
 DRAWN
 M MATSHINYATSIMBI
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CONSULTANT
 T. MONONYANE
 RECOMMENDED
 for CONSULTING ENGINEER
 DATE: _____

RECOMMENDED
 for HEAD OF DEPARTMENT
 DATE: _____

CLIENT ADDRESS:

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 Meyerton
 1960
 TEL: (016) 360 7400
 FAX: (016) 360 7519

CLIENT
MIDVAAL LOCAL MUNICIPALITY
 PROJECT TITLE
**CONSTRUCTION OF BULK WATER SUPPLY LINE
 FOR MIDVAAL LOCAL MUNICIPALITY**
 DRAWING TITLE
MANHOLE COVER FRAME DETAILS (SHEET 1 OF 2)

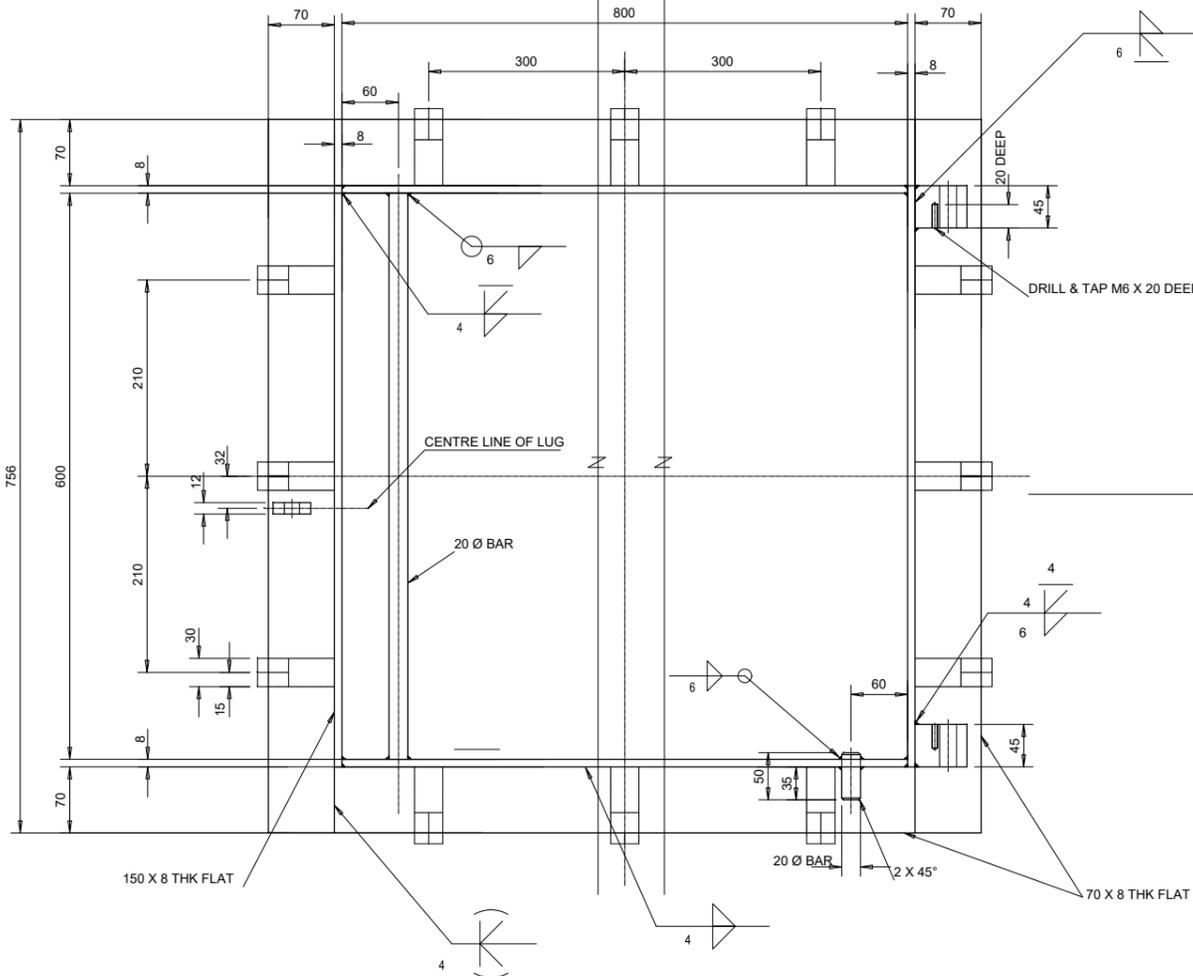
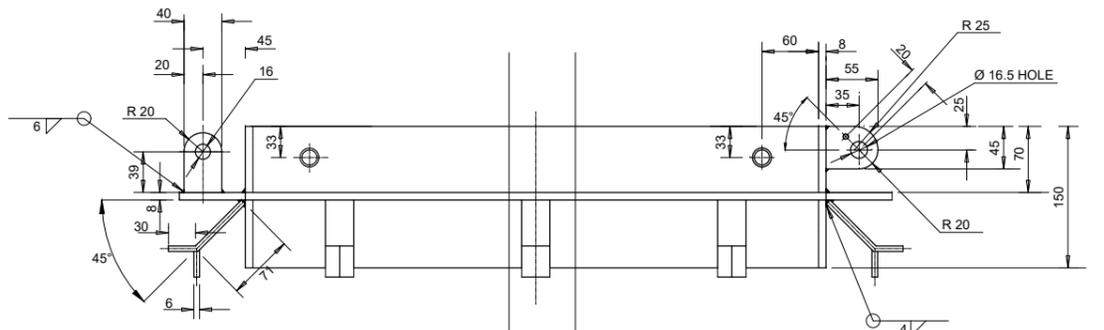
CONTRACT No. 8/2/2434 (2025-2028)

SCALE
1:10

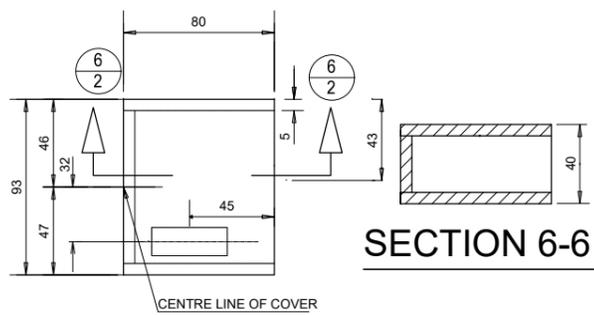
TYPE OF PLANNING
**TENDER
 DRAWINGS**

REVISION
0

PLAN No.
AC345/19/SD/11

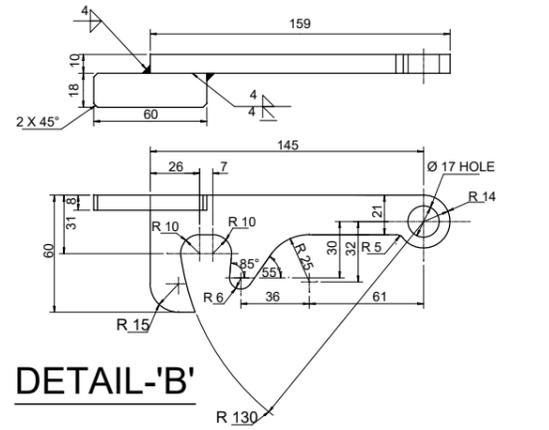


1	MANHOLE FRAME
MATL: MILD STEEL	MASS: ± 70 Kg.
No. OFF: 1	SCALE: 1:4



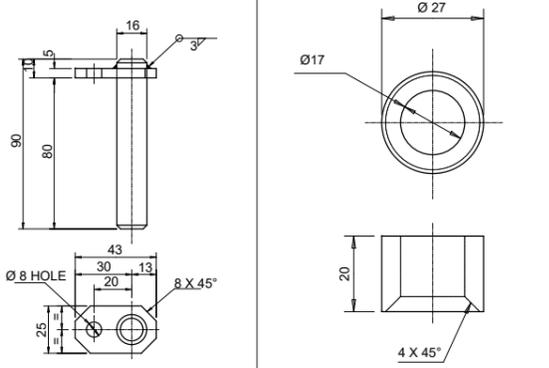
DETAIL-'A'

9	PATENTED LOCKING DEVICE
MATL: MILD STEEL	MASS: ± 5 Kg.
No. OFF: 1	SCALE: 1:2



DETAIL-'B'

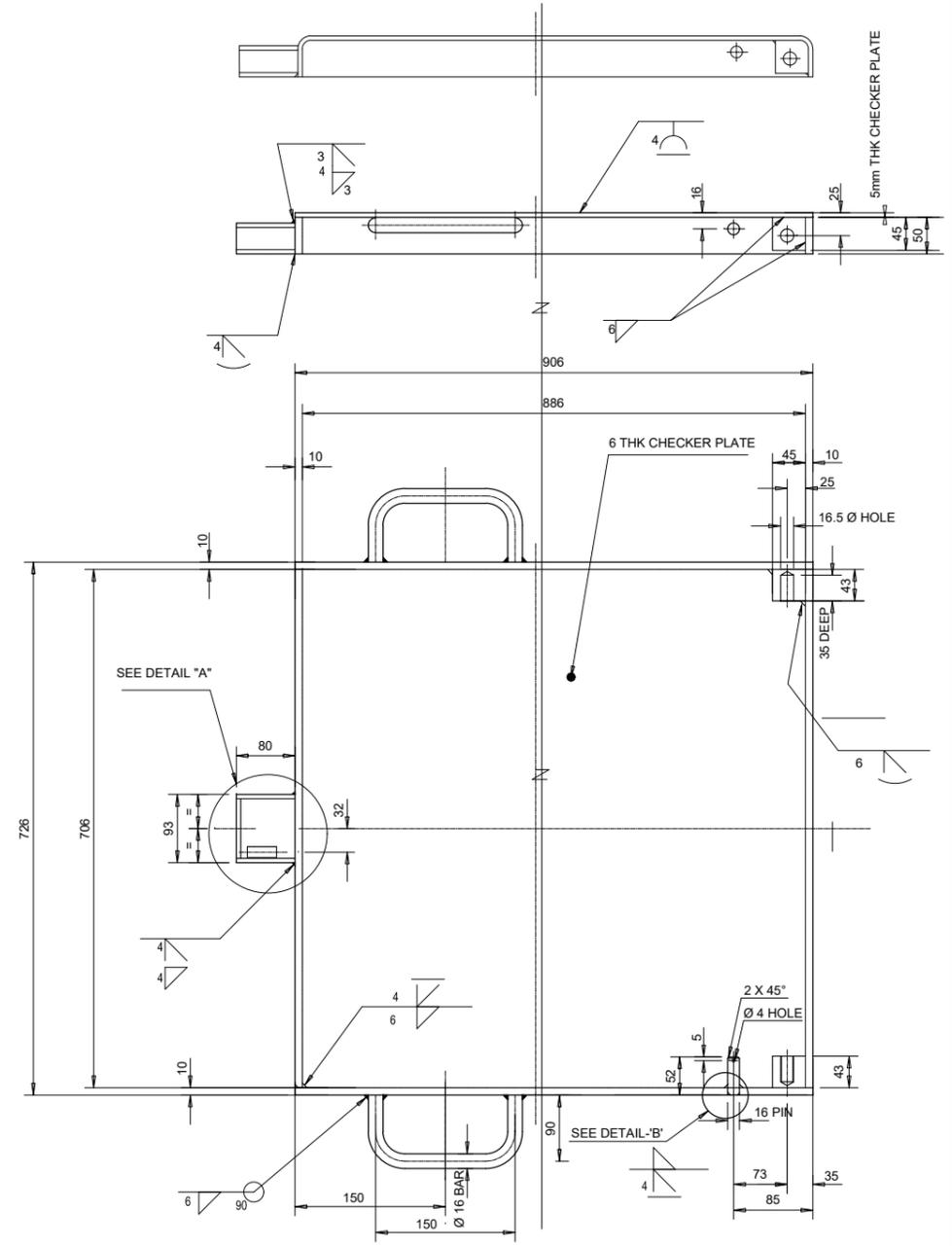
5	LOCKING DEVICE
MATL: MILD STEEL	MASS: ± 0.4 Kg.
No. OFF: 1	SCALE: 1:2



4	PIN
MATL: MILD STEEL	MASS: ± 0.2 Kg.(EA)
No. OFF: 2	SCALE: 1:1

3	SPACER
MATL: MILD STEEL	MASS: ± 0.05 Kg.
No. OFF: 1	SCALE: 1:1

NOTE TO MANUFACTURER:
 USE 10 THK FLAT SIDES.
 ALTERNATIVELY 6 THICK CHECKER PLATE
 TO BE BENT TO SUIT INSIDE DIMENSIONS
 OF COVER (886 X 706). ALL OTHER DIMENSIONS
 TO BE ADJUSTED ACCORDINGLY.

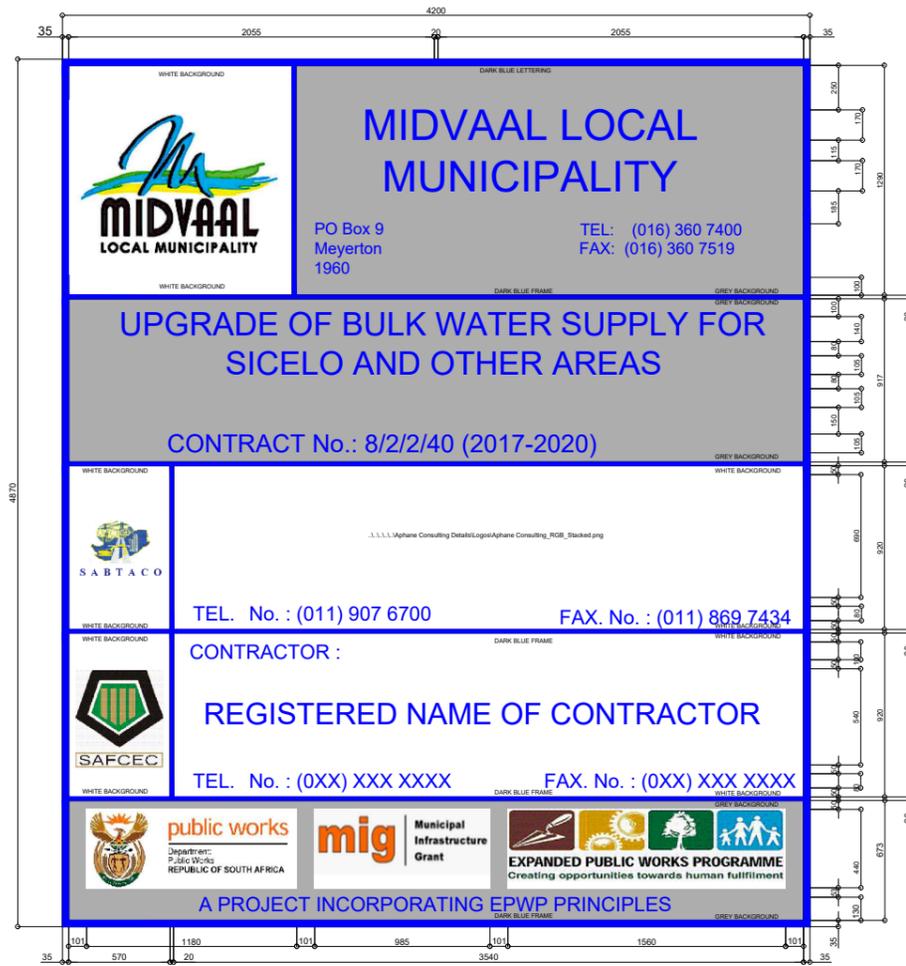


2	MANHOLE COVER
MATL: MILD STEEL	MASS: ± 50 Kg.
No. OFF: 1	SCALE: 1:5

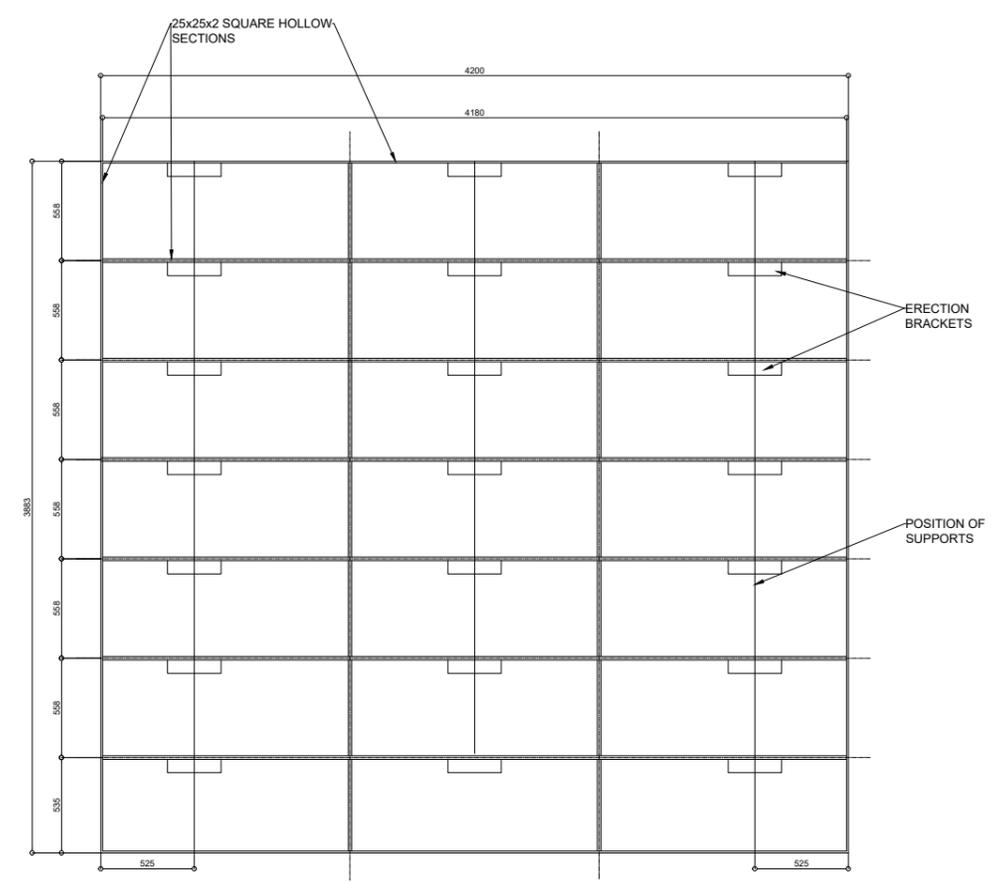
NOTES:
GENERAL DIMENSIONAL TOLERANCES (S.O.S.)
 DIMENSIONS UP TO 500 : ± 1 mm
 DIMENSIONS ABOVE 500 TO 1000 : + 2 mm
 DIMENSIONS ABOVE 1000 ±: 3mm
 THICKNESS OF MATERIAL- AS MANUFACTURED
WELDING
 IDENTICAL WELDS SYMBOLISED ONCE ONLY
 CODED WELDERS TO BE UTILISED FOR WELDING
 OPERATIONS.
MATERIAL
 ALL MILD STEEL ITEMS TO BE IN ACCORDANCE
 WITH S.A.B.S. 1431 - GRADE 300WA
DO NOT SCALE DRAWING

SURFACE PROTECTION:
 AFTER FABRICATION ALL MILD STEEL ITEMS TO BE
 GALVANIZED IN THE FOLLOWING MANNER.
 1) SURFACE PREPARATION TO S.A.B.S. 064
 PARAGRAPH 2.3.6. FOR ACID PICKLING.
 2) FOLLOWED BY HOT-DIP GALVANIZING TO
 S.A.B.S. 763 TO GIVE A MIN. COATING
 THICKNESS OF 85 MICRONS.
 3) NO CUTTING, DRILLING OR WELDING WILL
 BE PERMITTED AFTER GALVANIZING.
ALL DIMENSIONS IN MILLIMETRES

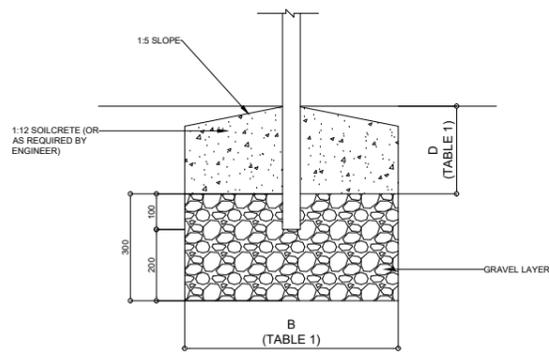
DESIGNED BY	T. MONONYANE	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
	T. MONONYANE			PO Box 9 Meyerton 1960	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY		AS SHOWN	TENDER DRAWINGS
	M. MATSHINYATSIMBI	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	TEL: (016) 360 7400 FAX: (016) 360 7519			REVISION	PLAN No.
		DATE:	DATE:				0	AC345/19/SD/12
No.	DATE	REVISIONS	BY	CHECKED BY	DRAWING TITLE			
					MANHOLE COVER FRAME DETAILS (SHEET 2 OF 2)			



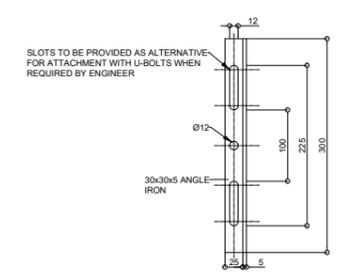
FRONT ELEVATION



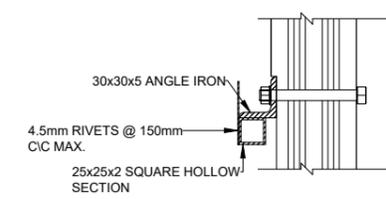
REAR SIDE BRACING



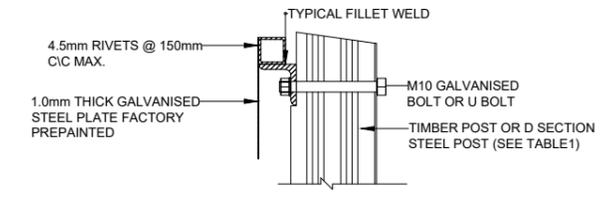
FOUNDATION DETAILS
N.T.S



ERECTION BRACKET
ELEVATION
N.T.S



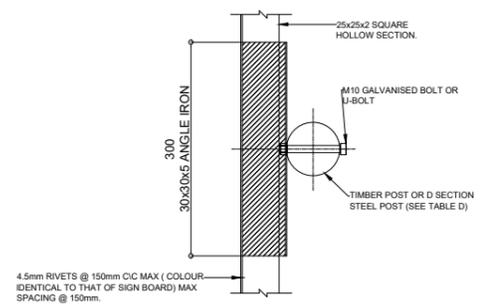
SIDE ELEVATION
N.T.S



SIDE ELEVATION
N.T.S

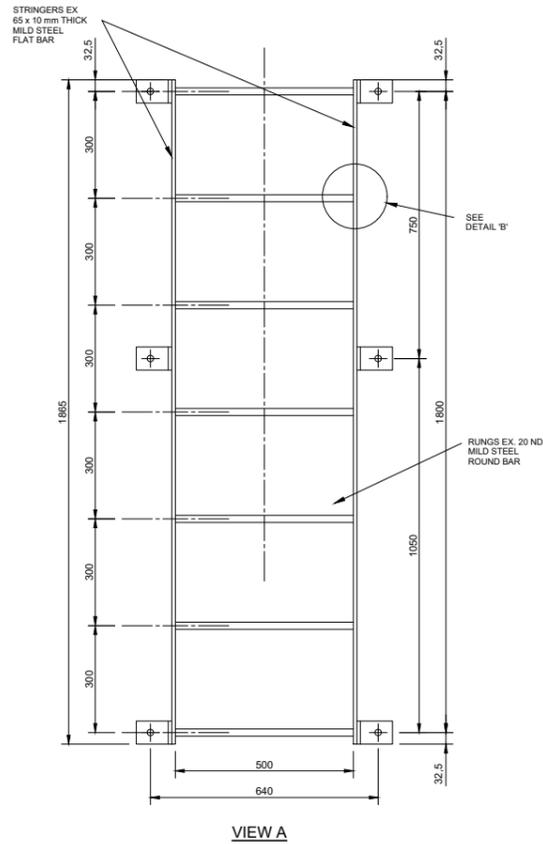
TYPE POST	UPRIGHT	STAY	D	B
TIMBER POST AND STAY	80 mm	80 mm	600 mm	750 mm
TIMBER STAY	160 mm	-	900 mm	1350 mm
D SECTION STEEL POST	100 mm x 4 mm	-	900 mm	1350 mm

- NOTE:
- ALL EMBLEMS TO BE DISPLAYED IN FULL COLOUR ON A SEMI-MATT BACKGROUND.
 - DESCRIPTION MATT-BLACK, SERIES DIN B LETTERS AND NUMBERS ON A SEMI MATT SMOKE GREY BACKGROUND.
 - BORDER : NON REFLECTORIZED.
 - TWO SIGN BOARDS SHALL BE ERRECTED AS DETERMINED BY THE ENGINEER.
 - SAFCEC EMBLEM ONLY, IF CONTRACTORS IS A MEMBER, ALL OTHER CASEES REMAIN BLANK.
 - SAACE LOGO TO BE OBTAINED FROM SAACE JOHANNESBURG.

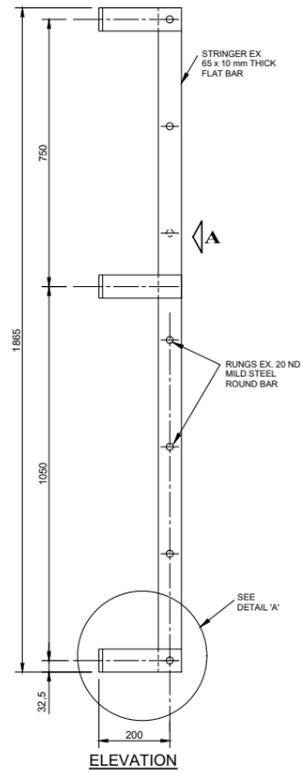


PLAN: SECTION D-D
N.T.S

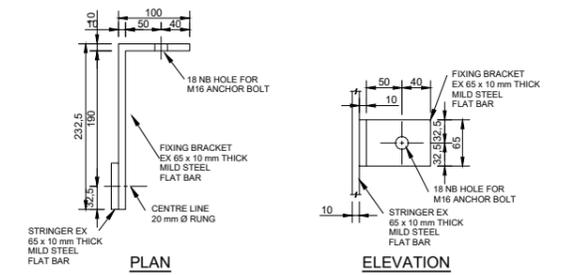
No	DATE	REVISIONS	BY	CHECKED BY	DESIGNED BY	 P.O. BOX 19964 SUNWARD PARK 1470 Tel: (011) 9076700 Fax: (011) 876 7434	DESIGNED BY	T. MONONYANE	CONSULTANT	RECOMMENDED	CLIENT ADDRESS:	CLIENT	MIDVAAL LOCAL MUNICIPALITY	CONTRACT No. 8/2/2/434 (2025-2028)	SCALE	TYPE OF PLANNING
							DRAWN	T. MONONYANE	for CONSULTING ENGINEER	for HEAD OF DEPARTMENT	 PO Box 9 Meyerton 1960 TEL: (016) 360 7400 FAX: (016) 360 7519	PROJECT TITLE	CONSTRUCTION OF BULK WATER SUPPLY LINE FOR MIDVAAL LOCAL MUNICIPALITY	AS SHOWN	TENDER DRAWINGS	
					CHECKED BY			M. MATSHINYATSIMBI	DATE:	DATE:		DRAWING TITLE	NAMEBOARD DETAILS	REVISION	PLAN No.	
														0	AC345/19/ SD/13	



ACCESS LADDER TYPE 1
SCALE 1:10



ACCESS LADDER TYPE 2
SCALE 1:10



DETAIL 'A'
SCALE 1:5

DETAIL 'B'
SCALE 1:5

GENERAL NOTE:-

- i) LADDER, MANHOLE COVER AND FRAME AND VENTILATORS TO BE OF FULLY WELDED CONSTRUCTION.
- ii) AFTER FABRICATION, ALL COMPONENTS OF THE LADDER, MANHOLE COVER AND FRAME AND VENTILATORS ARE TO BE HOT DIP GALVANISED TO PROVIDE A MINIMUM THICKNESS OF 105 MICRON, IN ACCORDANCE WITH SANS ISO 1461:1999 AND SANS ISO 14713 : 1999.

No.	DATE	REVISIONS	BY	CHECKED BY

DESIGNED BY



T. MONONYANE
DESIGNED

T. MONONYANE
DRAWN

M. MATSHINYATSIMBI
CHECKED

P.O. BOX 19964
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1470

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CONSULTANT	RECOMMENDED
T. MONONYANE DESIGNED	
T. MONONYANE DRAWN	
M. MATSHINYATSIMBI CHECKED	

CLIENT ADDRESS:



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CLIENT	CONTRACT No.
MIDVAAL LOCAL MUNICIPALITY	8/2/2/434 (2025-2028)
PROJECT TITLE	
DRAWING TITLE	

SCALE	TYPE OF PLANNING
AS SHOWN	TENDER DRAWINGS
REVISION	PLAN No.
0	AC345/19/SD14

ACCESS LADDER DETAILS

